



Draft Cork County Development Plan 2013

Volume Three: Environment and Natura Impact Reports

3

9th December 2013



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County Hall, Cork.

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How do I make a submission

You can become involved by making a submission or observation on any aspect of the Draft Plan/Environmental Report/Natura Impact Report. Submissions can be made from the 9th of December 2013, to 4pm on the 26th of February 2014. Submissions can be lodged with the council in a number of ways.

Please make your submission by one medium only either electronic or hard copy.

1. **By making an on-line submission**, just log onto our website www.corkcoco.ie and follow the instructions provided:

or

2. **By making a written submission** and addressing it to:

Senior Planner
Planning Policy Unit
Floor 13
County Hall
Cork



The deadline for receipt of all submissions is
4pm on Wednesday the 26th of February 2014.

For legal reasons we cannot accept submissions for this stage outside these dates and times. It is important that you include your name and address when you send us your views.





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Section 1:

Strategic Environmental Assessment Environmental Report





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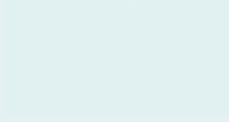
Chapter 1

Introduction

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1.1 Introduction

- 1.1.1 This is the environmental report on the strategic environment assessment of the draft Cork County Development Plan 2013 and it describes the assessment of the likely significant effects on the environment of implementing the draft Plan.

1.2 Strategic Environment Assessment

- 1.2.1 From a legislative viewpoint, the concept of SEA was initially introduced by way of the Directive 2001/42/EC of the European Parliament and of the Council of 27th June 2001 on the assessment of the effects of certain plans and programmes on the environment (the SEA Directive) which was transposed into Irish legislation by the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations, 2004 (S.I. No. 435 of 2004) and Planning and Development (Strategic Environmental Assessment) Regulations, 2004 (S.I. No. 436 of 2004). Subsequently, these statutory instruments were amended by S.I. 200 of 2011 and S.I. No. 201 of 2011. This SEA is being undertaken under S.I. No. 436 of 2004 (as amended) in accordance with Article 8, insofar as this legislation relates to land-use planning.
- 1.2.2 Strategic Environment Assessment is a systematic process of predicting and evaluating the likely environmental effects of implementing a plan, or other strategic action, in order to ensure that these effects are appropriately addressed at the earliest stage of decision-making on a par with economic and social considerations. The SEA process is undertaken using a methodical iterative approach. The methodology followed in this report is derived from a number of sources including the appropriate legislation and guidance documents prepared on a national and EU level. Legally, the SEA Directive (2001/42/EC), transposed Irish regulations and associated amendments to provide the legislative framework. The main sources of guidance include the documents detailed below:
- Implementation of SEA Directive (2001/42/EC): Assessment of the Effects of Certain Plans and Programmes on the Environment Guidelines for Regional Authorities and Planning Authorities, Department of Environment, Heritage and Local Government, 2004;
 - SEA Pack and Scoping Guidance Document, EPA.
 - SEA Process Checklist, EPA.

1.3 Stages of SEA

- 1.3.1 There are a number of stages involved in the SEA process which are listed as follows:
- (1) Screening
 - (2) Scoping
 - (3) Collection of baseline data, assessment and compilation of the Environmental Report (**current stage**).
 - (4) Consultation with designated environmental authorities on Environmental Report and Draft Plan.
 - (5) Evaluation of submissions received in response to the consultation and amendments to the plan as appropriate with designated environmental authorities.
 - (6) Issuing of the final SEA Statement identifying how environmental considerations have been integrated into the final adopted Plan.
 - (7) Monitoring of significant environmental effects following adoption and implementation of the Plan.
- 1.3.2 This report only deals with stages 1-3.



Screening

- 1.3.3 The purpose of screening is to determine definitively if there is a necessity for a strategic environmental assessment to be undertaken. There is a mandatory requirement under the Planning and Development (Strategic Environmental Assessment) Regulations, 2004 (as amended) to undertake a strategic environmental assessment in respect of county development plans, so in this instance, screening was not required and the SEA process proceeds to the next stage.

Scoping

- 1.3.4 The process of scoping for SEA is defined as the procedure whereby the range of environmental issues and the level of detail to be included in the Environmental Report are decided upon, in consultation with the prescribed environmental authorities. Scoping is necessary in order to establish, with objectivity, the potential impacts of the implementation of the draft plan on a number of environmental elements from consultations with a range of environmental bodies and the incorporation of associated submissions into the draft plan by way of their inclusion in the Environmental Report.
- 1.3.5 Scoping for the current SEA was undertaken as part of the preparation of the Section 11 Consultation Document published in January 2013 which was circulated to all the prescribed authorities. None of the submissions received in response to the Section 11 document related to the SEA process.

Collection of Baseline Data, Assessment and Environmental Report.

- 1.3.6 In order to assess the likely significant impacts of the Plan, baseline data on the current state of the environment has to be collected and evaluated and the potential effects of the plan predicted and considered. In accordance with legislation and guidance, the existing environment is described with respect to biodiversity, population, human health, fauna, flora, soil, water (surface freshwater, coastal, transitional, groundwater, bathing and water services (drinking water and waste water treatment), air, climatic factors, material assets (roads, transportation, energy etc), cultural heritage (including architectural and archaeological heritage), landscape and the interrelationships between these factors as appropriate. Any existing problems relevant to the new Plan are also identified at this baseline stage.
- 1.3.7 Identification of baseline environmental status provides for the identification of key resources and sensitivities within the Plan area and the identification of potential threats to the environment, thus allowing for the inclusion of mitigation measures that may need to be incorporated into the new Plan to ensure that it does not exacerbate existing problems. Assessment of the baseline environment also enables plan-makers to consider how the environment might evolve in the absence of the proposed plan.
- 1.3.8 As the data is compiled and plan policies evolve the likely significant effects of implementing the plan are identified, described and evaluated and this is described in the Environmental Report.
- 1.3.9 The information to be contained in the environmental report is set out in Annex 1 of the SEA Directive and reproduced in Schedule 2B of the Planning and Development Regulations 2001, as inserted by Article 12 of the Planning and Development (SEA) Regulations 2004). The structure of this report is summarised as follows:

Table 1-1: Information to be contained in an Environmental Report

Item	Information to be contained in an Environmental Report	Relevant Section of Environmental Report
A	Outline of the contents and main objectives of the draft plan and relationship with other relevant plans or programmes	Chapter 2: Context of the Plan
B	Description of the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan	Chapter 3: Baseline Environment
C	Description of the environmental characteristics of areas likely to be significantly affected	Chapter 3: Baseline environment
D	Description of any existing environmental problems which are relevant to the plan including those relating to any areas of a particular environmental importance, such as Natura 2000 sites	Chapter 3: Baseline environment
E	Description of environmental protection objectives (EPOs), established at international, EU or national level, which are relevant to the plan and the way those objectives and any environmental considerations have been taken into account during its preparation	Chapter 4: EPOs
F	Description of the likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and interrelationships between these factors	Chapter 6: Evaluation of Draft Plan
G	Description of the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan	Chapter 6: Evaluation of Draft Plan
H	Outline of the reasons for selecting the alternatives considered, with a description of how the assessment was undertaken and including any difficulties encountered in compiling the information	Chapter 5: Alternative Scenarios.
I	Description of the measures envisaged concerning monitoring of the significant environmental effects of implementation of the plan	Will be included in SEA Statement once plan finalised
J	A non-technical summary of the above information.	



Documenting the SEA process

- 1.3.10 The SEA Process produces two documents – this environmental Report which is published with the Draft County Development Plan and an SEA statement which will be published at the end of the process, once the plan is adopted.
- 1.3.11 This Environmental Report will be submitted to the Elected Members with the draft County Development Plan (CDP). The Members must take account of the Environmental Report before the Plan is adopted. When the Plan is adopted, an SEA Statement will be published, summarising, inter alia, how environmental considerations have been integrated into the Plan and the reasons for choosing the Plan as adopted over other alternatives considered in the environmental report .
- 1.3.12 Should alterations to the draft Plan be proposed, there will be a further submission period of not less than four weeks during which time submissions and/or observations may be made on the proposed alterations. If material alterations are proposed they will need to undergo a screening process to determine if SEA is required. The proposed alterations, the screening document and SEA Environmental report, where relevant, will be sent to the Minister, the Board and the prescribed authorities and will be made available for public inspection.

1.4 Habitats Directive Assessment

- 1.4.1 Habitats Directive Assessment is an iterative process which runs parallel to and informs both the plan making process and the Strategic Environmental Assessment Process. It involves analysis and review of draft policies as they emerge during each stage of plan making, to ensure that their implementation will not impact on sites designated for nature conservation, nor on the habitats or species for which they are designated. Within this process, regard must also be had to the potential for policies to contribute to impacts which on their own may be acceptable, but which could be significant when considered in combination with the impacts arising from the implementation of other plans or policies.
- 1.4.2 The results of this analysis and review are presented in a Natura Impact Report which is contained in section B of this volume of the Draft County Development Plan. At the end of the plan making process, an Appropriate Assessment Conclusion Statement will be produced which contains a summary of how ecological considerations in relation to Natura 2000 sites have been integrated into the plan. The final Natura Impact Report and a declaration in relation to the potential for the plan to affect the integrity of Natura 2000 sites within its potential impact zone will also be produced at this time.

1.5 Strategic Flood Risk Assessment

- 1.5.1 As part of the review of the County Development Plan, and in order to meet the needs of the Strategic Environmental Assessment process and the requirements of the Department of the Environment, Heritage and Local Government / Office of Public Works Guidelines, “The Planning System and Flood Risk Management” (2009), Cork County Council also undertook a Strategic Flood Risk Assessment (SFRA).
- 1.5.2 The assessment provides for an improved understanding of flood risk issues within the County and the spatial distribution of flood risk. The SFRA report sets out how the Flood Risk Assessment was undertaken, as well as how its findings were addressed and integrated into the County Development Plan. A copy of the SFRA is included in Appendix A of this report. It should be read in conjunction with the Draft County Development Plan.

1.6 Difficulties encountered

1.6.1 During the preparation of the Environmental Report, no new research was undertaken and information was gathered from existing sources of data. It should be noted that there are a number of areas where data was not readily available which include:

- Lack of habitats surveys for non-designated sites and insufficient baseline data on habitats and species to allow for on-going monitoring
- No wetland inventory
- Information is largely paper based with exceptions of designated areas in digitised format (GIS)
- Lack of guiding legislation in some areas e.g. soils and their conservation.
- Limited Air Quality monitoring data for the plan area. The frequency of this monitoring is also identified as an issue.
- Lack of a data on compliance records for waste water treatment systems on settlements of less than 500 pe.
- Lack of information on the effectiveness of existing septic tank systems within the county.
- The lack of centralised data source for environmental baseline data posed a difficulty to the SEA process.

1.6.2 In addition, the status of a number of Transitional and Coastal Waterbodies was not available. Not only did this impede the preparation of the baseline assessment, it also highlights a potential problem with the implementation of the Water Framework Directive.





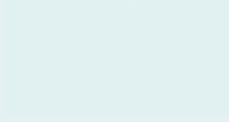
Chapter 2

Plan Context

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2.1 Introduction

- 2.1.1 In accordance with the Planning and Development Act, 2000 a planning authority is legally obliged to prepare a Development Plan (CDP) for its functional area every six years and, not later than four years after the preparation of this plan, a planning authority must give notice of its intention to review that plan and prepare a new plan.
- 2.1.2 The current Cork County Development Plan was adopted in 2009 and fell due for review in 2013. On the 7th of January 2013 the Council commenced a review by publishing an Issues Paper and placing notices in the press to advise the public of the commencement of an 8 week period of public consultation. A number of background documents were also made available dealing with Population, Rural Housing, Retail Development and Energy. A Draft Joint Housing Strategy was also published. Submissions received were considered and included in a Managers Report to the Elected Members of the Council in April 2013. Following consideration of the report, the Members issued a direction to the Manger to proceed with the preparation of the Draft Plan.

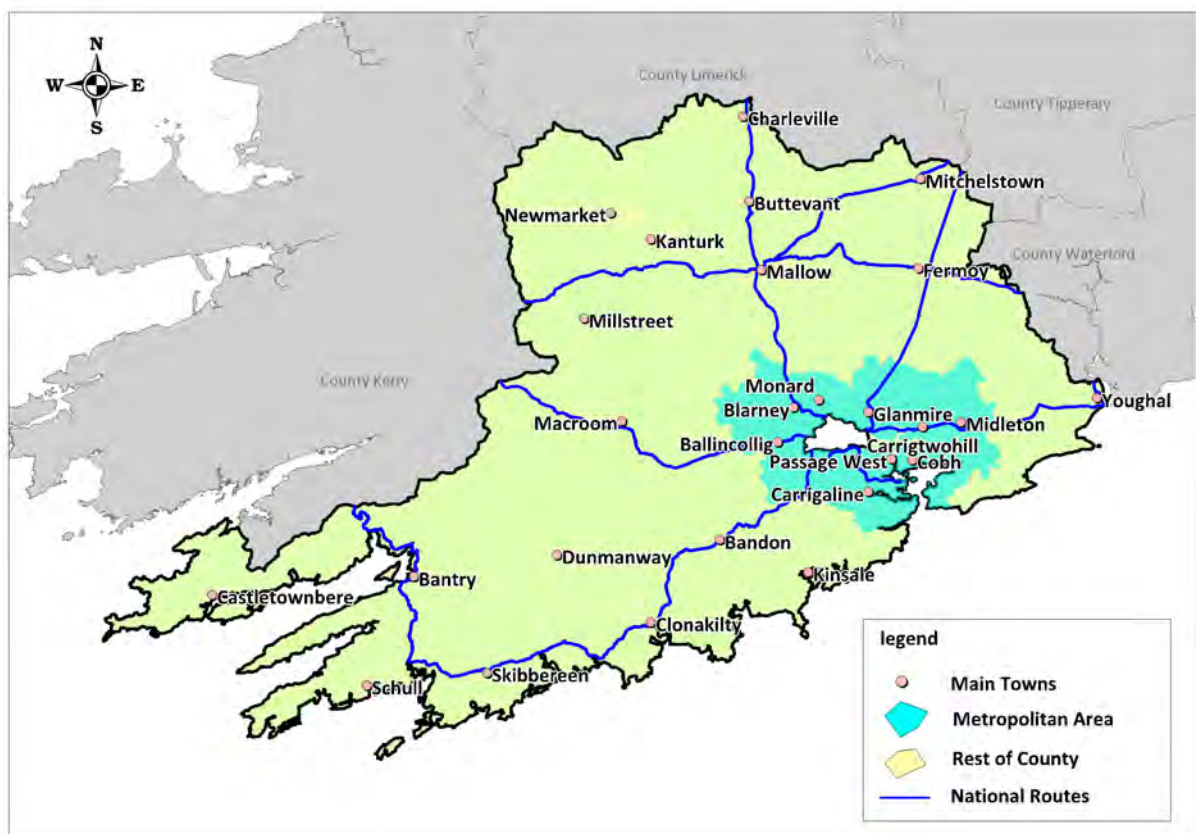


Figure 2-1: Map of County Cork

2.2 Contents /Objectives of Draft Plan and its relationship with other plans

- 2.2.1 The Draft County Development Plan provides a blueprint for the development of County Cork for the latter part of this decade and the early years of the next. Table 2-1 below details the structure and broad chapter content of the Draft Plan.

Table 2-1: Structure of Draft Cork County Development Plan 2013

<p>Chapter 1 Introduction</p>	<p>Chapter 1 details the principles on which the draft plan is based, the National and Regional Planning Policy and the legislative context within which the draft Plan was prepared, the structure of the plan and the process for completing the plan making process. The chapter indicates that the vision and main aims for the County will be underpinned by the core principles of:</p> <ul style="list-style-type: none"> • Sustainability - plan promotes and encourages the integration of economic, environmental, social and cultural issues into the policies and objectives of the plan to ensure the needs of urban and rural communities are met. • Social inclusion- plan strives towards achieving a more socially inclusive society by seeking the provision of good quality affordable housing, community infrastructure and improving access to information and resources. • Quality of design: plan promotes high quality design by encouraging its integration into every aspect of the plan • Climate change adaptation - plan addresses the main areas where this can be achieved in the sections dealing with energy, land use planning, transport, waste management and biodiversity.
<p>Chapter 2 Core Strategy</p>	<p>This Chapter identifies key aims for the development of the county as a whole as follows:</p> <ul style="list-style-type: none"> • Enhanced quality of life for all; • Sustainable patterns of growth in urban and rural areas; • Sustainable and balanced economic investment; • An effective physical and community infrastructure; • A quality built environment; • A network of enhanced natural resources; • Responsible guardianship of the County. <p>The Core Strategy identifies a target growth in population of 70,820 for the county as a whole for the period 2011-2022 and sets out the target distribution of this population growth with 11% of the total new growth allocated to the villages and rural areas and 89% to the towns. Priority is given to the development of the Metropolitan Area given in role in the development of the Cork Gateway and 61% of total population growth is assigned to the Metropolitan area, equivalent to 43,382 persons. A corresponding need for 31,038 additional housing units is also recognised. The Ring Area is assigned 19% of total population growth, equivalent to 13,464 persons with a housing requirement of 13,406 units; the North SPA gets 8% of total population growth equivalent to 5,514 persons with a need for 5,689 housing units, while in the West population growth is equivalent to 12% of the total for the county at 8,460 persons and there is a requirement for 7,872 housing units. The core strategy</p>



Table 2-1: Structure of Draft Cork County Development Plan 2013

	<p>assumes a household formation rates continue to decline and a rate of 2.41 has been applied to the targets for 2022.</p> <p>This Chapter also sets out the Settlement Hierarchy for the county comprising the Cork Gateway, Hub Town, Ring Towns, County Towns, Key Villages, Villages, village Nuclei and Other locations and the West Cork island Communities, and the strategic objectives for the development of each Strategic Planning Area.</p>
Chapter 3 Housing	<p>The chapter seeks to ensure that all new development within the County supports the achievement of sustainable residential communities, promoting high quality design, good housing mix and development which prioritises walking and cycling provision. The chapter also sets out the revised density requirements for housing development in the county which aim to broaden the range of house types that can be built on zoned land. The chapter also deals with specialised housing needs.</p>
Chapter 4 Social and Community	<p>Sets out standards for the provision of social and community facilities to meet current and future needs of all age cohorts of the population including childcare, education, health, amenity and recreational facilities. Also includes a new section on planning for the ageing population.</p>
Chapter 5 Rural, Coastal and Islands	<p>This chapter sets out policies applicable to the management of housing in rural, coastal and island areas in accordance with the guidance contained in the Guidelines on Sustainable Rural Housing. Chapter identifies different rural area types within the county and sets out detailed criteria that will be used to assess applications for rural housing within each area. Chapter also outlines policies in relation to greenbelts and deals with the protection, management and development of coastal resources.</p>
Chapter 6 Economy	<p>This chapter outlines the strategy for the economic development of the county which seeks to achieve balanced economic development and improved employment choices across the county. Plan sets out a hierarchy of employment locations dealing with employment development in (a) the Gateway locations (Metropolitan Cork) and Mallow Hub, (b) other towns and key villages and, (c) Rural Areas. Strategy aims to ensure new employment opportunities are developed in tandem with the provision of housing and infrastructure so that people have the opportunity to live closer to where they work. Strategy also supports key employment sectors including the agricultural and mineral sectors. The strategy promotes agricultural and farm diversification and the special economic role of Cork Harbour.</p>
Chapter 7 Town Centres and Retail.	<p>This chapter includes policies aimed at strengthening and reinventing town centres and details the retail hierarchy of the county and future retail needs.</p>
Chapter 8 Tourism	<p>This chapter identifies the main tourism assets and attractions within the county and includes policies for the development of the tourism sector, including marine leisure and walking and cycling. Chapter also focuses on rural tourism and the development of tourism facilities and tourism accommodation</p>



Table 2-1: Structure of Draft Cork County Development Plan 2013

Chapter 9 Energy and Digital Economy.	This chapter sets out policies aimed at ensuring that sufficient energy and related infrastructure is available to meet the existing and future needs of the county, recognising the importance of exploiting the renewal energy resources of the county. Chapter includes specific policies on renewable energy development including wind.
Chapter 10 Transport	Transport policies seek to manage overall transport demand and provide better linkages between homes, schools, employment and other destinations. Chapter also focuses on promoting and facilitating more walking and cycling within communities and includes a new approach to car parking standards.
Chapter 11 Water Services & Waste	This chapter includes an assessment of water services capacity within the main settlements and seeks to ensure the delivery of the infrastructure required to meet the future population targets and support continued economic development of the county. Chapter also details the approach to flood risk management.
Chapter 12 Heritage	This chapter deals with the protection of natural, architectural, archaeological and cultural heritage.
Chapter 13 Green Infrastructure & Environment	This chapter sets the scene for the development of a green infrastructure strategy for the county to identify, protect, manage and develop green infrastructure resources. Chapter also set out the framework for protecting the most sensitive landscape areas of the County, scenic views, water and air quality.
Chapter 14 Zoning and land use	Provides clear guidance on how to manage the appropriate land-uses on zoned land within the County including the management of uses within transitional zones, dealing with non-conforming uses and encouraging the re-use of brownfield land. It also outlines the Part V requirements and the approach to development within Seveso consultation zones.
Chapter 15 Putting the Plan into practice	This chapter assigns responsibility for the implementation of the Plan's policies to various agencies including the Local Authority. It also sets out the expected timeframes for the delivery of physical and social infrastructure, including the assignment of Plan priorities and funding streams necessary to secure key development objectives. It also outlines the approach to monitoring and how the Plan will inform lower tiers Plans within its functional area.

Development Plan Objectives

- 2.2.2 In accordance with Section 10(2) of the Planning and Development Act 2000, as amended the draft Plan contains objectives and policies for, inter alia:
- Provision or facilitation of infrastructure (Chapter 11)
 - Conservation and protection of the environment (chapter 11 and Chapter 13)
 - Management of features of the landscape (chapter 12 and 13)
 - Promotion of compliance with environmental standards included in river basin management plans (chapter 13)
 - Integration of planning with social, community and cultural requirements (Chapters 4 and 12)
 - Preservation of the character of the landscape (chapter 13)
 - Protection of protected structures (chapter 12)
 - Preservation of character of Architectural Conservation Areas (Chapter 12)
 - Renewal of areas in need of regeneration (chapter 7)
 - Provision of accommodation for travellers(chapter 3)
 - Preservation and improvement of amenities and recreational amenities (Chapters, 3, 5 and 13)
 - Control of Seveso II sites and development adjacent to such sites (chapter 14)
 - Provision of facilitation of community services such as education facilities and childcare (chapter 4)
 - Protection of linguistic and cultural heritage of the Gaeltacht (chapter 12)
 - Promotion of sustainable settlement and transportation strategies (chapters 2, 3,4,6 and 10)
 - Preservation of public rights of way to places of natural beauty or recreational utility (chapter 13)
 - Identification, assessment, protection, management and planning of landscapes (chapter 13).

2.3 The relationship of the draft CDP with other relevant plans and programmes.

- 2.3.1 The County Development Plan is part of a hierarchy of local, regional and national plans. While it should be consistent with higher-level plans such as those of a regional or national nature, it must guide or direct plans and programmes at a lower level hierarchically. The following national, regional and local plans have influenced the policies contained in the draft CDP.

National Policy

- 2.3.2 **National Spatial Strategy:** The National Spatial Strategy (NSS) is a twenty year planning framework for the entire country which is designed to achieve a better balance of social, economic and physical development and population growth between regions. The main focus of the NSS is to bring people, jobs and services closer together, in order to achieve a better quality of life for people, a strong, competitive economic position for the country and to ensure environmental protection.
- 2.3.3 Cork is identified as a gateway, a nationally significant centre whose location, scale and service base supports the achievement of the type of critical mass necessary to sustain strong levels of growth. Cork will build on its substantial and established economic base to lever investment into the South West region, with the support of its scale of population, its third level institutions and the substantial capacity for growth identified in the Cork Area Strategic Plan (CASP). Implementation of CASP is important to secure the



objectives of the NSS. Mallow is identified as a 'hub' and will perform an important role within the national structure at regional and County level. Improvements in regional accessibility through roads, advanced communications infrastructure and public transport links are key supporting factors. The NSS also seeks to develop the potential of other towns and villages. Large towns near Cork City need to be promoted as self-sustaining towns. Medium sized towns in coastal and peripheral areas have a critical role to play as service centres and in economic development. In the more rural parts of the County "a dynamic and nationally important tourism product has been developed which will require effective management and sustainable development of the natural and cultural heritage to sustain it for the future".

- 2.3.4 **National Development Plan 2007 – 2013:** The National Development Plan (NDP) Transforming Ireland — A Better Quality of Life for All sets out our national investment priorities and has four basic objectives: to continue sustainable national economic and employment growth, to strengthen and improve Ireland's international competitiveness, to foster balanced regional development and to promote social inclusion. In Cork, the NDP identifies the need to accelerate growth and development and identifies a number of investment priorities for Cork including motorways, integrated public transport systems, enhancement of tourism, leisure and recreational facilities, developing employment, research and development capacity etc.
- 2.3.5 **Food Harvest 2020– A Vision for Irish Agri-Food and Fisheries:** The agri-food and fisheries sector is Ireland's most important indigenous industry and is recognised as having a key role to play in Ireland's export-led economic recovery. With €7bn in exports the sector currently accounts for over half of manufacturing exports, by Irish owned firms. The geographical distribution of the sector ensures that any future wealth and employment generated will be of direct benefit to rural and coastal communities. The 2020 vision for the sector seeks to increase the value of primary output in the agriculture, fisheries and forestry sector by €1.5 billion by 2020 (an increase of 33% on 2007-2009 levels); increase value added in the agri-food, fisheries and wood products sector by €3 billion (+40%) and achieve an export target of €12 billion for the sector (+ 42%). Meeting these targets will have significant environmental challenges including reducing the carbon intensity of Irish agriculture and ensuring the sector plays its part in reducing our overall greenhouse gas (GHG) emissions. As a County with a strong agri-food and fisheries sector already, there is obvious scope of sustainable growth in this area which should bring many benefits to the County as a whole.
- 2.3.6 **National Climate Change Strategy (2007 – 2012) / Climate Change Adaption Framework 2012:** The National Climate Change Strategy 2007 – 2012 sets out a range of measures, building on those already in place under the first National Climate Change Strategy (2000) to ensure Ireland reaches its target under the Kyoto Protocol. The Strategy provides a framework for action to reduce Ireland's greenhouse gas emissions.
- 2.3.7 The National Climate Change Adaptation Framework introduces an integrated policy framework, involving all stakeholders on all institutional levels to ensure adaptation measures are taken across different sectors and levels of government to manage and reduce Ireland's vulnerability to the negative impacts of climate change. Under the Framework, the relevant Government Departments, Agencies and local authorities have been asked to commence the preparation of sectoral and local adaptation plans and to publish drafts of these plans by mid-2014

- 2.3.8 **National Renewable Energy Action Plan:** The National Renewable Energy Action Plan (NREAP) sets out the Government’s strategic approach and concrete measures to deliver on Ireland’s 16% target under European Renewable Energy Directive 2009/28/EC. The development of renewable energy is central to overall energy policy in Ireland. Nationally, the Government’s ambitions for renewable energy and the related national targets are fully commensurate with the European Union’s energy policy objectives and the targets addressed to Ireland under the Renewable Energy Directive. Ireland’s energy efficiency ambitions (20% of energy from renewable sources by 2020) as set out in the National Energy Efficiency Action Plan are duly reflected in the NREAP.
- 2.3.9 **National Biodiversity Plan:** Action for Biodiversity 2011 – 2016: Ireland’s second National Biodiversity Plan sets out a vision for the conservation and restoration of biodiversity and ecosystems in Ireland and includes the overarching target of “reducing biodiversity loss and degradation of ecosystems in Ireland by 2016, and achieving substantial recovery by 2020”. The Plan sets out a number of strategic objectives and actions which are aimed at mainstreaming biodiversity in the decision making process across all sectors, strengthening the knowledge base and increasing awareness of biodiversity in order to support the achievement of the target.
- 2.3.10 **Our Sustainable Future -A framework for Sustainable Development in Ireland (2012):** This framework recognises that the green economy and sustainable development agendas are a key element of Ireland’s economic recovery strategy and sets out the range of environmental, economic and social measures required to move these agendas forward. The framework sets out 70 measures that will ensure we improve our quality of life for current and future generations and sets out clear measures, responsibilities and timelines in an implementation plan. These include areas such as the sustainability of public finances and economic resilience, natural resources, agriculture, climate change, transport, sustainable communities and spatial planning, public health, education, innovation and research, skills and training, and global poverty. The framework recognises that some aspects of the pattern of development that emerged in Ireland over the last decade present major challenges from a sustainable development perspective and spatial planning is one of the mechanisms, along with wider public policy coordination and fiscal policy, to effect change at national, regional and local level and deliver more sustainable communities.
- 2.3.11 **Smarter Travel. A new transport Policy for Ireland 2009-2020:** Smarter Travel recognises that transport and travel trends in Ireland are unsustainable. Even with the investment in Transport 21, if we continue with present policies, congestion will get worse, transport emissions will continue to grow, economic competitiveness will suffer and quality of life will decline. Smarter travel is designed to show how we can reverse current unsustainable transport and travel patterns and reduce the health and environmental impacts of current trends and improve our quality of life. Actions are aimed at influencing overall travel demand and reducing emissions in both urban and rural areas. Key actions include the following:
- Actions to reduce distance travelled by private car and encourage smarter travel, including focusing population growth in areas of employment and to encourage people to live in close proximity to places of employment and the use of pricing mechanisms or fiscal measures to encourage behavioural change,
 - Actions aimed at ensuring that alternatives to the car are more widely available, through improved public transport service and investment in cycling and walking,
 - Actions aimed at improving the fuel efficiency of motorised transport, and
 - Actions aimed at strengthening institutional arrangements to deliver the targets.



- 2.3.12 **National Action Plan for Social Inclusion 2007 – 2016:** This National Action Plan for Social inclusion, complemented by the social inclusion elements of the National Development Plan 2007-2013: Transforming Ireland– A Better Quality of Life for All, sets out how the social inclusion strategy will be achieved over the period 2007-2016. The overall goal of this Plan is to reduce the number of those experiencing consistent poverty to between 2% and 0% by 2012, with the aim of eliminating consistent poverty by 2016.
- 2.3.13 **National Heritage Plan 2002:** The National Heritage Plan sets out a clear and coherent strategy and framework for the protection and enhancement of Ireland’s national heritage. The core objective of the Plan is to protect the national heritage as well as promoting it as a resource to be enjoyed by all.

Regional Policy

- 2.3.14 **South Western Regional Planning Guidelines:** Prepared by the South West Regional Authority to provide a broad canvas to steer the sustainable growth and prosperity of the region in line with the key principles of national strategy. Planning Authorities are required to have regard to the guidelines in the discharge of their functions.
- 2.3.15 **South West River Basin District Management Plan** has been prepared on foot of the EU Water Framework Directive to create an integrated approach to managing water quality on a river basin basis. It requires that management plans be prepared on a river basin basis in six year cycles and specifies a structured approach to developing those plans with the first plans to cover the period 2009 to 2015. The South West River Basin Management Plan is the mechanism for protecting and improving the County’s water resources and ensures that development permitted meets the requirements of the relevant River Basin Management Plan and does not contravene the objectives of the EU Water Framework Directive.

Waste Management Plan: A joint waste management strategy was prepared for the Cork City and county in 1995 by the both Local Authorities. Since then separate waste management plans have been prepared for each jurisdiction and the most recent plan for the County covers the period 2004-2009. Waste minimisation is a key element of the most recent Plan (2004) and includes a number of measures including waste prevention, reduction at source, reuse, recycling and recovery and is achieved through the use of bring sites, civic amenity sites, waste transfer stations, authorised transfer facilities and material recovery. All of these have a role to play in achieving national recycling targets.

Local Policy

- 2.3.16 **County Biodiversity Action Plan 2009-2014:** This plan addressed how the wildlife resources of the County, including native plants, animals and the ecosystems that they combine to produce, will be managed and protected. Its implementation will contribute to achieving national and international targets for the conservation of biodiversity in the context of constantly accelerating rates of species extinction and habitat loss and deterioration globally.
- 2.3.17 **Cork County Heritage Plan 2005-2010:** The development of the County Heritage Plan had its origins in the National Heritage Plan published in 2002. The aim of the plan is to ‘ensure the protection of our heritage and to promote its enjoyment by all’. This is underpinned by the core principle that heritage is communal and we all share a responsibility to protect it.



2.3.18 **Cork City Development Plan 2009-2015.** The city plan is of relevance because the city is the main economic and retail focus for the county as a whole and the focus of public transport services within the metropolitan area. The formal review of the plan commenced in April 2013 with the publication of an issues paper. The issues paper includes a population target for the city of 150,000 by 2022 and re-emphasises the potential for the development of brownfield land in the City Centre, Docklands, Mahon and Blackpool to cater for the sustainable growth of the city.

Legislative Context

2.3.19 The Directive 2001/42/EC of the European Parliament and of the Council on the assessment of the effects of certain plans and programmes on the environment (the SEA Directive) and its transposed Irish legislation, including amendments form the legislative framework for the SEA process, including its documentation in the form of an Environmental Report. The Planning and Development Act, 2000 (as amended) also forms an integral part of SEA and additional guidance from a European context and national context has been listed within this Section (2.3). Additional key pieces of legislation pertaining to environmental considerations include the following list which is regarded as not exhaustive:

- EU Birds Directive (79/409/EEC)
- EU Habitats Directive (92/43/EEC)
- The Wildlife Act, 1976 (as amended)
- The Flora (Protection) Order 1999
- UN Convention of Biological Diversity 1992 (ratified 1996)
- Convention on Wetlands of International Importance (Ramsar Convention 1971)
- European Communities (Birds and Natural Habitats) Regulations, 2011
- Urban Waste Water Treatment Regulations, 2001 and 2004 and Amendments (2010)
- Water Services Act, 2007
- Water Services (Amendment) Act, 2013
- European Communities Environmental Objectives (Surface Waters) Regulations, 2009
- European Communities Environmental Objectives (Freshwater Pearl Mussel) Regulations, 2009
- European Communities Environmental Objectives (Groundwater) Regulations, 2010
- EU Nitrates Directive (91/676/EEC)
- European Communities (Good Agricultural Practice for Protection of Waters) Regulations, 2010
- EU Bathing Water Directive (2006/7/EC)
- Bathing Water Quality Regulations, 2008
- Bathing Water Quality (Amendment) Regulations, 2011
- Shellfish Waters Directive (2006/113/EC)
- European Communities (Quality of Shellfish Waters) Regulations, 2006
- European Communities (Quality of Shellfish Waters) (Amendment) Regulations, 2009
- Waste Water Discharge (Authorisation) Regulations, 2007
- European Communities (Environmental Liability) Regulations, 2008
- Air Quality Standards Regulations, 2011
- Environmental Noise Regulations, 2006
- The European Landscape Convention, 2000



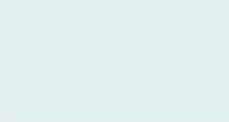


Chapter 3

Baseline Assessment

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3.1 Introduction

- 3.1.1 The environmental baseline of County Cork is described in this chapter. This baseline information outlines the environmental context within which the Cork County Development Plan will operate. The purpose of this section is to provide enough environmental baseline data to:
- support the identification of environmental problems;
 - support the process of assessing the environmental effects;
 - provide a baseline against which future monitoring data can be compared.
- 3.1.2 A number of key environmental issues set the context for the collection of the baseline data and each section includes an overview of the current situation, the key environmental problems and an analysis of the likely evolution in the absence of the draft County Development Plan. The Environmental issues are listed below:
- Population and Human Health
 - Biodiversity – Flora and Fauna
 - Soil
 - Water
 - Air and Climatic factors
 - Material Assets
 - Cultural Heritage
 - Landscape
- 3.1.3 A number of maps are included to illustrate the baseline environment of the County, the majority of which indicate the existing situation for the environmental issues identified above.
- 3.1.4 The Department of the Environment, Heritage and Local Government (DoEHLG) circular SEA 1/8 and NPWS 1/8 requires that under the Habitats Directive an Appropriate Assessment of the ecological implications of a plan is conducted. An appropriate assessment of the Cork County Development Plan 2015 was conducted by Cork County Council and is provided as part of the Draft Cork County Cork Development Plan.



3.2 Population

- 3.2.1 The 2011 Census identified a population of 519,032 for Cork County as a whole, equivalent to 11% of the national population and the second largest county in the state after Dublin. Excluding the city, the population of the county area was 399,802, an increase of just under 38,000 persons (10.5%) on the 2006 Census figure of 361,877. There was a modest decline in the population of the city over the same period.
- 3.2.2 The population of the county is spread across an extensive network of settlements comprising 26 'main towns', the North and South City Environs, a network of 275 villages and smaller settlements and the rural areas. The main towns and city environs together account for 46% of the population of the county in 2011. The greatest concentration is within the City South Environs (2011 population of 32,635). Ballincollig is the largest town in the County, followed by Carrigaline, Cobh, Midleton and Mallow.
- 3.2.3 For planning policy purposes Cork is divided into four strategic planning areas which are illustrated in Fig 3.1 below. There have been significant variations in the pattern of growth within the four Strategic Planning Areas (SPAs) in the period to 2011.

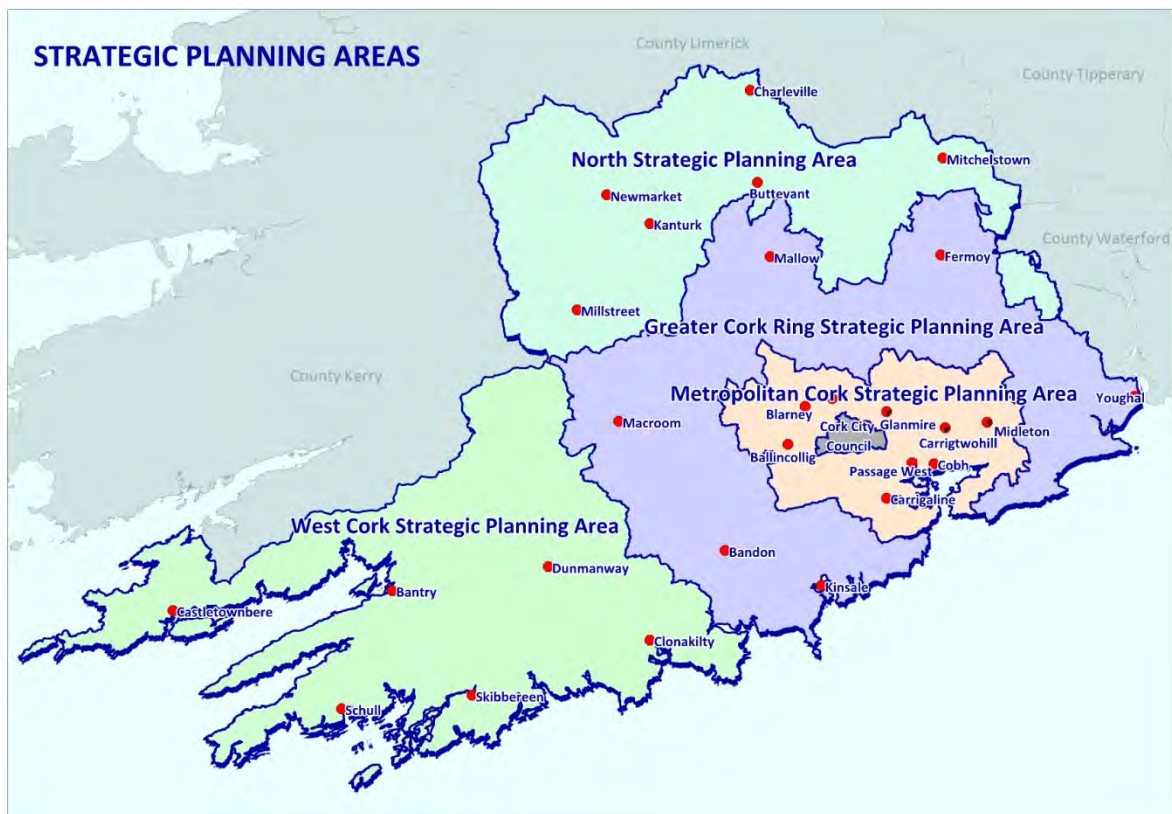


Figure 3-1: Strategic Planning Areas

Population Change

3.2.4 Figure 3.2 illustrates the distribution of population per DED within the Strategic Planning Areas of the County and shows the greatest density of population is within Metropolitan Cork. Analysis of the Census 2011 figures highlight that 51% of the population of County Cork live in urban areas with 49% living in rural areas. The red, orange and pale green shading shows the areas with the highest density of population (red is the most dense), while the dark green shading shows the areas with the lowest density of population.

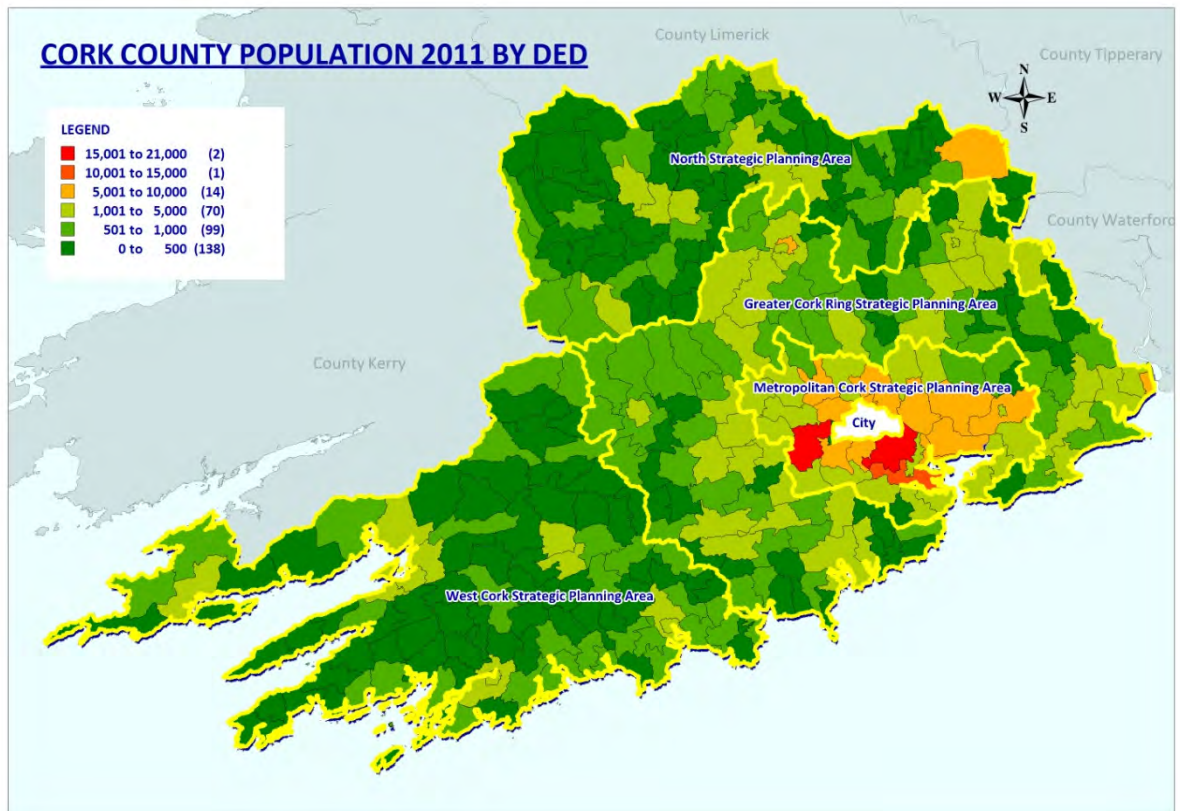


Figure 3-2: Cork County Population 2011 by DED

3.2.5 Figure 3.3 shows the percentage growth in population by DED and Strategic Planning Area and illustrates the dispersed pattern of growth which has taken place across the entire county with the dark pink colour showing the areas which achieved the highest level of population growth.

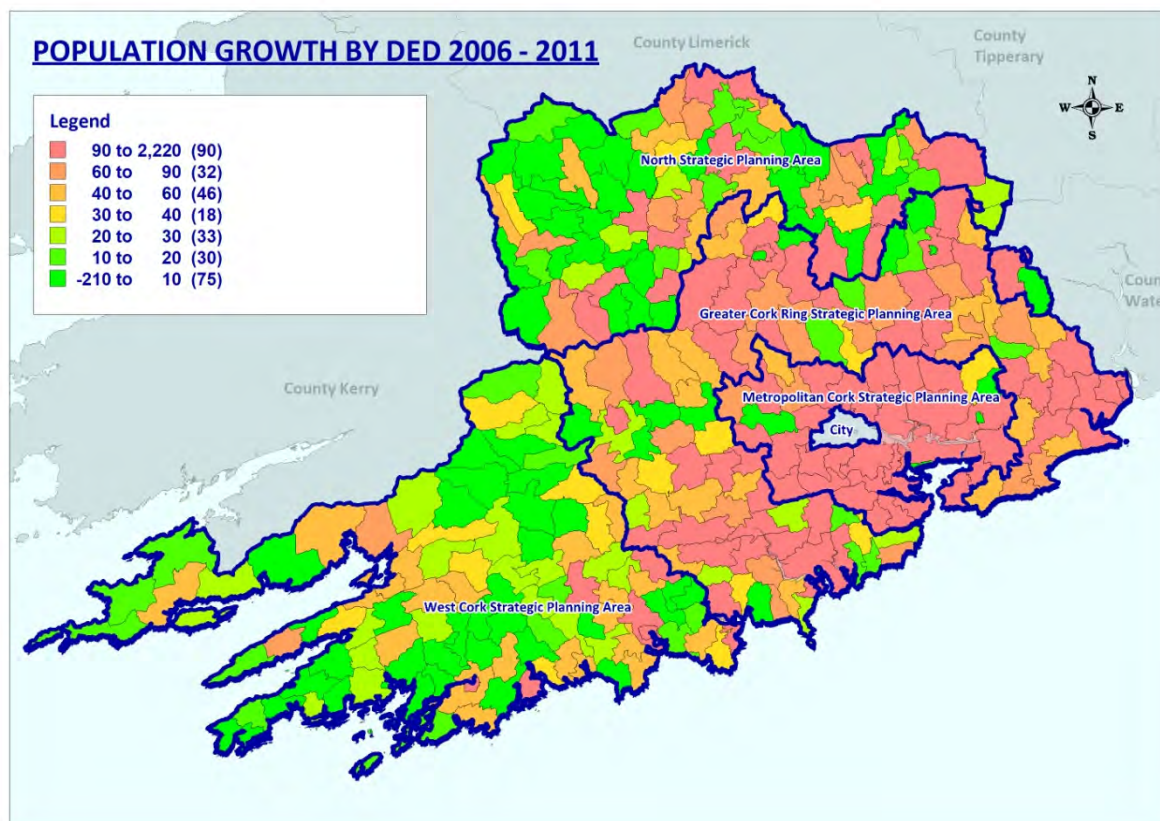


Figure 3-3: Population Growth by DED 2006-2011

- 3.2.6 Analysis of population change by Strategic Planning Area shows that population growth in the period to 2011 diverged from the adopted growth strategy for the county as expressed in the County Development Plan 2007, and as envisaged by the Regional Planning Guidelines. In the period 2006-2011. The details are outlined in Table 3.1 below. The Metropolitan area (including Cork City) recorded a significant under-performance (16,852 persons or -49%) relative to the target population growth of 34,050 set by the South West Regional Planning Guidelines. A significant over-performance in population growth was recorded in the CASP Ring, with population growth exceeding the 2011 target by 10,724 persons or 406%. This means that the Metropolitan area is growing at about half the rate intended by the SWRPG, and at the same time, the CASP Ring area is growing at over four times the rate intended by the SWRPG. In addition, despite the strong urban structure of the CASP Ring, only 37% of the growth occurred within the towns, with the remaining 63% occurring in the villages and rural areas. Within this period a high rate (2,816) of one-off housing was recorded within the CASP Ring representing a population equivalent of over 7,500 persons.
- 3.2.7 The North Strategic Planning Area recorded positive growth, exceeding the 2011 SWRPG target by 34%. The distribution of the growth, however, represented a 38:62 urban/villages and rural split. The North and West Strategic Plan (2002) suggested an optimum population distribution would be a 50/50 split for this area given the inherently weaker urban structure.

- 3.2.8 The West Strategic Planning Area slightly underperformed (-16%) in meeting its 2011 growth target. The distribution of growth between the urban and rural areas was 36:64, similar to that recorded in North. Of significance in these figures is the high rate of one-off housing recorded and also high vacancy rate which suggests many of the houses are used as second/holiday homes. This trend is also evident in the other scenic, coastal locations in the country.

	Population change 2006-2011	SWRPG Interim Target 2011 Growth	Excess over/under Interim Target	
			Persons	% Projected Growth
Metropolitan*	17,198	34,050	-16,852	-49%
CASP Ring	13,363	2,639	+10,724	+406%
North	4,070	3,155	+1,095	+34%
West	3,106	3,741	-635	-16%
TOTAL County	37,925	43,585	-5,660	-13%
	*including Cork City			

Population Growth Strategy

- 3.2.1 The growth strategy envisaged by the SWRPG, and the growth target for the county as detailed in the Draft County Development Plan for the period to 2022, are set out in Table 4-2 below. The strategy of the Draft Plan seeks to respond to recent trends and realign the pattern of population growth in the future, directing 61% of the target growth in population to the County Metropolitan Strategic Planning Area (SPA), 19% to the Greater Cork Ring SPA, 8% to the North SPA and 12% to the West SPA.

Strategic Planning Area	Census 2011	Population Target for 2022	Growth 2011-2022
Total County Metropolitan	170,509	213,891	43,382
Total Greater Cork Ring	118,418	131,882	13,464
Total North	50,498	56,012	5,514
Total West	60,377	68,837	8,460
Total Cork County	399,802	470,622	70,820

- 3.2.2 The breakdown of this growth between the towns/villages and rural areas within each Strategic Planning Area (as outlined in the Section 11 Document) is detailed in Table 3-3 below.



Table 3-3: Population and Housing Requirements, Town Villages and Rural Areas

Strategic Planning Area	Towns : 2011-2022			Villages and Rural 2011-2022			Total for County		
	Pop growth	New housing units Required	Available supply (housing units)	Pop growth	New housing units Required	Available supply (housing units)	Pop growth	New units Required	Available supply (housing units)
County Metro	42,621	27,235	32,811	761	3,803**	3,809	43,382	31,038	41,207
CASP	13,427	8,601	14,323	37	4,805**	5,661	13,464	13,406	19,984
North	4,024	2,615	4,048	1,490	3,074	3,094	5,514	5,689	7,142
West	6,006	3,742	5,534	2,454	4,130	4,182	8,460	7,872	9,716
Total	66,078	42,193	56,716	4,724	15,821	16,746*	70,820	58,005	77,869

Note: * This figure includes provision for 8,919 units within the villages and an estimated 7,827 rural one off houses.

**Although population growth target is low, falling household size means more houses are needed to accommodate the same quantum of population.

- 3.2.3 As illustrated in Table 3-3, 89% of the growth in population across the county as a whole is directed at the mains towns of the county, with 11% going to the villages and rural areas.
- 3.2.4 In terms of the numbers of new houses required, 70% of the target requirement for new dwellings arises in the towns, while 30% of the requirement is identified in the villages and rural areas. In terms of the land supply, the available supply of land for housing exceeds the requirement in all areas.
- 3.2.5 The population target for the Metropolitan area provides for an additional 43,382 persons and seeks to direct 92% of this growth to the Metropolitan towns by improving their attractiveness as places to live and work and by improving the range of housing options available. Eight percent of the population growth is aimed at the villages and rural area. Given the level of underperformance experienced in the Metropolitan area, in terms of population growth in the period to 2011, achieving this growth would imply a very significant increase in development activity, with associated potential for environmental impact, in the period to 2022. Population growth of 43,382 persons would require a corresponding increase in employment opportunities to support the population, additional housing estimated at 31,036 new housing units, and supporting services such as transportation, schools, shops, recreation etc.
- 3.2.6 Within the CASP Ring the strategy also seeks to maintain growth rates in the Hub town of Mallow and the other ring towns and to manage pressure for growth in the rural areas of the Ring so that population remains stable and the viability of existing services is not undermined. Within the Ring, the strategy provides for in excess of 99% of the growth in population to take place within the towns. A requirement for 13,407 new housing units is identified with 4,805 of these identified for the villages and rural area of the CASP Ring.
- 3.2.7 In the North SPA, in excess of 70% of the future growth in population is directed at the towns but 54% of the requirement for new houses arises within the villages and rural areas. In the West SPA,

71% of future population growth is directed at the towns but only 52% of the requirement for new houses is located within the villages and rural areas. This relatively high level of development within the villages and rural areas has potential to lead to further impacts on the environment.

- 3.2.8 As detailed later in the Section on Water, only nine of the 28 towns in the county have Wastewater Treatment plant infrastructure capable of meeting the future growth targets. Eleven of the towns cannot take any further development until such time as the infrastructure is upgraded, while five towns can accommodate some growth but will need additional investment to cater for the planned levels of growth.

Age Profile

- 3.2.9 The age structure of the population has important implications for future demand for housing, employment, education and health care facilities and other supporting services.
- 3.2.10 Figure 3.4 below highlights the changes in the population profile of the County since 2006. The majority of the age cohorts have experienced growth save for the 20-24 and 25-29 years age cohorts. This may be a reflection of emigration affecting this sector of the population profile. The most significant increases are in the total numbers in the younger pre-school and education cohorts.

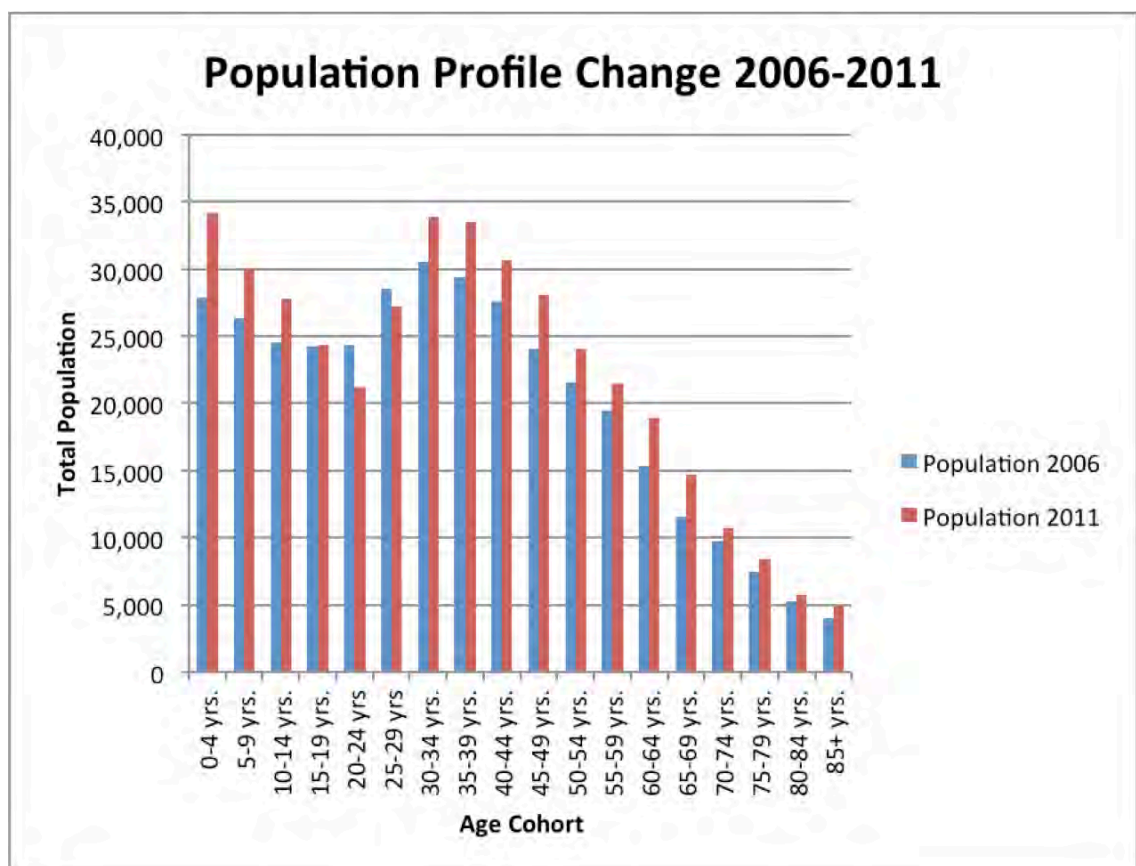


Figure 3-4: Population Profile Change 2006-2011

- 3.2.11 The highest concentration of the 0-15 year cohort is in Metropolitan Cork with a particular clustering around Midleton which is illustrated in Figure 3-5 below. The distribution of the young (0-15 year)



cohort will be an important consideration in the provision of childcare and education facilities within the County.

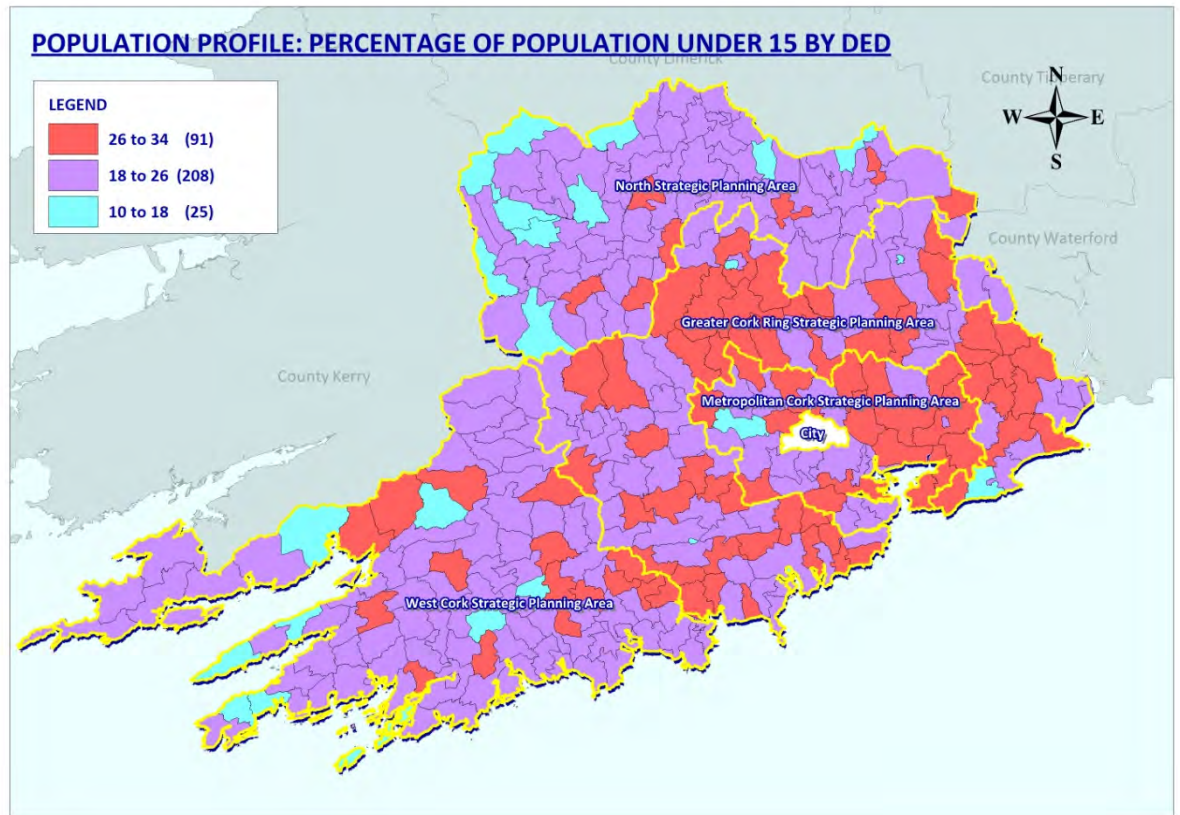


Figure 3-5: Population profile <15 by DED

3.2.12 Conversely, the highest proportion of 65+ age cohort is in the West and North Strategic Planning Areas which is expressed in figure 3-6 below. The proportion of the population aged 65 and over has risen from 37,911 in 2006 to 44,430 in 2011 which equates to a 17% increase in this cohort. Access to healthcare facilities, sheltered housing and nursing homes is an important consideration for this age group, in addition to ensuring that our town centres are 'age friendly' and deliver universal access.

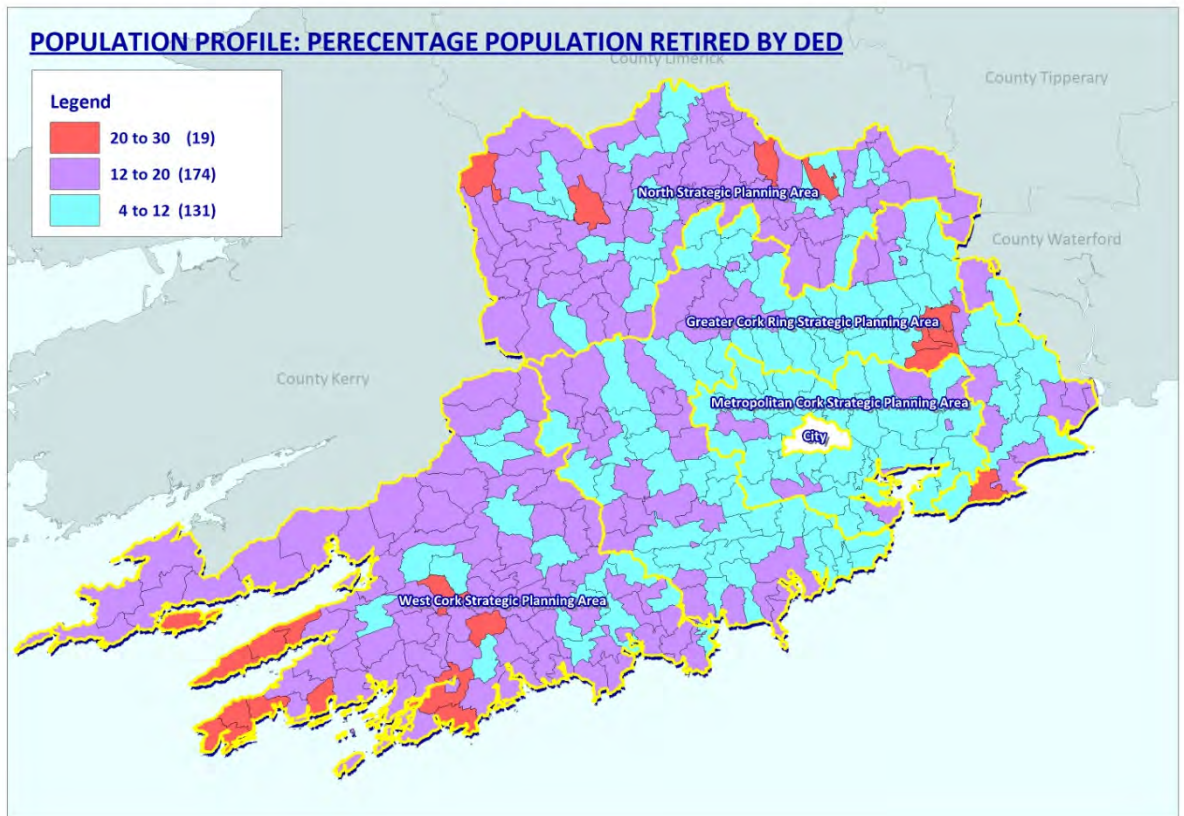


Figure 3-6: Population of 65+ by DED

- 3.2.13 The highest representation of the working cohort is within the Metropolitan area on the fringes of the City. Access to employment is a key requirement of this section of the population and the availability of employment and the creation of new employment opportunities is the foundation for future population and economic growth. The Core Strategy of the Draft County Development Plan seeks to direct 61% of future population growth to the Metropolitan Area so there will need to be a significant growth in employment to support and attract that level of population growth to the area. Employment creation needs to be facilitated in locations which are sustainable from a public transport point of view.

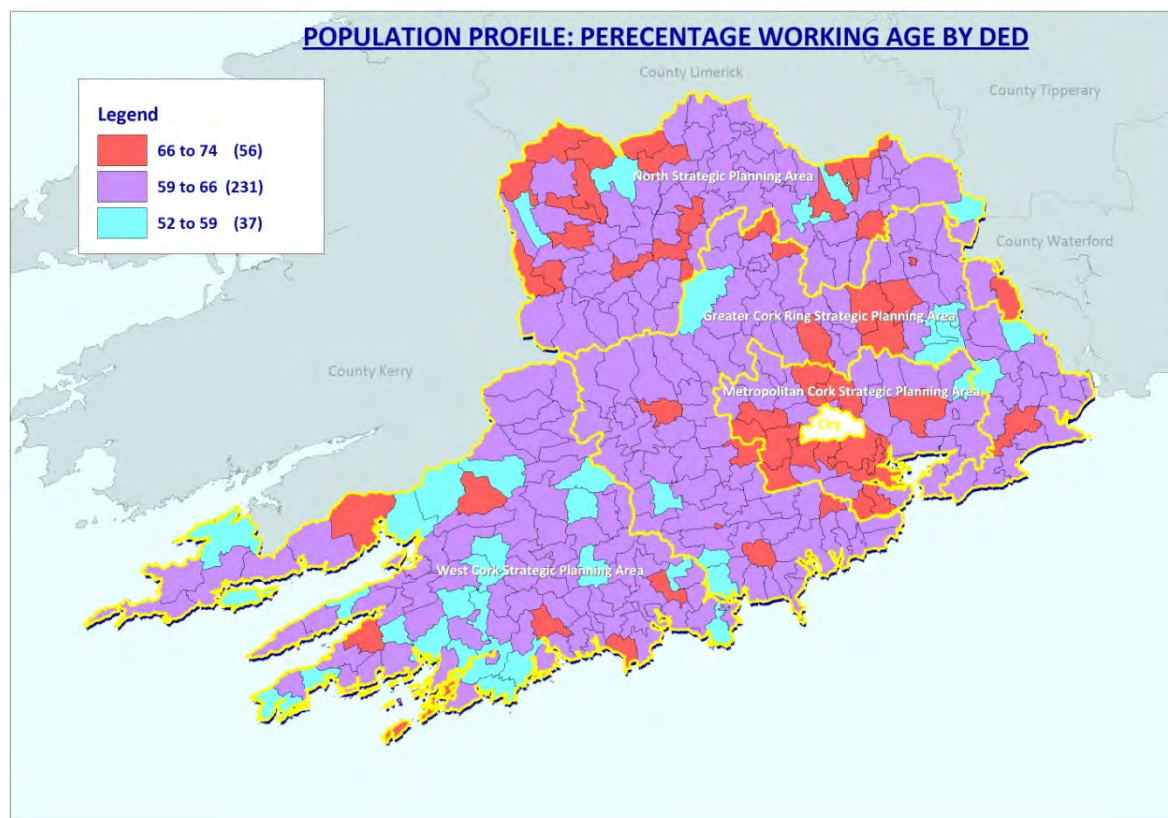


Figure 3-7: Population at Work (15-65 cohort) by DED

Housing

- 3.2.14 A Draft Joint Housing Strategy has been prepared by all local authorities in County Cork to ensure a common strategy for the provision of housing across the county and to examine the overall need for housing in the period 2015-2022 taking account of the population targets set out in the Regional Planning Guidelines. In the period since 2006 there has been a dramatic decline in the construction of new houses in Cork. The Core Strategy of the Draft County Development Plan identifies a need for the provision of 58,005 new housing units within the county in the period 2011-2022. In terms of the available land supply, the Core Strategy indicates that there is 2570 ha of zoned land available across the county to cater for such housing development and that this land supply, in addition to the level of growth provided for within the villages (see below), can provide 73,462 units, subject to the provision of appropriate transport and water services infrastructure. These figures are summarised in Table 3-4 below.
- 3.2.15 Ten Electoral Area Local Area Plans were adopted in 2010 which set out the Council's strategy for the development of all the settlements in the County – the main towns and a network of 275 villages and smaller settlements. Within the villages, land has not been zoned for housing but each village has a development boundary and the plan indicates the number of dwellings that could be developed up to the year 2020. Across the county as a whole the Local Areas Plans make provision for the development of 8,919 houses on unzoned land within the village network, subject to appropriate servicing etc.

- 3.2.16 Some of the villages also have outstanding planning permissions for multiple house developments on a scale in excess of the growth levels provided for by the LAPs. Were these developments to proceed then the supply of housing in the villages could be higher than anticipated by the LAPS. However, given the current economic climate it is likely that many of these developments will not proceed.

Strategic Planning Area	Housing Requirement				Housing Supply	
	Census 2011	Population Target 2022	Total New Households 2011-2022	New Units Required 2011-2022	Net Residential area zoned in CDP / LAP / TC	Total Units*
County Metropolitan	170,509	213,891	27,856	31,038	1241.94ha	36,620
Greater Cork Ring	118,418	131,882	12,431	13,406	705.63 ha	19,984
North	50,498	56,012	5,206	5,689	261.50 ha	7,142
West	60,377	68,837	7,000	7,872	360.90 ha	9,716
Total Cork County	399,802	470,622	52,493	58,005	2569.97 ha	73,462*
* Includes the target number of units on unzoned land within the villages as per the 2011 Local Area Plans.						

Employment

- 3.2.17 Access to employment is a key requirement of the population and the availability of employment and the creation of new employment opportunities is the foundation for future economic growth. Employment opportunities are spread throughout the county within all the main settlements and within rural areas. There is a particular concentration of employment within the metropolitan area at traditional industrial locations such as Ringaskiddy, Little Island, Whitegate, Carrigtwohill and Kilbarry, and in more recent times at the Airport Business Park. With the exception of Carrigtwohill, Kilbarry and the Airport Business Park, these locations have historically been developed as standalone employment centres because of the nature of the heavy industry located there and the need to separate residential uses to protect residential amenities. The Airport Business Park is a standalone centre because of the nature of the Airport function and the need to separate it from residential uses on amenity and safety grounds. As a result of the stand alone nature of these employment centres a significant proportion of the workforce commute to work by car. In order to reduce car-borne travel and improve quality of life, there is a need to promote sustainable alternatives to the car but this is very difficult given the dispersed nature of the settlement network. It is important that new population and employment growth is focused on locations where existing public transport facilities can be enhanced or where new transport investment is planned or capable of being delivered.



- 3.2.18 It is envisaged that significant employment opportunities will also arise in the future at Ballincollig and Midleton, which are major population growth centres with existing public transport services, and at the proposed Science Park at Curraheen which is supported by proposals for enhancing existing public transport services (high frequency bus) serving the area.
- 3.2.19 Figure 3-8 below illustrates the workforce catchment of the area broadly defined as Cork City as prepared by the All-Island Research Observatory, NUI Maynooth using POWSCAR data provided through the CSO from the 2011 Census and demonstrates the extent of the city's catchment as an employment area. The extent of the area, and the limited nature of public transport facilities beyond the city suburbs, highlights the dependence on car based commuting to access employment.
- 3.2.20 The map displays the percentage of the workforce within each ED that work within the area defined as 'Cork City' as shown by the black line. The City Area is defined to include Glanmire and Glounthaune / Little Island to the East, the airport to the South, Ballincollig to the West and almost as far as Blarney to the north. Within the area covered by the darker red shading, for example, over 50% of the population of the area commute to work in Cork City. Within the wider area shaded orange, which extends almost to Macroom in the west, beyond Killeagh to the east, along the coastline to the south and beyond Mallow to the North, 30-50% of the population work within the city area.

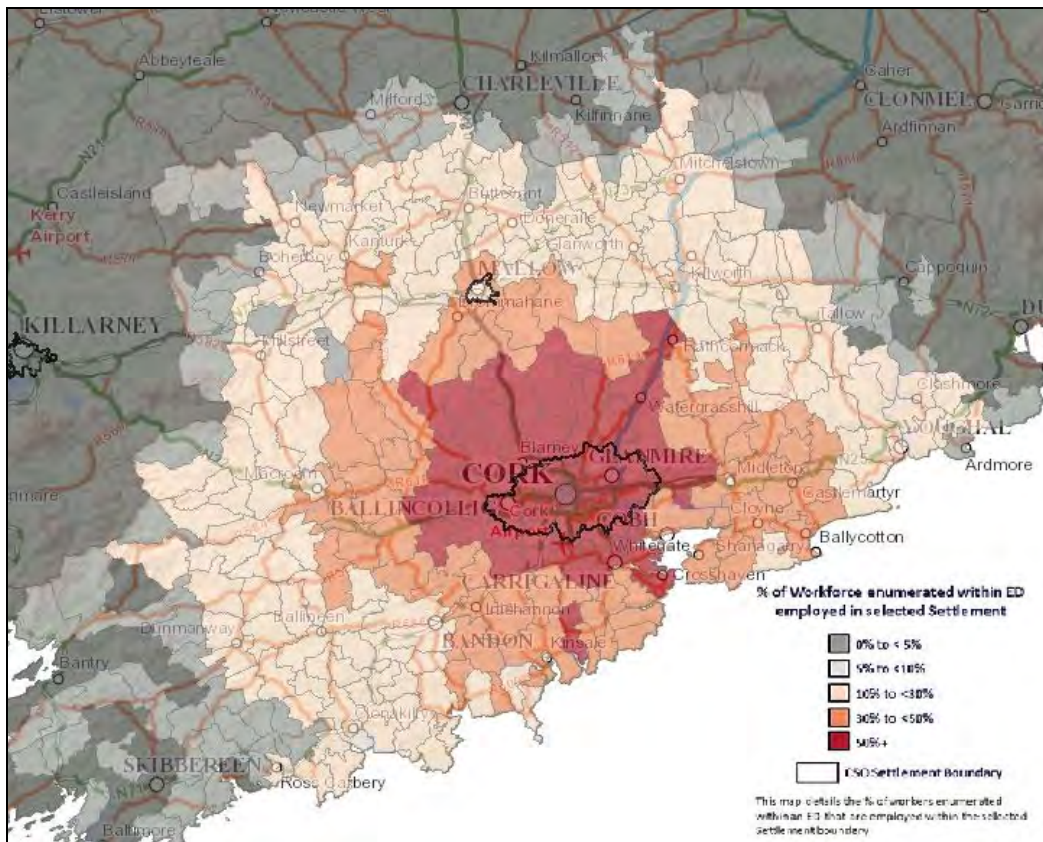


Figure 3-8: Workforce Catchment of Cork City

Existing problems

- 3.2.21 The key objective of the National Spatial Strategy and the National Development Plan is to achieve balanced regional development to underpin our national competitiveness and to bring people, jobs and services closer together to enhance economic, social and environmental sustainability, improve our competitiveness and deliver a better quality of life for the population as a whole. The development of the Cork Gateway as the economic engine for the region has a very significant role to play in delivering on this vision of balanced regional development and enhanced competitiveness. In this context, the divergence between the settlement strategy as expressed in the 2007 County Development Plan and the SWRPG, and the actual settlement pattern as evidenced by the census of population 2011 (which shows high rates of development in the villages and rural areas and low growth rates in the Cork Gateway and many of the county towns) is a matter of some concern as it represents a significant weakening of the urban structure of the county and the Gateway. If this trend continues, it will reduce the attractiveness of the Gateway to inward investment, negatively impacting in the long term on the economic opportunities available within the Gateway and the quality of life for the population as a whole.
- 3.2.22 Cork County has an extensive settlement network with 26 main towns, the north and south City Environs areas and a network of 275 villages and smaller settlements. Some of these towns and villages have water services infrastructure to support additional population growth and others (including many of the main towns) do not. In many settlements no further growth can take place until significant investment is undertaken in upgrading the water services infrastructure. There is therefore a danger, as happened already in the period to 2011, that the infrastructure required to release development land at the preferred urban locations will not be delivered on time, and the population growth will then disperse to other less sustainable locations around the county.
- 3.2.23 Bringing people, jobs and services closer together and discouraging dispersed development is a key principle of government policy on many levels as it helps achieve many targets in relation to sustainable development and in particular helps reduce emissions from the transport sector, enhances the viability of public transport and reduces impacts in the environment. Census 2011 indicates that 49% of the population of the county live in rural areas with 51% living in urban areas across an extensive settlement network. This spatial pattern presents many challenges for the future in terms of trying to promote sustainable development and grow and develop the Cork Gateway as the competitive, cost efficient engine for economic growth in the region.
- 3.2.24 The dispersed nature of the population coupled with the concentration of many employment opportunities within the metropolitan area and the towns, gives rise to a continued dependency on private car transport with its associated potential for adverse impacts on air quality and climatic factors. The provision of viable public transport services is very difficult in these circumstances. Even within the metropolitan area there is a significant mismatch between the settlement network and the main centres of employment which can make public transport services difficult to provide.
- 3.2.25 In many areas of the county the pace of development over the last few years has exceeded demand and with the dramatic slowdown in the economy many settlements have been left with vacant and unfinished housing developments and vacant retail and commercial space for which there is



currently no demand. This can detract from the amenity and vitality of these settlements. Given the focus for growth within the metropolitan area going forward, demand levels in some of the smaller settlements may not return to pre recession levels and the role of some of these settlements may need to be redefined.

- 3.2.26 High levels of dispersed rural one off housing can have adverse impacts on environmental quality because it is more carbon intensive and car dependent than more urban living patterns. Rural housing itself leads to the loss of agricultural lands and natural undeveloped areas with cumulative impacts on landscape character. The ongoing dependence on on-site waste water treatment and disposal systems can result in the localised pollution of soil and water which can also have adverse impacts on human health and the integrity of habitats and species. Dispersed rural housing can also hinder the delivery of alternative energy developments such as windfarms.
- 3.2.27 There continues to be a high demand for one off rural housing. Many people have a strong preference for rural living while for others it seems to be the way of escaping the perceived drawbacks of urban living. Many just want the opportunity to build their own house and the rural option is considered more affordable in this regard. If the aim of more compact sustainable higher density urban settlements is to be realised then more needs to be done to enhance the quality of life of urban residents and the type and cost of housing options available.

Likely evolution of Population in the absence of the County Development Plan.

- 3.2.28 The Draft Plan seeks to manage the spatial distribution of population growth in the future across the different Strategic Planning Areas and includes objectives regarding the delivery of the necessary supporting infrastructure required to deliver the growth at the locations prioritised by the strategy.
- 3.2.29 In the absence of the County Development Plan there would be no strategy to manage the growth of the County (in line with SWRPG targets) which would undermine the vision of delivering a strong, vibrant and competitive Gateway that would act as the principle engine of growth for the County and wider region. This could contribute to the weakening in the competitive advantage of Cork as an international location for inward investment because of the rising costs associated with a more dispersed population. In addition, there would be no integrated framework for the provision of infrastructure and services to match the target growth areas across the network of settlements, on which the implementation of many of the critical aspects of the plan depends.

3.3 Human Health

- 3.3.1 Human health is influenced by the environment in which people live and can be impacted on by various environmental vectors (e.g air, water, soil) through which pollutants may be transmitted, giving rise to hazards or nuisances to human health as well as more general quality of life issues such as the quality of the built environment, access to services, amenities and recreational facilities. The impact of development on human health is also influenced by the extent to which new development is accompanied by the necessary supporting infrastructure and services.
- 3.3.2 Access to clean water, air and soil are basic necessities for human health and are discussed later in this section.

Deprivation

- 3.3.3 Deprivation is frequently associated with poor health. Those who experience economic, social or education disadvantage are more likely to have poor health. The Deprivation Index of Ireland has compiled a map for the entire country and categorises DEEDS into a number of categories ranging from “Extremely Disadvantaged” to “Extremely Affluent”. This is compiled using a number of different sources. The majority of County Cork is characterised as “Marginally above average”. There are notably pockets of “affluent” and “very affluent” in the suburbs and adjacent to some of the County Towns. There is only a limited number (6 DEEDS) identified as “disadvantaged” and these are largely located on the northern and western periphery of the County.
- 3.3.4 Nationally, unemployment stands at 13.7% (May 2013). Unemployment and the current economic pressures faced by many people can have a significant effect on human health.
- 3.3.5 The government provides support mechanisms for areas of disadvantage within the State. The RAPID programme deals with urban areas of socio-economic disadvantage. There are only 2 towns within the County (Mallow and Youghal) identified for support in this programme. The government also provides support for disadvantaged rural areas under the Clár Programme. These are located to the north and west of the county.
- 3.3.6 In terms of what is necessary for human health Cork is well served with essential health and community infrastructure and facilities (i.e. amenity areas for recreational opportunities), high air quality and availability of a clean water supply.

Radon

- 3.3.7 Radon is a naturally occurring radioactive gas caused by the breakdown of Uranium which is found in underground rock. It is a colourless and odourless gas which disperses in air but it has been shown to be carcinogenic with risks of contracting lung cancer. A recent survey by the Radiological Protection Institute of Ireland highlighted that one of the areas of the country most at risk from high levels of radon is north Cork around Mallow and Mitchelstown and south of the County around Glanmire, Cobh and Kinsale. In these high radon areas more than 10% of the homes are predicted to have radon concentrations above the acceptable levels. Reducing the health risk from Radon involves a range of interventions to address prevention in new buildings and identification and



remediation of radon problems in existing buildings. A National Radon Strategy Group was established in 2011 to formulate solutions to the radon problem in Ireland. A Draft National Radon Strategy was published for consultation in January 2013 and is currently being finalised. The map (figure 3-9) below highlights the occurrence of radon within the county.

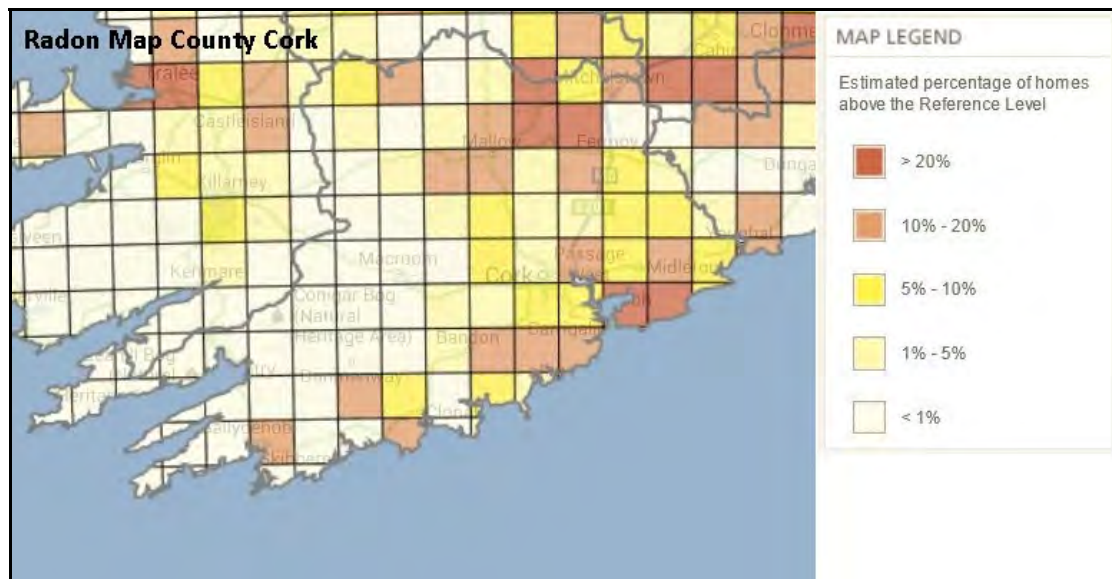


Figure 3-9: Radon Map of County Cork

Seveso Sites

- 3.3.8 The Seveso II Directive (European Directive 96/82/EC) and the European Communities (Control of Major Accident Hazards Involving Dangerous Substances) Regulations, 2000 (S.I. No. 476 of 2000) seek to reduce the risk and limit the consequences to both people and the environment, of accidents at manufacturing and storage facilities involving dangerous substances that present a major accident hazard. The provisions apply to companies where dangerous substances are present in quantities equal to or above specified thresholds - a lower one of 50 tonnes (“Lower tier sites”) and a higher one of 200 tonnes (“Top tier sites”). Lower tier sites are required to have a Major Accidents Prevention Policy and a Safe Work Systems Plan. Top tier sites are required to carry out, in conjunction with the local competent authority (including the HSA, Gardaí and Local Authority) a Major Accidents External Emergency Plan.
- 3.3.9 County Cork has the highest concentration of Seveso sites per Local Authority area in the country. Table 3-5 below lists the facilities subject to the Seveso II Directive within the County. There are a total of 11 “Higher Tier” sites and 9 “Lower Tier” sites at various locations. Emergency plans must take full account of objectives established for nearby waters in river basin plans. The legislation deals with the prevention of major accidents and imposes planning restrictions within and adjacent to listed sites.

Table 3-5: Seveso Sites

Name of Establishment	Location	Tier	Name of Establishment	Location	Tier
BASF Ireland Ltd.	Little Island,	1	Phillips 66 Whitegate Refinery Ltd.	Whitegate,	1
Calor Teoranta	Whitegate,	1	BOC Gases Ireland Ltd.	Little Island,	2
Calor Teoranta	Tivoli,	1	ESB Aghada Power Station	Whitegate,	2
Dynea Ireland Ltd.	Marino Point, Cobh	1	Hovione Limited	Loughbeg, Ringaskiddy	2
Eli Lilly S.A.	Dunderrow, Kinsale	1	Irish Distillers Ltd.	Dungourney	2
GlaxoSmithKline, Smith Kline Beecham (Cork) Ltd.	Currabinny, Carrigaline	1	Johnston Logistics Limited	Little Island	2
Irish Distillers Ltd.	Midleton	1	LPGas Filling Services	Quarterstown Mallow	2
Novartis Ringaskiddy Ltd.	Ringaskiddy,	1	Merck Millipore Ltd.	Tullagreen, Carrigtwohill	2
Pfizer Ireland Pharmaceuticals	API Plant, Ringaskiddy	1	Pfizer Ireland Pharmaceuticals	Little Island	2
Phillips 66 Bantry Terminals Ltd (formerly ConocoPhillips)	Reenrour, Bantry	1	Tervas Ltd.	Knockburden, Ovens	2

Existing Problems

- 3.3.10 Unemployment levels remain high in the current economic recession and this coupled with the collapse of the property market places many families under significant stress which can effect health.
- 3.3.11 Cork County Council has tested over 4,500 homes, including all of its social housing stock in high radon areas, for the gas. The survey identified over 200 homes with high levels of gas and works have been undertaken to reduce the levels present. There is an on-going programme of testing by the Council which will be carried out in newly occupied homes to ensure new tenants are given the same protection against radon.

Evolution in the absence of the County Development Plan

- 3.3.12 The County Development Plan currently limits the risk to human health within the potential impact zone of Seveso sites by managing proposals for new development within such areas. In the absence of the Development Plan for County Cork, development would proceed in a more unplanned and ad-hoc manner which would have an indirect negative effect on human health as a result of negative effects on other environmental elements such as air, water quality and biodiversity and an overall lower quality of life for inhabitants of the county.



3.4 Biodiversity Flora and Fauna

Introduction

- 3.4.1 Biodiversity, short for biological diversity, is the term used to describe the variety of life found on Earth and all of the natural processes. The term includes the variety of species, plants, animals and micro-organisms found on earth, but it also includes the places (habitats and ecosystems), where these organisms live. There is value, not only in huge diversity of species and habitats that have evolved on our planet over billions of years (diversity between species), but also in the genetic diversity which is found within species (for example the genetic differences between varieties of crops or breeds of livestock).
- 3.4.2 Biodiversity is a primary indicator of the health of our surroundings and is inextricably linked to the welfare of human beings. We depend on the ability of nature to sustain and replenish itself, to constantly renew and exchange. Biodiversity gives us many of the essentials of life - oxygen, water, food, clothing and health. It is fundamental to human existence and is essential to human survival.
- 3.4.3 Flora and fauna refers to plants and animals, respectively. The indigenous plant and animal species of a geographical region are often referred to as that region's flora and fauna.
- 3.4.4 The National Biodiversity Data Centre have published a national inventory of biodiversity ("State of Knowledge, Irelands Biodiversity 2010") which identifies more than 31,000 species occurring in Ireland, 60% of which are invertebrates. Only 10% are 'familiar' species such as plants, birds or mammals. Much of Irelands richest biodiversity is in the marine environment where we have high numbers of whale and dolphin species, large seabird breeding colonies and cold water coral communities. Ireland is also an important staging post and destination for migratory birds and holds significant populations of birds which are rare elsewhere in Europe, as well as internationally important wetlands for bird communities. Many of our habitats are internationally important because of their scarcity elsewhere in Europe.
- 3.4.5 In 2009 Cork County Council produced the Cork County Biodiversity Action Plan which was to foster awareness of a range of heritage issues and support the development of pro-active policies. The overall aim of County Cork Biodiversity Action Plan is to conserve and to enhance biodiversity and to ensure that every person in the county has the opportunity to appreciate and understand its importance on our lives. The Plan takes into account the overall goal, objectives and principles of the Convention on Biological Diversity, as well as the National Biodiversity Action Plan, and translates them into a local County Cork context.

Legislation

- 3.4.6 Our biodiversity is protected by both European and Irish legislation, most particularly the EU Habitats and Birds Directives, the EU (Natural Habitats) Regulations 2011, and the Irish Wildlife Acts (1976 and 2000). The requirements of the Habitats and Birds Directives have been incorporated into planning law in the Planning and Development (Amendment) Act, 2010.



The Habitats Directive and Special Areas of Conservation

- 3.4.7 The Habitats Directive provides for the protection of biodiversity across Europe through the designation of Special Areas of Conservation. These sites are proposed or designated for protection because they support habitats and/or populations of plant and animal species that have been identified to be rare or threatened at a European level.
- 3.4.8 The habitats for which sites can be proposed for designation include coastal habitats such as sand dunes, upland habitats such as blanket bog and heath, freshwater habitats including lakes and rivers, and a number of different woodland types. The species for which such sites are proposed for designation include both plants and animal species eg Killarney Fern, Otter, Salmon and Freshwater Crayfish. Many sites support more than one protected habitat type and they may also support protected species. These sites are selected because they support the best national examples of important habitats, and/or they support important populations of protected species. Legal protection applies to both proposed and designated Special Areas of Conservation.

The Birds Directive and Special Protection Areas

- 3.4.9 The Birds Directive provides for the protection of sites used (for breeding, roosting or feeding) by species of birds that are rare, or vulnerable or in danger of extinction. It also provides for the protection of areas that are particularly important for migratory birds, where they congregate in significant numbers. These are usually wetlands, and include many coastal estuarine sites. Sites designated under the Birds Directive are called Special Protection Areas.

The Natura 2000 Network

- 3.4.10 The network of sites designated or proposed for designation across Ireland and Europe under the Habitats and Birds Directives is known as the Natura 2000 Network. This network includes Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), as well as sites that are proposed for designation as SACs or SPAs. The sites are also known as Natura 2000 sites or European Sites. Proposed developments affecting or potentially affecting such sites must be assessed by the Planning Authority and developments which would adversely affect the integrity of these sites, cannot generally proceed, except in very exceptional circumstances.

The Wildlife Act and Natural Heritage Areas

- 3.4.11 Natural Heritage Areas (NHAs) and proposed Natural Heritage Areas (pNHAs) are sites that are designated or proposed for designation under the Wildlife (Amendment) Act 2000. These are sites that are of national importance and they generally support a range of habitats, plant and animal species and, in some cases, geological features. The Cork County Development Plan provides protection for these sites, and as such, the Planning Authority must have regard to the potential for any development proposal to impact on such sites during the planning assessment process.

Designated sites

- 3.4.12 The designation of sites at a national level is the responsibility of the Department of the Arts, Heritage and the Gaeltacht. There are 30 designated Special Areas of Conservation (SACs) and 18 Special Protection Areas (SPA's) across County Cork, which together make up the Natura 2000 Network of sites throughout Europe - see Tables 3-6 to 3-9 below and Figure 3-10.



Table 3-6: candidate Special Areas Of Conservation in County Cork

Site Code	Site Name	Site Code	Site Name
0077	Ballymacoda (Clonpriest and Pillmore)	1070	Myross Wood
0090	Glengarriff Harbour & Woodland	1230	Courtmacsherry Estuary
0091	Clonakilty Bay	1547	Castletownshend
0093	Caha Mountains .	1873	Derryclogher (Knockboy) Bog
0097	Lough Hyne Nature Reserve and Environs	1879	Glanmore Bog
0101	Roaringwater Bay and Islands	1890	Mullaghanish Bog
0102	Sheep's Head	2036	Ballyhoura Mountains
0106	St. Gobnet's Wood	2037	Carrigeenamronety Hill
0108	The Gearagh	2158	Kenmare River
0109	Three Castle Head to Mizen Head	2165	Lower River Shannon
0365	Killarney National Park, Magillycuddy Reeks and Caragh River Catchment	2170	Blackwater River (Cork/Waterford)
1040	Barley Cove to Ballyrisode Point	2171	Bandon River
1043	Cleanderry Wood	2189	Farranamanagh Lough
1058	Great Island Channel	2280	Dunbeacon Shingle
1061	Kilkeran Lake & Castlefreke Dunes	2281	Reen Point Shingle

Table 3-7: Special Protection Areas in County Cork

Existing SPA		Proposed SPA	
Site Code	Site Name	Site Code	Site Name
4021	Old Head of Kinsale	4081	Clonakilty Bay
4022	Ballycotton Bay	4155	Beara Peninsula
4023	Ballymacoda Bay	4156	Sheep's Head to Toe Head
4028	Blackwater Estuary	4161	Stack's to Mullaghareirk Mountains,
4030	Cork Harbour	4162	Mullaghanish to Musheramore Mts.
4066	The Bull and the Cow Rocks	4190	Galley Head to Duneen Point
4094	Blackwater Callows	4191	Seven Heads
4095	Kilcolman Bog		Courtmacsherry Bay
4109	The Gearagh		
4124	Sovereign Islands		

Table 3-8: Natural Heritage Areas in County Cork

Site Code	Site Name	Site Code	Site Name
1059	Hungry Hill Bog	2416	Pulleen Harbour Bog
2105	Derreennatra Bog	2417	Leahill Bog
2371	Trafrask Bog	2447	Boggeragh Mountains
2386	Conigar Bog	2449	Mount Eagle Bogs

Table 3-9: Proposed Natural Heritage Areas in County Cork

Site Code	Site Name	Site Code	Site Name
12	Ballinvonear Pond	1066	Lough Beg (Cork)
72	Blackwater River and Estuary	1067	Lough Gal
73	Blackwater River Callows	1069	Lough Namaddra and Lough West
74	Awbeg Valley (below Doneraile)	1071	Owen's Island
75	Awbeg Valley (above Doneraile)	1072	Priory Wood, Lismire
76	Ballycotton, Ballynamona & Shanagarry	1073	Roancarrigbeg & Roancarrimore
78	Ballyvergan Marsh	1074	Rockfarm Quarry, Little Island
79	Bride/Bunaglanna Valley	1075	Rosscarbery Estuary
80	Bull and Cow Rocks	1076	Rosttellan Lough, Aghada Shore and Poul nabibe Inlet
83	Capel Island and Knockadoon Head	1077	Seven Heads and Dunworly Bay
84	Castletownshend (Gate Lodge)	1080	Blackwater Valley (Killavullen)
85	Glanworth Ponds	1082	Dunkettle Shore
86	Dursey Island	1083	Toon Bridge Wood
87	Garrylucas Marsh	1084	Whitegate Bay
88	Glengarriff (Thatched Shooting Lodge in Forest Park)	1169	Brown's Farm, Togher Cross Roads
92	Kilcolman Bog	1183	Clasharinka Pond
94	Lee Valley	1235	Ballyquirk Pond
98	Loughavaul	1248	Prohus Wood
99	Ballynaclashy House, North of Midleton	1249	Ballincollig Cave
100	Old Head of Kinsale	1284	Cappul Bridge
103	Shournagh Valley	1408	Carrigacrump Caves
105	Sovereign Islands	1498	Dirk Bay
107	Templebreedy N.S., Crosshaven	1515	Bandon Valley below Inishannon
110	Whiddy Island	1537	Rosnahunsoge
371	Fountainstown Swamp	1561	Awbeg Valley (Castletownroche)
446	Loughs Aderry and Ballybutler	1740	Bandon Valley above Inishannon
593	Kilcatherine Heath	1793	Blackwater Valley (Ballincurrag Wood)
899	Ballindangan Marsh	1794	Blackwater Valley (Kilcummer)
1028	Orthon's Island, Adrigole Harbour	1795	Blackwater Valley (Killathy Wood)
1029	Araglin Valley	1796	Blackwater Valley (Cregg)
1034	Bandon Valley West of Bandon	1797	Blackwater Valley (The Beech Wood)
1035	Bandon Valley South of Dunmanway	1798	Blarney Lake
1036	Banteer Ponds	1799	Ardamadame Wood
1037	Bateman's Lough	1826	Currakeel
1039	Blarney Castle Woods	1829	Ballinaltig Beg Pond
1042	Carrigshane Hill	1854	Boylegrove Wood
1043	Cleanderry Wood	1857	Blarney Bog
1044	Cloonties Lough	1887	Derreen Upper Bog
1046	Douglas River Estuary	1966	Minane Bridge Marsh
1049	Eagle Lough	1977	Sheelane Island
1050	Eyeries Island	1978	Ballycotton Islands
1051	Firkeel Gap	1979	Monkstown Creek
1052	Gallanes Lough	1985	Kilkinnikin
1053	Garrettstown Marsh	1986	Garinish Point
1054	Glanmire Wood	1987	Cuskinny Marsh
1055	Glashgarriff River	1990	Owenboy River
1057	Gouganebarra Lake	2049	Domestic Dwelling (near Glengarriff)
1059	Hungry Hill	2050	Cregg Castle
1060	James Fort	2086	Ballintlea Wood
1062	Killaneer House Glen	2097	Conavmore, Ballyhooly (near Fermoy)
1064	Leamlara Wood	2099	Carriganass Castle, near Kealkill
1065	Lough Allua		

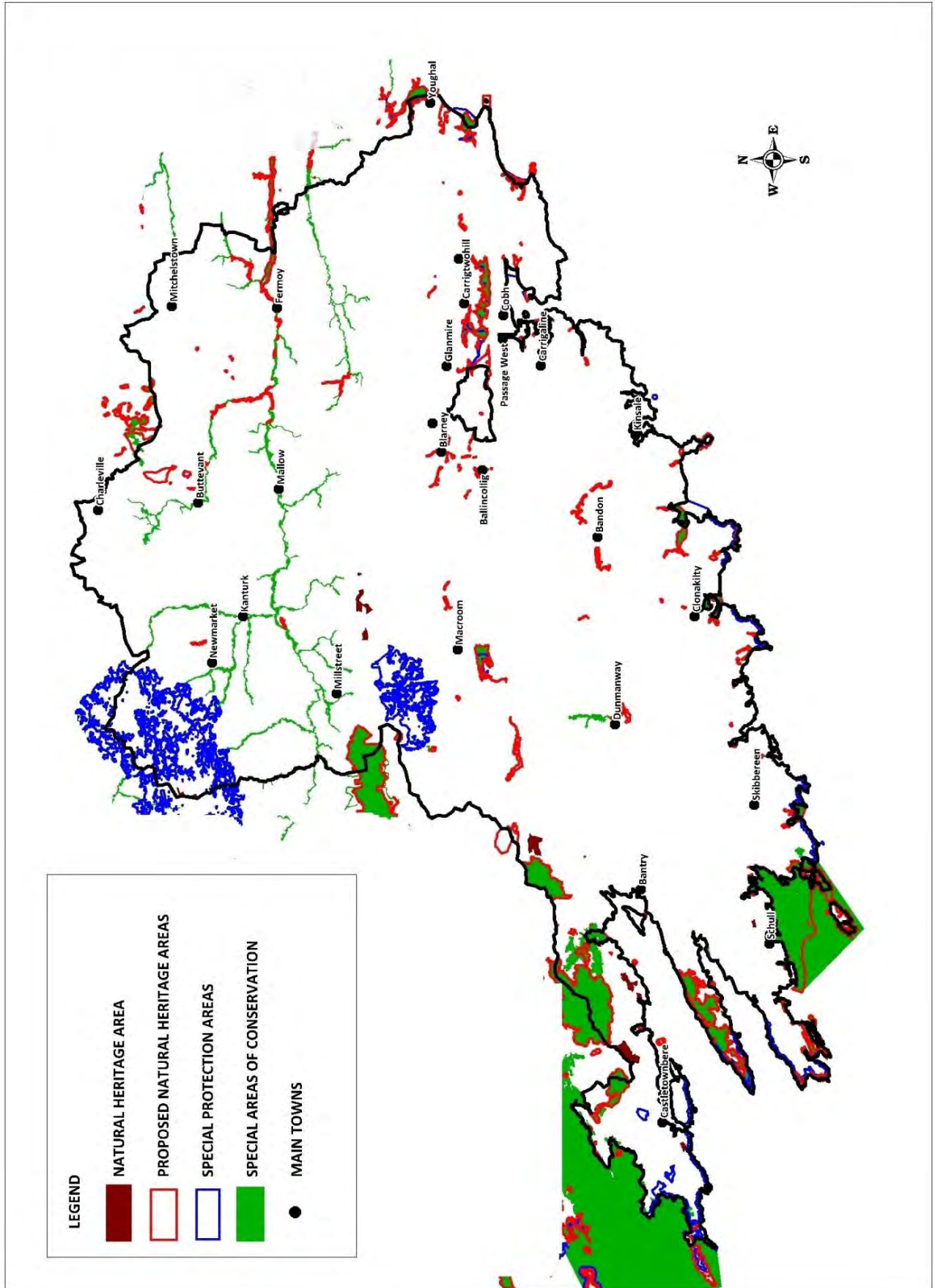


Figure 3-10: Protected Sites

Wetlands

3.4.15 Wetland habitats occur where the water table is at or near the land surface, or where the land is periodically covered by shallow water. They include a range of different habitat types including marshes, fens, reedbeds, bogs and wet woodlands. These areas tend to have high biodiversity value, as well as serving other functions relating to the protection of water quality and protection from flooding. While many protected areas include wetlands, most occur outside protected sites. Works involving the drainage or reclamation of a wetland generally require planning permission and may be subject to Environmental Impact Assessment.

Ramsar Sites

3.4.16 There are 5 Ramsar wetland sites within County Cork which cover internationally important wetlands. Wetlands are areas where water is the primary factor controlling the environment and the associated plant and animal life. They occur where the water table is at or near the surface of the land, or where the land is covered by shallow water. The Convention on Wetlands is an intergovernmental treaty which provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources. The 5 Ramsar sites in County Cork include the following:

- The Gearagh:
- Cork Harbour (Rostellan Lough, Aghada Shore and Poul nabibe Inlet)
- Ballymacoda (Clonpriest and Pillmore):
- Ballycotton, Ballynamona, and Shanagarry
- Blackwater River and Estuary

Nature Reserves

3.4.17 A Nature Reserve is an area of importance to wildlife, which is protected under Ministerial order. Nature reserves include land, inland waters or foreshore areas forming the habitat of a species or community of flora and fauna of scientific interest, which would benefit from protection measures, established under the Wildlife Act, 1976 and the Wildlife (Amendment) Act, 2000. Most nature reserves are owned by the State, however, some reserves are also owned by organisations or private landowners. There are 6 nature reserves in Cork County:

- Capel Island and Knockadoon Head Nature Reserve
- The Gearagh
- Kilcolman Bog Nature Reserve:
- Knockomagh Wood Nature Reserve
- Lough Hyne Nature Reserve
- Glengarriff Harbour and Woodland



Refuges for Fauna

- 3.4.18 Refuges for Fauna are designated by ministerial order under Section 17 of the Wildlife Act 1976 as amended by Section 28 of the Wildlife (Amendment) Act 2000. The objective of this designation is the protection of a named species of wild animal (vertebrate or invertebrate). The designation's main use in Ireland has been in protecting breeding bird species on marine cliffs and small islands where there is no threat of potentially damaging activities due to the inaccessibility of the sites. There are three Refuges for Fauna in Cork – Bull Rock, Cow Rock and the Old Head of Kinsale.

Biogenetic Reserve

- 3.4.19 The Council of Europe launched the concept of a European Network of Biogenetic Reserves in 1973, the programme was started in 1976. The objective of this designation is conservation of representative examples of natural European heritage, scientific research and exchange of information. The Gearagh near Macroom was formed at the end of the last iceage and contains the best example in Ireland of an alluvial woodland ecosystem, rich in submerged aquatic plants and riverine grasslands and is designated as a Biogenetic Reserve.

Wildfowl Sanctuaries

- 3.4.20 These sanctuaries are areas that have been excluded from the 'Open Season Order' so that game birds can rest and feed undisturbed. Shooting of game birds is not allowed in these sanctuaries. There are 5 Wildfowl Sanctuaries in Cork - Ballynamona – Shannagarry, Douglas Estuary, Kilcolman Bog, Lee Reservoir and River Blackwater. -

Protected Species

- 3.4.21 County Cork supports a diverse range of native species associated with terrestrial, freshwater, coastal and marine habitats. Some plant and animal species are protected by national or international legislation as they are considered to be rare in a national or international context. Most native Irish mammals, amphibians and birds, and some native fish and invertebrate species are protected. Of particular relevance are plant species listed under the Flora Protection Order; plant and animal species listed in the Habitats Directive; birds listed in the Birds Directive; and plant and animal species protected under the Wildlife Act.
- 3.4.22 There are 139 protected species occurring within County Cork including 38 protected animal species, 80 protected bird species and 29 protected plant species. (Full details of all the protected species are included in Appendix B Protected Species). Many of the species are identified as being of Special Conservation Significance in Cork (Cork County Biodiversity Action Plan). Some bird species are listed in Red Data Books (species considered rare or threatened). Many species have a particular local significance. For example, these may be species that we observe more readily in County Cork (e.g. Leisler's Bat (*Nyctalus leisler*) than in other parts of the country, or for that matter in Europe. There are other species for which County Cork is especially important in maintaining the population at regional or national level. Examples here include the particularly rare plant Spotted Rock-rose (*Tuberaria guttata*) which is found in a few locations in West Cork and the Barn Owl (*Tyto*

alba), which has undergone a serious decline across the country but for which County Cork remains a stronghold. Full details of all the protected species are included in Appendix B Protected Species.

Habitats of Special Conservation Importance

3.4.23 A number of different habitat types are deemed to be of Special Conservation Importance in Cork and these are listed in the Table 3-10 below. These are habitats that are considered rare, at risk or have undergone/are undergoing a high rate of decline in extent and/or quality at a national/regional or local level and therefore it is important to protect examples in Co Cork. Also included are habitats which are important for assemblages of key species/species of conservation concern and habitats subject to a significant increase in human activities which are likely to cause damage (and therefore cause a decline in habitat extent/quality in future) and habitats for which there are significant gaps in knowledge within the county. The objective is to protect these types of habitats where they occur.

Lakes and ponds : Dystrophic Lakes Acid oligotrophic lakes Mesotrophic lakes Eutrophic lakes	Heath Montane heath
Watercourses Eroding upland rivers Depositing lowland rivers	Peatland Upland blanket bog Cutover bog Lowland Blanket Bog Poor Fen and Flush Transition Mire
Swamps Reed and large sedge swamps	
Freshwater marsh Marsh	Exposed rock Exposed calcareous rock
Semi-natural woodlands Oak-birch-holly woodland Oak-ash-hazel woodland Oak-birch-holly woodland Yew woodland Wet pedunculate oak-ash woodland	Coastal Habitats Coastal soft cliffs Lagoons and saline lakes Sand dunes – Embryonic dunes, Marram dunes and Fixed dunes Salt Marsh – lower salt marsh, upper Salt Marsh
Semi-natural grasslands Lowland hay meadows Dry calcareous grassland Species-rich wet grassland Molinia grassland	Marine Habitats Rocky shores Littoral sediments

Ecological Networks and Corridors

3.4.24 The EU Habitats Directive recognises the importance of ecological networks as corridors and stepping stones for wildlife. These areas are particularly important for the successful migration, dispersal and genetic exchange of species. The Habitats Directive requires that ecological connectivity and areas of ecological value outside the Natura 2000 network are maintained and managed in land use planning and development policies. Ecological networks are important in connecting sites of local biodiversity with each other and with designated sites and can help prevent islands of habitats becoming isolated and hence reducing species range in the County.



Ecological networks are composed of linear features such as treelines, hedgerows, rivers and streams. These provide corridors or stepping stones for wildlife species which allow them to move within their normal range. Ecological networks are very important for many mammal species particularly bats and also for fish of both marine and freshwater systems that use them for spawning and breeding at certain times of the year e.g. salmonid species.

- 3.4.25 It is the intention of Cork County Council to identify, survey and map areas of high biodiversity value and corridors. This process has begun with the County Habitat Mapping Project and work has been completed in the Blarney, Carrigaline and Midleton Electoral Areas but needs to be completed for the rest of the county.
- 3.4.26 Woodland areas are also very important ecological stepping stones for species in the County. As well as the Annex I woodlands there are other types of woodland in the County that are of conservation interest including various Oak-Ash-Hazel, (mixed) Broadleaved woodland and mixed Broadleaved/Conifer woodland. A great number of these occur in areas with no designated protection and their conservation as ecological corridors is significant. A complete dataset of these woodlands is not available at present.

Hedgerows and Grassland habitats

- 3.4.27 Hedgerows and scrub can be viewed as small patches of woodland and are an important feature in the Irish agricultural landscape, providing ideal habitat for many species as well as 'wildlife corridors' that provide safe passage from one place to another. Woodlands and hedgerows are important habitats for many bat species; while mature trees may provide safe roost sites it is known that bats follow linear feature such as hedgerows when foraging at night.
- 3.4.28 As highlighted in the Corine Land cover mapping below, the majority of Cork is made up of grassland pastures. These habitats are largely agricultural and improved in nature. Interspersed with hedgerows and pockets of woodland and scrub, the less improved grasslands have important biodiversity value for a range of 'farmland' species including birds, mammals and invertebrates.
- 3.4.29 The Cork County Biodiversity Action Plan 2009-2014 includes a number of actions related to grasslands and hedgerows. It proposes the continued development of the County Habitat Mapping Project and the development of GIS based ecological dataset incorporating information on all habitats including hedgerows and grasslands. The implementation of such an objective will help address the current data deficiencies that exist in relation to hedgerows across the County. In addition the need to provide training and guidance documentation for staff around environmentally sensitive management practises including the management of hedgerows and old trees is also identified in the Plan.

Peatlands

3.4.30 Just 8% of the county comprises peatland. Peatlands are an important ecosystem sustaining a range of animal and plant species but are under constant pressure from domestic and commercial peat extraction, afforestation, wind farms, recreational activities and invasive species. Peatlands act as a natural carbon store but once the peatland is damaged the carbon is released. Release of terrestrial carbon from soil and biomass is a major source of carbon dioxide, the main contributor to climate change. Damage to peatland can also impact on water quality due to siltation, increased nutrient release from drained bogs and increased acidification from afforestation on bogs. Some of the best examples of peatland habitat in Cork are designated Natura sites or as proposed Natural Heritage Areas and are therefore protected.

Aquatic Habitats and Biodiversity

3.4.31 In addition to land based biodiversity, Cork possesses a variety of aquatic ecosystems that significantly contribute to the county's biodiversity richness. These systems include;

- freshwater habitats such as rivers, streams, drainage ditches, lakes and ponds.
- coastal habitats including rocky sea cliffs and coastal heaths, coastal lagoons and sand dune systems.
- intertidal habitats which extend from the top of the shoreline to the low water level, and mark the transition from land to sea. Although this zone is often no more than a few metres in vertical height, the richness in life can surpass many other habitats. County Cork has long stretches of rocky shorelines where specially adapted plant and animal communities thrive..
- the open sea is defined by a wide variety of complex subtidal communities. The upper portion of the 'sub-littoral' zone frequently holds dense stands of kelp, these 'kelp forests' providing important habitats for fish, birds and mammals. Deeper areas are dominated by animals rather than by algae, with this habitat being particularly interesting in sheltered coastal area. The seas around Cork contain a rich diversity of mammal species.

Protected Aquatic Habitats

3.4.32 All aquatic ecosystems are important, supporting a variety of habitats and a wide range of species, as well as providing vital water resources for people. EU Regulations provide for the protection/maintenance of prescribed water quality standards in certain rivers or coastal waters, for particular species that are of value from a biodiversity and commercial perspective as follows:

Salmonid Waters

3.4.33 There are four designated Salmonid Waters in County Cork as prescribed under the European Communities (Quality of Salmonid Waters) Regulations, 1988. These include the main channels of the River Argideen, Blackwater, Bride and Lee (from source to City waterworks)



Shellfish Waters

3.4.34 These waters are protected under the Shellfish Waters Directive, which aims to protect or improve such waters in order to support shellfish life and growth. The directive is designed to protect the aquatic habitat of bivalve and gastropod molluscs, which include oysters, mussels, cockles, scallops and clams. The Directive requires Member States to designate waters that need protection in order to support shellfish life and growth. The Directive sets physical, chemical and microbiological requirements that designated shellfish waters must either comply with or endeavour to improve.

3.4.35 At the beginning of 2007 there were 14 areas designated as shellfish waters in Ireland within the meaning of the Directive and the 2006 Regulation and, of these 3 were in Cork County:

- Glengarriff Harbour
- Roaringwater Bay
- Bantry Bay Inner

3.4.36 In July 2007 the Government selected additional waters to be designated as Shellfish Growing Waters which specifies the minimum standards of water quality that must be maintained in bays and inlets around the Irish coast where shellfish are grown. Strict measures and penalties will be applied in order to ensure the protection of the water quality in these areas. There are now 68 designated shellfish water areas afforded protection nationally. The new shellfish protection waters designated in Cork County, identified in figure 3-11 include:

- | | |
|--------------------------------|-------------------------------|
| Toormore Bay | Ballymacoda Bay |
| Adrigole Harbour | Castketownbere |
| Kinsale Harbour | Sherkin Island |
| Oyster Haven | Great Island North |
| Dunmanus Inner | League Point |
| Ardgroom | Bantry Bay South ¹ |
| Rostellan North, South & West. | |

¹ www.dcmnr.gov.ie/





Figure 3-11: Shellfish Waters

Fresh Water Pearl Mussel

- 3.4.37 While freshwater habitats are home to a number of species, one species which is of particular importance in Cork is the Fresh Water Pearl Mussel (*Margaritifera margaritifera*). This mussel requires clean, cool, well-oxygenated water free from mud and suspended matter. It is a declining species throughout Europe and in Ireland particularly over the past 50 years and has been listed on the IUCN red data book as endangered worldwide.
- 3.4.38 The species requires very high quality rivers with clean river beds and waters with very low levels of nutrients. Its decline in Ireland has been attributed to the continuous failure to produce new generations of mussels because of the loss of clean gravel beds, which have become infiltrated by fine sediment and/or over-grown by algae or macrophytes. While there remain adult populations in many rivers, there has been no recruitment to the populations of this species for up to thirty years in some rivers.
- 3.4.39 The Fresh Water Pearl Mussel is protected under the Wildlife Acts, 1976 and 2000 and is listed on Annex II Habitats Directive, which means that it is a species for which EU member states must designate Special Areas of Conservation. It is included on the red data list for Ireland as being critically endangered. Under the Water Framework Directive, River Basin Management Plans (RBMPs) have been prepared for each River Basin District in Ireland. The RBMPs include a programme of measures for the protection and improvement of water quality. In tandem with these plans, draft Sub-basin Management Plans for the Pearl Mussel catchments have been

prepared by the Department of the Environment, Heritage and Local Government (DEHLG). These draft plans identify critical local pressures and impacts on the freshwater pearl mussel, and stipulate additional measures which are required for restoration to favourable conservation status.

3.4.40 All nine designated freshwater pearl mussel populations in the South Western RBD have failed most of the requirements as specified in the European Communities Environmental Objectives(Freshwater Pearl Mussel) Regulations (SI 296 of 2009) due to water quality conditions and are at unfavourable conservation status. The catchments of particular concern in County Cork include:

- Allow - According to the South West River Basin Management Plan (2009-2015), the pearl mussel population is failing due to the deterioration in habitat quality which is evident from the high levels of siltation and macrophyte growth. Its demographic profile is poor as there are not the numbers of juveniles present in the population to provide sustainable replacement of the current adult numbers.
- Bandon/Caha – the SWRBMP states that the pearl mussel population of *Margaritifera* in the Bandon and Caha is not likely to be in favourable condition, based on most recent available information from surveys in 2005 and on habitat surveys in 2009. Its demographic profile is poor and there is an absence of juveniles and rarity of small mussels throughout the catchment.
- Munster Blackwater – The SWRBMP highlighted that the monitoring of this catchment is incomplete. Three sites were investigated on the main channel of the Munster Blackwater upstream of Rathmore in 2009 and no *Margaritifera* were found. Heavy siltation has been observed at all locations investigated to date (both upstream and downstream of Mallow), indicating that conditions are unsuitable for the survival of juvenile mussels in the Munster Blackwater system.
- Owenagappul (on the Beara)

3.4.41 Development within the Freshwater Pearl Mussel catchments requires very careful assessment in terms of its likely impact on this species. Figure 3-12 below outlines the Freshwater Pearl Catchments in County Cork.



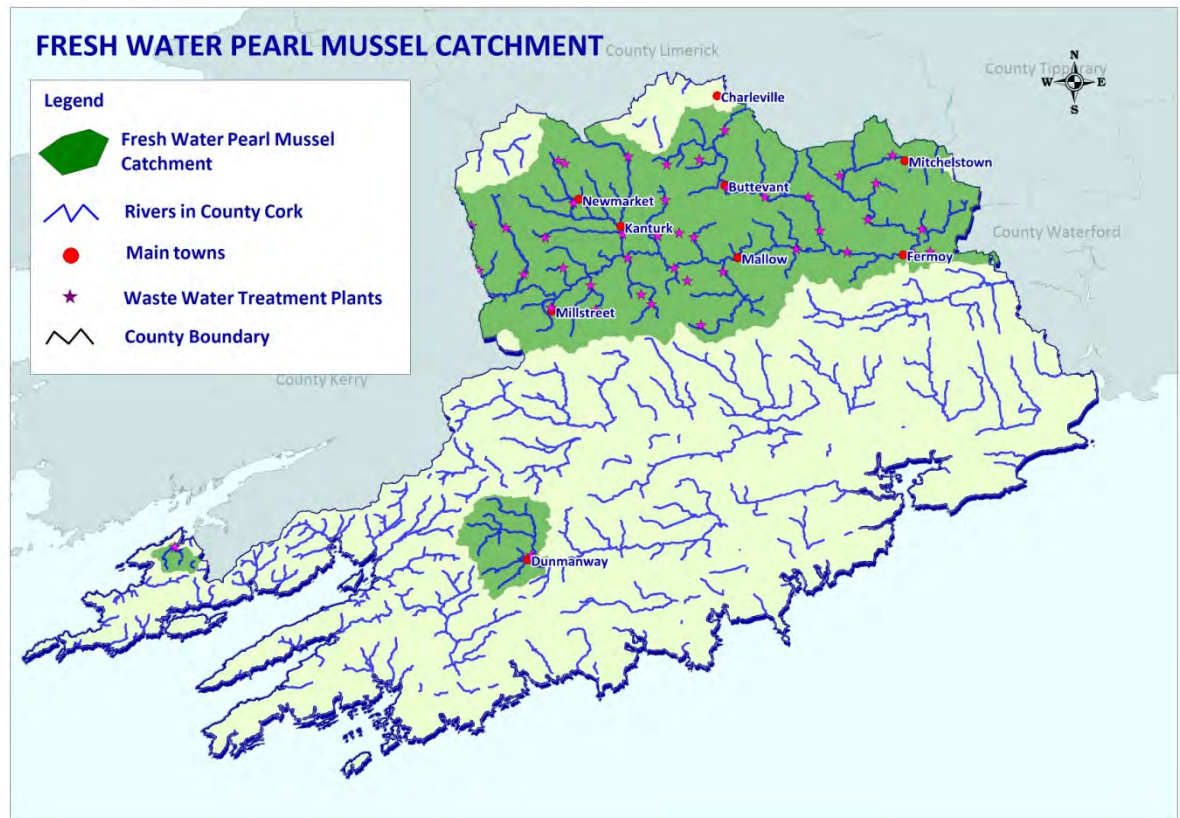


Figure 3-12: Freshwater Pearl Catchments

Corine Land Cover Mapping

3.4.42 Corine Land Cover (CLC) is a map of the European environmental landscape based on interpretation of satellite images. The most up to date mapping for Cork County is from 2006. As expected it shows the concentration of urban areas in and around the metropolitan Cork Strategic Planning Area. In total, the urban fabric only makes up 1.6% of land cover in the County. The map also shows that the majority of the land cover is made up of pasture land (56%), with the highest concentration of arable land to the east of the county. The west of the county is made up of peaty bogs and moors and heaths (8.3%). The updated 2012 dataset is to be published in 2014. Table 3-11 outlines the total land area for each of the land cover categories used by the EPA in the land cover mapping program and it is illustrated on Figure 3-13.

Table 3-11: Land Cover Categories

Land Cover Type	Area (Ha's)	Proportion
Airports	216	0.03%
Beaches, dunes, sand	62	0.01%
Broad leaved forest	6087	0.81%
Coastal lagoons	114	0.02%
Complex cultivation	20083	2.69%
Coniferous forest	31355	4.20%
Construction sites	263	0.04%
Continuous Urban Fabric	190	0.03%
Discontinuous Urban Fabric	11936	1.60%
Estuaries	1098	0.15%
Green Urban areas	123	0.02%
Industrial or Commercial	1043	0.14%
Inland Marshes	131	0.02%
Intertidal flats	1728	0.23%
Land principally occupied by agriculture	33245	4.45%
Mineral extraction sites	731	0.10%
Mixed forest	1957	0.26%
Moors and Heath	8623	1.15%
Natural Grassland	3841	0.51%
Non-Irrigated arable land	97984	13.11%
Pastures	419838	56.17%
Peat Bogs	62054	8.30%
Road and Rail networks	176	0.02%
Salt Marshes	420	0.06%
Sea	3053	0.41%
Sea Ports	260	0.03%
Sparsely vegetated	365	0.05%
Sport and leisure facilities	1554	0.21%
Stream courses	559	0.07%
Transitional woodland-shrub	37245	4.98%
Water bodies	1059	0.14%
Total Area	747,394	100.00%

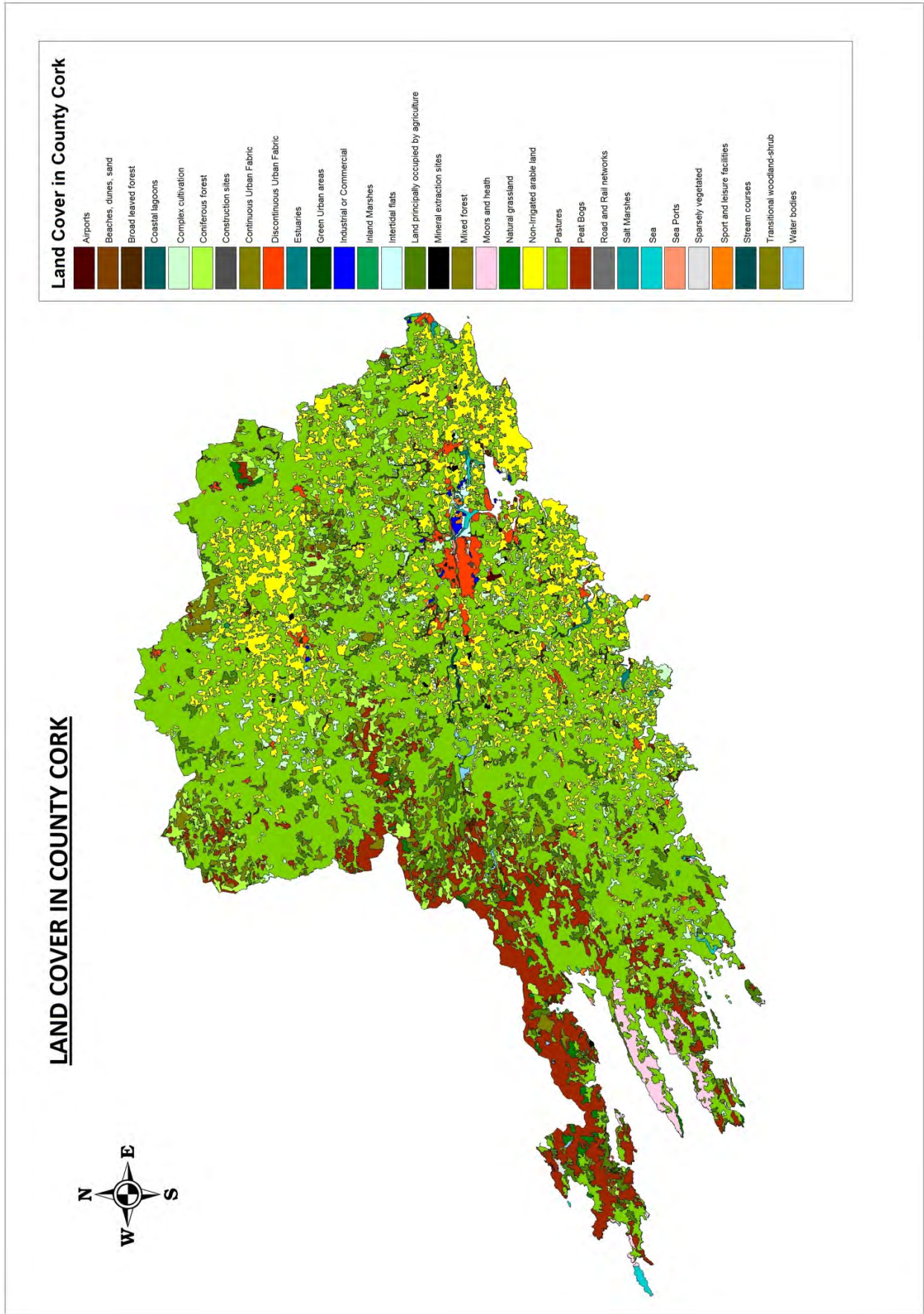


Figure 3-13: Corine Land Cover

Existing Problems

- 3.4.43 In County Cork habitat loss, fragmentation, and disturbance to wildlife caused by changing land uses and development, agricultural, forestry and recreational activity are probably the greatest threats, with climate change and invasive species also important issues.
- 3.4.44 Aquatic habitats and species are particularly vulnerable to deterioration in water quality, hence the importance of maintaining and restoring river, surface and ground water and coastal water status in accordance with the objectives of the Water Framework Directive and controlling waste water discharges, surface water run off, discharges from agriculture and run off from forestry etc. The main effects of such run off is nutrient enrichment that can result in greatly increased plant and algae growth, and which can introduce silt to freshwater systems.
- 3.4.45 In terms of the development envisaged by the draft County Development Plan discharges from urban waste water discharges are particularly relevant for impacts on biodiversity. These issues are discussed in more detail in Section 3.6 Water. In unsewered areas, development needs to be subject to a site suitability assessment. A national programme of inspection of existing septic tanks is also underway which should lead to problematic systems being upgraded as appropriate in time.
- 3.4.46 Inappropriate development within or near Natura 2000 sites may impact significantly on their qualifying interests, directly, indirectly or in combination with other developments, plans for development or projects. However, it is usually possible to avoid or mitigate impacts on designated sites by giving consideration to design and siting at the outset of the planning process. Cork County Council has developed guidance for prospective developers to deal with issues relating to the protection of natural and semi-natural habitats and native species in the planning process (*Biodiversity and the Planning Process, -Guidance for developers on the management of biodiversity issues during the planning process*).
- 3.4.47 The River Blackwater is designated for its significant habitats of International and National importance and the improvement of water quality and maintenance of stable hydrological conditions in the river is critical to the wellbeing of the habitats and species for which it is designated. Potential threats include discharges from agriculture and waste water treatment plants and water abstraction. The Local Area Plans adopted in 2010 recognise the need to prepare a waste water and storm water plan for the Blackwater catchment upstream of Mallow, before any additional development was permitted, but this plan has yet to be prepared. Details of waste water treatment plants discharging to the Blackwater are provided in Section 3.6 Water.
- 3.4.48 The spread of invasive species is now cited as the second greatest threat to biodiversity worldwide after habitat destruction; the introduction of non-native flora and fauna can wreak havoc on Irish habitats and species. A number of invasive, non native species of both flora and fauna are present throughout the County, for example, the Japanese Knotweed which is very damaging to infrastructure as it can grow through tar macadam and concrete. Japanese Knotweed can act as a barrier in important wildlife migration corridors.
- 3.4.49 There is also a need to identify and collect information on all areas of local biodiversity value and ecological corridors in the county by continuing with the process of Habitat mapping. Baseline

information on the location and condition of habitats is fundamentally important for habitat management and conservation. This information is necessary to inform future planning policy and conservation policies, and for creating awareness among the public.

Likely evolution in the absence of the Development Plan.

- 3.4.50 In the absence of a plan for development for Cork, development will be ad-hoc, dispersed and assessed on a case-by-case basis and species and habitats may face potential pressures as a result of direct or indirect impacts or pollution from poorly-sited developments. The Development Plan promotes the sustainable development of the County and the protection of biodiversity. While major sites and species would still be protected under other legislation in the absence of a development plan, the plan allows for a more strategic and co-ordinated approach to development and helps protect local ecological networks and species which are an integral part of the sustainable building blocks for the county.

3.5 Soils and Geology

- 3.5.1 Soil is defined as the top layer of the earth's crust and is a biologically active mixture of weathered minerals, organic matter, organisms and water which provides the foundation of life in terrestrial ecosystems. The extended timescales over which soils are formed means that they should be regarded as a non-renewable natural resource. Soils are a fragile resource and are particularly vulnerable to contamination, compaction and erosion by wind or water. Issues such as climate change threaten to increase this fragility and may possibly reduce soils' ability to accommodate change without significant or lasting damage.
- 3.5.2 Soil performs an important environmental function by supporting natural ecosystems and human life and by providing raw materials, food production and land for facilitating development. Soil also stores, filters, transforms and acts as a buffer to substances that are introduced to the environment. This is particularly important in the production and protection of water supplies and for regulating greenhouse gases. Soil is also a fundamental component of our landscape and cultural heritage.

Soil Types

- 3.5.3 The most dominant soil types in County Cork are Brown Podzolics and Grey Brown Podzolics which are medium to heavy texture with a great depth of profile. These soils derive from the calcareous glacial drift deposits and are located in the southern and eastern parts of the county, in particular. Brown Podzolics display good physical characteristics and are usually devoted to cropping and pasture production. Grey Brown Podzolics are good all purpose soils. Figure 3-14 displays the soil cover characteristics within the county.



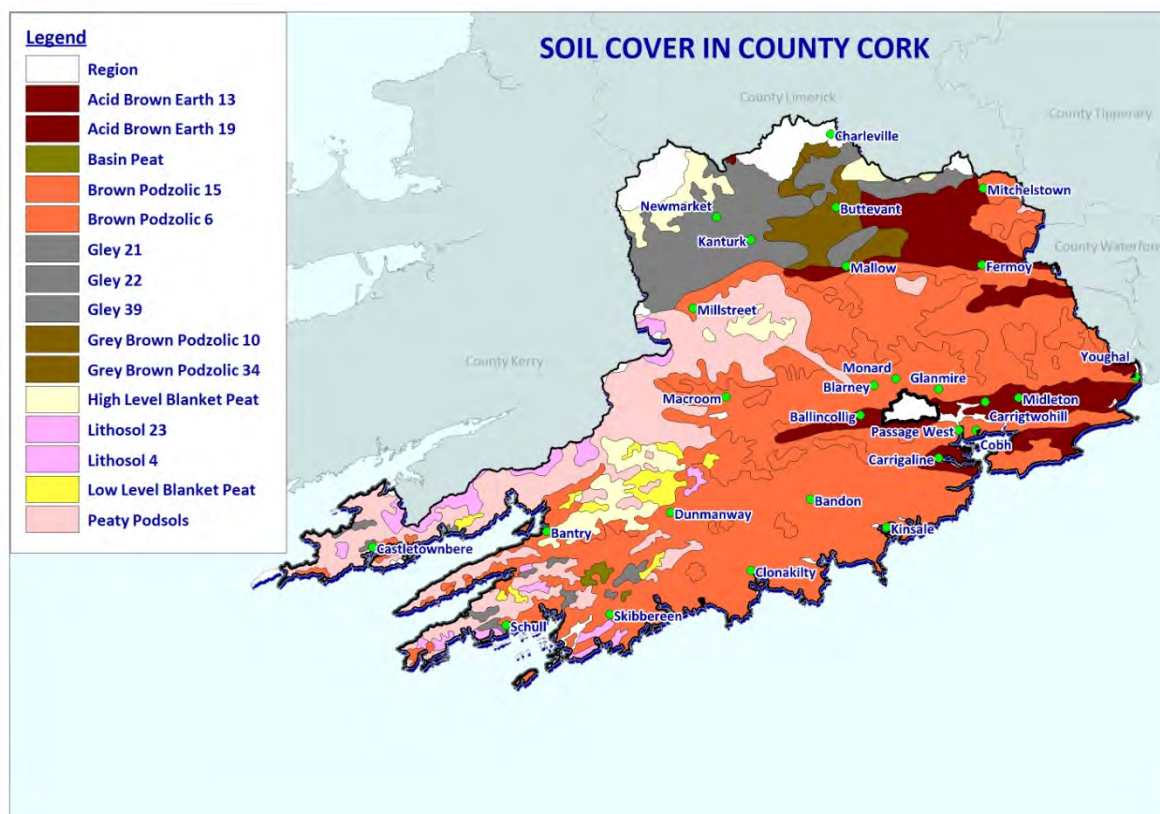


Figure 3-14: Soil Cover in County Cork

- 3.5.4 To the north-west of the County there is heavy textured gley soil resulting from shales, grits and flagstones of glacial drift. Gleys are poorly drained due to a combination of heavy texture, gently undulating topography and/or high ground water level. The land-use range of these soils is more limited and they are best suited to grassland production. Most gleys have poor physical conditions and restricted growth seasons.
- 3.5.5 Along the shores of the Rivers Lee and Blackwater there is a prevalence of acid brown soils which are derived from alluvial deposits (i.e. coarse textured gravels and sands). These soils are free draining subject to flooding and are best suited to grass production but also support good crops of cereal.
- 3.5.6 High level Blanket Peat soils and low level peat soils are also found in western and north-western parts of the County. High Level Blanket Peat soils occur above 150 meters and also at the higher mountain areas in the western parts of the County. Low level peat soils occur in flat or undulating topography below the 150m contour. Poor drainage and adverse physical conditions limit their agricultural use. Peaty Podzols are also found in the western and south-western parts of the County.

Soil Condition:

- 3.5.7 The general consensus is that soil quality in Ireland is good. The long growing season and temperate climate with plenty rainfall is good for the soil. In addition the lack of heavy industry means that our soils have not suffered significant amounts of contamination and the large percentage of permanent pasture lands also protected our soil from serious degradation. (EPA 2012)

Geology

3.5.8 The underlying bedrock of County Cork consists primarily of sandstone with a granite-sandstone mix prevailing to the west and Lower Avonian shale glacial till to the south. Examination of the geology of west cork also reveals areas of high and low level blanket peat and sandstone glacial till. Along the Lee and Blackwater Valleys the sandstone is found with limestone glacial till.

Quarrying Activities

3.5.9 There are a significant number of quarries operating within the County, primarily engaged in sand, gravel and stone quarrying. There are distinct clusters at locations near Carrigtwohill, Midleton, Ovens, along the Bandon River from Dunmanway to Innishannon and to the east of Kanturk at Cecilstown. The map below identifies the locations of 65 registered quarries within the County as per Section 261 of the Planning and Development Act 2000.

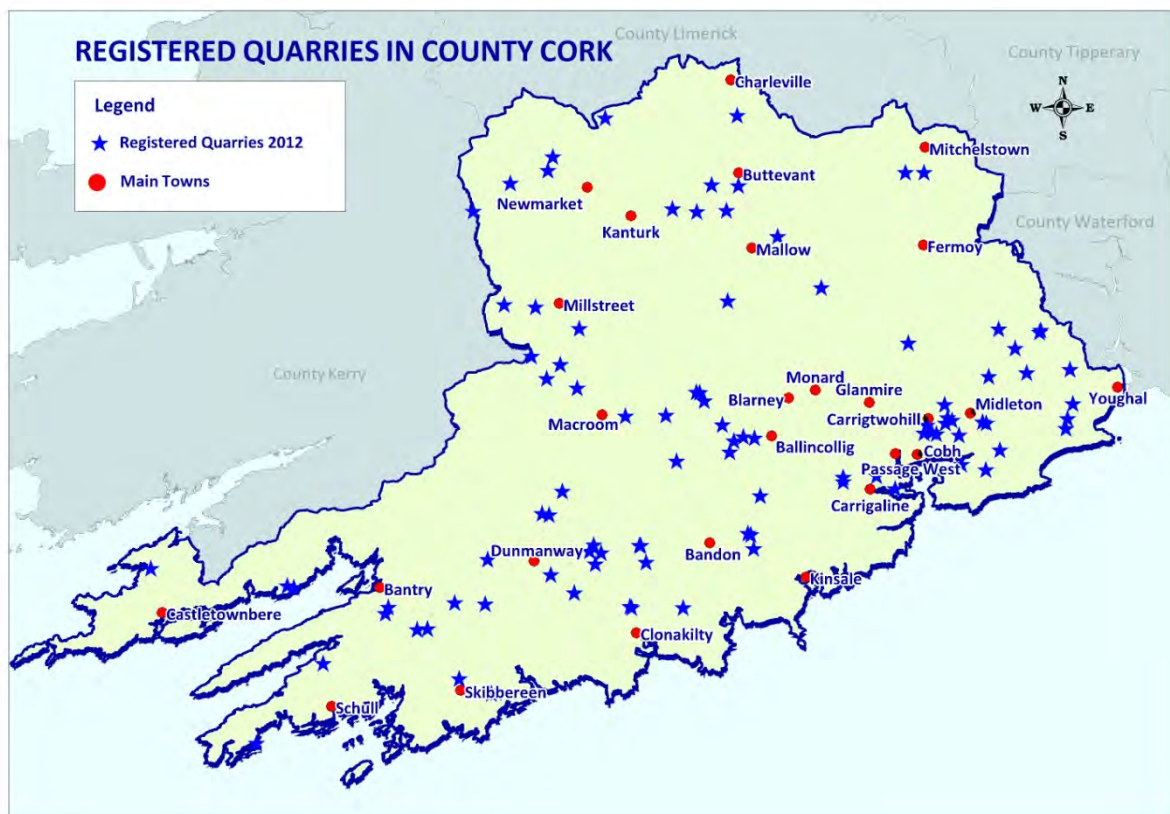


Figure 3-15: Registered Quarries

Areas of Geological Interest

3.5.10 There are 143 sites of geological interest in County Cork which are afforded protection under the County Development Plan. Some of these sites are also designated as Natural Heritage Areas under national legislation.

Current Issues and Problems

- 3.5.11 The best soils in the county are in the areas of highest development pressure and this land will be lost to agricultural production once development takes place.
- 3.5.12 Change in soil characteristics can result from both natural processes and human activity. Increasing demands for food and fuel from a growing population along with pressures for more land for new housing and infrastructure and most significantly climate change can all pose a threat to the quantity and quality of soil available.
- 3.5.13 While many sources of soil pollution have been dealt with through environmental regulation, challenges remains in certain areas of the County where the use of poorly maintained septic tanks are likely to have an impact on local soil pollution. Soil can also be polluted and contaminated by agriculture and industrial activities. Managing the impact of construction and development on soils' essential functions, like absorbing rainwater, is also vital.
- 3.5.14 Climate change is also a critical factor and has the potential to increase soil erosion rates through hotter, drier conditions that make soils more susceptible to wind erosion, coupled with intense rainfall incidents that can wash soil away. Soil erosion can also have off-site effects which result from the movement of sediment and agricultural pollutants into watercourses. This can result in increase silting of watercourses, disruption to ecosystems and contamination of drinking water supplies.
- 3.5.15 Generally blanket peat within the County is not significantly impacted upon, especially where it is protected under European designations. Outside designated sites, there may be some localised losses of peat.
- 3.5.16 Coastal erosion is a growing issue in the County and although a natural phenomenon, poorly planned human activities can aggravate the occurrence and consequences of its impact. Failure to address or control coastal erosion can lead to adverse impacts on biodiversity, the weakening of natural defences, an increase risk of coastal flooding and possible weakening of economic opportunities, particularly in relation to tourism.

Likely Evolution in the absence of the Plan

- 3.5.17 In the absence of the Development Plan, development would occur in a haphazard manner without due consideration to the soil characteristics of the County. National Planning Policy recommends the re-use of brownfield land as part of its suite of achieving a more sustainable development pattern. In the absence of a County-wide settlement strategy of encouraging brownfield development and directing growth to dedicated settlements, further growth could lead to a proliferation of haphazard development in areas of important soils, thus leading to their loss or damage.



3.6 Water

Introduction

- 3.6.1 This section discusses water, i.e. surface water (rivers and lakes, estuarine and coastal waters) and groundwater in County Cork and also deals with water services infrastructure (drinking water supply, wastewater treatment and storm water).
- 3.6.2 Water is both a receptor and pathway of environmental pollution and hence its importance as an environmental consideration in this context cannot be overstated. Water quality is governed by a plethora of legislation at the local, national and European level. In recent years the Water Framework Directive has radically altered the more traditional emission limit value approach to water protection by introducing a water protection / improvement and conservation framework. This Directive is unique in that, for the first time, it establishes a framework for the protection of all waters including rivers, lakes, estuaries, coastal waters and groundwater, and their dependent wildlife/habitats under one piece of environmental legislation. It requires governments to take a new holistic approach to managing their waters and it applies to rivers, lakes, groundwater, estuaries and coastal waters. Member States must aim to achieve good status in all waters by 2015 and must ensure that status does not deteriorate in any waters. Specifically the WFD aims to:
- protect/enhance all waters (surface, ground and coastal waters)
 - achieve "good status" for all waters by December 2015
 - manage water bodies based on river basins (or catchments)
 - involve the public
 - streamline legislation
- 3.6.3 The Water Framework Directive requires the status of water bodies to be classified as high, good, moderate, poor or bad. Water bodies are rivers, lakes, estuaries, coastal waters out to 1 nautical mile and groundwater. Status is defined with respect to its biology, chemistry, quantity and morphology.
- 3.6.4 As part of the implementation of the Water Framework Directive, the island of Ireland was subdivided into eight River Basin Districts (RBD's). The majority of Cork County is located within the South West River Basin District (SWRBD). Small areas of the county are located within the Shannon River Basin District and the South East River Basin District (SERBD). Based on EPA monitoring data, the SWRBD Management Plan made an assessment of the status of water bodies in the area.
- 3.6.5 The European Communities Environmental Objectives (Surface Waters) Regulations 2009 introduced further environmental quality standards in relation to all surface waters -- including lakes, rivers, canals, transitional waters, and coastal waters -- and provide, inter alia, for:
- The establishment of legally binding quality objectives for all surface waters and environmental quality standards for pollutants;
 - The examination and where appropriate, review of existing discharge authorisations by Public Authorities to ensure that the emission limits laid down in authorisations support compliance with the new water quality objectives/standards;



- The classification of surface water bodies by the EPA for the purposes of the Water Framework Directive;
- The establishment of inventories of priority substances by the EPA, and;
- The drawing up of pollution reduction plans by coordinating local authorities (in consultation with the EPA) to reduce pollution by priority substances and to cease and/or phase out discharges, emissions or losses of priority hazardous substances.

3.6.6 In addition, the Regulations require that a public authority shall not, in the performance of its functions, undertake those functions in a manner that knowingly causes or allows deterioration in the chemical status or ecological status (or ecological potential as the case may be) of a body of surface water. In order to satisfy the overall WFD objective of 'good status', a surface water body must achieve the requirements of the good ecological and chemical status.

Rivers

3.6.7 Rivers are a very important habitat within the county and are also an important source of drinking water. In the RBD's, the overall classification of river water bodies was obtained by combining the results of the individual risk assessments. There are 885 river water bodies in the SWRBD. Of these, 291 river water bodies or 33% were determined to be in the "High" status category, 319 river water bodies or 36% were in the "good" category, 216 or 24% were in the "moderate" category and 59 or 7% were in the "poor" category. The majority of river water bodies in the "poor" category are located in the eastern half of the SWRBD. The catchments of the Blackwater, Lee and Bandon rivers in particular show a high proportion of "poor" water bodies. In the case of the Blackwater, the presence of the Freshwater Pearl Mussel imposes much higher target water quality standards which the River does not meet, hence the poor status. Were the mussel not present in the river then the standard would be lower and the River would be classified as 'good'.

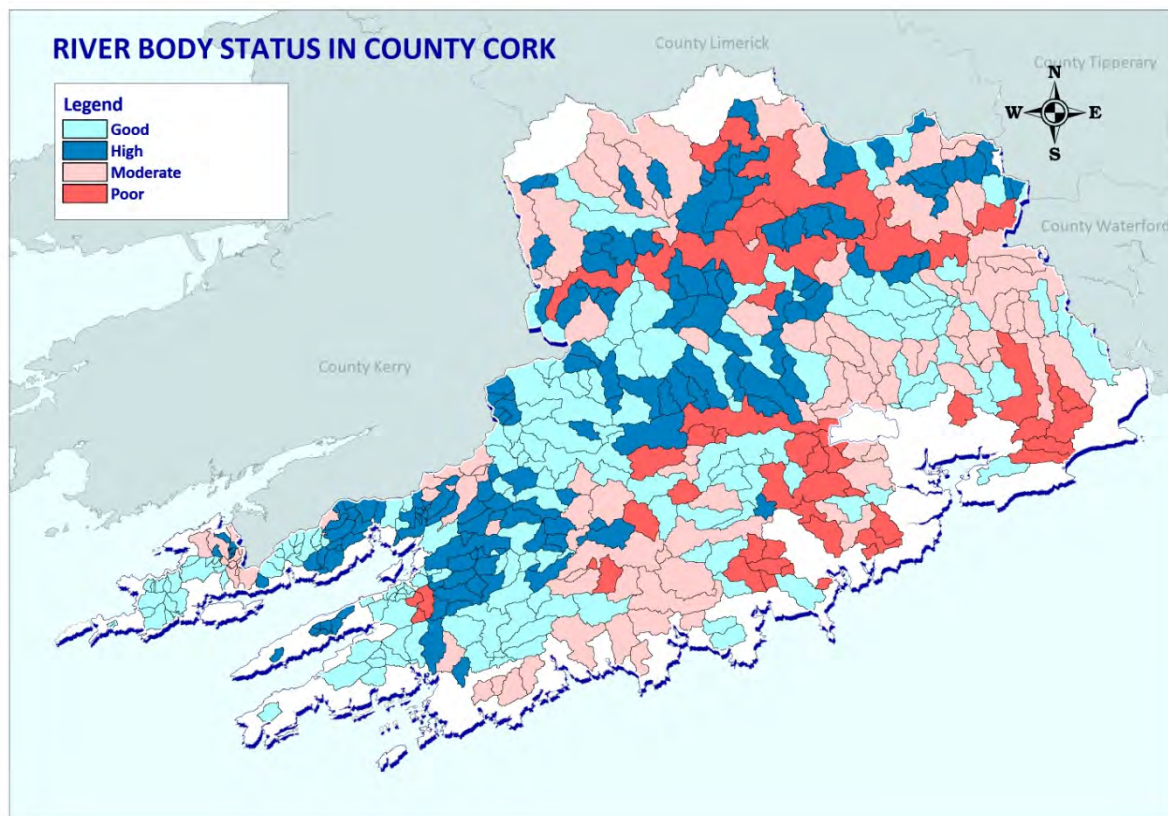


Figure 3-16: Riverbody Status

Groundwater

- 3.6.18 Ground water is important as a source of drinking water in Ireland, providing approximately 25% of all drinking water nationally (EPA2012). Groundwater is also a significant factor in the ecology of many rivers, lakes and estuaries, especially during low flow periods when ground water forms a significant part of surface water flows. Ground water is at risk from contamination by nitrates and phosphates from diffuse sources such as agricultural activity which can lead to eutrophication of surface waters and impact on the quality of water abstracted for drinking water. Ground water is at risk from point sources such as municipal waste water treatment plants.
- 3.6.19 Groundwater quality is monitored nationally by the EPA's groundwater monitoring programme which has been developed to improve knowledge of groundwater quality and quantity, and the links between groundwater and the ecological health of associated surface water receptors. Monitoring points were selected to be representative of the variations in hydrogeology and human pressures across a groundwater body and to reflect the 'average' concentrations for pollutants across the whole groundwater body. The monitoring programme includes:
- a quantitative monitoring network (based on the assessment of water levels and water balance estimations);
 - a surveillance and operational water quality monitoring network;
 - appropriate monitoring to support the achievement of protected areas objectives, for example drinking water and Habitats protected areas.
- 3.6.20 In the South Western RBD the number and location of monitoring points is influenced by the hydrogeological characteristics of the area. Three groundwater quality monitoring points are located in



areas underlain by productive bedrock and sand/gravel aquifers (1% of the district). Poorly productive rocks (which underlie 88% of the district) and karstic rock (which underlie 11% of the district), are characterised by high surface runoff, low bedrock transmissivity and storage properties, low well yields, small localised underground flow systems and occasional narrow high transmissivity zones. Consequently, achieving a representative network in these rocks can be problematic. Two level monitoring wells and 17 quality monitoring sites are located within poorly productive aquifers in the RBD.

- 3.6.21 Ground water quality in county Cork is largely of good status. There is an area of poor status to the east of the city around Carrigtwohill where there is karstic bedrock characterised by high surface runoff and low bedrock transmissivity.

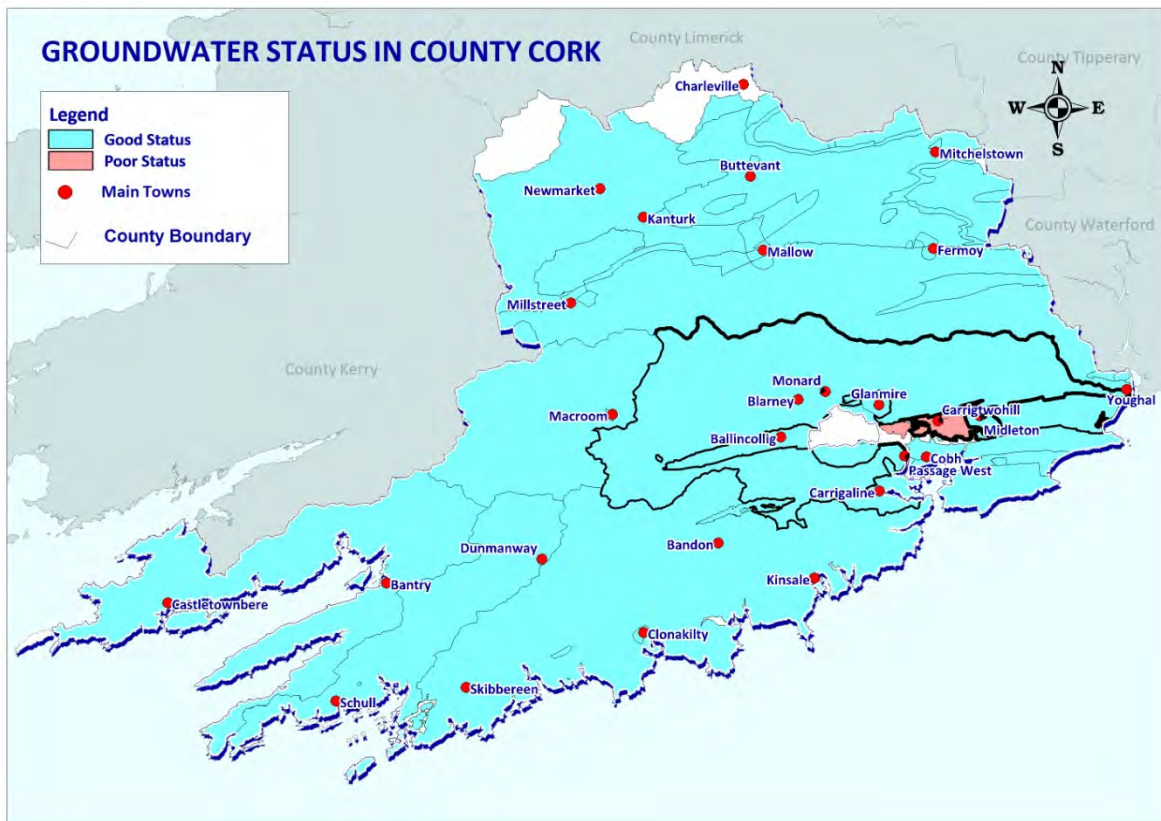


Figure 3-17: Groundwater Status

- 3.6.22 Groundwater quality is protected under the European Communities Environmental Objectives Groundwater Regulations 2010, (S.I. No. 9 of 2010), which gives effect to the requirements of the Water Framework Directive (2000/60/EC) and the Groundwater Directive (2008/118/EC). These regulations established environmental objectives to be achieved in groundwater bodies, groundwater quality standards and threshold values for the classification of groundwater and the protection of groundwater against pollution and deterioration in groundwater quality.
- 3.6.23 Groundwater Protection schemes are county based schemes undertaken jointly by the GSI and each local authority, incorporating land surface zoning and groundwater protection responses. The

Geological Survey of Ireland (GSI) has compiled a Groundwater Protection Scheme for Cork County which includes:

- Assessment and categorisation of the vulnerability of Groundwaters.
- Mapping lands in accordance with their vulnerability categorisation.
- Development of Protection Response Matrices.

3.6.24 The catchment area around a groundwater source, which contributes water (Zone of Contribution) to a borehole or spring, is known as a Source Protection Zone. The GSI have prepared Groundwater Source Protection reports for a small number of public supplies in North Cork and South Cork. The EPA have also prepared Groundwater Source Protection Reports for the monitoring points in Cork in the EPA's National Groundwater Monitoring Network. There are no Groundwater Source Protection Reports for the majority of public water supplies in County Cork at present.

3.6.25 The Councils Groundwater Protection Scheme is aimed at protecting the general groundwater resource from contamination and does not consider well sources. The Council is currently preparing indicative source protection areas for all public water supply springs and boreholes..

Estuaries (Transitional) and Coastal Waters

3.6.26 Estuaries (or transitional waters) are waters near river mouths which are saline as a result of being beside coastal waters, but which are influenced by fresh water flow. Coastal waters, under the WFD, are surface waters up to one nautical mile from the coast.

3.6.27 The estuarine and coastal environment is subject to a wide variety of pressures. These include inputs of organic matter, nutrients and contaminants from sources such as urban waste water, industrial discharges, riverine inputs and accidental spillages. Local impacts can also arise from marine-based activities such as dredging and aquaculture. The quality of Ireland's tidal waters is determined by the composition of the waters of the North East Atlantic that bathe our coasts and the degree to which this is altered by inputs of organic matter, nutrients and other materials from the land and atmosphere.

3.6.28 There are 43 estuarine water bodies identified within the SWRBD. Of these 14 were considered to be of "Moderate Status". The remainder have not been classified to date.



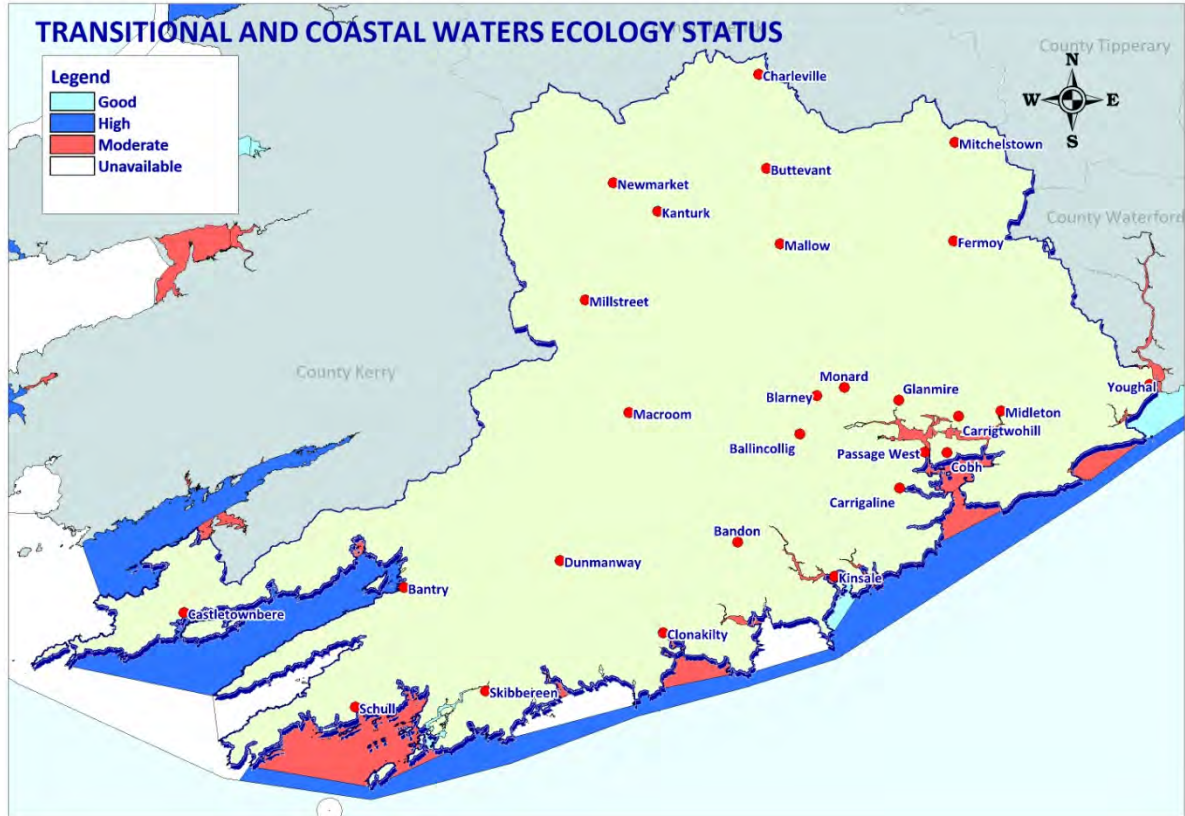


Figure 3-18: Transitional & Coastal waters ecology status

Protected Areas

3.6.29 Under Article 6, 7(1) and Annex IV of the Water Framework Directive, reference is made to a register of protected areas. Essentially, designated areas require special protection of surface water and groundwater or for the conservation of habitats and species directly depending on water are listed and maintained in a register which is kept under review.

3.6.30 In Cork County they include shellfish waters such as Bantry Bay and Roaringwater Bay, bathing waters such as Redbarn and Barleycove beaches, nutrient sensitive areas, such as Bandon Estuary, Special Areas of Conservation and Special Protection Areas such as the Bandon River. Protected area categories are outlined below:

- Waters used for the abstraction of drinking water
- Areas designated to protect economically significant aquatic species: These are protected areas established under earlier EC directives aimed at protecting shellfish (79/923/EEC) and freshwater fish (78/659/EEC) – see Section 3.4.22.
- Recreational Waters These are bathing waters designated under the Bathing Water Directive (76/160/EEC) (see 3.6.21 below)
- Nutrient Sensitive Areas: These comprise nitrate vulnerable zones designated under the Nitrates Directive (91/676/EEC) and areas designated as sensitive under the Urban Waste Water Treatment Directive (91/271/EEC).

- Areas designated for the protection of habitats or species: These are areas designated for the protection of habitats or species where the maintenance or improvement of the status of water is an important factor in their protection. These are designated under the Birds Directive (79/409/EEC) and the Habitats Directive (92/43/EEC). See section 3.4 on biodiversity.

Bathing Water

- 3.6.31 Overall the quality of Ireland's bathing water quality remains very high, with 97 per cent of bathing waters (132 of 136 identified bathing waters) complying with the EU mandatory values and achieving at least 'sufficient' water quality status despite 2012 precipitation records accounting for the wettest summer for nearly 50 years. From 2009 to 2012, the proportion of bathing waters meeting the mandatory values has increased by over five per cent. The proportion of bathing waters meeting the stricter 'good' water quality was 67 per cent (91 of 136 identified bathing waters). The main impacts were on beaches in the south and southwest of the country.
- 3.6.32 The legislation governing the quality of bathing waters for the 2012 season is set out in the new Bathing Water Quality Regulations 2008 (SI No. 79 of 2008) which transposed the new EU Directive on bathing water (2006/7/EC) that came into force on 24 March 2006. Transitional measures are in place until the 2008 Regulations are fully implemented in 2015.
- 3.6.33 Overall, while the vast majority of Ireland's identified bathing waters meet the current minimum standards, the stricter criteria set out in the 2006 Directive (2006/7/EC) will require local authorities to make even greater efforts to improve the water quality and to tackle potential sources of pollution.
- 3.6.34 In Cork County, there are 13 designated bathing waters. Of these 4 are considered to be of "good" status, 8 are considered "sufficient", with one, Fountainstown, considered to be of "poor" status because it suffered from episodic but persistent pollution throughout the summer of 2012 and failed to meet the minimum standards.

Blue Flag Beaches

- 3.6.35 The Blue Flag is operated in Ireland by An Taisce. Beaches and marinas that achieve this standard must comply with a specific set of criteria relating to water quality, information provision, environmental education, safety and beach management. At beaches the bathing water must comply with the excellent standard in accordance with the EU Bathing Water Directive. There are 5 designated blue flag beaches in Cork and are identified on the map below.



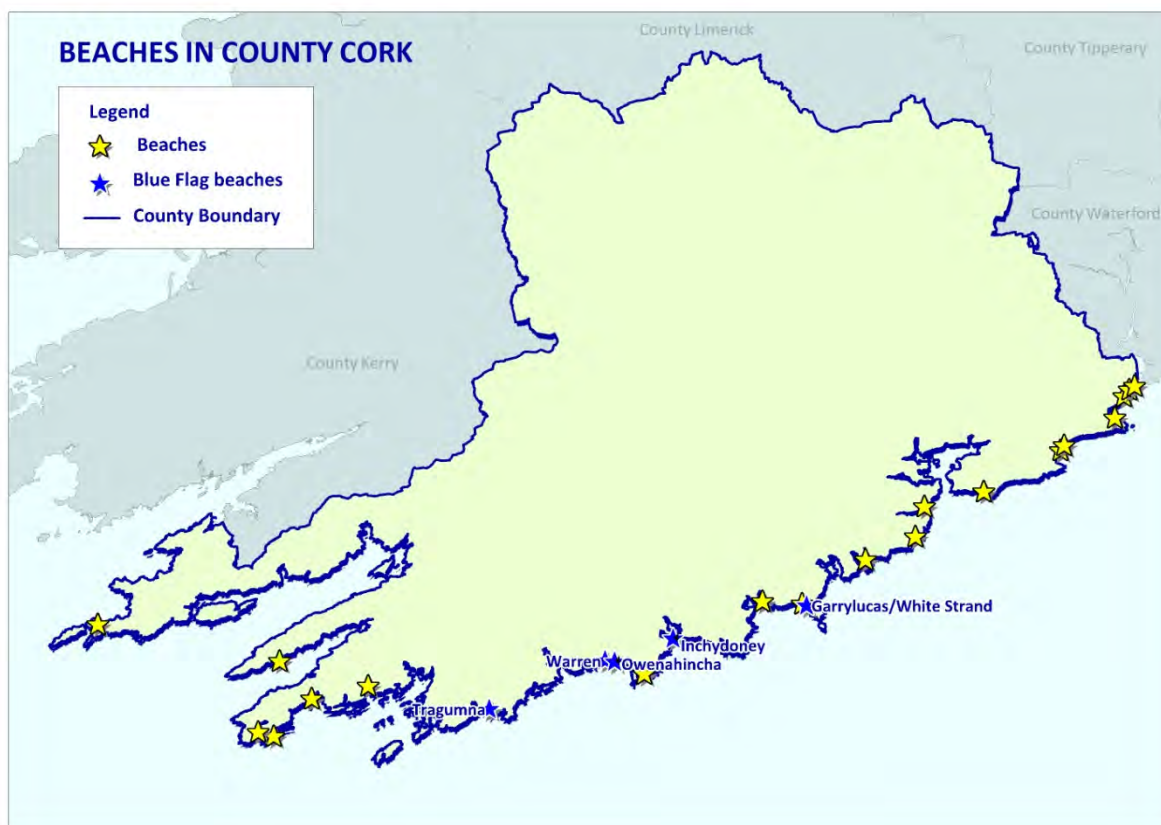


Figure 3-19: Beaches in County Cork

Dredging

3.6.36 Dredging is undertaken regularly within Cork Harbour and at various other coastal locations around the County periodically to remove excessive levels of silt which may interfere with marine traffic lanes or to facilitate construction or repair works to piers, marinas or other harbour infrastructure. The dredging process can affect water quality and ecology by releasing toxic contaminants into the water source and altering the hydrology. This is a particular concern in areas close to protected habitats or species and designated Shellfish waters.

Water supply Infrastructure

3.6.37 Cork County Council treats and supplies water to approximately 40,000 non-domestic customers and 115,000 homes across the county through of network of approximately 4,500km of distribution mains. Water is sourced from groundwater contained in rock or gravel aquifers or from surface waters i.e. rivers and lakes. Disinfection is provided on all supplies in order to provide safe drinking water. Most groundwater supplies require no additional treatment - although iron and manganese are removed in some supplies where the levels are elevated. In contrast surface water requires far more extensive treatment in order to ensure a consistent and acceptable quality of water. There are approximately 185 Public Water Supply Schemes in the county including five Regional schemes, nine town schemes and other smaller schemes.

- 3.6.38 Population growth targets for County Cork for the period to 2022 provide for an additional 70,820 persons and an additional 52,493 new households. The Status of the Water Supply Schemes serving the main towns, and their ability to cater for future growth in population are detailed in Tables 3-12 – 3-15 below. Of the twenty eight main settlements targeted for growth, including the city environs, six settlements have sufficient drinking water production capacity to cater for future demands – South City Environs, Cobh, Glanmire, Fermoy, Kanturk, and Millstreet.
- 3.6.39 In five of the main settlements drinking water production capacity is significantly constrained and additional development cannot proceed pending further investment - Bantry, Clonakilty, Mitchelstown, Castletownbere, and Dunmanway. Investment is also required to facilitate development in Monard.
- 3.6.40 In the remaining sixteen settlements some capacity is available to serve future growth but additional investment is required to meet the demands of the target growth in population – Ballincollig, Blarney, Carrigaline, Carrigtwohill, North City Environs, Midleton, Passage West, Mallow, Bandon, Kinsale, Macroom, Youghal, Buttevant, Charleville and Newmarket, Schull and Skibbereen.
- 3.6.41 In 2011 it was estimated that approximately 49% of current water production is unaccounted for – lost through leaks, burst pipes etc. National and European Water Policy now places significant emphasis on water conservation, which is defined as “the minimisation of loss or waste, care and protection of water resources and the efficient and effective use of water.” Its overall aim is to reduce water loss to sustainable levels, thereby maximising the value of existing and future capital investments while protecting and facilitating improved management of our available water resources. It is driven by four key components – Demand Management, Pressure Management, Leakage Control and Mains Rehabilitation. Cork County Council has an ongoing water conservation programme and it is envisaged that a large proportion of future water demand will be met by reductions in the amount of ‘unaccounted for’ water.
- 3.6.42 In some cases it may be necessary to increase water production by increased abstraction. Virtually all the water bodies from which water is sourced are classified as ‘sensitive’ for some reason - either surface drinking water protected area, water management unit protected areas, within Natura sites or the potential impact zoned of Natura Sites or within Natural Heritage areas or proposed natural Heritage Areas, so the need for increased production will need to be very carefully assessed. In the case of Castletownbere the existing source is from a lake within an SAC and there are already issues with current levels of abstraction.



**Table 3-12: Capacity of Water Supply Infrastructure
County Metropolitan Strategic Planning Area**

Settlement	Planned Pop Growth	WMU Name (water source)	Water body Sensitivity	Does WS system meet future needs
Ballincollig	5,062	Lower Lee-Owenboy WMU	Yes - surface drinking water protected area	
Blarney	5,096	Lower Lee-Owenboy WMU	Yes - surface drinking water protected area	
Carrigaline	3,095	Lower Lee-Owenboy WMU	Yes - surface drinking water protected area	
Carrigtwohill	7,067	Owennaacurra WMU	Yes - surface drinking water protected area; within impact zone of Great Island SAC & Cork Harbour SPA.	
City Environs (N)	3,339	Lower Lee-Owenboy WMU	surface drinking water protected area	
City Environs (S)	-1,327	Lower Lee-Owenboy WMU	Surface Drinking Water Protected Area.	
Cobh	2,196	Glashaboy WMU	Yes. Within impact zone of Natura 2000 site (SPA).	
Glanmire	1,661	Glashaboy WMU	Yes. Surface Drinking Water. Potential impact zone of Natura Site - SAC SPA	
Monard [^]	3,619			
Midleton	9,575	Womanagh / Owennaacurra WMU	Yes . Surface Drinking Area, WNU protected Area, Within PIZ of SAC and SPA	
Passage West	488	Lower Lee - Owenboy WMU	Yes . Surface Drinking Area	
Total	39,967			

[^] Monard is a proposed new town.

KEY	<i>Strategic Infrastructure Deficit. Planned Development may require further investment and /or EPA licence compliance issues resolved.</i>
	<i>Some development may proceed but significant works/EPA license required to accommodate planned population target</i>
	<i>Current major infrastructure sufficient to achieve planned population target. (Includes planned infrastructure where there is a firm commitment to the timing of delivery).</i>



**Table 3-13: Status of Water Supply Infrastructure
Ring Strategic Planning Area**

Settlement	Planned Pop Growth	WMU Name (water source)	Water body Sensitivity	Does WS system meet future needs
Bandon	1,125	Bandon Stick WMU	Yes - surface drinking water protected area	
Fermoy	1,100	Blackwater WMU	Yes. Within SAC.	
Kinsale	829	Bandon - Stick WM Unit	Yes - Surface Drinking Area	
Macroom	657	Upper Lee Water MU	Yes - Surface Drinking Area	
Mallow	8,395	Blackwater Water Management Unit	Yes. SAC. Requires high level of protection.	
Youghal	1,321	Blackwater Estuary WMU	Yes. SAC. Surface Drinking area . Requires high standard of protection.	
Total	13,427			
KEY	<i>Strategic Infrastructure Deficit. Planned Development may require further investment and /or EPA licence compliance issues resolved.</i>			
	<i>Some development may proceed but significant works/EPA license required to accommodate planned population target</i>			
	<i>Current major infrastructure sufficient to achieve planned population target. (Includes planned infrastructure where there is a firm commitment to the timing of delivery).</i>			

**Table 3-14: Status of Water Supply Infrastructure
North Strategic Planning Area**

Settlement	Planned Population Growth	WMU Name (water source)	Water body Sensitivity	Does WS system meet future needs
Buttevant	556	Blackwater-Awebeg WMU	Within impact zone of Natura 2000 Site; requires high standards of water quality & protection of stable hydrology	
Charleville	1,279	Blackwater - Awebeg WMU	Within impact zone of River Blackwater SAC; requires high standards of water quality & protection of stable hydrology	
Kanturk	137	Blackwater Water MU	Yes - Surface Drinking water Protected Area. Within impact zone of River Blackwater SAC - Freshwater Pear Mussel .	
Millstreet	182	Blackwater Water MU	n/a	
Newmarket	201	Blackwater Water MU	Yes. Source within SPA.; Within impact zone of River Blackwater SAC	
Mitchelstown	1,669	Blackwater Funshion WMU	Yes. Source within PIZ of Natura Blackwater SAC (unverified)	
Total	3,869			
KEY	<i>Strategic Infrastructure Deficit. Planned Development may require further investment and /or EPA licence compliance issues resolved.</i>			
	<i>Some development may proceed but significant works/EPA license required to accommodate planned population target</i>			
	<i>Current major infrastructure sufficient to achieve planned population target. (Includes planned infrastructure where there is a firm commitment to the timing of delivery).1</i>			

Table 3-15: Status of Water Supply Infrastructure West Strategic Planning Area				
Settlement	Planned Population Growth	WMU Name (water source)	Water body Sensitivity	Does water supply system meet future needs
Bantry	2,136	Inner Bantry Bay WMU	No	
Castletownbere	527	Beara North WMU	Yes. Source from Lake within in SAC .	
Clonakilty	2,497	Skibbereen Clonakilty WMU	No	
Dunmanway	391	Upper Bandon WMU	No	
Schull	90	Skibbereen Clonakilty WMU	No	
Skibbereen	365	Skibbereen Clonakilty WMU	No	
Total	6,006			
KEY	<i>Strategic Infrastructure Deficit. Planned Development may require further investment and /or EPA licence compliance issues resolved.</i>			
	<i>Some development may proceed but significant works/EPA license required to accommodate planned population target</i>			
	<i>Current major infrastructure sufficient to achieve planned population target. (Includes planned infrastructure where there is a firm commitment to the timing of delivery).</i>			

Wastewater Treatment

- 3.6.43 The treatment of wastewater is governed by the Urban Waste Water Treatment Directive (91/271/EEC) (amended by Directive 98/15/EEC) transposed into Irish law by the Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001). The Directive aims to protect the environment from the adverse effects of the wastewater discharges by ensuring that wastewater is appropriately treated before it is discharged to the receiving environment.
- 3.6.44 The treatment of wastewater is relevant to the Water Framework Directive which requires all public bodies, including Cork County Council, to coordinate their policies and operations so as to maintain the good status of water bodies which are currently unpolluted and restore less –than- good water bodies to good status by 2015.
- 3.6.45 The treatment of wastewater in Cork is principally through wastewater treatment plants or individual septic tank units. Outside of the larger towns and villages within the County, most developments are not connected to a public wastewater disposal system. Effluent disposal is treated by individual proprietary wastewater treatment plants and septic tanks.
- 3.6.46 Under the terms of the Waste Water Discharge (Authorisation) Regulations 2007 waste water discharges from agglomerations greater than 500 PE require a waste water discharge license. Discharges from agglomerations of less than 500 PE require a certificate of authorisation. The EPA is the licensing authority and also carry out monitoring and enforcement. Within the main towns in County Cork, there are a number of waste water discharge licences pending. Licences are still pending for treatment plants in Carrigtwohill, Bandon, Dunmanway, Kinsale, Skibbereen, Bantry, Buttevant, Newmarket, Millstreet and Macroom.

- 3.6.47 Seventy two smaller settlements with a population equivalent of less than 500 have been certified to date. Certification is awaited on a further two (Grenagh and Coolea near Macroom).
- 3.6.48 One of the principal requirements of the 2001 Urban Waste Water Regulations is to monitor the outflow from treatment plants. For most treatment plants BOD (Biochemical Oxygen Demand), COD (Chemical Oxygen Demand) and TSS (Total Suspended Solids) require monitoring. The results of this monitoring for Cork County for 2012 for settlements with a population equivalent of greater than 500 PE indicates that forty one of the seventy seven urban centres subject to monitoring failed to meet the required standards (See details in Appendix C). In many cases this is because there are no treatment facilities in place or the mandatory secondary or tertiary treatment standard required has not been provided. Of the forty one that failed to meet minimum standards in 2012, nine were main settlements (Cobh, Carrigtwohill, Passage West, Carrigaline, Youghal, Castletownbere, Clonakilty, Dunmanway, Schull) while the others were villages.
- 3.6.49 Secondary Treatment is mandatory for Urban areas >2,000 pe discharging to freshwater or estuaries and >10,000pe discharging to coastal waters. Smaller urban areas below these thresholds require 'appropriate treatment such as to allow the receiving waters to meet the relevant water quality objectives and provisions of European Directives. In Cork secondary treatment for Cobh/Passage West/Monks town/Ringaskiddy/Crosshaven, and Carrigaline is overdue since 2005 and is still awaited as part of the Cork Lower Harbour scheme. Similarly in Youghal, secondary treatment has been a requirement since 2005 but is still not in place.
- 3.6.50 For urban areas with a population greater than 10,000 there is a requirement to provide nutrient reduction in addition to secondary treatment where there are discharges to sensitive waters. This is still awaited at Carrigtwohill and at the Carrigrennan plant serving Cork City and parts of the County area.
- 3.6.51 In order to protect water that may be at risk from eutrophication the Directive specifies additional requirements on certain nutrients in effluent discharging to sensitive areas from urban areas with >10,000pe. In particular the Directive sets limits on total phosphorus and total nitrogen. With respect to Nitrogen, discharges in Cork City and Carrigtwohill are of concern as they have failed the standards in 2012. With respect to total Phosphorus, discharges from Carrigtwohill also failed the standard in 2012.



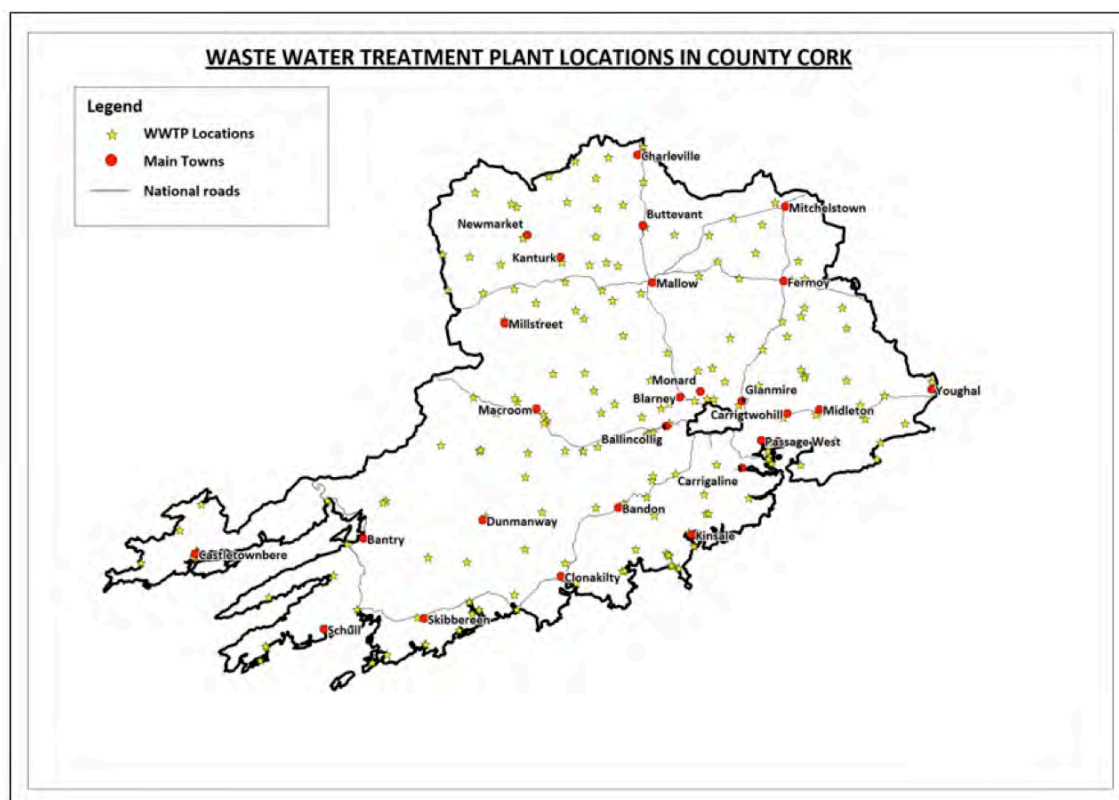


Figure 3-20: Wastewater treatment Plants

Capacity of Waste Water Treatment Infrastructure

- 3.6.52 The current position as regards the waste water treatment infrastructure in the main towns of the county is detailed in the tables below and is organised by Strategic Planning Area. The tables reflect the capacity in terms of future loadings from residential development only and do not take account of other potential loadings from commercial or industrial development.
- 3.6.53 Of the 28 main towns in the county, only nine have existing waste water infrastructure with sufficient capacity to meet the demands of target growth set out in the Draft County Development Plan. Eleven of the towns are already at capacity and require further investment to cater for any additional development, including Carrigaline and Carrigtwohill which are within the Metropolitan area and are targeted for significant growth. An additional five towns have some capacity for growth but need additional investment to cater for the target level of growth. These towns include Mallow and Midleton which have the highest growth targets of all the towns in the county. Also of concern is the lack of any existing treatment facilities in coastal towns such as Youghal where tourism is a significant economic driver for the local economy.
- 3.6.54 A number of the schemes required to address the current deficiencies in the wastewater treatment infrastructure network have been identified on the Water Services Investment Programme (WSIP) but others have not.

Table 3-3: Capacity of Waste Water Treatment Infrastructure**County Metropolitan Strategic Planning Area 2013**

Settlement	Planned Pop. Growth	Natura 2000	EPA Licence	Discharges to Waterbody (Waterbody Status) (Risk)	Capacity for development
Ballincollig	6,437	No (pNHA)	Yes	River Lee (Poor) (At Risk)	
Blarney	5,096	No (pNHA)	Yes	Tributary of River Lee (Moderate) (At Risk)	
Carrigaline	3,095	SPA	Yes*	Cork Harbour (Moderate) (At Risk)	
Carrigtwohill	7,067	SAC	Pending	Lough Mahon (Good) (At Risk)	
City Environs (N)	4,027	SAC/ SPA	Yes	Lough Mahon (Moderate) (At Risk)	
City Environs (S)	-1,327	SAC/ SPA	Yes	Lough Mahon (Moderate) (At Risk)	
Cobh	2,196	SPA	Yes*	Cork Harbour (Moderate) (At Risk)	
Glanmire	1,661	SPA	Yes	Lough Mahon (Moderate) (At Risk)	
Monard^	3,619	SAC/ SPA	Yes	Cork Harbour (Moderate) (At Risk)	
Midleton	9,575	SAC/ SPA	Yes	North Channel Great Island (Moderate) (At Risk)	
Passage West	1,175	SPA	Yes*	Lough Mahon (Moderate) (At Risk)	
Total	42,621				

Notes: *Anticipated that the provision of the Lower Harbour Sewerage Scheme will enhance status in short / medium term. ▼
Data collected August 2013. ^Monard is a proposed new town (not yet developed).

Strategic Infrastructure Deficit. Planned Development may require further investment and /or EPA licence compliance issues resolved.

Some development may proceed but significant works/EPA licence required to accommodate planned population target

Current major infrastructure sufficient to achieve planned population target. (Includes planned infrastructure where there is a firm commitment to the timing of delivery).



**Table 3-17: Status of Waste Water Treatment Infrastructure
Ring Strategic Planning Area 2013**

Settlement	Planned Pop. Growth	Discharge to Natura 2000 site	EPA Licence	Discharges to Waterbody (Waterbody Status) (Risk)	Capacity for development
Bandon	1,125	No (pNHA)	Pending	Bandon River (Good) (At Risk)	
Fermoy	1,100	SAC	Yes	River Blackwater (Poor) (At Risk)	
Kinsale	829	No (pNHA)	Pending	Lower Bandon Estuary (Moderate) (At Risk)	
Macroom	657	No	Yes	River Lee (Good) (Not at Risk)	
Mallow	8,395	SAC	Yes	River Blackwater (Moderate) (At Risk)	
Youghal	1,321	SAC	Yes*	Youghal Harbour (Moderate) (At Risk)	
Total	13,427				

Notes: *Waste water discharge to cease 31 December 2015. Data collected August 2013

Strategic Infrastructure Deficit. Planned Development may require further investment and /or EPA licence compliance issues resolved.

Some development may proceed but significant works/EPA licence required to accommodate planned population target

Current major infrastructure sufficient to achieve planned population target.

(Includes planned infrastructure where there is a firm commitment to the timing of delivery).

**Table 3-18: Status of Waste Water Treatment Infrastructure
North Strategic Planning Area 2013**

Settlement	Planned Pop Growth	Discharge to Natura 2000	EPA Licence	Discharges to Waterbody (Waterbody Status) (Risk)	Capacity for development
Buttevant	556	SAC	Pending	River Blackwater (Poor) (At Risk)	
Charleville	1,279	SAC	Yes	Tributary of the Maigne (Poor) (At Risk)	
Kanturk	137	SAC	Yes	River Blackwater (Moderate) (At Risk)	
Millstreet	182	SAC	Pending	Tributary of River Blackwater (High) (At Risk)	
Newmarket	201	SAC	Pending	Tributary of River Blackwater (Moderate) (At Risk)	
Mitchelstown	1,669	SAC	Yes	Tributary of River Blackwater (Moderate) (At Risk)	
Total	4,024				

Data collected August 2013

Table 3-19: Status of Waste Water Treatment Infrastructure West Strategic Planning Area					
Settlement	Planned Pop. Growth	Discharges to Natura 2000 Site	EPA Licence	Discharges to Waterbody (Waterbody Status)	Capacity for development
Bantry	2,136	No (pNHA)	Pending	Bantry Bay (High) (At Risk)	
Castletownbere	527	SAC	Yes	Berehaven (High) (At Risk)	
Clonakilty	2,497	SAC	Yes	Clonakilty Harbour (Moderate) (At Risk)	
Dunmanway	391	SAC	Yes	Bandon River (Moderate) (Probably at Risk)	
Schull	90	SAC	Yes	Roaring Water Bay (Moderate) (At Risk)	
Skibbereen	365	SAC	Pending	Ilen Estuary (Good) (At Risk)	
Total	6,006				

Strategic Infrastructure Deficit. Planned Development may require further investment and /or EPA licence compliance issues resolved.

Some development may proceed but significant works/EPA licence required to accommodate planned population target

Current major infrastructure sufficient to achieve planned population target.

(Includes planned infrastructure where there is a firm commitment to the timing of delivery).

3.6.55 In addition to the towns, the settlement network of the county also includes 275 villages and smaller settlements, some of which have waste water treatment facilities discharging to various water bodies. The Local Area Plans adopted in 2010 make provision for up to 8,919 dwelling units across this settlement network, subject to the proviso that development would only take place where appropriate and sustainable water and waste water infrastructure is in place which will secure the objectives of the relevant River Basin Management Plan and protection of the Natura 2000 sites with water dependent habitats or species. As detailed earlier, discharges from forty one of the seventy six licensed waste water treatment plants in the county failed to meet the requirements of their discharge licences in 2012. Data in relation to the performance of the plants in settlements of less than 500PE, relative to the requirements of their Certification of Authorisation, is not readily available at present.

Carrigrennan Waste Water Treatment Plant

3.6.56 Carrigrennan WWTP (Wastewater Treatment Plant) is located at Little Island, Co. Cork. The plant treats wastewater from Cork City and surrounding areas in the County including the City Environs, Glanmire and the proposed new town at Monard. The plant was commissioned in 2004 with a design organic load capacity of 413 000 population equivalent. The plant was designed to ensure compliance with the Urban Wastewater Directive. It provides primary and secondary treatment. Treated wastewater from the plant is discharged through a 500m long outfall pipe to Cork Harbour at Lough Mahon. The design of the existing plant did not include for nutrient removal or disinfection.



3.6.57 Since the plant was commissioned the upper harbour, has been designated a sensitive area under the Urban Wastewater Treatment (Amendment) Regulations 2004 (SI 440/2004). Current discharges from the plant do not comply with these regulations. Furthermore, there are several shellfish waters designated within Cork Harbour. The plant therefore needs to be upgraded and Cork City Council have commissioned a preliminary report to identify what works are necessary to upgrade the plant to ensure the plant can be made is fully compliant in terms of current and future loadings.

Other discharges

3.6.58 Other urban waste water discharges are controlled by IPPC licenses and licences for discharges to waters under the Water Pollution Acts. IPPC licences aim to prevent or reduce emissions to air, water and land, reduce waste and use energy/resources efficiently. 173 IPPC licences have been issued in Cork, the majority of which authorise the discharge of effluent to water bodies across the county. These licences need ongoing monitoring / reviewed to ensure water quality is protected.

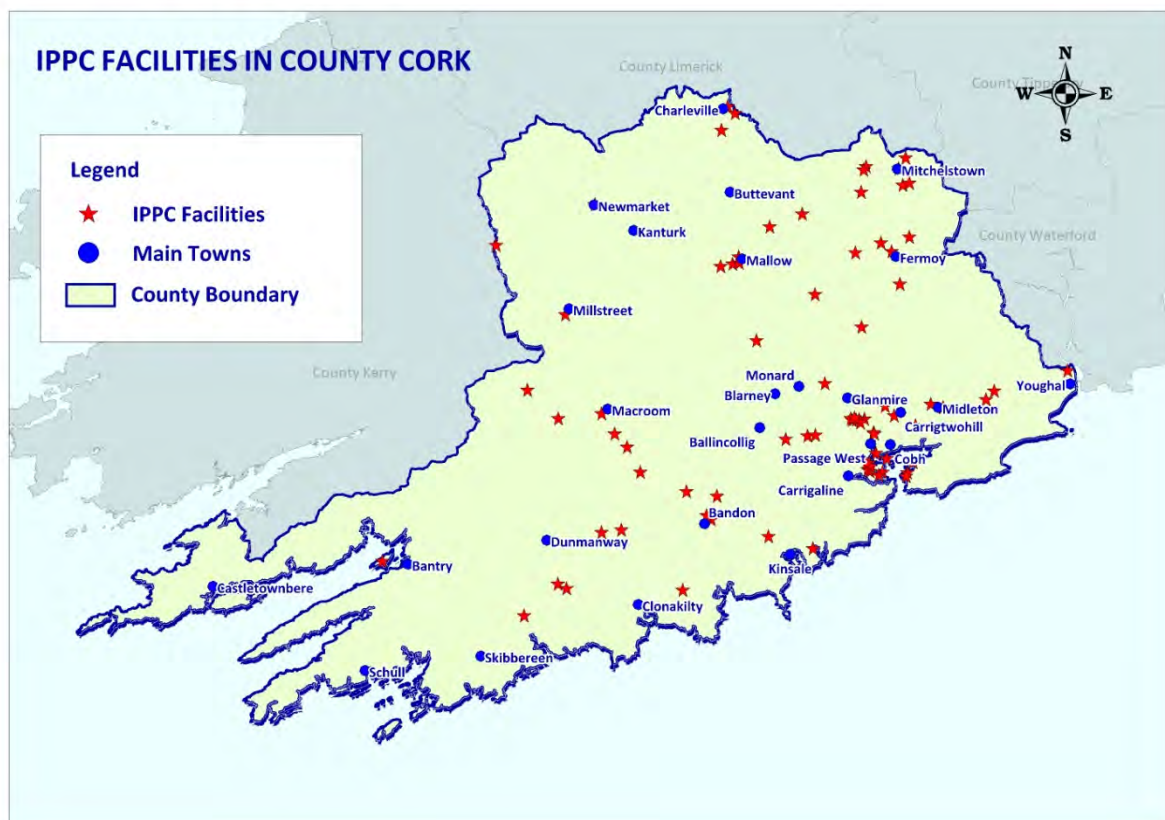


Figure 3-21: IPPC Facilities, County Cork

Storm Water

- 3.6.59 Storm water is water that originates during precipitation events. As urban areas grow and green fields are replaced by roads, building and hard surfaces, the collection and management of storm water has become more challenging. Runoff from impermeable surfaces in urban areas is often contaminated by pollutants such as oils, detergents, trace metals, pesticides and herbicides. Rainwater that does not soak into the ground becomes surface runoff which either flows directly into surface waterways or is diverted into sewers. In settlements with older drainage systems surface water may be piped directly to a watercourse thus bypassing the natural buffering / filtering effect of the natural environment and, at times of prolonged or heavy rainfall can lead to flooding, scouring of watercourses and contamination of surface water. In other areas surface water can discharge to combined storm and foul sewer before being treated in the waste water treatment plant, which can lead to overloading of the plant at times of heavy rainfall. In newer developments separate storm sewers are provided and surface water is collected and stored in underground tanks and then released gradually to a watercourse. While this effectively manages the rate at which this surface water is discharged and thus avoids flooding, there is no opportunity for a natural purification process to improve the quality of the water being stored. These approaches inevitably have a negative effect on the water quality of the receiving waters and alternative approaches are needed to further address the objectives of the Water Framework Directive.
- 3.6.60 The Sustainable Urban Drainage approach involves a move away from controlling the volume and rate of surface water runoff to an integrated approach which considers land use planning, water quality, water quantity, amenity and habitat enhancements and seeks to manage flows and pollutants on site where possible through the use of amenity spaces and open air water storage solutions and minimising the amount of impervious surfaces.
- 3.6.61 All new developments need to incorporate Sustainable Urban Drainage systems. In sensitive water catchments and where large areas of new development are proposed then some advance planning is required in designing a strategic SUDS approach as the natural pathways for the water, location of existing water courses and the optimum locations for wetlands, ponds or swales or other attenuation measures needs to be considered.

Current Issues and Problems

- 3.6.62 There are considerable pressures on the existing water quality of the county and the deadlines for achieving good status have been extended to 2021 in many cases. The main pressures are diffuse and point sources of pollution including discharges from agricultural activity, domestic septic tanks and urban waste water treatment systems which can result in elevated nutrient concentrations which can contribute to eutrophication and eventual deoxygenation of surface waters. Agricultural activity in particular can result in elevated nitrate concentrations which can severely impact on both surface and ground waters.
- 3.6.63 Discharges from the wastewater infrastructure within the county discharges to a number of different water bodies, including the Rivers Bandon, Blackwater and Lee, Lough Mahon, Cork Harbour and Clonakilty Harbour. In general, waste water discharges from waste water treatment plants in the



main towns flow into waterbodies of “moderate” status. Discharges from the treatment plants in Charleville, Fermoy, Mitchelstown and Ballincollig however flow into water bodies that have been classified as being of “poor” status. The River Lee, into which the Ballincollig treatment plant discharges, is a source of drinking water for Cork City.

- 3.6.64 One of the key aims of the SWRBMP is to restore all water bodies in the South West region to good status by 2021. Those water bodies that are defined as being ‘at risk’ are water bodies which are unlikely to meet the required quality standards as set out in the Water Framework Directive and /or are unlikely to be restored to “Good” status by 2021. With the exception of the waterbodies to which the Macroom (‘not at risk’) and Dunmanway (‘probably at risk’) wastewater treatment plants discharge, all other waterbodies receiving discharges from the WWTP serving the main settlements are classified by the SWRBMP as being “at risk”. While loadings from agriculture are likely to be the main source of risk to these waterbodies, the cumulative performance of wastewater treatment plants discharging to the these waterbodies, and their ability treat existing and proposed additional effluent loadings without having an adverse impact on water quality, requires careful management and monitoring.
- 3.6.65 Monitoring data in relation to the emissions from licensed plants in the county for 2012 indicates that some plants are not meeting the requirements of the urban waste water treatment regulations (See Appendix B). Several locations fail because they have no treatment facilities at all (Ballycotton, Castletownbere, Castletownsend, Cobh, Passage West/ Monkstown, Carrigaline, Crosshaven, Timoleague, Whitegate/Agahda and Youghal). Others have failed because they have only preliminary/primary treatment - Ballingearry, Ballydehob, Ballymakeera, Coachford, Courtmacsherry, Glengarrif, Innishannon, Ringaskiddy, Rosscarbery/Owenahincha, Schull, and Union Hall. In other locations while treatment is provided, the discharges did not meet the required standards. Many of the plants are in coastal locations discharging to the marine environment which offers a more favourable assimilative capacity but the impact on coastal and transitional waters remains undesirable. This level of non compliance with the licensing requirements is of concern given the additional development proposed across the county and the need to restore the water status of many water bodies and protect existing water bodies of good and high status.

Discharges within the Blackwater Catchment

- 3.6.66 The catchment of the Blackwater River has been identified as being particularly sensitive to development as it hosts three Natura 2000 sites and the freshwater pearl mussel which is especially sensitive to water quality. Within the North and Ring SPAs, the Core Strategy of the Draft Plan identifies a requirement, based on national population targets, for almost 8,000 new houses within the Blackwater catchment, of which 4,552 are required in Mallow. Within the Mallow and Kanturk Electoral Areas, the Local Area Plans (LAPs) include an additional requirement to produce a wastewater and storm water plan for town and villages in the catchment of the Munster Blackwater, upstream of Mallow, to identify and implement measures necessary to protect this river and its dependent habitats and species. All new development provided for in the LAPs must be compliant with this plan. To date no such wastewater and storm water plan has been prepared, thus limiting the development potential of the area upstream of Mallow in the medium term until such time as it can be demonstrated that development can take place without adversely impacting on the

Blackwater Catchment. (A subsequent Natura Impact Statement on the Blackwater completed in 2011 suggests the impacts downstream of Mallow are also significant– see below).

- 3.6.67 Natura Impact Statements completed in 2011 by Ryan Hanley Consulting Engineers on behalf of Cork County Council on the impacts of WWTP discharges from Licensed and Authorised plants within the catchment concluded that the discharges from most of the settlements in the catchment would have no significant impacts on the Blackwater River cSAC. The reports indicated that impacts could not be discounted in Fermoy, Mallow and Millstreet or in the villages of Ballyclough, Dromahane, Cecilstown, Lombardstown and Glenville. The plants in Mallow, Fermoy, Millstreet, Ballyclough and Dromahane have since been licensed by the EPA and are meeting the requirements of their discharge licences and should not therefore be adversely impacting on the conservation interests of the Blackwater c SAC. The plants in Glenville, Lombardstown and Cecilstown have been given Certificates of Authorisation by the EPA and once operated in accordance with the terms of the authorisation, should not impact on the conservation interests of the Blackwater cSAC.
- 3.6.68 As highlighted by the Natura Impact Report accompanying the Draft Plan, further assessment is required on the likely impact on the Blackwater catchment of the additional population growth targeted at the settlements within the catchment under the Draft Plan. This work has yet to be completed but will inform the amendment stage of the Plan making process.

Discharges within Cork Harbour

- 3.6.69 The Draft Plan targets significant additional growth to the Cork Gateway which is within the catchment of Cork Harbour. Population growth of 31,088 is envisaged within the towns of Carrigaline, Carrigtwohill, City Environs, Cobh, Glanmire, Monard, Midleton and Passage West. Development within Carrigaline, Cobh and Passage West is largely conditional on the delivery of the Lower Harbour Treatment Plant while the plants in Midleton and Carrigtwohill will need to be upgraded. The City environs, Glanmire and Monard are served by the Carrigrennan Plant which is also in need of an upgrade (see above).
- 3.6.70 It is an assumption of the draft development plan, that the population targets which are set for settlements, in the Gateway, within the catchment of Cork Harbour can be accommodated without having an impact on the qualifying features of the designated sites around these. This is dependent on the following;
- that waste water treatment facilities can be designed to ensure that discharges of effluent will be of a standard which ensures that there will be no impact on the qualifying features of relevant Natura 2000 sites;
 - that the required infrastructure will be provided prior to the commencement of discharges from new developments and
 - that license conditions set by the EPA are sufficient to ensure that discharges will not have negative impacts on water sensitive Natura 2000 sites.



Discharges within Clonakilty Bay

- 3.6.71 The Natura Impact Report also highlights the need for an assessment of the impacts of the development proposed for Clonakilty on the conservation interests of Clonakilty Bay, and this work has yet to be completed but will inform the amendment stage of the plan making process.

Other discharges

- 3.6.72 In addition to discharges from treatment plants, unsewered wastewater discharges have the potential to introduce further pollutants in the form of suspended solids and nutrients such as phosphorus and nitrogen to both surface and ground waters. A nationwide system of compulsory registration of domestic septic tanks was introduced in 2012 which should lead to problematic systems being upgraded as appropriate in time.

Infrastructural investment

- 3.6.73 In order to accommodate the additional population provided for by the Draft Plan significant investment is required across the settlement network to deliver the necessary water supply and waste water treatment facilities. The plan strategy is based on the assumption that planning permission for new development will only be granted where the necessary infrastructure will be provided before needs arise/discharges commence, and that the waste water treatment facilities provided can be designed to ensure that effluent will be of a standard which ensures that there will be no adverse impacts. There is a danger that if the necessary infrastructure is not delivered in a timely fashion, development will be unable to proceed in some of the settlements targeted for growth and development will end up being accommodated elsewhere, at locations where water services are available but which may be less sustainable for other reasons, undermining the strategy of the Draft Plan and the development of the Gateway.

Other Issues

- 3.6.74 The main pressure on water quantity is abstraction, where water is taken from a water body to provide a drinking water supply. Water Conservation measures seeks to reduce the levels of unaccounted for water which will help cater for much of the increased demand associated with the additional growth in population.
- 3.6.75 Other existing problems pertaining to water quality include impacts from forestry – acidification, nutrient enrichment and siltation are generally the impacts from this source. Peat extraction and its consequential release of nutrients and peat silt to surface waters is another notable problem, in addition to pesticide use, aquaculture, and threats from landfills, contaminated lands, historic mines, invasive alien species and water abstraction.
- 3.6.76 Specific problems pertaining to coastal and transitional waters, as well as bathing and shellfish waters include fishing practices, recreational activities, dumping at sea, wastewater discharges, inappropriate coastal development and dredging.

Likely Evolution of Water in the absence of the Development Plan

- 3.6.77 The Development plan provides a framework for sustainable development of the county and targets growth at specific locations which allows for the planning of the necessary infrastructural provision



and the regulation of the development in tandem with the delivery of the necessary infrastructure. This approach ensures that the wider planning issues can be considered in planning for the future growth of the county, in addition to obligations in relation to water quality and should facilitate the more efficient provisions of infrastructure. In the absence of the development plan, the Regional Planning Guidelines and other national plans and programmes and legislation such as the Water Framework Directive, Habitats Directive etc. would still apply which may protect water quality but development would be more likely to occur in an ad-hoc and piecemeal fashion with potential negative impacts / increased pressures on the wider water resources of the county.

- 3.6.78 In the absence of the Plan, issues such as future water demand, resource identification and protection may not be comprehensively assessed resulting in a poor level of service provision and possible degradation of important reserves. Also, the future investment in key infrastructure will not be targeted appropriately to key development areas. This could result in a more haphazard, un-coordinated delivery of service, resulting in negative environmental impacts and additional difficulties in meeting commitments under the Water Framework Directive.



3.7 Air and Climatic Factors

Introduction

3.7.1 Air pollution can damage health and reduce life expectancy and can also damage the environment by contributing to acidification, eutrophication and crop damage. Emissions of pollutants from vehicles, power stations, industry, domestic fuel burning and agriculture can have international, national, local or global effects. Emissions of carbon dioxide and other greenhouse gases are enhancing the greenhouse effect and causing global warming. The most significant and sustained contributor to greenhouse gas emissions is the transport sector. In recent decades legislation introduced by the EU has led to a significant improvement in air and Member States are now required to monitor, assess and manage air quality. Air Quality in Ireland is of a high standard across the country and is among the best in Europe, due to the prevailing clean Atlantic air and a lack of large cities and heavy industry.

Air Quality

3.7.2 Air quality monitoring in Ireland is undertaken largely to implement EC Directives on smoke and sulphur dioxide (SO₂), lead, ozone (O₃) and nitrogen dioxide (NO₂) and to assess compliance with national air quality standards. Air quality monitoring and assessments are undertaken at 5 locations within Cork County, of which 3 are located within Cork City Council area and 2 locations are within the administrative area of Cork County Council. Air quality is monitored and assessed in Cork County at Glashaboy and Cork Harbour at Passage West.

3.7.3 Air quality is generally good in the County and Cork is located in an area with a relatively mild climate and has an almost continuous movement of clean air. It is now evident that, due mainly to the very significant increase of vehicles on the public roads, the biggest threat now facing air quality in urban areas is emissions from road traffic.

Noise

3.7.4 Legislation controlling the impacts of environmental noise is set down in the Environmental Noise Directive (2002/49/EC). This Directive provides for a common approach intended to avoid, prevent or reduce the harmful effects of environmental noise. The Noise Regulations 2006 transposed the Directive into Irish law and require that strategic noise maps be produced for large urban areas, major transport corridors and airports above certain thresholds. Cork County and City Councils have prepared a joint noise action plan (currently on draft consultation) which deals with the mitigation of noise within the Cork conurbation as well as along all national and some regional roads within the county.

3.7.5 Exposure to excessive noise levels can have a significant impact upon environmental quality, public health and amenity. Common sources of noise within the County include road vehicles, aircraft, railways, industry, construction, commercial premises and entertainment venues, sports and recreation venues and windfarms.

3.7.6 The planning system has an important role to play in the prevention and limitation of adverse noise effects. By guiding development to the right locations and where necessary, specifying design and layout solutions, planning authorities can limit the overall number of people exposed to potential

noise effects. Development Plans and Local Area Plans can also ensure that conflicts do not occur between noise-generating and noise sensitive uses such as housing, hospitals, schools, places of worship etc..

Waste licences

- 3.7.7 In 1996 the Environmental Protection Agency (EPA) began licensing certain activities in the waste sector. These include landfills, transfer stations, hazardous waste disposal and other significant waste disposal and recovery activities. A waste licence is a single integrated licence dealing with emissions to all environmental media and the environmental management of the facility. 49 such licences have been issued in Cork.

Climatic Factors Greenhouse Gases

- 3.7.8 Increased atmospheric concentrations of greenhouse gases such as carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O), released by human activities, trap additional energy in the Earth's climate system. This is known as 'global warming' and gives rise to a range of Earth system changes, broadly referred to as climate change. The resultant impacts include increasing global average temperature, loss of snow and ice cover, and global sea-level rise. If not addressed, the projected impacts of climate change present a very serious risk of dangerous global impacts which would threaten global food production and natural ecosystems, and could cause irreversible flooding of low-lying coastal areas. The causes and consequences of climate change pose an immense global challenge which is addressed at an international level under the UN Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol. At an EU level the Climate and Energy Package and Adaptation Strategy provide the context for actions in Ireland.
- 3.7.9 The Kyoto Protocol established emissions reduction targets for developing countries to reduce greenhouse gas emissions and their associated impact on the atmosphere. The EU 2008 Climate and Energy Package commits its Member States to an overall reduction of GHG emissions by 20% by 2020 relative to 1990 emissions levels. The EU has also committed to raise this to a 30% emission reduction in the context of a global agreement involving comparable effort by other developed countries and major emitters.
- 3.7.10 Ireland needs to take action to reduce its greenhouse gas emissions and to adapt to climate change impacts. In Ireland, the agricultural sector produces the highest proportion of emissions at 30.5% and this is projected to increase in the coming years in line with the strategy to increase agricultural output. Emissions from the Energy sector (power generation & oil refining) come in at 21.8% and transport at 18.9% of the total. The remainder is made up of Industry and commercial (14.6%), Residential Sector (12.7%) and Waste at 1.4%.
- 3.7.11 Ireland uses a range of policy instruments, both domestic and EU, to advance mitigation of GHGs across the main economic sectors. These include the EU Emissions Trading Scheme and CAP reform; a national carbon tax; and policies to promote the uptake of renewable energies and to advance low-emission transport options.



Climate Change Impacts, Adaption and Planning

3.7.12 The National Climate Change Adaption Framework was published in December 2012 and provides a strategic policy focus to ensure adaption measures are taken across different sectors and levels of government to reduce Ireland's vulnerability to the negative impacts of climate change. The framework looks at national vulnerability to climate change and the development and implementation of sectoral and local adaption action plans as part of a comprehensive national response to the impacts of climate change. Local authorities have to ensure that their development plans adequately address adaption to climate change and such plans will in effect become the mechanism for the location of local climate change adaption action.

Energy

3.7.13 In County Cork 1,238MW of electricity are currently generated from conventional fossil fuel power stations and hydro electric plants. Whitegate, in east Cork, plays a strategic role, with 25 per cent of all national energy produced in one square mile. Also, 90 per cent of the oil reserves held in the state are stored here and elsewhere in the Cork region. There is the potential for a total of 720 MW (more than double the current capacity) of wind energy as a result of the existing, permitted and pending wind farm applications, should planning permission for all these be granted. If all these projects are authorised and connected to the grid, their cumulative effect would equip Cork well to meet its share of the National Targets for 2020.

3.7.14 Other sources of renewable energy in County Cork include:

- | | |
|-------------------------------------------|----------|
| • Inniscarra/Carrigadrohid Hydro Electric | 27MW |
| • Other small scale hydro projects | 0.3MW |
| • Residential & Commercial Biomass plants | 22 units |
| • Combined heat and power plants | 4 units |

3.7.15 Facilitating the sustainable development of the renewable energy resources of the County will play a key role in attracting inward investment to the County, help the State meet its' targets and international obligations and at the same time support the development of a green/low carbon economy.

Current Issues and Problems

3.7.16 In Ireland generally air quality is not a huge issue with the main threat for air quality being emissions from road traffic. However given our reliance on car based transport this will continue to be a problem unless measures are introduced to reduce car use and emissions from vehicles.

3.7.17 Climate change is a cross cutting issue which impacts on habitats, species, fisheries, aquaculture, tourism, water quality, water safety, infrastructure, flood risk and people. Minor changes in climate can result in higher probability of droughts in summer resulting in water shortages and increased flooding events in winter. Of increasing concern is the issue of flooding of rivers, estuaries and coastal areas. Along the coast, salt marshes and sand dunes will be particularly vulnerable. These are

important habitats for many species of migratory birds. Changes in sea level and/or changes in the occurrence of severe rainfall events as a result of climate change could adversely impact upon the county's population, its biodiversity and its economy. Changing climatic factors can have serious implications on the carrying capacity of the drainage network and can threaten critical infrastructure such as transport corridors, bridges etc. throughout the county.

Evolution in the Absence of the County Development Plan

- 3.7.18 In the absence of a County Development Plan, there would be no framework for the location of new development and as a consequence uncontrolled dispersed development would be likely to occur. There would also be missed opportunities relating to energy efficiency, renewable energy and reduction in local transport related emissions due to a lack of integrated land-use and transportation policies and wind strategy.
- 3.7.19 The Plan also encourages the integration of land use and transport in order to minimise the use of road transport and promote the use of alternative forms of transport such as bus, rail, cycling and walking. In the absence of these policies, greenhouse gas emissions would increase and this would be contrary to the policies of the National Climate Change Strategy (2007).

3.8 Material Assets

Introduction

- 3.8.1 The EPA SEA Process Draft Checklist (2008) defines material assets as the critical infrastructure essential for the functioning of society such as: electricity generation and distribution, water supply, wastewater treatment, transportation, etc. Water Supplies and Waste Water Treatment infrastructure are dealt with under Water in Section 4.7. This section deals with Transport and Waste.

Transportation

Roads Infrastructure

- 3.8.2 The road network within the county comprises national, regional and local roads. Several National routes serve the county and many converge on the Southern Ring Road N40 which bypasses the city centre to the south. This ring road plays an important role in providing strategic connectivity for the region, connecting the Rosslare/Waterford (N25) and Dublin Roads (M8) with the city and southwards to Ringaskiddy (N28), the Airport and West Cork (N27 and N71) and westwards to Kerry (N22). All the routes are of Motorway or dual carriageway standard approaching the city boundary. Connectivity with the N20 Cork to Limerick road is provided via the Northern Ring Road through the northern city suburbs of Mayfield and Blackpool.
- 3.8.3 The National Secondary Route N72 runs east /west to the north of the County connecting Waterford and Killarney via Mallow and Fermoy, while the N73 connects Mallow and Mitchelstown.
- 3.8.4 The maintenance and improvement of the national road network is the responsibility of the National Roads Authority. Within the county there are a number of significant constraints at present which impact on the strategic development of the county including:



- Capacity issues at the Dunkettle Interchange & Jack Lynch Tunnel on the N25.
- Capacity issue on the N28 serving Ringaskiddy which may affect the strategic development of the Port and employment uses in the Lower Harbour area.
- The absence of a Northern Ring Road to remove inter-regional traffic from the city environs, facilitate the development of Monard and advance the Atlantic Corridor strategy
- Suspension of the proposed M20 linking Cork and Limerick which is an essential ingredient in the delivery of growth to the Mallow hub;
- Capacity issues on the N22 (Ovens to Ballyvourney) route which impacts on Macroom town centre and regional connectivity between the Cork and Kerry.

3.8.5 The Status of a number of road projects is detailed in table 3-20 below:

Project	Status
M 20 Cork To Limerick	Preferred route stage - Suspended
N8 Dunkettle Interchange	Planning
N22 Ballyvourney – Macroom	Planning
N22 Macroom to Ballincollig	Suspended
N22 Cork Northern Relief Road	Preferred route stage - Suspended
N25 Carrigtwohill to Midleton	Preferred route stage - Suspended
N25 Midleton to Youghal	Suspended
N28 Ringaskiddy to Cork	Preferred route stage - Suspended
N40 Cork SRR interchanges	Construction being finalised
N71 Bandon to Innishannon	Suspended

3.8.6 The Regional road network is also of strategic importance to the development of the county and there are 1321km of regional roads within the county which the Council must maintain. These routes connect the national roads together and link the larger towns and villages to each other and many carry important public transport services. In addition, the council maintains 10,261 km of local roads.

Rail Infrastructure

3.8.7 Parts of Cork County are well served by intercity rail services. The rail infrastructure linking Cork city and Dublin has seen significant investment in fixed infrastructure and rolling-stock. Journey time is about 2 hours 45 minutes and there are 14 inter-city services each day at hourly intervals. Most trains serve Mallow and many serve Charleville and offer connections to Limerick at Limerick Junction.

3.8.8 The suburban services serve the Cork to Cobh and Cork to Midleton line linking many of the Metropolitan towns to Cork and Mallow. The network currently serves Little Island, Glounthaune, Carrigtwohill, Midleton, Fota, Carrigaloe, Rushbrook and Cobh, and will in future serve Blarney and Dunkettle,



- 3.8.9 An additional rail station has been proposed in the Strategic Development Zone Masterplan at Monard, between the City boundary and Blarney to serve a planned new settlement for about 12,500 people.

Public Transport

- 3.8.10 Cork County covers a large geographical area with a large dispersed network of settlements and in general is starting from a low base in public transport provision. The established settlement pattern necessitates a high dependence on private car transport which will make achieving targets in relation to modal shift particularly challenging.

Cork International Airport

- 3.8.11 Cork Airport is located 5km to the south of the City and now serves more than 40 scheduled and charter destinations across the UK, Europe and beyond. A new passenger terminal, three times the size of the original, opened to passengers in August 2006. A Special Local Area Plan has been prepared for Cork Airport. The aim of this plan was to facilitate the development of Cork Airport by providing for, and where necessary, protecting land for the future operation and development needs of the Airport, looking forward to the year 2040. It also identified the future aviation needs and associated infrastructural requirements of Cork Airport in the long term and will specify policy and objectives to safeguard the continuing growth of the Airport as a key economic driver for the region.

Ports and Harbours

- 3.8.12 County Cork has an extensive coastline and also has a number of important ports and harbours which form part of the key asset base for the county and are of importance for economic, social, recreational and cultural reasons. Cork Harbour has long been associated with industrial development and marine leisure activities and its potential for further development, particularly in the area of cultural and recreational tourism and amenity is increasingly recognised
- 3.8.13 The National Ports Policy (2013) identifies three ports in Ireland -Dublin, Cork and Shannon Foynes - as being Ports of National Significance (Tier 1). These are the ports that are responsible for at least 15% to 20% of overall tonnage through Irish ports, and have clear potential to lead the development of future port capacity in the medium and long term. The continued commercial development of these three Ports of National Significance (Tier 1) is a key objective of National Ports Policy.
- 3.8.14 The Port of Cork Company is one of only two ports, the other being Dublin, capable of handling traffic across all five principal traffic modes (LoLo, RoRo, Break Bulk, Dry Bulk and Liquid Bulk). It handles approx. 19% of all seaborne trade in the State. It is second only to Dublin in its importance in the LoLo sector, handling around 21% of all LoLo traffic in the State (IMDO, 2012a). In 2012 the total traffic in volume terms amounted to 9.05 million tonnes. The company has an ongoing investment programme in port facilities and handling equipment and has invested €103 since its incorporation in 1997. In recent years the Port has invested in improvements to the cruise facilities in Cobh and in 2012, the Port of Cork welcomed 57 cruise liners, carrying in excess of 100,000 passengers and crew to the region.



- 3.8.15 The Port of Cork's Strategic Development Plan Review, published in 2010, outlined the company's intention over time to relocate commercial trade to the lower harbour area at Ringaskiddy. The Port of Cork is continuing to engage with relevant stakeholders with a view to a phased implementation of this review's recommendations.
- 3.8.16 Bantry Bay, Castletownbere, Kinsale and Youghal are also important ports in the County for receiving and exporting of goods. Smaller harbours are Union hall and Ballycotton are also important fishing ports.

Waste Management Facilities

- 3.8.17 National policy on waste management is set out in "A Resource Opportunity", published in July 2012 and this sets out the measures through which Ireland will continue to meet targets in reducing, reusing and recycling waste. The delivery of the policy will be ensured through mandatory regional waste management plans.
- 3.8.18 Cork County Council has a responsibility to ensure that the collection, treatment and disposal of waste within its functional area is undertaken in a controlled manner by an authorised operator such that it does not pose a risk to human health or the environment. The Councils approach to Waste management is set out in the Waste management Plan for Cork County 2004.
- 3.8.19 A review of the 2004 plan completed in 2009 concluded that the Waste Management Plan for Cork County (2004) as predicated in Scenario 2 of the Waste Management Strategy for Cork Region (1995) remains relevant in the current climate and has been shown to have the capacity to successfully address the council's obligations under both Irish and EU legislation.
- 3.8.20 Waste minimisation is a key element of Cork County Council's Waste Management Plan (2004). Waste minimisation can include a number of measures, including waste prevention, reduction at source, reuse, recycling and recovery and is achieved through the use of bring sites, civic amenity sites, waste transfer stations, authorised transfer facilities and material recovery and treatment plants each of which have a role to play in achieving national recycling targets.

Waste Transfer Stations

- 3.8.21 An aim of the Waste Management Plan for Cork County (2004) is to ensure that Cork County Council will continue its construction programme for transfer stations to aid the efficient collection of waste in the county. It was proposed that these would be located at Castletownbere (already constructed), Clonakilty, Mallow, Bantry, Fermoy, Kanturk/Millstreet/Macroom area and Skibbereen/Schull area. The programme has since been revised resulting in a decision to move the location of the proposed waste transfer station in Bantry to Derryconnell.

Waste Collection and Dry Recyclables Collection

- 3.8.22 Cork County Council has successfully overseen the introduction of both pay-by-use and a 2-bin collection system for domestic Mixed Dry Recyclables and Mixed Residual Waste across its entire functional area. As a result Mixed Dry Recyclables accounted for 47% of the domestic municipal solid waste collected in 2007. With respect to commercial/industrial municipal waste MDR accounted for 46% of the municipal solid waste collected in 2007. As 'Changing our Ways' set a target of 35% recycling of municipal waste by 2013 it can be seen that Cork County has already exceed this target.

As an aside, Repak have stated that the national target of 50% recovery of packaging waste by 2005 set in 'Delivering Change' has been achieved.

Recycling facilities/initiatives

Civic Amenity Sites

- 3.8.23 There are 22 civic amenity sites in Cork County, located at Ballincollig, Bandon, Bantry, Carrigaline, Carrigtwohill, Castletownbere, Charleville, Clonakilty, Cobh, Dunmanway, Fermoy, Glanmire, Kinsale, Macroom, Mallow, Midleton, Millstreet, Mitchelstown, Newmarket, Schull, Skibbereen and Youghal.

Bring Banks

- 3.8.24 A network of 157 bring banks (BB) has also been provided throughout the county for the collection of dry recyclables. In general the provision is for glass only whereas some bring banks provide for the recycling of glass, plastics, paper and textiles.

Waste Management Facility	Name/Location	Scale of Facility
Residual Landfill Site	Bottlehill	Cork Region
Waste Transfer Station	Castletownbere /Clonakilty	
Civic Amenity Site	11	Local
Landfill	Derryconnell/Youghal	
Bring Banks	Countywide	Local
Door Step Collection	Countywide	
Authorised Transfer Facilities	18	

Hazardous Waste

- 3.8.1 The EPA has prepared a National Hazardous Waste Management Plan (2008-2012) which focuses on reducing the generation of hazardous waste; encourages increased self-sufficiency in the management of hazardous waste including a reduction in export and focuses on minimising the environmental, social and economic impacts of hazardous waste generation and management. The Plan also places an onus on Local Authorities to deal with contaminated land within the Development Plan and Local Area Plan process, where it arises in their jurisdiction.



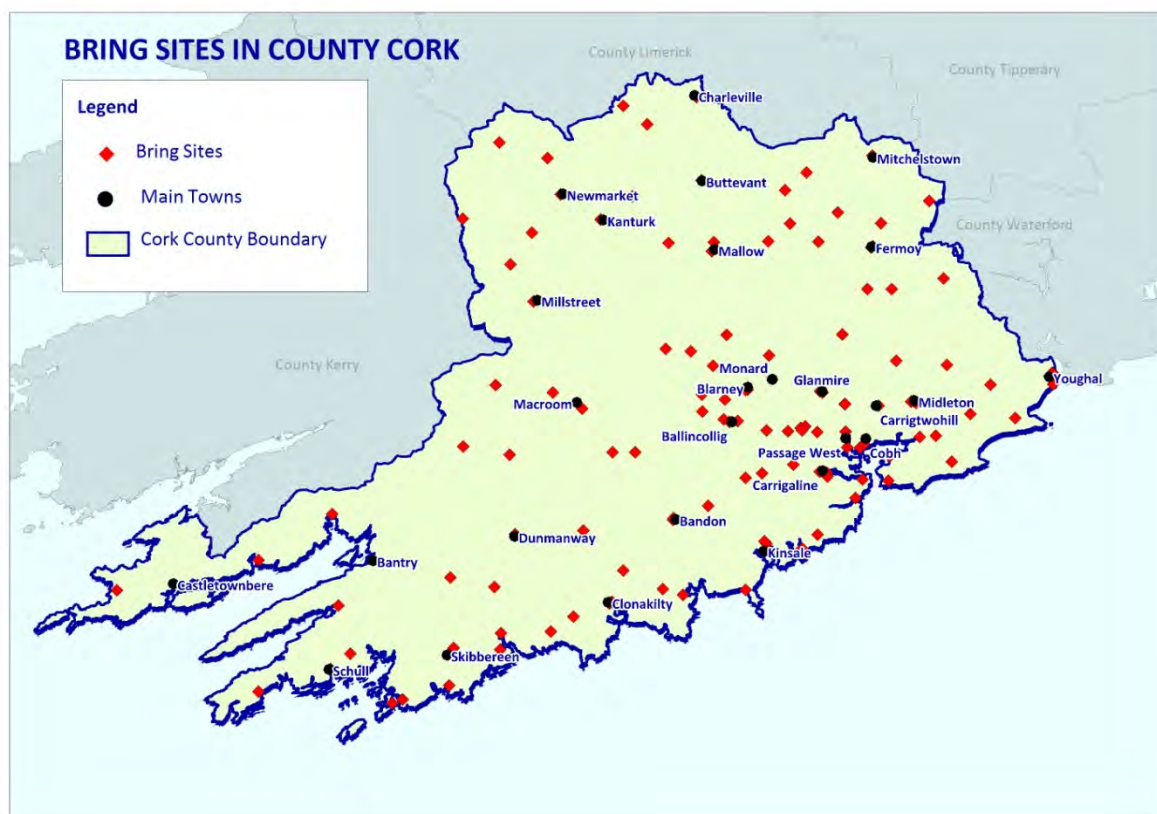


Figure 3-22: Bring Sites in County Cork

Transmission Network

- 3.8.2 EirGrid, state owned company with responsibility for the development of the electricity transmission network has identified the need to strengthen and expand the transmission network in the south and east of Ireland in order to support the growth of the region, ensure the continued reliability and security of supply and allow for the growth in the renewable energy sector. It is proposed to develop a new 400 kV transmission circuit linking the transmission substations at Dunstown in Co. Kildare to Knockraha in Co. Cork via Great Island in Co. Wexford. This development will be of significant benefit to the region.

Current Issues and Problems

- 3.8.3 The constraints affecting the road network of the county and the key road projects which need to be delivered to facilitate development are detailed at paragraph 3.8.2 and 3.8.4 above.
- 3.8.4 In terms of public transport there is a need to optimise the benefits of the investment which has taken place in the suburban rail network by ensuring development land along the rail corridor is prioritising for development and infrastructure needed to facilitate this is delivered. Integration of Kent station with the bus network is also needed to facilitate onward travel to other parts of the city. More importantly, the city quarter around the Kent station needs to be developed for employment uses in order to support the use of the rail service by commuters - this is an issue for the City Council.

Within the wider city hinterland existing public transport services do not provide a realistic alternative to the car for journeys to work and in the absence of improvements to the basic service this is unlikely to change significantly.

- 3.8.5 Economically, the continued development of the Port of the Cork and the development of employment uses within the wider harbour area would confer many benefits on the county and the region. Cork Harbour is also the focus on many land and marine based tourism, recreational and amenity activities and there are plans to develop these further in the future. The harbour is also home to many important habitats and species which are designated for protection and is an area rich in biodiversity, culture and heritage generally. The cumulative impacts of the intensification of all these activities within the harbour area is potentially very significant and because of the diverse nature of the uses and stakeholders involved in the development of the harbour it can be difficult to prioritise development and co-ordinate activity within the harbour area. There is a need for a more detailed and focused strategy/development plan to guide the development of the entire harbour area.

Likely Evolution in the Absence of the County Development Plan

- 3.8.6 In the absence of the County Development Plan there would be no framework directing development and associated infrastructural requirements such as new roads and public transport investment to the appropriate locations, protecting the land needed to safeguard such infrastructure and provide new infrastructure or for balanced the competing demands of different activities in an area.

3.9 Cultural Heritage

Overview

- 3.9.1 Cork County has a rich and diverse cultural heritage that includes archaeological sites, villages and townscapes and the buildings they contain. Cultural heritage also includes intangible items. UNESCO defines these as *"the practices, representations expressions, knowledge, skills – as well as the instruments, objects, artifacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognise as part of their cultural heritage"*. Our cultural heritage is constantly evolving and being created as it is transmitted from generation to generation in response to environment, interactions with nature and history and provides us with a sense of identity and continuity. . The protection of our heritage not only has environmental benefits for the quality of life of the people of Cork but it also brings economic benefits by providing important tourism assets for visitors to enjoy.

Archaeological Heritage

- 3.9.2 Archaeological heritage is defined as including structures, places, caves, sites, features or other objects, whether on land, underwater or in the inter-tidal zones. Cork County has a vast resource of archaeological heritage with over 19,000 monuments registered throughout the County. Monuments span a range of pre-historic eras from the bronze age, iron age, Christian and Medieval



periods. Archaeological features are part of our historic landscape and help us gain knowledge and understanding of the past.

- 3.9.3 The Minister for Arts, Culture and the Gaeltacht is responsible for the protection of archaeological heritage, including the licensing of archaeological excavations through the National Monuments Act.
- 3.9.4 There are a number of categories of monuments which can be summarised as follows:
- Recorded Monuments which are subject to statutory protection in the Record of Monuments and Places (RMP) established under Section 12 of the National Monuments (Amendments) Act 1994;
 - Monuments in the Sites and Monuments Record (SMR) in www.archaeology.ie;
 - National Monuments (Monuments in State or Local Authority Ownership/Guardianship), preservation order or temporary preservation order. Ministerial consent is required for any works at or in proximity to the monument under Section 14 of the National Monuments (Amendment) Act 2004;
 - Underwater archaeology (wrecks over 100 years old) is subject to statutory protection under Section 3 of the National Monuments Act 1987.
- 3.9.5 Figure 3-23 below indicates the distribution of recorded monuments within the county. The County has the highest concentration of National Monuments (58 in total) and these are listed in Appendix A. Within the network of settlements designated for growth, a number of towns are subject to zones of archaeological potential for their historic significance. These include Bandon, Buttevant, Clonakilty, Cobh, Fermoy, Kinsale, Macroom, Mallow, Midleton, Skibberen and Youghal, which are allocated growth under the proposed settlement strategy. Some of these towns are also walled towns and subject to recently released national policy and guidelines regarding “walled towns” (Youghal, Bandon, Kinsale & Buttevant).
- 3.9.6 County Cork has a wealth of industrial archaeology and this is protected through the archaeological record. Underwater Archaeology is now recognised as an important element of our cultural heritage. Given the coastal geography of County Cork and the significance some of the County’s coastal ports and towns played in historic events over the centuries there is very high potential for underwater cultural material in the form of shipwreck remains and associated artefactual materials. There is a database of shipwrecks on and off the Irish coast. Shipwrecks over 100 years old are now protected under new legislation dealing with Underwater Archaeology. There are 100 registered in County Cork and 78 of these are over 100 years old. This is a valuable part of our historical and archaeological heritage.
- 3.9.7 Some of the coastal towns may have been subject to reclamation and infrastructure may have been developed to facilitate the maritime landscape. Maritime artefacts such as quays, jetties, anchorages, access routes to the sea etc are all important cultural heritage resources.

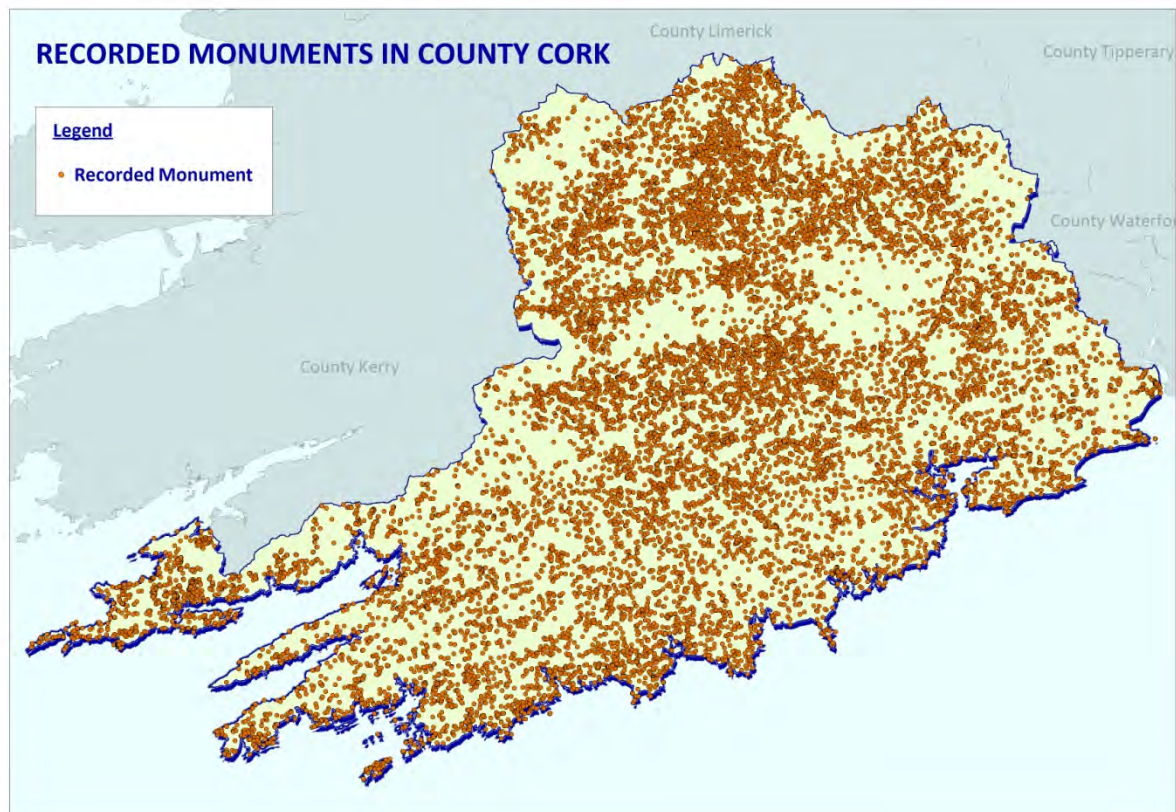


Figure 3-23: Recorded Monuments

Architectural Heritage

- 3.9.8 The Planning and Development Act sets out the requirements for County Development Plans to protect structures of “architectural, historical, archaeological, artistic, cultural, scientific and technical interest” by including a Record of Protected Structures (RPS) or the designation of Architectural Conservation Areas (ACAs) to protect areas of townscape value. Under the legislation structures or buildings listed together with their setting and attendant grounds are awarded protection.
- 3.9.9 There are currently 1,296 structures on the RPS as part of the County Development Plan 2009 and a further 1,462 structures currently designated as part of the 9 no. Town Council Plans. A variety of structures are protected and these include bridges, mansions, shop fronts, post offices, gate lodges and buildings dating from the 1500s to the 1990s. Figure 3-24 below illustrates the distribution of protected structures throughout the County.
- 3.9.10 There are 43 Architectural Conservation Areas designated within the County Development Plan 2009 and all of the town councils contain 1 or more Architectural Conservation Areas within their boundaries. Under the Planning Act it is an objective to protect the special character of an area which generally comprises of a collection of buildings and their setting and in many cases may include a historic demense or park. Some of these are within settlements designated for growth.

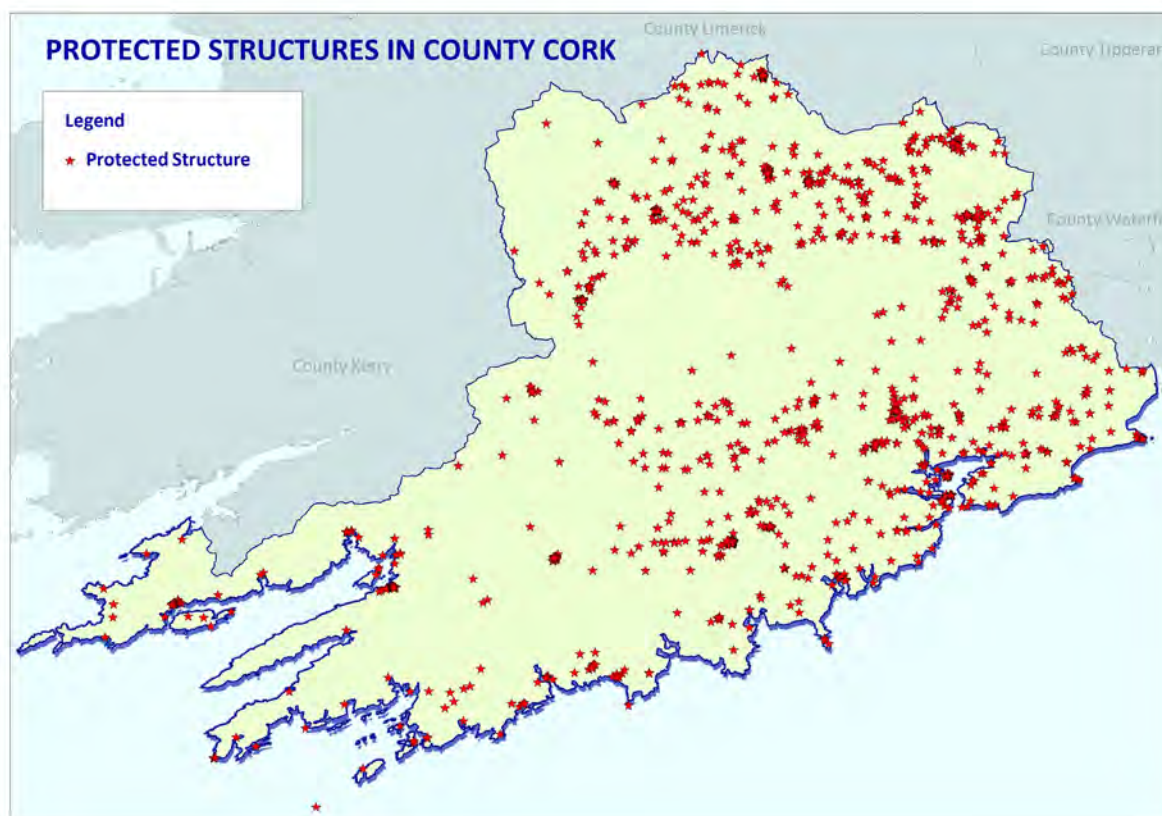


Figure 3-24: Protected Structures, County Cork

- 3.9.11 The National Inventory of Architectural Heritage is a section within the Department of the Environment, Heritage and Local Government and involves the identification and recording of Ireland's architectural heritage from 1700 to present. Identified buildings are awarded a value and may be put forward for inclusion in the Record of Protected Structures. A total of 6,282 structures are recorded on the NIAH for County Cork (including the 9 Town Councils).
- 3.9.12 A national survey of historic gardens has also been undertaken by the NIAH. While there are over 1,000 historic gardens identified in the survey for Cork, in many cases the main features of the designed garden are no longer recognisable, although peripheral features may remain visible. Additional analysis of the survey work is required to assess the value and distribution of what is remaining.
- 3.9.13 Table 3-22 below illustrates the distribution of the main aspects of the built heritage within the main towns of the county. The majority of these assets are within the existing built form of the town and so proposed infill or brownfield proposals will need to be particularly managed to avoid undue impacts on the cultural heritage of the town. While the largest proportion of growth will be allocated to Greenfield lands, these may impact on archaeology deposits. Where deposits are deemed of significance development should be avoided or mitigated, where appropriate.

Table 3-22: Built Heritage Assets per Settlement				
Settlement Name	ACA	RPS	NIAH (Buildings & Gardens)	Archaeology (*as per Urban Archaeology Survey)
Metropolitan SPA				
City Environs (N)	0	2	7	16 sites
City Environs (S)	2	26	58	19 sites
Monard	0	0	3	6 sites
Glanmire	0	17	39; <i>(7 Historic Gardens)</i>	c. 14 sites in boundary
Blarney	0	8	24 <i>(2 outside town)</i>	c. 25 sites in boundary
Carrigaline	0	6	12	29 sites
Passage West (& Monkstown)	3	10	217 in total <i>(3 National)</i>	7 sites
Ballincollig	0	12	48	27 sites
Midleton	1	51	150 <i>(4 of National Importance)</i>	9 sites* <i>(including historic town)</i>
Carrigtwohill	0	6	11	14 sites
Cobh	5	377	351 <i>(1 International & 1 National)</i>	6 sites <i>(including historic town*)</i>
Cork Ring SPA				
Mallow	3	117	171 <i>(1 National)</i>	44 sites <i>(including historic town, town walls & 1 National Monument)</i>
Bandon	6	54	213 <i>(1 National)</i>	10 sites* <i>(includes walled town)</i>
Fermoy	1	210	221 <i>(1 National)</i>	4 sites <i>(including historic town*)</i>
Kinsale	1	50	190 <i>(4 National)</i>	12 sites* <i>(including Historic town, town walls & 2 National Monuments)</i>
Macroom	0	53	<i>(1 National)</i>	4 sites <i>(including historic town*)</i>
Youghal	1		276 <i>(11 National)</i>	23 sites <i>(* including Walled Town & 1 National Monument)</i>
North SPA				
Buttevant	1	29	53	8 sites* <i>(including walled town & 1 National Monument)</i>
Charleville	1	58	87	9 sites
Kanturk	2	32	39	7 sites
Millstreet	1	32	21	7 sites
Mitchelstown	1	82	146	18 <i>(including Historic town)</i>
Newmarket	0	9	15*	8 sites
West SPA				
Bantry	3	40+	93 <i>(1 National)</i>	5 sites
Castletownbere	0	c. 20	28	13 sites
Clonakilty	1	207	177	3 sites <i>(including Market Town*)</i>
Dunmanway	0	28	51	8 sites
Schull	0	0	32	2 sites
Skibbereen	1	165	125	17 sites <i>(including historic town*)</i>

Tree Preservation Orders

3.9.14 There are 6 Tree Preservation Orders in the County.

Gaeltacht

3.9.15 Parts of County Cork lie within the Gaeltacht which includes Oileán Chléire (Cape Clear Island), an area west of Macroom and adjoining the Kerry border including Baile Bhuirne (Ballyvourney) and Béal Atha an Ghaorthaigh (Ballingeary). These areas have a distinctive cultural heritage which includes the Irish language but also traditions and music which requires protection.

Current Issues / Problems

3.9.17 The archaeological heritage of the county is a non replaceable resource which is generally protected by legislation. Increased development pressure raises the potential for impact on the archaeological resource of the county unless properly assessed, managed and mitigated. There are some 1,500 new archaeological monuments listed on the Record of Monuments and Places since 1994 but these are outside the scope of the National Monuments Act. Similarly, the protection of battlefields, ambush sites, industrial and maritime archaeology are recognised as important elements to the historic landscape but are vulnerable to destruction due to limits in the scope of archaeological legislation.

3.9.18 The architectural heritage of the county is a finite resource. While County Cork has an extensive list of structures on the RPS, the completion of the NIAH has highlighted that there is an extensive list of additional buildings which may be worthy of inclusion, some of which are deemed to be of national importance. If these remain outside the RPS they may be vulnerable to inappropriate alteration, extension or intervention and may lead to loss of important elements of our cultural heritage. Many protected structures are threatened by neglect and deterioration where they lie vacant and unused and this can be a more difficult issue to address.

Evolution in the absence of the Plan

3.9.19 In the absence of the Plan a large number of archaeological sites which do not fall within the National Monuments Act would have no means of protection. The County Development Plan can include policies to protect all sites of archaeological value.

3.9.20 Without a strategic framework to direct population growth, development could occur in a haphazard manner negatively impacting on important cultural assets of the County, some of which are of international and national importance. The allocation of growth to historic settlements can help secure the future of heritage structures through appropriate use.

3.10 Landscape

Overview

3.10.1 Landscapes comprise the visible features of an area of land which includes physical elements such as landforms, living elements of flora and fauna, abstract elements such as lighting and weather conditions and human elements such as agriculture and the built environment. Landscape also embraces historic settlement patterns, townscapes and seascapes. The geography and topography of County Cork contains a diverse set of landscape types which are important not only for their intrinsic value as places of natural beauty but also because they provide residents and tourists with land for recreation and other uses.

Landscape Types, Values, Sensitivity and Importance

3.10.2 The Cork County Development Plan 2003 identified 76 landscape character areas in the County, reflecting its complexity and diversity. The landscape character areas were then amalgamated into 16 generic landscape types, based on similarities evident within the areas. Each landscape type represents a generic area of distinctive character based on large-scale characteristics. The Landscape Character Assessment evaluated each of the 16 landscape character types and attributed a value, sensitivity and importance to each landscape type. It is intended that the County Development Plan will provide a framework to manage change appropriately within the landscape by limiting development within the most sensitive and scenic locations and directing growth to appropriate robust landscape areas within the fringes of the existing settlement network.

3.10.3 Landscape values are the environmental or cultural benefits, including services and functions, which are derived from various landscape attributes. In Cork County the landscape along the coastline has been valued as “very high”. Very high valued landscape includes the peninsulas of West Cork, extending eastwards to include the landscape in the vicinity of Cork Harbour, including the landscape in the vicinity of Glanmire, Carrigtwohill and Midleton. Elsewhere in the County a high landscape value has been identified for north Cork, particularly in the vicinity of the Blackwater and along the Lee and Bandon river valleys.

3.10.4 Landscape sensitivity is a measure of a landscape’s ability to accommodate change or intervention without suffering unacceptable effects to its character and values. The Landscape Character Assessment has categorised sensitivity into the following and are mapped below:

- Low sensitivity landscapes - robust landscapes with strong efficiency of resistance, accommodates pressure changes.
- Medium sensitivity landscapes - can accommodate development pressure, but with limitation.
- High sensitivity landscapes - vulnerable landscapes with low limitation of development pressure acceptances.
- Very high sensitivity landscapes - extra vulnerable landscapes (seascape area with national importance).

3.10.5 The landscape along the coastline, including Cork Harbour and the areas of Glanmire, Carrigtwohill, Midleton, Passage West and Cobh have been identified as having very high landscape sensitivity.



Similarly, in northeast Cork, the landscape in the vicinity of the Blackwater valley, including the towns of Mallow, Buttevant, Charleville, Fermoy and Mitchelstown has very high sensitivity. Parts of the landscape near the Lee river valley have also been identified as having very high sensitivity.

- 3.10.6 The importance i.e. value of landscape has been categorised as local, county or national. A landscape strategy has been developed and it is an objective to ensure the management of development throughout the county, while having regard to the value of the landscape, its character, distinctiveness and sensitivity. The Strategy aims to ensure that different kinds of development will be successfully integrated throughout the County in order to minimise the visual and environmental impact of development, particularly in areas designated as sensitive landscapes where higher development standards (layout, design, landscaping, materials used) will be required.
- 3.10.7 Guidelines on the Heritage appraisals of Development Plans outlines the definition of Heritage and this includes seascapes. While the Landscape Character Assessment has considered the landform element of seascape, there are broader considerations which need further assessment.

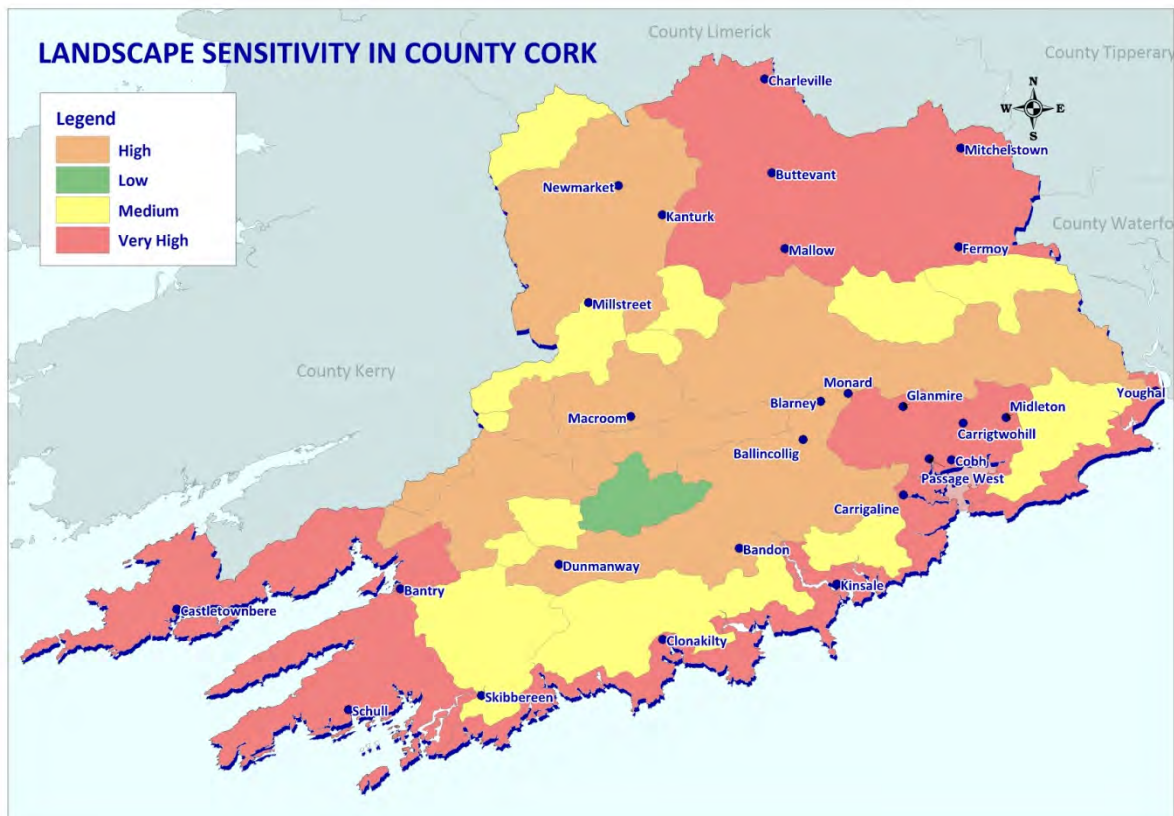


Figure 3-25: Landscape Sensitivity Map

Scenic Routes

- 3.10.8 Scenic routes act as indicators of high value landscapes and identify more visually sensitive locations where higher standards of design, siting and landscaping are required.

Environmental Problems

- 3.10.9 While recognising that landscape and seascape are a constantly evolving entity, the most significant impact of development on the landscape relates to its visual impact. In areas of the County with high landscape sensitivity, the capacity to accommodate development without adverse impacts on the environment would be more limited. New developments in the landscape, may not in itself have an adverse visual impact, however, the cumulative impact of many similar developments could have the potential to adversely affect the landscape.
- 3.10.10 Figure 4.25 indicates landscape sensitivity in the County. There is potential for conflict between development pressure and landscape sensitivity in parts of the County, particularly in the areas of the County with very high landscape sensitivity which have experienced strong development pressure in recent years. Furthermore, the fresh development approach to the location of wind farms has potential to have a negative impact on the landscape value around Cork Harbour. The County Development Plans broad support for the development of renewables both on and off shore highlights the need for a comprehensive Seascape Assessment so development can be guided away from the most sensitive and visually vulnerable coastlines of the county.

Evolution in the absence of the Plan

- 3.10.11 In the absence of the Plan there would be no framework for limiting development within the most sensitive and scenic parts of the County. The cumulative impact of haphazard development within sensitive landscapes could erode the character and value it represents to the citizens and visitors of the County.

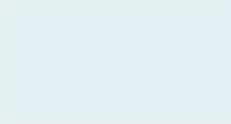




Chapter 4 Environmental Protection Objectives

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4.1 Strategic Environmental Protections Objectives

Introduction

- 4.1.1 This section identifies the Strategic Environmental Protection Objectives used in the assessment of the Draft Plan. Environmental Protection Objectives (EPOs) are methodological measures against which the environmental effects of the Plan can be tested. If complied with in full, EPOs would result in an environmentally neutral impact from the implementation of the Plan. The EPOs are set out under a range of topics and are used as standards against which the provisions of the Plan can be evaluated in order to help identify areas in which significant adverse impacts are likely to occur, unless mitigated.
- 4.1.2 The SEA Directive requires that the evaluation of plans and programmes be focused upon the relevant aspects of the environmental characteristics of areas likely to be significantly affected. EPOs are developed from international, national and regional policies including various European Directives which have been transposed into Irish law and which are intended to be implemented within the County. The EPOs selected have also been informed by Table 4B of the SEA Guidelines (DEHLG, 2004), those used in the preparation of the current County Development Plan and the issues arising from the baseline assessment. The use of EPOs, although not a statutory requirement, does fulfil obligations set out in Schedule 2B of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004).
- 4.1.3 The EPOs are linked to indicators which can facilitate monitoring the environmental effects of implementing the Plan when adopted, as well as to targets which the Plan can help work towards.

4.2 Population and Human Health

- 4.2.1 The impact of the Plan on the population and human health is potentially multifaceted as the plan interacts with all the environmental receptors. The plan guides physical land use and seeks to promote sustainable development, guiding the spatial distribution of population across the county. Key directives and policy documents relevant to population have been referenced earlier in this document and include the National Spatial Strategy, Regional Planning Guidelines, National Development Plan, Our Sustainable Future – A Framework for Sustainable Development in Ireland 2011-2016, Smarter Travel, Guidelines for Sustainable Residential Development in Urban Areas, Sustainable Rural Housing, Guidelines for Planning Authorities 2005 etc.
- 4.2.2 The impact of the plan on human health will be influenced by nature, location and design of new development permitted under the plan and its impact on environmental factors like water quality, air quality, noise, landscape and in the long term on climatic factors. The following EPOs, Indicators and Targets have been identified having regard to the policy context and the environmental baseline described in Chapter 3.



Table 0-1: EPO Population and Human Health

Environmental Protection Objective	Targets	Indicators
<p>Population</p> <p>EPO 1: To ensure the sustainable development of Cork County so the people of Cork have the opportunity to live in communities with high quality residential, working and recreational environments with sustainable travel patterns.</p>	<ul style="list-style-type: none"> • Increase population growth in the main settlements of the county and particularly within Metropolitan Cork. • Reduce the number of new residential properties in the areas where it is difficult to provide services. • Ensure new development is located where it can access a choice of transport modes to connect to the main centres of employment. • Decrease journey time and distance travelled to work during the lifetime of the plan. • All large scale housing development to be accompanied by a Design Statement. 	<ul style="list-style-type: none"> • Significant increase in the population of the main towns. • Distance and mode of transport to work/ school. • No. of new houses in rural areas. • No of new houses/ employment development built within 1km of the Cork Suburban rail line or within 400m of a bus route. • Increased high frequency bus service provision as measured by the amount (route kilometers) of bus services with a 15 minute frequency.
<p>Human Health</p> <p>EPO 2: To protect and enhance human health and manage hazards or nuisances arising from traffic & incompatible land uses.</p>	<ul style="list-style-type: none"> • Avoid incompatible development nears SEVESO sites or IPPC licensed sites • Ensure new development is well served with community facilities and facilitates including walking and cycling routes. 	<ul style="list-style-type: none"> • No of planning permissions granted within the consultation distance of Seveso sites/IPPC facilities. • No of new primary health care/schools/creches/ community facilities provided. • Amount of (Km) new cycleways provided.

4.3 Biodiversity, Flora and Fauna

4.3.1 County Cork has a rich and diverse natural heritage which is described in the baseline section of this report (Chapter 3). Key directives and policy documents relevant to biodiversity, flora and fauna have been referenced earlier in this document and include the EU Habitats Directive (92/43/EEC), the EU Birds Directive (79/409/EEC), UN Convention on Biological Diversity, the National Biodiversity Plan – Action for Biodiversity 2011-2016 and the County Biodiversity Action Plan 2009-2014. The following EPOs, Indicators and Targets have been identified having regard to the policy context and the environmental baseline described in Chapter 3.

Table 0-2: EPO Biodiversity, Flora & Fauna		
Environmental Protection Objective	Targets	Indicators
<p>Biodiversity, Flora and Fauna</p> <p>EPO 3: Throughout the county, conserve and restore ecosystems, habitats and species in their natural surroundings, and ensure their sustainable management, including the ecological corridors between them.</p>	<ul style="list-style-type: none"> • Maintain the favourable conservation status of all habitats and species, especially those protected under national and international legislation. • Implement the actions of the Cork County Biodiversity Action Plan. • Establishment of a Green Infrastructure Strategy for the County • Protect habitats from invasive species 	<ul style="list-style-type: none"> • Number of developments receiving planning permission within designated sites or within the consultation distance of designated sites where the HDA process identified potential for impacts. • Reduction in the quantum of greenfield land in the county as measured by the increase in the amount of brownfield land associated with each settlement and the no. of one off houses being built in the countryside. • Number of actions achieved in Biodiversity Action Plan • Progress on Green Infrastructure strategy

4.4 Soil

4.4.1 There is currently no legislation specific to protecting soil resources. Successive development plans have sought to protect and sustainably manage the soil resource of the county. The following EPOs, Indicators and Targets have been identified having regard to the environmental baseline described in Chapter 3.

Table 0-3: EPO Soil		
Environmental Protection Objective	Targets	Indicators
<p>Soil</p> <p>EPO 4: Protect the function and quality of the soil resource in County Cork</p>	<ul style="list-style-type: none"> • Reduce the use of greenfield land by encouraging the reuse of brownfield sites. • Encourage sustainable extraction of non-renewable sand, gravel and rock deposits and the reuse and recycling of construction and demolition waste. 	<ul style="list-style-type: none"> • No of brownfield sites that have been redeveloped. • Volume of construction and demolition waste recycled. • Reduction in number of vacant and derelict buildings.

4.5 Water

4.5.1 Water Quality is governed by a large body of legislation and is subject to regular monitoring. As discussed in Chapter 3, the Water Framework Directive has introduced a new approach to water protection. The current baseline status of waters in Cork is varied (see Chapter 3) and the improvement of less than good water quality status is a priority for the future. Key directives and policy documents relevant to water have been referenced earlier in this document and include the Water Framework Directive (2000/60/EC) and Groundwater Quality Directive 2006/118/EC. The following EPO, Indicators and Targets have been identified having regard to the policy context and the environmental baseline described in Chapter 3.

Table 0-4: EPO Water		
Environmental Protection Objective	Targets	Indicators
<p>Water (W)</p> <p>EPO 5: Maintain and improve the quality of water resources and improve the management and sustainable use of these resources to comply with the requirements of the WFD.</p>	<ul style="list-style-type: none"> • To achieve 'good' status in all bodies of surface waters (lakes rivers, transitional and coastal waters). • Achieve compliance with Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC (protection of groundwater). • Not to permit development where it would result in a WWTP exceeding the terms of its discharge license. • Encourage future population growth in areas served by urban waste water treatment plants and public water supplies. 	<ul style="list-style-type: none"> • Trends in classification of overall status of surface water under Surface Water Regulations 2009 (SI No 272 of 2009) • Trends in Classification of Bathing Waters as set by Directive 2006/7/EC. • Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC. • No of households served by urban waste water treatment plants/ septic tanks/ individual WWTP or other systems. • No of households served by public water supplies. • % of water unaccounted for.

4.6 Air and Climate

- 4.6.1 The main impacts on air quality are likely to arise from traffic emissions and noise from traffic and other sources. The land use policies of the plan affect the journeys people make every day to work, school, shopping or for leisure purposes etc. At present approximately 90% of journeys to work within the county are made by the private car. The transport sector is also a significant contributor to greenhouse gas emissions. Key directives and policy documents relevant to Air/ Climate change include Directive 96/62/EC – Air Quality Framework Directive, the Kyoto Protocol and the National Climate Change Strategy (2007-2012) and Climate Change Adaption Framework 2012.
- 4.6.2 The following EPO, Indicators and Targets have been identified having regard to the policy context and the environmental baseline described in Chapter 3.

Table 0-5: EPO Air Quality & Climate		
Environmental Protection Objective	Targets	Indicators
<p>Air Quality and Climate (AQ/C)</p> <p>EPO 6: Protect and improve air quality.</p> <p>EPO 7: Contribute to mitigation of, and adaptation to, climate change.</p>	<ul style="list-style-type: none"> • Ensure air quality monitoring results are maintained within appropriate emission limits. • Increase modal shift in favour of public transport, walking and cycling. • Encourage production and use of renewal energy. • Encourage energy efficiency in building design and construction. • Provide flood protection measures where appropriate. • Avoid inappropriate development in areas of flood risk. 	<ul style="list-style-type: none"> • Trends in Air Quality monitoring data. • Percentage of population travelling to work by public transport, walking or cycling. • No of wind turbines permitted. • No of developments permitted within areas at risk of flooding.

4.7 Cultural Heritage

- 4.7.1 Cork has a rich architectural, archaeological and cultural heritage. Key directives, legislation and policy documents relevant to cultural heritage include the Planning and Development Acts 2000 – 2013, National Monuments Acts, National Heritage Plan 2000 and the Framework & Principles for the Protection of Archaeological Heritage (DAHGI 1999).
- 4.7.2 The following EPO, Indicators and Targets have been identified having regard to the policy context and the environmental baseline described in Chapter 3.

Table 0-6: EPO Cultural Heritage		
Environmental Protection Objective	Targets	Indicators
<p>Cultural Heritage (CH)</p> <p>EPO 8: Protect and, where appropriate, enhance the character, diversity and special qualities of architectural, archaeological and cultural heritage (including Gaeltachta) in County Cork.</p>	<ul style="list-style-type: none"> • No loss of or adverse impact on the fabric or setting of monuments on the Record of Monuments (RMP). • No loss of or adverse impact on the architectural heritage value or setting of protected structures. • No loss of or adverse impact on structures recorded on the National Inventory of Architectural Heritage. • Implement the Cork County Heritage Plan 	<ul style="list-style-type: none"> • Loss of or adverse impact on monuments on the Record of Monuments (RMP). • Loss of or adverse impact on protected structures included on the RPS or structures included on the NIAH.

4.8 Landscape

- 4.8.1 The European Landscape Convention was signed in 2000 and came into force in Ireland in 2004. The European Landscape Convention aims to promote the protection, management and planning of European landscapes and to organise European co-operation on landscape issues. The Convention highlights the importance and need for public involvement in the development of landscapes. It encourages a joined up approach through policy and planning in all areas of land-use, development and management, including the recognition of landscape in law and is the first international treaty to be exclusively concerned with the protection, management and enhancement of the European landscape. The Convention covers natural, rural, urban and peri-urban areas. It deals with ordinary and degraded landscapes as well as those of outstanding beauty.
- 4.8.2 The preparation of a National Landscape Strategy is underway since 2011 but has yet to be completed. A Draft Landscape Strategy for County Cork was prepared in 2008 and identifies landscapes in the county in terms of their Character, Value, Sensitivity and Importance and includes recommendations on balancing development and change with landscape protection. Once the National Landscape Strategy is finalised the County Strategy will need to be reviewed and completed.
- 4.8.3 The following EPOs, Indicators and Targets have been identified having regard to the policy context and the environmental baseline described in Chapter 3.

Table 0-7: EPO Landscape		
Environmental Protection Objective	Targets	Indicators
<p>Landscape (L)</p> <p>EPO 9: Protect and, where appropriate, enhance the character, diversity and special qualities of landscapes in County Cork.</p>	<ul style="list-style-type: none"> No large scale development permitted in areas of high landscape value. 	<ul style="list-style-type: none"> Number of large scale developments permitted in areas of high landscape value.



4.9 Material Assets

4.9.1 Material Assets, for the purposes of SEA, comprises the infrastructure the population needs for the functioning of society and includes roads, transport, water services, energy and telecommunications infrastructure, the building stock of the county, production facilities (factories etc), green infrastructure (parks open spaces, recreational facilities etc.). Large infrastructural installations have the potential to have significant effects on the environment, both during its construction/ development stage and during its use and operation. Such projects will generally require EIA as part of the planning process which would evaluate such impacts and introduce mitigation measures where necessary to minimise any negative environmental effects.

4.9.2 The following EPO, Indicators and Targets have been identified having regard to the policy context and the environmental baseline described in Chapter 3.

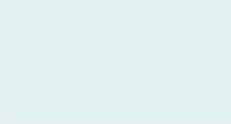
Table 0-8: EPO Material Assets		
Environmental Protection Objective	Targets	Indicators
<p>Material Assets (MA)</p> <p>EPO 10 Make best use of the material assets of the county and promote the sustainable development of new infrastructure to provide for the current and future needs of the population.</p>	<ul style="list-style-type: none"> • Develop the road, rail and public transport infrastructure of the county to facilitate sustainable growth and travel patterns. • Ensure appropriate water services infrastructure is delivered in areas targeted for population growth. • Protect and optimise the use of the existing building stock. • Facilitate the sustainable expansion of production facilities to enable economic growth and create new employment opportunities. • Protect and enhance green infrastructure. • Protect existing recreational facilities and green infrastructure. 	<ul style="list-style-type: none"> • New critical infrastructural projects completed (projects identified by the CDP).

Chapter 5

Alternative Scenarios

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5.1 Introduction

- 5.1.1 The SEA Directive and Regulations require the Environmental Report to consider 'reasonable alternatives taking into account the objectives and geographical scope of the plan or programme' and the significant environmental effects of the alternatives selected. The alternatives must be reasonable and capable of implementation within the statutory and operational requirements of the Plan.
- 5.1.2 Three alternative scenarios have been considered during the drafting process for the preparation of the Cork County Development Plan 2015. Each scenario was prepared having regard to Ministerial Guidelines, the National Spatial Strategy and the Regional Planning Guidelines for the South West Region, including its population targets, and the key aims of the County Development Plan as set out in the Section 11 Consultation Document. Any scenario that runs counter to these higher level plans would not be reasonable and has not been considered as part of the Environmental Assessment process.

5.2 SEMPRE

- 5.2.1 The SEMPRE Settlement Sustainability project for Cork¹ was completed in 2013. The study involved a detailed analysis of the sustainability of the 26 main towns in County Cork using Sustainability Evaluation Metric for Policy Evaluation (SEMPRE) which is an indicator based method of sustainability measurement. The study identified the relative sustainability of the 26 main towns using a series of 25 sustainable indicators, (Table 5-2) of which 5 were identified as key performance indicators (measure significant aspects of sustainability). Each settlement was assessed and awarded a score out of 100, enabling settlements to be ranked in terms of relative sustainability. The Sustainable Development Index (SDI) scores for the 26 main settlements in Cork are detailed in Table 5-1 and are organised into 3 categories. It can be observed that in general, larger settlements are more sustainable and as distance from Cork city increases, settlement sustainability decreases:
- Category 1 settlements have the highest SDI results,
 - Category 2 have intermediate SDI results, and
 - Category 3 have the lowest SDI results.

¹ A pilot study undertaken as part of a research project on Settlement Sustainability under the EPA STRIVE Programme 2007-2013, prepared for the Environmental Protection Agency by Centre for Environmental Research, Chemical and Environmental Science Department, University of Limerick, (Travis O'Doherty, Brian G. Fitzgerald, Richard Moles and Bernadette O' Regan).



Table 5-1: Settlement Sustainable Development Indicators

Infrastructure and location
Infrastructural capacity for settlement expansion**
Connected to gas distribution network
Index of recycling facilities
Proportion of households with broadband internet
Presence of farmers markets
Water and wastewater
Water quality of water bodies
Wastewater treatment spare capacity
Unaccounted for water
Populated area at risk of flooding**
Urban wastewater treatment status
Population and urban form
Planned population density **
Proportion of population unemployed
Proportion of population with 3 rd level education
Housing vacancy rate
Distance to nearest largest retail centre
Transport and energy
Average transport CO ₂
Settlement walkability
Number of public transport services/1000 population**
Average household heating CO ₂
Proportion of population travelling to work by private car
Livability
Distance to nearest acute hospital**
Tidy Towns points score
SAC, SPA, HA within 5km of settlement
Distance to nearest park, nature reserve or wildlife park
Presence of 24 hour Garda station
** key performance indicators

Table 5-2: Main Towns Sustainable Settlement Ranking

Settlement	SDI Score 2013	Category	Population 2011
Ballincollig	62.8	1	17,368
Blarney	61.5	1	2,437
Carrigaline	57.2	1	14,775
Carrigtwohill	56.8	1	4,551
Midleton	54.9	1	12,001
Cobh	54.8	1	12,347
Bandon	54.5	1	6,640
Mallow	53.6	1	11,605
Glanmire	53.5	1	8,924
Bantry	53.1	1	3,348
Clonakilty	50.3	2	4,721
Kinsale	50.3	2	4,893
Fermoy	49.6	2	6,489
Passage West	48.6	2	5,709
Macroom	46.7	2	3,879
Buttevant	46.1	2	945
Schull	43.8	2	658
Mitchelstown	42.8	2	3,677
Charleville	41.1	3	3,646
Newmarket	41.0	3	988
Skibbereen	39.2	3	2,670
Youghal	38.2	3	7,794
Dunmanaway	37.8	3	1,585
Castletownbere	37.7	3	912
Millstreet	36.7	3	1,574
Kanturk	35.3	3	2,263

- 5.2.2 In general Category 1 settlements are relatively large in terms of population size and are located in relatively close proximity to Cork city. Category 1 settlements benefit from economies of scale in terms of infrastructure and services. All settlements in the County Metropolitan Strategic Planning Area are Category 1 settlements with the exception of Passage West which falls into Category 2. Category 1 settlements outside of the Metropolitan SPA are: Mallow, Bandon and Bantry.
- 5.2.3 Category 2 settlements generally have smaller population sizes and are more peripheral relative to Cork City. Certain settlements such as Schull and Buttevant have population sizes of less than 1,000 persons and peripheral locations yet fall into the intermediate sustainability category.
- 5.2.4 Category 3 settlements are the least sustainable (with an average *SDI* of 38.4) and range in population size from Castletownbere (912 persons) to Youghal (7,794 persons) with an average of 2,682 persons. In general category 3 settlements are smaller settlements sited in more peripheral locations relative to Cork city, and are mainly located in the North and West Strategic Planning areas.
- 5.2.5 The score each town receives is determined by how the town measures up in relation to the indicators used in the study which were arrived at following consultation with a range of stakeholders. Indicators chosen were limited by data availability and applicability at the spatial scale of individual towns and it is acknowledged that the use of different indicators may yield different results. The lack of public transport provision and the high reliance on the private car as a means of travelling to work means that most settlements score poorly in terms of transportation while those with an older housing stock score poorly in terms of energy due to higher household heating CO₂ emissions. Proximity to the city influenced two indicators (proximity to large retail centre and an acute hospital) so for some towns their sustainability automatically decreases with distance from the city. A sample of potential measures for enhancing the sustainability of these settlements is set out in Appendix D. The study has informed the consideration of alternative scenarios for development in the formulation of the Draft Plan.

5.3 Description of Alternative Plan Scenarios Scenario Context

- 5.3.1 Cork is a large county and, owing to its scale and diversity, has always been administered on the basis of sub areas or divisions dealing with North, West and South Cork. For the purposes of forward planning these have evolved into four Strategic Planning Areas (SPAs) as follows -
- Metropolitan Cork which encompasses the suburbs of the city within the county's functional area and the surrounding towns of Ballincollig, Blarney, Carrigaline, Carrigtwohill, Cobh, Glanmire, Middleton and Passage West.
 - Greater Cork Ring: this is the area outside the Metropolitan area which was covered by the Cork Area Strategic Plan (approximately that area within a 40 minute commute time of the city) and includes the hub town of Mallow and the Ring Towns of Bandon, Fermoy, Kinsale, Macroom and Youghal.
 - North Cork encompasses the northern section of the county and includes the towns of Buttevant, Charleville, Kanturk, Millstreet, Mitchelstown and Newmarket.
 - West Cork encompasses the western section of the county including the towns of Bantry, Castletownbere, Clonakilty, Dunmanway, Schull and Skibbereen.
- 5.3.2 Cork County has an extensive urban structure comprising towns and villages. The Electoral Area Local Plans adopted in 2011 provide for the development of 28 main towns (26 towns and the north and south



environs of the city) and 275 villages and smaller settlements and an number of specialist locations with specific industrial/ tourism functions e.g Marino Point, Ringaskiddy, Whitegate, Fota, Spike Island, Trabolgan, Haulbowline, Redbarn and Dromolour etc. . Table 5-3 shows the network of settlements provided for within the current Local Area Plans adopted in 2011.

Table 5 3: Settlements as designated by the Electoral Area Local Area Plans 2011

	Metro	Ring	North	West
Towns	Blarney; Glanmire; Monard; Carrigtwohill; Midleton; Cobh; Passage West, Carrigaline; Ballincollig; Ringaskiddy * Cork City Environs(N) Cork City Environs (S)	Bandon; Fermoy Kinsale Macroom Mallow; Youghal;	Mitchelstown; Kanturk; Millstreet; Newmarket; Charleville; Buttevant	Clonakilty; Dunmanway; Skibbereen; Bantry; Schull; Castletownbere;
Key Villages	Tower; Glounthane; Crosshaven & Bays; Kilumney/Ovens Cloyne; Whitegate*/ Aghada;	Innishannon; Riverstick; Ballinspittle; Belgooly; Carignavar; Glenville; Grenagh; Coachford; Castlemartyr; Killeagh; Castlelyons/ Bridebridge Kilworth; Rathcormac; Doneraile	Ballyhooly; Conna; Glanworth; Kildorrery; Ballydesmond; Banteer; Boherbue; Dromina; Knocknagree; Milford; Newtownshandrum; Watergrasshill; Castletownroche;	Ballingeary; Ballymakeery/ Ballyvourney; Ballydehob; Durrus; Glengarriff; Ballineen/ Enniskeane; Baltimore; Courtmacsherry; Drimoleague; Leap; Roscarbery; Timoleague; Union Hall; Ballydehob;
Villages	Dripsey (Model Village); Kerry Pike; Upper Dripsey; Killeens; Whitechurch; Ballinhassig; Ballygarvan; Minane Bridge; Waterfall; Ballynora; Knockraha; Saleen	Ballinadee; Kilbrittain; Old Chapel; Stuake/ Donoughmore; Halfway; Upper Glanmire; Crossbarry; Rylane/ Seiscne; Aherla; Crookstown; Kilmurry; Aghabullogue; Clondrohid; Newcestown; Cloghduv; Ballycotton; Ballymacoda;	Ballindangan; Glenahulla; Ballydaly; Ballyhea; Castlemagnar; Cullen; Derrinagree; Freemount; Kilbrin; Kilcorney; Kiskeam; Lismire; Meelin; Rathcoole; Rockchapel; Tullylease; Churchtown; Killavullen;	Inchageelagh; Kilnamartyra; Goleen; Crookhaven; Kilcrohane; Ballylickey; Ahaskista; Eyerics; Allihies; Ardgroom; Kealkill; Kilcrohane; Ardfield; Ballynacarriga; Ballinascorthy; Ballingurteen; Butlerstown; Cappeen;

Table 5 3: Settlements as designated by the Electoral Area Local Area Plans 2011

	Metro	Ring	North	West
		Churchtown South; Dungourney; Ladysbridge; Mogeely; Shanagarry/ Garryvoe; Ballyclogh; Dromahane; Bweeng; Burnfort; Glantane; Lombardstown; Newtwpothouse	Liscarroll; Cecilstown; Shanballymore; Lyre;	Castletown- kenneigh; Castletownsend; Clogagh; Drinagh; Glandore; Kilmichael; Lissavard; Rathbary (Castlefreke); Reenascreena; Ring; Rossmore; Shannonvale; Teerelton
Villages Nuclei	Berrings; Caherlag; Cloghroe; Courtbrack; Matehy; Fivemilebridge; Ballymore/ Walterstown; Leamlara; Lisgoold; Lower Dripsey	Ballyfeard; Ballyheada; Crossmahon; Dunderrow; Gaggan; Nohoval; Tinkers Cross; Garrettstown/ Garrylucus; Firmount; Fornaght; New Tipperary; Rathduff; Ballinagree; Carrigadrohid/ Killinardrish; Carriganimmy; Knockavilla/Old Chapel Cross; Bealnamorive; Tooms; Murragh; Canovee; Farnanes; Lissarda; Farnivane; Ballinacurra/Brinny; Upton; Rusheen; Ballinacurrig; Ballinrostig; Ballintotis; Clonmult; Gortaroo; Mount Uniacke; Inch; Ballymackibbott Kildinan; Mourneabbey; Laharn Cross Roads; Gortroe; Old Two-pothouse;	Araglin; Ballygiblin; Curraghalla; Knockanevin; Rockmills; Aubane; Ballyhass; Curraraigue; Cloghboola; Dromagh; Foilogohig; Knockaclarig; Taur; Lisgriffin; Nad	Aghyohil; Coolea; Toon Bridge; Reananerree; Kilbarry; Urhan; Toormore; Kilcoe; Church Cross; Coomhola; Dromore; Pearson's Bridge; Lowertown; Adrigole; Rossmackowen/ Waterfall; Lislevane; Lyre; Drombeg; Johnstown; Togher; Connonagh; Caheragh; Rathmore;
Other locations	Belvelly; Carrigaloe; Carriganass; Fota Island*; Garryvoe Upper; Haulbowline*; Marino Point*;	Bottlehill*; Rathcooney; Barnabrow/ Ballymaloe; Knockadoon; Redbarn; Ballymartle; Barrels	Sallys Cross; Dromalour*	Ballinglanna; Darkwood; Darrara Rural Model Village; Inchadoney; Lisbealad;

Table 5 3: Settlements as designated by the Electoral Area Local Area Plans 2011

	Metro	Ring	North	West
	Spike Island*; Clogheen; Killard; Inniscarra; Rathcooney; Templemichael; Waterloo; Whites Cross; Gyleen, Roches Point; Trabolgan*; Curraghbinny; Curraheen; Farmers Cross; Iniscarra; Tracton;	Cross; Browns Mills; Gogganshill; Jagoes Mills; Kilcolman; Killeady; Kilmacsimon Quay; Oysterhaven; Robert's Cove; Sandy Cove; Bealnablath; Farran/Lower Farran; Gougane Barra; Gurrane; Srelane Cross		Ownahinchy; Poundlick; Tragumna; Ardnageehy Beg; Barleycove

* locations with a specialist function.

- 5.3.3 Successive County Development Plan strategies have sought to encourage balanced growth across the county to sustain the economies and service levels of the main towns and villages and the key aims of the Draft Plan support the continuation of this approach, seeking sustainable patterns of growth in urban and rural areas.
- 5.3.4 The Regional Planning Guidelines support this balanced approach to development in order to maintain vibrant rural communities with an equal level of urban and rural growth. The population targets set out in Regional Planning Guidelines distribute the population growth target for the SW Region to the Cork Gateway (including Metropolitan Cork), the Greater Cork Area, equivalent to the CASP Ring, the Northern Area which includes North Cork and parts of North and East Kerry, and the Western Area which includes West Cork and South and West Kerry. Targets for the North and West Areas have been allocated between Cork and Kerry in their respective County Development Plan strategies.
- 5.3.5 The scenarios considered in preparing this Draft Plan have therefore been prepared in this context. The overall level of growth allocated to each Strategic Planning Area is the same for each scenario, in line with targets of the Regional Planning Guidelines and North and West allocations agreed between the Regional Authority, Cork and Kerry County Councils. The scenarios look at options for development *within* each SPA. Scenarios which would be inconsistent with this approach, by focusing more growth on the metropolitan area for example, have not been considered.

5.4 Scenario 1: Public Transport

- 5.4.1 This scenario seeks to focus development within Metropolitan Cork within the city suburbs in the first instance and then along an east/ west public transport corridor between Midleton/Cork City/Ballincollig to facilitate greater use of public transport infrastructure and underpin additional investment in public transport services. In the Ring, North and West Strategic Planning Areas the scenario focuses a greater proportion of development in a smaller number of settlements to enhance the viability of bus based inter-urban public transport services. Under this scenario the potential for growth is still dispersed over the entire settlement network but a greater proportion of the growth is focused on a smaller number of locations.

- 5.4.2 The Census 2011 shows that the wider Cork Metropolitan area, including Cork City has reached a population of 289,739 persons, significantly less than the interim target set in the Regional Planning Guidelines for 2011 of 206,591. This correlates to an underperformance of 49% or 16,582 persons relative to the interim target. Within the county Metropolitan area 63% of the growth occurred in the towns but the villages and rural areas also recorded significant growth. In contrast to the underperformance of the Metropolitan Area, the Ring over performed by 10,724 persons or 406%, while north Cork over performed by 1,095 persons or 34% and West Cork underperformed by 635 persons or 13%. (See Chapter 3 Baseline Environment). By focusing on public transport, this scenario may increase the likelihood of the metropolitan area achieving its population target for 2022.
- 5.4.3 Within Metropolitan Cork this scenario looks at directing higher levels of growth to the environs of the City and the towns along the Midleton- Cork City – Ballincollig transport corridor. In the short term significant levels of growth are focused on the North and South Environs where it can be underpinned by existing public transport / public services and provide a platform for further investment in these services. Growth would involve development of brownfield and greenfield areas and would need a proactive planning approach to secure its delivery. Some land west of the city currently identified as greenbelt would also be released for development. This strategy would also ensure that more people are able to live closer to the employment opportunities offered by the metropolitan area. This strategy would also give rise to increased demand for supporting infrastructure and services within the metropolitan area, supporting the strategy for growth in the city.
- 5.4.4 The second phase of growth would concentrate development increasingly along a west east corridor, from Ballincollig - Cork City – Midleton. High density development, both residential and employment related would be encouraged along the route corridor, on brownfield and greenfield lands.
- 5.4.5 Very little growth has been allocated to the rural area under this scenario. It is anticipated that the reduced growth targets for the rural areas combined with a revised approach to managing rural housing, would serve to further consolidate growth in those areas along the preferred public transport corridors.
- 5.4.6 In the Greater Cork Ring, North and West Areas, this scenario concentrates growth in fewer settlements. In the Ring SPA, Mallow is the principle growth centre and 77% of all growth is directed to the town. Again very little growth, 2.5%, is directed to the villages and rural areas. This pattern of growth reflects not only Mallow's "Hub" status, as set out in the NSS, but also the need to regulate growth in the rural areas of the Ring in order to avoid the replication of previous trends.
- 5.4.7 In the North and West SPA's, most of the growth is directed towards Charleville, Mitchelstown, Clonakilty and Skibbereen with the aim of delivering a sufficient critical mass of population in these towns so as to justify further investments in primarily bus based public transport around the county and growth in rural areas is curtailed.

Environmental Impacts of Scenario 1

- 5.4.8 Scenario One allocates *some* growth to *every* settlement in the network and to villages and rural areas, while seeking to concentrate a greater proportion of the growth in a smaller number of settlements. Many of these settlements have inadequate drinking water supply and/or waste water treatment infrastructure, and significant public investment in infrastructure will be required to enable such development to take place. Such investment is essential to accommodate the growth and mitigate impacts on water quality, human



health etc. This dispersed pattern of growth will generally give rise to some cumulative impacts on ground and surface water quality, heritage, landscape and biodiversity and will lead to increased levels of environmental effects associated with additional commuting such as increased energy consumption, emissions to air, road traffic noise etc.

- 5.4.9 In those areas where more intense levels of growth are promoted, there is greater potential for negative environmental impacts on soil, air quality, biodiversity and landscape. Such impacts can however be managed by adherence to good practice guidance and procedures in development management. Intense development in some areas would also be balanced with lower development pressures in other areas, particularly the villages and rural areas which will lead to less pressure on biodiversity, groundwater resources, flora and fauna etc. and the general rural amenities of the county.
- 5.4.10 Investment in infrastructure in the main growth centres can be more targeted, potentially leading to better quality provision/ design solutions/ economies of scale.
- 5.4.11 Within the main growth areas, the correlation between population growth and public transport infrastructure will have a neutral to positive environmental impact particularly on air quality, climatic factors and human health due to the reduction in the need to travel and road traffic emissions. The concentration of population within the built up area of the city and its environs might also encourage a greater proportion of people to consider a move to other modes of transport such as walking and cycling with positive benefits on human health, air quality etc.

Planning Effects of Scenario One

- 5.4.12 Increased growth levels around the city will strengthen the Gateway and provide the population base and economies of scale necessary to underpin investment in enhancing services and facilities.
- 5.4.13 While the settlement pattern for the county remains dispersed, overall commuting should decrease as a greater proportion of population growth is accommodated within the city environs and along key public transport corridors close to the city, reducing commuting distances and car dependency with associated positive benefits for the population.
- 5.4.14 The concentration of growth in the manner proposed by this strategy may lead to reduced levels of investment in the other areas which may have negative impacts on quality of life and the quality of the urban environment if there are higher levels of vacancy. The reduced population targets for towns outside the corridor may also hinder their ability to secure investment in waste water infrastructure in the future if there are lower levels of population and employment growth.
- 5.4.15 Dispersed settlement pattern means limited resources for infrastructural investment have to be spread over a large number of settlements, leading to deficiencies in the level of service provided with potential for negative impacts on the environment (most likely in the area of waste water treatment and water quality). The reduced population targets for towns outside the corridor may also hinder their ability to secure investment in waste water infrastructure in the future if there are lower levels of population and employment growth.
- 5.4.16 When the proposed population projections are modelled using the SEMPRe methodology, 73% of all growth was targeted to Category A towns. However the SEMPRe model does not include the North and South City Environs, where significant levels of growth are targeted.



Table 5-3: Scenario 1 Population Targets				
	Census Population 2011	CDP 2009 2020 Target Population	Scenario 1 Population Target 2022	Scenario 1 Population Growth 2011 - 2022
Metropolitan Cork				
Cork North Environs	6,692	9,031	15,053	8,361
Cork South Environs	32,635	30,102	35,102	2,467
Ballincollig	17,368	21,430	28,535	11,167
Blarney	2,437	7,533	5,533	3,096
Carrigaline	14,775	14,066	15,666	891
Carrigtwohill	4,551	12,012	8,012	3,461
Cobh	12,347	14,543	13,543	1,196
Glanmire	8,924	10,788	9,985	1,061
Midleton	12,001	23,735	18,576	6,575
Monard	0	7,788	3,619	3,619
Passage West	5,790	5,286	6,278	488
Total Main Towns	117,520	156,314	159,902	42,382
Villages & Rural	52,989	59,926	53,989	1,000
Total Metropolitan	170,509	216,240	213,891	43,382
Greater Cork Ring				
*Bandon	6,640	7,379	7,265	625
*Fermoy	6,489	7,442	7,089	600
*Kinsale	4,893	4,519	5,222	329
*Macroom	3,879	4,351	4,236	357
*Mallow	11,605	20,000	22,000	10,395
*Youghal	7,794	8,309	8,115	321
Total Main Towns	41,300	52,000	53,927	12,627
Villages and Rural	77,118	69,760	77,155	837
Total Cork Ring	118,418	121,760	131,882	13,464
North Cork SPA				
Buttevant	945	1,501	1,501	556
Charleville	3,646	4,925	5,425	1779
Kanturk	2,263	2,400	2,400	137
Millstreet	1,574	1,756	1,756	182
Mitchelstown	3,677	5,346	5,846	2169
Newmarket	988	1,189	1,189	201
Total Main Towns	13,093	17,117	18,117	5024
Villages and Rural	37,405	36,768	37,895	490
Total North	50,498	53,885	56,012	5514
West Cork SPA				
Bantry	3,348	5,484	3,984	636
Castletownbere	912	1,439	1,339	427
Clonakilty	4,721	7,218	8,518	3797
Dunmanway	1,585	1,976	2,676	1091
Schull	658	748	748	90
Skibbereen	2,670	3,035	4,635	1965
Total Main Towns	13,894	19,900	21,900	8006
Villages and Rural	46,483	46,569	46,937	454

5.5 Scenario 2: Employment Towns.

- 5.5.1 This Scenario looks at employment-led growth which focuses development in key locations where employment growth is more likely to be delivered and differs from previous Plan strategies which spread growth more evenly across all the Main Settlements.
- 5.5.2 This strategy continues to focus the greatest proportion of population growth to the Metropolitan Area which is the employment focus for the Cork City Gateway. This approach is similar to the planning strategy adopted in the previous County Development Plan.
- 5.5.3 Within the Cork Ring the growth strategy is adjusted to focus higher levels of growth in a fewer number of settlements where accessibility to good roads infrastructure is available and these towns can perform an important sub-regional focus. This is offset by lower levels of growth in the remaining Ring Towns. Mallow is allocated the highest level of growth because of its designation as a “hub” town. It also enjoys access to planned M20, has a regional employment role and an existing hospital.
- 5.5.4 Fermoy is also selected for a higher growth target given its proximity to the M8 which places it at a strategic advantage in terms of inward investment. Macroom is selected for a higher growth target than previously prescribed under the 2009 County Development Plan to strengthen its sub-regional role within the county & its strategic location on the N22 between the Cork Gateway and Tralee/Killarney Hub. The town also has a strong supply of housing and business land and an “e-business” park.
- 5.5.5 Under this scenario growth targets for Youghal, Kinsale & Bandon have been reduced as they are considered to have a lower priority employment role.
- 5.5.6 Within the North SPA this scenario allocates 91% of the growth to the towns and 9% to the Villages and Rural while seeking to concentrate development in the towns of Kanturk, Charleville and Mitchelstown making them the focus for economic growth in the North Cork area, enhancing employment opportunities in the area and helping to reduce commuting.
- 5.5.7 Kanturk is well positioned in the NW of the county to serve the wider rural hinterland and has a strong town centre and plentiful land supply to cater for future development. The town also provides an important agricultural-related employment base with the potential for further growth in this sector in the future.
- 5.5.8 Charleville is served by the intercity rail service and will also be served by the proposed M20 making it an attractive location for new business. The town has a strong town centre and employment base in the food processing sector and a plentiful land supply to cater for future employment /housing growth.
- 5.5.9 Mitchelstown also has an important market town function and agricultural-related employment base and excellent access to the M8 making it an attractive location for future investment.
- 5.5.10 Within the West Cork SPA this scenario focuses growth in Clonakilty & Bantry with reduced growth targets in Castletownbere and Dunmanway. This takes account of the proposed employment policies of the Plan. This approach reinforces the important regional employment focus allocated to Clonakilty in the CDP and acknowledges the existing role Bantry plays as an employment centre serving a wider hinterland area and as the only location in West Cork offering an acute hospital facility.



Environmental Impacts Scenario Two

- 5.5.11 Scenario Two allocates growth across the full settlement network, while seeking to concentrate a greater proportion of the growth in a smaller number of settlements where economic/employment growth may be more easily achieved. Many of these settlements have inadequate drinking water supply and/or waste water treatment infrastructure, and significant public investment in infrastructure will be required to enable such development to take place. Such investment is essential to accommodate the growth and mitigate impacts on water quality, human health etc. This dispersed pattern of growth will generally give rise to some cumulative impacts on ground and surface water quality, heritage, landscape and biodiversity and will lead to increased levels of environmental effects associated with additional commuting such as increased energy consumption, emissions to air, road traffic noise etc.
- 5.5.12 This scenario concentrates economic growth and employment growth in a smaller number of settlements, making them more self sufficient. This could potentially have negative impacts on soil, air quality, biodiversity and landscape but these impacts can be mitigated by implementing good proactive in development management and would be balanced with lower development pressures in other areas, particularly the villages and rural areas with less pressure on the water quality, biodiversity, landscape etc. in these areas. In addition more people will have the opportunity to work locally and possible switch to walking or cycling modes, thus reducing travel distances, traffic volumes and traffic emissions within positive benefits to air quality, climatic factors and human health.
- 5.5.13 The concentration of growth in the manner proposed by this strategy may lead to reduced levels of investment in the other areas which may have negative impacts on quality of life and the quality of the urban environment if there are higher levels of vacancy and reduced employment opportunities at these locations. The reduced population targets for towns outside the designated employment nodes may also hinder their ability to secure investment in waste water infrastructure in the future if there are lower levels of population and employment growth.

Planning Impacts

- 5.5.14 The concentration of growth in the manner proposed by this strategy will strengthen the economic position of these towns chosen as the main growth centres, underpinning further investment and making them more attractive places to live. The strategy may also lead to reduced levels of investment in the other areas which may have negative impacts on quality of life and the quality of the urban environment of those areas if there are higher levels of vacancy and reduced employment opportunities at these locations. The reduced population targets for some towns may also hinder their ability to secure investment in waste water infrastructure in the future if there are lower levels of population and employment growth.
- 5.5.15 Lower levels of development in the rural areas will help conserve the landscape and amenity of those areas, potentially making it more attractive for visitors.
- 5.5.16 The Metropolitan area is given the most significant proportion of the target growth given its status as the main employment focus for the Gateway. This is similar to the approach taken in previous Plans. This strategy places the highest growth target at the most sustainable locations within the County where the concentration of jobs and population are closely aligned.
- 5.5.17 When the proposed employment-led strategy is inputted to the SEMPRe methodology it reveals that 68% of the total growth was targeted to Category A towns as opposed to 68.3% as set out in the preferred



scenario. A slightly higher proportion of growth is allocated to Category 2 towns 19.7% as opposed to 19.1% in the preferred scenario. A lower level of growth (12.3%) is allocated to Category 3 towns under this scenario.

Table 5-4: Scenario 2 Population Targets				
	Census Population 2011	CDP 2009 2020 Target Population	Scenario 2 Population Target 2022	Scenario 2 Population Growth 2011 - 2022
Metro Cork Pop Target 2022				
Cork North Environs	6,692	9,031	10,031	3,339
Cork South Environs	32,635	30,102	31,308	-1,327
Ballincollig	17,368	21,430	22,430	5,062
Blarney	2,437	7,533	7,533	5,096
Carrigaline	14,775	14,066	17,870	3,095
Carrigtwohill	4,551	12,012	11,618	7,067
Cobh	12,347	14,543	14,543	2,196
Glanmire	8,924	10,788	10,585	1,661
Midleton	12,001	23,735	21,576	9,575
Monard	0	7,788	3,619	3,619
Passage West	5,790	5,286	6,278	488
Total Main Towns	117,520	156,314	157,391	39,871
Villages + Rural	52,989	59,926	56,500	3,511
Total Metropolitan	170,509	216,240	216,240	43,382
Greater Cork Ring Pop Targets 2022				
Bandon	6,640	7,379	7,265	625
Fermoy	6,489	7,442	8,289	1,800
Kinsale	4,893	4,519	5,222	329
Macroom	3,879	4,351	5,536	1,657
Mallow	11,605	20,000	22,000	10,395
Youghal	7,794	8,309	7,915	821
Total Main Towns	41,300	52,000	53,927	12,627
Villages and Rural	77,118	69,760	77,455	337
Total Cork Ring	118,418	121,760	131,882	13,464
North Cork SPA Pop Targets 2022				
Buttevant	945	1,501	1,501	556
Charleville	3,646	4,925	5,070	1,779
Kanturk	2,263	2,400	2,700	437
Millstreet	1,574	1,756	1,756	182
Mitchelstown	3,677	5,346	5,746	2,169
Newmarket	988	1,189	1,189	201
Total Main Towns	13,093	17,117	18,117	5024
Villages and Rural	37,405	36,768	37,895	490
Total North	50,498	53,885	56,012	5514
West Cork SPA Pop Targets 2022				
Bantry	3,348	5,484	5,734	2,286
Castletownbere	912	1,439	1,039	127
Clonakilty	4,721	7,218	7,468	2,747
Dunmanway	1,585	1,976	1,876	291
Schull	658	748	748	90
Skibbereen	2,670	3,035	4,035	1,365

Table 5-4: Scenario 2 Population Targets				
	Census Population 2011	CDP 2009 2020 Target Population	Scenario 2 Population Target 2022	Scenario 2 Population Growth 2011 - 2022
Total Main Towns	13,894	19,900	21,900	8006
Villages and Rural	46,483	46,569	46,937	454

5.6 Scenario 3: Balanced Growth

- 5.6.1 In this scenario, significant growth is allocated across the main settlements with lower levels of growth in the villages and rural areas. The principle strength of this scenario lies in the balanced approach allowing for the majority of growth to take place in the main settlements but at the same time allowing for continued, more modest growth in the villages and rural areas, continuing to support the economies of these areas to underpin local services and quality of life. The pattern of population distribution in this scenario is more dispersed than in the other scenarios as it seeks to support all the main towns. However this is balanced with an employment strategy which seeks to bring people and jobs closer together either in the same settlement or by high quality transport links connecting settlements together.
- 5.6.2 Within the Metropolitan area significant levels of growth are targeted at Midleton and Carrigtwohill which are along the suburban railway corridor and at Blarney, Ballincollig and Carrigaline and the North Environs of the city. The level of growth earmarked for the new town at Monard has been reduced from the previous development plan to 3619. Target growth levels in the other towns are more modest and the south environs is to contract. Some growth is also allocated to the villages and rural area
- 5.6.3 Within the Ring Area, Mallow as the hub town is allocated the greatest proportion of growth with more modest and relatively even growth levels for the other towns. Almost no growth in population is allocated to the villages and rural areas within the Ring, to redress the rapid growth experienced in the period to 2011.
- 5.6.4 In the North, Mitchelstown, Charleville and Buttrvant are assigned the highest levels of growth with more modest growth targets in Kanturk, Millstreet and Newmarket and in the villages and rural area.
- 5.6.5 In West Cork, the majority of the growth is assigned to Clonakilty with more modest growth in the other towns, villages and rural areas.

Environmental Impacts

- 5.6.6 The concentration of both population and employment growth in the main urban areas of the County would serve to reduce commuting patterns as more people would be afforded greater opportunities to live closer to their places of employment and/or travel using high quality public transport links. Such an approach would have a positive environmental effect by serving to reduce CO2 emissions and would enhance people's quality of life.
- 5.6.7 The concentration of growth in the main along the suburban rail network will have a positive environmental impact on air quality, climatic factors and human health due to the reduction in car travel and road traffic emissions. The concentration of population along the suburban rail line might also



encourage a greater proportion of people to consider a move to other secondary modes of transport such as walking and cycling with positive benefits on human health, air quality etc.

- 5.6.8 Focusing population growth across the settlement network will necessitate significant investment in water services infrastructure.
- 5.6.9 While allowing for growth in rural areas, this scenario will result in some negative impacts on the environment. It is unlikely that developments in rural area will be connected to public wastewater treatment networks. While not as significant on their own, the cumulative impact of rural development could have significant negative impacts both on biodiversity and particularly on water quality.
- 5.6.10 This scenario would still give rise to the growth of rural housing outside the settlement network which would contribute to further unsustainable commuting patterns and increased car dependency.

Planning Impacts

- 5.6.11 In common with the other scenarios, this scenario has a strong urban influence. It sets out population targets for the main settlements that, while ambitious, will ultimately help them perform their function as the primary growth centres in the county.
- 5.6.12 The scenario also recognises that there is a demand for growth in rural areas and provides for some additional growth in the key villages and lower order settlements in rural areas. Facilitating population growth in these areas would in turn encourage the retention of services in these locations. The scale of growth envisaged however is not of a scale that would serve to undermine the growth of the main urban centres in the county.
- 5.6.13 It is considered that the population targets set out in this scenario will support the development of the Gateway and underpin investment in the suburban rail network.

Table 5-5: Scenario 3 Population Targets				
	Census Population 2011	CDP 2009 2020 Target Population	Scenario 3 Population Target 2022	Scenario 3 Population Growth 2011 - 2022
Metro Cork Pop Target 2022				
Cork North Environs	6,692	9,031	10,031	3,339
Cork South Environs	32,635	30,102	31,308	-1,327
Ballincollig	17,368	21,430	22,430	5,062
Blarney	2,437	7,533	7,533	5,096
Carrigaline	14,775	14,066	17,870	3,095
Carrigtwohill	4,551	12,012	11,618	7,067
Cobh	12,347	14,543	14,543	2,196
Glanmire	8,924	10,788	10,585	1,661
Midleton	12,001	23,735	21,576	9,575
Monard	0	7,788	3,619	3,619
Passage West	5,790	5,286	6,278	488
Total Main Towns	117,520	156,314	157,391	39,871
Villages + Rural	52,989	59,926	56,500	3,511
Total Metropolitan	170,509	216,240	216,240	43,382
Greater Cork Ring Pop Targets 2022				
Bandon	6,640	7,379	7,765	1,125
Fermoy	6,489	7,442	7,589	1,100
Kinsale	4,893	4,519	5,722	829
Macroom	3,879	4,351	4,536	657
Mallow	11,605	20,000	20,000	8,395
Youghal	7,794	8,309	9,115	1,321
Total Main Towns	41,300	52,000	54,727	13,427
Villages and Rural	77,118	69,760	77,155	37
Total CASP Ring	118,418	121,760	131,882	13,464
North Cork SPA Pop Targets 2022				
Buttevant	945	1,501	1,501	556
Charleville	3,646	4,925	4,925	1,779
Kanturk	2,263	2,400	2,400	437
Millstreet	1,574	1,756	1,756	182
Mitchelstown	3,677	5,346	5,346	2,169
Newmarket	988	1,189	1,189	201
Total Main Towns	13,093	17,117	17,117	5024
Villages and Rural	37,405	36,768	38,895	490
Total North	50,498	53,885	56,012	5514
West Cork SPA Pop Targets 2022				
Bantry	3,348	5,484	5,484	2,136
Castletownbere	912	1,439	1,439	527
Clonakilty	4,721	7,218	7,218	2,497
Dunmanway	1,585	1,976	1,976	391
Schull	658	748	748	90
Skibbereen	2,670	3,035	3,035	365
Total Main Towns	13,894	19,900	19,900	6,006
Villages and Rural	46,483	46,569	48,937	2,454
Total West	60,377	66,469	68,837	8,460

5.7 Evaluation of Alternative Scenarios.

5.7.1 The evaluation of the three proposed alternative scenarios for their respective impacts on the environment was undertaken utilising the Environmental Protection Objectives (EPOs) specifically developed to protect, maintain, conserve or restore environmental elements within Cork. Each scenario was assessed as to whether it was likely to have a positive, negative, uncertain or neutral impact on the EPO's. The EPO's against which the three scenarios were assessed are set out in Chapter 4 and are outlined below together with a matrix assessment of each scenario.

5.7.2 All scenarios are assessed on the basis that appropriate water services infrastructure will be available to cater for growth and development will not be permitted in the absence of this critical infrastructure.

EPO Reference number	Table 5-6: Environmental Objectives
EPO 1	To ensure the sustainable development of Cork County so the people of Cork have the opportunity to live in communities with high quality residential, working and recreational environments with sustainable travel patterns.
EPO 2	To protect and enhance human health and manage hazards or nuisances arising from traffic and incompatible landuses.
EPO 3	Throughout the county, conserve and restore ecosystems, habitats and species in their natural surroundings, and ensure their sustainable management, including the ecological corridors between them.
EPO 4	Protect the function and quality of the soil resource in County Cork
EPO 5	Maintain and improve the quality of water resources and improve the management and sustainable use of these resources to comply with the requirements of the WFD.
EPO 6	Protect and improve air quality.
EPO 7	Contribute to mitigation of, and adaptation to, climate change
EPO 8	Protect and, where appropriate, enhance the character, diversity and special qualities of architectural, archaeological and cultural heritage (including Gaeltachtaí) in County Cork.
EPO 9	Protect and, where appropriate, enhance the character, diversity and special qualities of landscapes in County Cork.
EPO 10	Make best use of the material assets of the county and promote the sustainable development of new infrastructure to provide for the current and future needs of the population.

Table 5-7: Alternative Scenarios interaction with Environmental Protection Objectives				
	Positive <i>Interaction with status of EPOs</i>	Negative <i>Interaction with status of EPOs</i>	Uncertain <i>Interaction with status of EPOs</i>	Neutral <i>Interaction with status of EPOs</i>
Scenario 1	EPO 2, 6, 7, 10	EPO1 3, 5		EPO 4, 8, 9
Scenario 2	EPO 2, 6, 7, 10	EPO 1, 3, 5		EPO 4, 8, 9
Scenario 3	EPO 1, 2, 6, 7, 10	EPO 3, 5		EPO 4, 8, 9

5.8 The Preferred Scenario.

5.8.1 The 2010 Act requires the core strategy of the county development plan to be consistent with the National Spatial Strategy and the regional planning guidelines and the policies of the Minister in relation to

population targets. This makes the consideration of alternative scenarios more difficult and the key parameters have already been determined. The provisions of the ct imply that higher level plans are the ones where the strategic alternative scenarios need to be considered and subjected to rigorous environmental assessment.

- 5.8.2 Given the parameters established by the Regional Planning Guidelines and the extensive nature of the designated settlement network within the county, the alternatives considered in preparing the draft plan are all rather similar in promoting balanced development across the county and have relatively similar impacts.
- 5.8.3 Scenario 3 is the one that places the most emphasis on building on what has already been achieved within the county in terms of supporting the network of settlements, the established employment areas and public transport investment along the rail corridor and within the metropolitan area while continuing to support the development of villages and rural areas and it is therefore the preferred scenario, giving the most positive interaction for most of the population with EPO 1. Scenarios 1 and 2 in promoting a more focused development pattern would inevitably lead to the decline and contraction of some of the other towns, villages and rural areas resulting in the loss of economic opportunities in those areas, reduced investment and an overall reduction in the quality of life for the people living in those areas.
- 5.8.4 The identification of Scenario 3 as the preferred scenario was further supported when the population targets for each scenario were analysed using the SEMPR_e methodology. The results show that the third scenario allocated the largest share of the population increase to the most sustainable settlements as identified by SEMPR_e, followed by the Employment and Transport Scenarios.

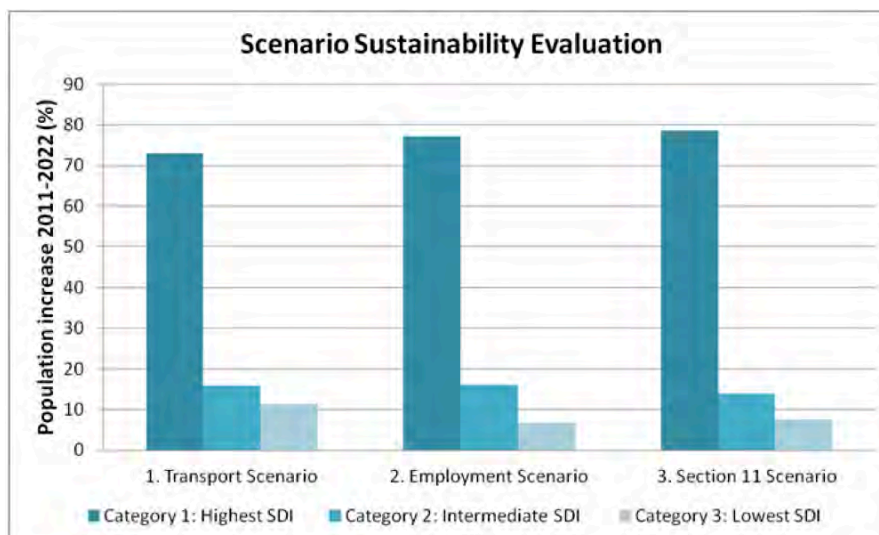


Figure 5-1: Scenario Sustainability Evaluation

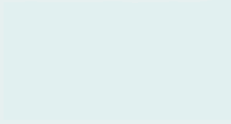


Chapter 6

Evaluation of Draft Plan

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6.1 Introduction

6.1.1 SEA legislation requires the Environmental Report to include the likely significant effects on the environment of implementing the Plan. This includes secondary, cumulative, synergistic, short, medium and long-term, permanent and temporary, positive and negative effects. The effects should be shown on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above. The following section identifies the effects on the environment of implementing the Draft Cork County Development Plan. The assessment is done on a chapter basis, looking at the key provisions of each chapter (rather than the individual objectives), the expected outcome of implementing the chapter and the implications for the environment. The chapter is then assessed for its likely interaction with the Environmental Protection Objectives and the assessment concludes with recommendations for changes to the Draft Plan. Interactions are assessed on the basis of being:

- Positive (+)
- Negative (-)
- Uncertain (?), or
- Neutral (Ne)

6.2 Chapter 2 Core Strategy

Key Provisions of Chapter

6.2.1 Chapter 2 outlines the strategy for complying with the population growth target for the county for the period 2011-2022 of 70,820 persons, as identified in the Regional Planning Guidelines published by the South West Regional Authority in 2010 and outlines the distribution of this population growth across the county :

- 89% of the total new growth is allocated to the towns and 11% to the villages and rural areas;
- The Metropolitan SPA has a growth target of 43,382 persons, necessitating an additional 31,036 housing units;
- The Ring SPA has a growth target of 13,464 persons and a housing requirement of 13,407 units;
- The North SPA has a growth target of 5,514 persons and a housing requirement of 5,688 additional units;
- The West SPA has a target of 8,460 persons, a housing requirement of 7,872 additional units.

6.2.2 The total new housing requirement for the county for the period to 2022 is identified as 58,003. Zoned housing land supply for the county as a whole is identified as 2,551 ha. Including the unzoned land supply available within the villages (which have capacity for 8,919 units), enough land is available across the settlement network to provide 73,462 units.

6.2.3 This chapter outlines the network of settlements for the county including the gateway / hub, towns, villages and smaller settlements, and the role and function of these settlements.

6.2.4 This chapter also details the strategy for the development of each Strategic Planning Area, giving priority to



the main settlements, and identifies key infrastructural, socio economic, environmental and transportation requirements for each area and seeks to protect / enhance the strategic natural heritage assets in each Area.

Expected outcome of implementing the Plan.

- 6.2.5 If implemented in full this strategy will see high levels of growth and development in the Metropolitan Area, coupled with strong levels of growth in the Ring, North and West. While most of the growth is allocated to the towns, the strategy identifies capacity for 8,919 new housing units within the villages of the county as provided for in the Local Area Plans adopted in 2011, thus supporting some growth within the village network.
- 6.2.6 In order to underpin this level of population growth across the county there will need to be a commensurate level of economic growth, especially growth in employment opportunities. This growth will result in an increased rate of development in sectors such as housing, employment, and other supporting sectors and services etc. In order to facilitate such development, major investment is needed in water services, roads and public transport, particularly in the main towns. If this infrastructure is not provided, then much of the development proposed is unsustainable.

Implications for the Environment

- 6.2.7 As noted above, the population growth provided for in this plan is in line with South West Regional Planning Guidelines published in 2010, which were subject to a full Strategic Environmental Assessment.
- 6.2.8 The proposed population growth will place significant additional demands on the environment. The strategy seeks to focus growth on the towns and there is adequate zoned land available within the towns to cater for the planned level of growth (this was subject to Strategic Environmental Assessment as part of the 2011 Local Area Plan Process).
- 6.2.9 Some growth will also take place within rural areas and within the network of villages as provided for by the 2011 Local Area Plans. The Local Area Plans set out the appropriate scale of development envisaged within the village network and these plans were also subject to an SEA process. However, in terms of water quality, there are significant water services constraints in many settlements and some settlements are currently non compliant with the terms of their Urban Waste Water Regulations discharge licence.
- 6.2.10 The Plan strategy assumes that all the growth detailed in the plan is capable of being assimilated subject to the delivery of new high quality water services infrastructure, thus ensuring compliance with emission standards, but the cumulative impacts of this have not been fully established, especially in sensitive catchments like the Blackwater and Clonakilty harbour. The Natura Impact Report has highlighted a need for more detailed assessment to be undertaken in this regard (before the plan is adopted) to demonstrate that the development can in fact be accommodated. On completion, the findings of this assessment may necessitate amendments to the Draft Plan at the next stage of the plan making process.
- 6.2.11 The strategy targets 89% of future population growth to the towns. However there is a danger that the availability of development land across such an extensive network of smaller settlements may serve to undermine the core strategy which seeks to concentrate growth in key locations within the Metropolitan area (Gateway), the Hub town of Mallow and within the main settlements. In some areas the supply of land exceeds the identified housing need and it may be difficult in practice to stop development happening



even though the target for the area has been reached. In some settlements growth will not be able to take place immediately because of existing capacity/ environmental considerations, and there is a risk that if these constraints are not addressed, population growth could disperse to other locations which may be less sustainable in other ways such as transport, access to employment / services etc. and lead to increased and more dispersed pressures on the environment.

- 6.2.12 As the main towns of the county, and the County Metropolitan area in particular, offer the best access to employment opportunities, public transport, housing, educational, health, retail and leisure facilities, implementing this plan will offer more people the opportunity of living in a more sustainable urban environment with the potential for a good quality of life which will confer significant positive benefits to the population and human health generally.
- 6.2.13 In terms of air quality, the strategy of the plan identifies the need for significant investment in public transport. This coupled with the focus for growth in the gateway, hub and main towns will offer more people the opportunity for a modal shift to public transport which should reduce car based commuting and have positive impacts on air quality.
- 6.2.14 Generally, while all development has the potential to impact on the environment, existing development management guidelines and procedures, coupled with the objectives of this plan, should safeguard against significant adverse impacts on all of the EPOs listed in the table below.

Table 6.1 Assessment of Chapter 2 Core Strategy						
EPO No	Objective	+	-	?	Ne	Comment
EPO 1	To ensure the sustainable development of Cork County so the people of Cork have the opportunity to live in communities with high quality residential, working, recreational and natural environments & sustainable travel patterns.	✓				Implementing this plan will offer people the opportunity of living in a more sustainable urban environment with the potential for a good quality of life. However implementation is dependent on the delivery of significant infrastructure in key locations which is uncertain in current economic climate.
EPO 2	To protect human health from hazards or nuisances arising from traffic & incompatible landuses.	✓				Implementing this plan will offer people the opportunity of living in a more sustainable urban environment with the potential for a good quality of life.
EPO 3	Conserve and restore ecosystems, habitats and species in their natural surroundings, both inside and outside protected areas and ensure the sustainable management of these areas and the ecological corridors between them.		✓			The scale and distribution of population growth envisaged and the additional economic growth, social and physical infrastructure needed to underpin it will increase pressure on the biodiversity resource of the county. The plan seeks to mitigate these effects by implementing good planning practice and protecting biodiversity.



Table 6.1 Assessment of Chapter 2 Core Strategy						
EPO No	Objective	+	-	?	Ne	Comment
						Additional research is also to be undertaken on the Blackwater and Clonakilty Harbour area to ensure that there is no conflict between the Draft Plan and the protection of Natura 2002 sites, and this will inform the next stage of the plan making process.
EPO 4	Protect the function and quality of the soil resource in the County		✓			The scale of development envisaged in the plan will lead to many new greenfield developments which will disturb the soil. The plan seeks to mitigate these effects by implementing good planning practice and encouraging the reuse of brownfield land. Additional wording could encourage the re-use of soil within development sites.
EPO 5	Maintain and improve the quality of water resources and improve the management and sustainable use of these resources to comply with the requirements of the WFD.			✓		The scale and distribution of growth envisaged will increase pressures on the water resources of the county and lead to increased pressure on water quality. However the plan is based on the assumption that new development will only take place where there is adequate and appropriate water services in place to service the development, thus avoiding significant adverse impacts on water quality. The plan also seeks to mitigate effects by supporting the implementation of the River Basin Management plans, protecting groundwater, managing surface water and ensuring agricultural development complies with appropriate legislation. Additional research is also to be undertaken on the Blackwater and Clonakilty Harbour area to ensure that there is no conflict between the Draft Plan and the protection of Natura 2002 sites, and this will inform the next stage of the plan



Table 6.1 Assessment of Chapter 2 Core Strategy						
EPO No	Objective	+	-	?	Ne	Comment
						making process.
EPO 6	Protect and improve air quality.			✓		While the Core Strategy disperses growth across the settlement network, it prioritises development in the main settlements with infrastructure priority in the gateway and hub. This will offer a significant proportion of the new population the opportunity of living in a more sustainable urban environment, encouraging a modal shift to public transport which will be positive for air quality.
EPO 7	Contribute to mitigation of, and adaption to, climate change	✓				The plan concentrates development within the main towns where flood risk and climate change risk are more certain and more easily planned for.
EPO 8	Protect and where appropriate enhance the character, diversity and special qualities of the architectural, archaeological and cultural (including Gaeltachtaí) heritage in County Cork.				✓	Population growth and increased levels of development and economic activity associated with such growth will lead to increased pressure on many aspects of the heritage of the county. Robust mitigation is provided by the plan though the protection of the various designated cultural assets. Economic growth may also have positive benefits by supporting the regeneration of town centres and heritage buildings which would be very positive.
EPO 9	Protect and, where appropriate, enhance the character, diversity and special qualities of landscapes in County Cork		✓			Growth will place pressure on the landscape but the plan does include mitigation. The absence of a National and County level landscape strategy however weakens policy in this area.
EPO 10	Make best use of the material assets of the county and promote the sustainable development of new infrastructure to provide for the current and future needs of the population.	✓				Growth and development will underpin further investment in the material assets of the county.

Conclusion



- 6.2.15 The preceding matrix (Table 6.1) identifies the positive, negative and uncertain effects of implementing the Core Strategy of the Draft Cork County Development Plan. The analysis showed that there were potential negative impacts on biodiversity, soil and landscape, uncertain impacts on water quality and air and neutral impacts on heritage (principally because of the built in mitigation measures already included in the plan). The findings of the outstanding assessments in relation to the capacity of the sensitive water catchments (Blackwater / Clonakilty) to absorb additional growth, and the options available in this regard, will inform the amendment stage of the plan making process.
- 6.2.16 Implementation of the core strategy will have many positive benefits for the population, human health and material assets. Many of the potential conflicts in the plan have been mitigated by the use of robust policies and objectives in the plan to protect and conserve the natural resources of the county. However there are a number of risks associated with in the implementation of the strategy, principally the issue of how development and infrastructural provision is to be prioritised and what happens if the critical infrastructure required to service development is not delivered. These issues, together with a number of recommendations for changes to the draft plan, are discussed further in the recommendations in section 6.17.

6.3 Chapter 3 Housing

Key Provisions and Expected Outcomes of Chapter

- 6.3.1 The chapter seeks to ensure that all new development within Cork County supports the achievement of sustainable residential communities, promoting high quality design, good housing mix and development which prioritise walking and cycling provision. In addition, the chapter sets out the revised density requirements for housing development in the county which aims to broaden the range of house types that can be built on zoned land, so that in future more households will be attracted to locate in the towns (especially within the County Metropolitan Area).
- 6.3.2 The application of the housing chapter policies will result in more sustainable communities, which will ultimately deliver a quality of life which residents and visitors are entitled to expect, in terms of amenity, safety and convenience
- 6.3.3 It is expected that new housing developments within the towns will provide a greater range of house types, sizes and densities so as to appeal to the wider housing market and help reduce demand for one off housing in the countryside by providing some self build opportunities within the towns.
- 6.3.4 The intention is that more people will chose to live in well designed and serviced developments within towns in the long term thus drawing more population into the towns.

Implications for the Environment

- 6.3.5 Table 6.2 (below) sets out the detail of the environmental impacts arising from the implementation of the housing policies of this plan. The potential benefits are in the areas of population and human health, air quality and climate change. The potential adverse impacts primarily concern landscape (particularly the impacts the construction of new houses will have on particular landscapes) and the impact on soil quality.
- 6.3.6 It is intended that implementation of the guidelines on Sustainable Residential Development in Urban



Areas and the accompanying Urban Design Manual will result in a more positive impact on the population and human health because of the requirement for the high quality design and layout, promoting the efficient use of land and energy to minimise greenhouse gas emissions and the provision of both hard and soft infrastructure. It also seeks to enhance and protect the built and natural heritage.

- 6.3.7 In line with the new policies proposed in relation to managing rural housing demand, facilitating growth in urban areas has the potential to have positive environmental effects by enhancing the attractiveness of urban living which tends to be more sustainable overall and reducing the demand for one off housing in the countryside.

Table 6.2 Assessment of Chapter 3 Housing						
EPO No.	Objective	+	-	?	Ne	Comment
EPO 1	To ensure the sustainable development of Cork County so the people of Cork have the opportunity to live in communities with high quality residential, working, recreational and natural environments & sustainable travel patterns.	✓				The implementation of the Sustainable Residential Development in Urban Areas and the accompanying Urban Design Manual, at a local and national level, will result in a more positive impact on population as will the Plan's density policies. The Plan will facilitate the delivery of higher quality design and layouts for residential developments, which promote the efficient use of land and the minimisation of greenhouse gas emissions.
EPO 2	To protect human health from hazards or nuisances arising from traffic & incompatible landuses.	✓				As Above
EPO 3	Conserve and restore ecosystems, habitats and species in their natural surroundings, both inside and outside protected areas and ensure the sustainable management of these areas and the ecological corridors between them.		✓			The proposals in the Core Strategy through active development practices will increase pressure on the biodiversity resource of the county. While objective GI 3-1 and 3-2 require new developments to contribute to the protection of existing green infrastructure corridors, consideration should be given to including new objectives in this chapter requiring the replacement of any habitats lost during the development process.
EPO 4	Protect the function and quality of the soil resource in the County		✓			The removal of topsoil during the construction phase has been identified as a potential conflict.

Table 6.2 Assessment of Chapter 3 Housing						
EPO No.	Objective	+	-	?	Ne	Comment
						While objective GI 9-1 does require the protection of soil in the County, this objective should be amended to require the sustainable re use of soil removed during the initial construction phase .
EPO 5	Maintain and improve the quality of water resources and improve the management and sustainable use of these resources to comply with the requirements of the WFD.	✓				The implementation of the Sustainable Residential Development in Urban Areas and the accompanying Urban Design Manual, at a local and national level, will result in a more positive impact on water as will the Plan's density and water protection policies.
EPO 6	Protect and improve air quality.	✓				The implementation of the Sustainable Residential Development in Urban Areas and the accompanying Urban Design Manual, at a local and national level, will result in a more positive impact on air as will the Plan's density and climate change adaptation policies.
EPO 7	Contribute to mitigation of, and adaptation to, climate change	✓				As above
EPO 8	Protect and where appropriate enhance the character, diversity and special qualities of the architectural, archaeological and cultural (including Gaeltachtaí) heritage in County Cork.				✓	The implementation of the Sustainable Residential Development in Urban Areas and the accompanying Urban Design Manual, will result in a more positive impact on cultural heritage as the protection and enhancement of built and natural heritage is a specific aim of the guidelines.
EPO 9	Protect and, where appropriate, enhance the character, diversity and special qualities of landscapes in County Cork		✓			Housing developments have the potential to have significant negative impacts on the landscape. Objective GI 6-1 however includes policies which will protect important landscapes from inappropriate development thus mitigating any potential negative impacts.
EPO 10	Make best use of the material assets of the county and promote the sustainable development of new	✓				The Core Strategy and the provisions of this chapter aim to make the best use of existing infrastructure by

Table 6.2 Assessment of Chapter 3 Housing						
EPO No.	Objective	+	-	?	Ne	Comment
	infrastructure to provide for the current and future needs of the population.					concentrating growth primarily in the Gateway where public infrastructure is provided.

Conclusions

- 6.3.8 The preceding matrix (Table 6.2) identified the positive, negative uncertain and neutral effects; of implementing the policies contained within Chapter 3 of the Draft Cork County Development Plan. The analysis showed that there were potential negative impact on biodiversity, soil quality, and landscape if the plan was implemented. The Plan however has recognised these potential conflicts and has identified a number of other mitigating measures in other sections of the Plan, notably the section on green infrastructure.
- 6.3.9 Further mitigating measures are recommended to reduce the potential negative impacts of the plan as follows:
- Include a new objective in chapter 3 requiring the replacement of habitats lost during the development process.
 - Include a new objective or amend GI 9-1 requiring the sustainable reuse of greenfield soils.

6.4 Chapter 4 Rural Coastal and Islands

Key Provisions and Expected Outcomes of Chapter

- 6.4.1 This chapter seeks to implement the provisions of the Guidelines on Sustainable Rural Housing and the NSS, which emphasise that rural generated housing need should be accommodated where it arises. In implementing the provisions contained in the guidelines this chapter aims to sustain and renew rural communities and manage urban generated housing pressures by;
- Managing the provision of housing to meet rural generated housing needs.
 - Identifying different types of rural areas in the County in accordance with the guidance contained in the Sustainable Rural Housing Guidelines and developing tailored policy responses in each area.
 - Providing guidance in the development plan on general planning and sustainable development criteria in particular how it relates to individual rural housing.
- 6.4.2 In addition, this Chapter includes policies relating to the management, protection and development of Cork's Coastal resources and supporting the sustainable development of the County's Island communities.
- 6.4.3 The implementation of the policies and objectives contained in this chapter will have the following outcomes;
- It is expected there will be additional population and housing growth in rural areas as a result of the introduction of rural housing policies which prioritise the needs of rural communities. However the new polices will result in a reduction in urban generated rural housing and the commuting associated with this form of development.



- It is envisaged that the rural housing policy controls in this draft plan, which are more extensive than the existing plan, will ensure that rural housing growth is restricted to meeting the needs of rural communities. Directing urban generated housing to urban areas will result in less rural housing throughout the County.
- It is expected that there will be a reduction in the number of individual dwellings permitted within the Metropolitan Greenbelt, while accommodating rural generated housing needs and within the wider CASP area on foot of rural housing restrictions introduced in this plan. The plan will focus on the rural generated housing needs of rural and agricultural communities which it is expected will result in more sustainable forms of housing provision in rural areas. In the area of North West Cork identified as a 'Weak Rural Area', it is expected that rural housing growth will remain in line with demand.
- It is also expected that new policy restrictions will lead to a reduction in the numbers of second and holiday homes and the re-use of disused / derelict housing stock in all rural areas (including Island Communities).
- It is expected that new housing proposals in rural areas will take into account a wider range of environmental criteria including flooding, wastewater treatment, water quality etc. and be more sustainable as a result.
- The introduction of additional planning policy measures relating to integrated coastal zone management (ICZM), coastal protection, and sustainable development in coastal areas is expected to lead to better management of the coastal zone.
- The permanent all year round population of the West Cork Islands will stabilise and grow, supporting the development of sustainable island communities.

Implications for the Environment

- 6.4.4 Table 6.3 (below) sets out the detail of the environmental impacts arising from the implementation of the policies of this chapter. It is assumed that the implementation of the policies in this chapter will deliver *less* rural housing when compared to the provision of the existing plan. The potential benefits of less rural housing will be seen in the areas of population, human health, soil, water, air and landscape.
- 6.4.5 The potential uncertain impacts primarily concern:
- Biodiversity,
 - Cultural heritage and
 - Material Assets.
- 6.4.6 The change in the rural housing policy emphasis with a focus on the needs of rural communities will likely result in lower levels of rural housing growth as there will be a reduction in urban generated housing demand. As a result, lower levels of rural housing growth in this plan compared to current levels and the development of policies which encourage the re-use of disused/derelict housing stock will likely have reduced environmental impacts for all rural areas, including the sensitive island communities.
- 6.4.7 The inclusion of specific policies relating to Integrated Coastal Zone Management (ICZM), coastal protection and sustainable development in coastal areas will have a positive impact on the environment.



Table 6.3 Assessment of Chapter 4 Rural, Coastal and Islands						
EPO No.	Objective	+	-	?	Ne	Comment
EPO 1	To ensure the sustainable development of Cork County so the people of Cork have the opportunity to live in communities with high quality residential, working, recreational and natural environments & sustainable travel patterns.	✓				The impacts will be positive as the sustainable rural housing needs of rural communities are prioritised in this chapter and urban generated needs are directed to urban areas, resulting in less commuting.
EPO 2	To protect human health from hazards or nuisances arising from traffic & incompatible landuses.	✓				The impacts on human health will be positive as the sustainable rural housing needs of rural communities are prioritised in this plan.
EPO 3	Conserve and restore ecosystems, habitats and species in their natural surroundings, both inside and outside protected areas and ensure the sustainable management of these areas and the ecological corridors between them.			✓		The objectives of this Plan recognise the importance of conserving and restoring ecosystems, habitats and species and the policies in this Chapter will seek to ensure that the risk from development will be minimised. The growth targets set out in the Core Strategy and housing policies contained in this Chapter should ultimately deliver less rural housing in County Cork.
EPO 4	Protect the function and quality of the soil resource in the County	✓				The growth targets set out in the Core Strategy and housing policies contained in this Chapter should deliver less rural housing in County Cork, thus protecting soil quality in rural areas.
EPO 5	Maintain and improve the quality of water resources and improve the management and sustainable use of these resources to comply with the requirements of the WFD.	✓				The growth targets set out in the Core Strategy and housing policies contained in this Chapter should ultimately deliver less rural housing in County Cork. As a result of directing urban generated housing to urban areas, more people will be connected to public water services infrastructure thus reducing demand for private wastewater treatment facilities / water sources in rural areas.
EPO 6	Protect and improve air quality.	✓				Directing urban generated housing to urban areas, will result in less commuting from rural areas and will serve to improve air quality.
EPO 7	Contribute to mitigation of, and adaption to, climate change	✓				As above
EPO 8	Protect and where appropriate enhance the character, diversity and special qualities of the				✓	Additional objectives in Chapter 12 of this Plan seek to ensure that the cultural,

Table 6.3 Assessment of Chapter 4 Rural, Coastal and Islands						
EPO No.	Objective	+	-	?	Ne	Comment
	architectural, archaeological and cultural (including Gaeltachtaí) heritage in County Cork.					architectural and archaeological heritage of County Cork is protected from inappropriate development.
EPO 9	Protect and, where appropriate, enhance the character, diversity and special qualities of landscapes in County Cork	✓				By delivering less rural housing, the provisions of this chapter will serve to protect important landscapes from inappropriate residential development.
EPO 10	Make best use of the material assets of the county and promote the sustainable development of new infrastructure to provide for the current and future needs of the population.				✓	

Conclusions

6.4.8 The preceding matrix (Table 6.3) identified the positive, negative uncertain and neutral effects of implementing the policies contained within Chapter 4 of the Draft Cork County Development Plan. The analysis showed that there were no potential negative impacts on the Environmental Protection Objectives. The growth targets set out in the Core Strategy and housing policies contained in this Chapter should ultimately deliver less rural housing in County Cork. As a result of directing urban generated housing to urban areas, more people will be connected to public water services infrastructure thus reducing demand for private wastewater treatment systems / water sources in rural areas.

6.5 Chapter 5 Social and Community

Key Provisions of Chapter 5

6.5.1 The plan aims to set out standards for the provision of social and community facilities to meet current and future needs of all age cohorts of the population including childcare, education, health, amenity and recreational facilities. It also includes a new section on planning for the ageing population.

6.5.2 The main provision of the chapter include;

- Securing the provision of facilities which provide community, educational, social, health, childcare, cultural, religious, recreation and leisure facilities that serve the needs of the public in order to build sustainable communities.
- Facilitating both publicly and privately funded and developed facilities. Supporting a strong and vibrant voluntary sector.
- Ensuring that all new developments make adequate provision for the full range of recreational and amenity activities sufficient to meet the needs of the development.
- Ensuring adequate provision of private and public open space within all residential developments while protecting existing recreational facilities.
- Acknowledging that the need may arise for the construction of new acute hospital facilities within the county.

Expected outcome of implementing Chapter 5

6.5.3 The implementation of the policies contained in this chapter will result in

- More timely and focused provision of facilities to meet the needs of the growing population and ensuring facilities are provided in a timely fashion as new development takes places.
- The development of sustainable and properly planned communities which will in turn strengthen the settlement structure of the county and provide for an enhanced standard of open space provision both qualitative and quantitative across the county.
- More sustainable provision of educational facilities and an enhanced level of recreation and amenity facilities to serve new residential developments
- Protection of existing recreational and sports facilities.

Implications for the Environment

6.5.4 Table 6.4 (below) sets out the details of the environmental impacts arising from the implementation of the policies of this chapter. The potential benefits are in the areas of population, human health, quality of life issues etc. Implementation of existing development management guidelines and procedures, coupled with the objectives of this chapter, should safeguard against significant adverse impacts the wider environment.

EPO No.	Objective	+	-	?	Ne	Comment
EPO 1	To ensure the sustainable development of Cork County so the people of Cork have the opportunity to live in communities with high quality residential, working, recreational and natural environments & sustainable travel patterns.	✓				The policies contained within this chapter will ensure the delivery of an appropriate range of community, educational, social, health, childcare, cultural, religious, recreation and leisure facilities that serve the needs of the public in order to build sustainable communities.
EPO 2	To protect human health from hazards or nuisances arising from traffic & incompatible landuses.	✓				As above
EPO 3	Conserve and restore ecosystems, habitats and species in their natural surroundings, both inside and outside protected areas and ensure the sustainable management of these areas and the ecological corridors between them.		✓			The provision of new sporting and recreational facilities on greenfield lands has the potential for significant adverse impacts on biodiversity in these areas. The wording of these elements of the plan should be prefaced by the references to the need to protect biodiversity/ minimise impacts on sensitive habitats and species.
EPO 4	Protect the function and quality of the soil resource in the County				✓	It is not considered that the objectives in this chapter will have any impact on soil quality.
EPO 5	Maintain and improve the quality of water resources and improve the management and sustainable use of these resources to comply with the requirements of the WFD.				✓	It is not considered that the objectives in this chapter will have an impact on water quality. In addition, objectives contained within Chapter 11 of the plan ensure protection of water

Table 6.4 Assessment of Chapter 5 Social and Community						
EPO No.	Objective	+	-	?	Ne	Comment
						quality.
EPO 6	Protect and improve air quality				✓	It is not considered that the objectives in this chapter will have an impact on air quality.
EPO 7	Contribute to mitigation of, and adaption to, climate change				✓	It is not considered that the objectives in this chapter will have an impact on climate change.
EPO 8	Protect and where appropriate enhance the character, diversity and special qualities of the architectural, archaeological and cultural (including Gaeltachtaí) heritage in County Cork.	✓				The provision of additional social and community facilities will enhance the opportunities to promote cultural heritage. Sport is a significant part of Ireland's cultural heritage, the policies in this chapter aim to protect existing facilities and provide additional sporting facilities, which will in turn enhance our cultural heritage.
EPO 9	Protect and, where appropriate, enhance the character, diversity and special qualities of landscapes in County Cork				✓	It is not considered that the objectives in this chapter will have an impact on landscape character in Cork.
EPO 10	Make best use of the material assets of the county and promote the sustainable development of new infrastructure to provide for the current and future needs of the population.	✓				The provisions of this chapter will have a positive impact on material assets.

Conclusions

- 6.5.5 The preceding matrix (Table 6.4) identified the positive, negative and neutral effects; of implementing the policies contained within Chapter 5 of the Draft Cork County Development Plan. The analysis showed that there were potential negative impacts on the Environmental Protection Objectives of the implementation of this chapter. Consideration will need to be given to amending this chapter to provide greater recognition of the need to protect biodiversity / minimise impacts on sensitive habitats and species.

6.6 Chapter 6 Economy

Key Provisions of Chapter 6

- 6.6.1 This chapter aims to achieve balanced economic development and improved employment choices across the county, supporting existing businesses and ensuring new economic development is located where it can be most effective.
- 6.6.2 The Chapter sets out a hierarchy of employment locations dealing with employment development in
- the Gateway locations (Metropolitan Cork) and Mallow Hub;
 - other towns and key villages, and
 - rural areas.

- 6.6.3 The economic strategy of the plan aims to ensure new employment opportunities are developed in tandem with the provision of housing and infrastructure so that people have the opportunity to live closer to where they work. The strategy identifies key strategic employment areas and provides locational guidance on the appropriate development in Enterprise, Business and Industrial areas.
- 6.6.4 This Chapter promotes the special economic role of Cork Harbour in terms of industrial / employment development recognising the important role of Ringaskiddy and Marino Point in accommodating the future growth of Cork Port and the redevelopment of the Cork City Docklands. The harbour's potential for recreation and tourism uses, specifically the redevelopment of Spike Island as a tourist attraction, is also noted.
- 6.6.5 Chapter includes policies to support key employment sectors including pharma, agricultural, forestry, fisheries and food sector which are critical to the economy and employment and provide for future planned development.
- 6.6.6 Chapter also supports farm diversification and the establishment of new rural enterprises.
- 6.6.7 Chapter supports a sustainable aggregates and mineral extractive industry and seeks to safeguard mineral resources.

Expected Outcomes of implementing Chapter 6

- 6.6.8 The implementation of the policies contained in this chapter will,
- Optimise economic potential of Metropolitan Cork (Gateway)
 - Concentrate new economic and employment development primarily within the towns.
 - Result in more effective utilisation of brownfield and greenfield lands around the harbour for industrial use including lands at Ringaskiddy and Marino Point to allow for the relocation of port uses from the city to enable redevelopment of the docklands area.
 - Lead to increased use of the harbour area for recreation and amenity uses and increased visitor number to the harbour area.
 - Support the development of the agricultural, forestry, fisheries and food and drink sectors in line with Government policy which will support the economy and employment base of the county.
 - Protect aggregates and minerals from incompatible development and ensure they are developed with due regard to the need to protect the environment and rural, scenic and residential amenities.
 - Consideration of the need to prepare a Minerals Strategy to support a sustainable extractive industry.

Implications for the Environment

- 6.6.9 Table 6.5 below sets out the details of the likely environmental impacts arising from the implementation of the economy chapter of the Plan. Increased economic development and prosperity will have potentially positive benefits in the areas of population, human health, and material assets while there are potentially negative impacts for biodiversity, soil, water, air cultural heritage, climate change, associated with increased development pressures. Implementation of existing development management guidelines and procedures, coupled with the objectives of this chapter, should safeguard against significant adverse impacts in the wider environment. Additional research is also to be undertaken on the sensitive catchments



to ensure that there is no conflict between the Draft Plan and our obligations in terms of protecting biodiversity, water quality and restoring waters to good status. This work will inform the next stage of the plan making process.

- 6.6.10 More focused provision of employment development in the main centres of population enhances the likelihood that development will be serviced by all the necessary supporting infrastructure and places less demand on the environment. If people work closer to where they live then car based journeys can be reduced and time spent commuting reduced, thus enhancing overall quality of life.
- 6.6.11 The development of the agricultural, forestry and fisheries sectors and in food and drink production has the potential to significantly impact on the environment, especially water quality, soil, air quality, landscape etc.
- 6.6.12 Additional traffic associated with more intensive uses within these sectors can also impact on roads infrastructure, air quality and rural amenity.
- 6.6.13 It is uncertain what impact a more intensive agricultural sector will have on the environment. More intensive agricultural practices could have negative impacts on biodiversity, water quality and landscape.

Table 6.5 Assessment of Chapter 6 Economy and Employment						
EPO Number	Objective	+	-	?	Ne	Comment
EPO 1	To ensure the sustainable development of Cork County so the people of Cork have the opportunity to live in communities with high quality residential, working, recreational and natural environments & sustainable travel patterns.	✓				This plan supports economic growth in appropriate locations close to centres of population growth thus reducing the need for excessive commuting. This chapter also seeks the clustering of similar business activities resulting in less intrusion on residential amenities and enhanced public transport linkages between employment and residential locations.
EPO 2	To protect human health from hazards or nuisances arising from traffic & incompatible landuses.	✓				As above
EPO 3	Conserve and restore ecosystems, habitats and species in their natural surroundings, both inside and outside protected areas and ensure the sustainable management of these areas and the ecological corridors between them.		✓			The proposals for economic and employment development will increase pressures on the environment and biodiversity. More intensive agricultural practices, which require larger field areas, will have a negative impact on biodiversity and landscape character. Building more factories, particularly in and around Cork Harbour will have a negative impact on the landscape character of the area.
EPO 4	Protect the function and quality of the soil resource in the County		✓			More intensive agricultural practices and more economic development will have a



Table 6.5 Assessment of Chapter 6 Economy and Employment						
EPO Number	Objective	+	-	?	Ne	Comment
						negative impact on soil quality.
EPO 5	Maintain and improve the quality of water resources and improve the management and sustainable use of these resources to comply with the requirements of the WFD.		✓			The proposals for economic and employment development will increase pressures on water quality and water services infrastructure. A stronger agricultural sector could also have significant negative impacts on water quality unless they comply with all discharge regulations.
EPO 6	Protect and improve air quality		✓			A more intensive agricultural sector will ultimately lead to the production of additional green house gases. More economic development will also lead to increased levels of CO2 Production.
EPO 7	Contribute to mitigation of, and adaption to, climate change		✓			As Above
EPO 8	Protect and where appropriate enhance the character, diversity and special qualities of the architectural, archaeological and cultural (including Gaeltachtaí) heritage in County Cork.				✓	The proposals for economic and employment development will increase pressures on cultural heritage , however compliance with the policies and objectives to protect cultural heritage as set out in the plan should ensure that there is no significant impact.
EPO 9	Protect and, where appropriate, enhance the character, diversity and special qualities of landscapes in County Cork		✓			The proposals for economic and employment development will increase pressures on the landscape. More intensive agricultural practices, which require larger field areas will have a negative impact on both biodiversity and landscape character. Concentrating economic growth in and around Cork Harbour will have a negative impact on the landscape character of the area.
EPO 10	Make best use of the material assets of the county and promote the sustainable development of new infrastructure to provide for the current and future needs of the population.	✓				This plan supports economic growth in locations that are well served (or will be well served) by existing water and wastewater infrastructure.



Conclusions

- 6.6.14 The assessment of Chapter 6 of the Draft Cork County Development Plan highlights a number of potential negative impacts on the Environmental Protection Objectives. The Chapter promotes economic development but does not qualify this by references to the need for such development to avoid degradation of the natural resources of the county. Objectives in relation to promoting large scale developments at Strategic Employment Locations, facilitating development in Cork Harbour and promoting agricultural and farm diversification in particular need to be modified to reference environmental protection. This chapter emphasises the importance of Cork Harbour as a location for economic development and promotes large scale industrial development in harbour locations such as Ringaskiddy and Little Island. Development in and around Cork Harbour in particular will need to be carefully considered so as to ascertain what impacts they will have on both biodiversity and landscape. The plan should include additional objectives requiring development proposals in these locations to minimise impacts on all sensitive habitats in the harbour. Consideration should be given to the need for a detailed environmental assessment to be undertaken that assesses the cumulative impact of significant development in the harbour area.
- 6.6.15 In terms of agriculture, the plan supports the growth of the sector and facilitates farm diversification. The intensification of agricultural practices will have an impact on biodiversity in rural areas. These aspects of the plan should be modified to recognise the intrinsic value of our environmental resources and to ensure the potential impacts on biodiversity and environmental protection and considered as part of proposal to develop these sectors.

6.7 Chapter 7 Town Centres and Retail

Key Provisions of Chapter

- 6.7.1 The key aim of Chapter 7 is to maintain, strengthen and reinvent the role of town centres as dynamic attractive and inclusive environments, particularly as the most important location for retailing and services. In order to deliver this change, the policies of this chapter aim to;
- Provide adequate retail choice in appropriate locations in line with the identified retail hierarchy and the identified quantum of retail space.
 - Promote the appropriate revitalisation of vacant and derelict properties and to facilitate the adaptation of existing property in town centre areas including a pro-active approach towards the development of opportunity sites.
 - To reduce amount of vacant floorspace within core retail areas by 50% in the short term.
 - Make town centres/retail locations as attractive and accessible as possible by public transport, cycling and walking in particular.
 - Encourage retail and town centre proposals which respect, retain and complement the heritage of town centres, particularly shopfronts, historic buildings and streetscapes.

Expected Outcome of implementing the plan.

- 6.7.2 If the approach is successful we will see regeneration and rejuvenation of town centres to include investment in retail, public realm, parking infrastructure, etc. Retail development will be promoted which is of an appropriate scale and in an appropriate location for its type thus ensuring negative impacts on vitality



and viability of any existing town centres are minimised. The sequential approach advocated in the plan, will limit large scale retail developments in non town centre locations.

- 6.7.3 By seeking to improve the attractiveness of town centres the plan seeks indirectly to encourage urban living as a sustainable settlement choice. It recognises that vibrant town centres are an essential component in the development of sustainable communities and in promoting social inclusion.
- 6.7.4 The promotion of town centres, where existing infrastructure is in place, will also assist in contributing to reduced reliance on private car transport and contribute to reduced levels of pollution, especially from the transport sector.
- 6.7.5 The plan seeks to address and encourage the revitalisation of derelict or underused sites prioritising the redevelopment of brownfield lands and vacant properties. It encourages appropriate re-use of the traditional and historic building stock as part of the economic regeneration of settlements. It seeks to promote cultural heritage and amenity.

Implications for the Environment

- 6.7.6 It is expected that the measures as proposed in chapter 7 will have positive implications for the environment. It is expected they will lead to physical improvements to the public realm including additional parking infrastructure and will improve the overall image, attractiveness and environmental quality of town centres. Ideally they will make our towns more attractive places in which to live. Positive redevelopment of brownfield sites and vacant units and utilisation of existing infrastructure within town centres are inherently sustainable subject to adequate mitigation which is provided for in the objectives.
- 6.7.7 The measures as outlined in the chapter will focus development on those locations where it is best placed to occur. It will support reduced dependency on the car and commuting contributing to reduction in GHG emissions and general environmental improvement.
- 6.7.8 By encouraging development in central areas of towns the potential for conflict with flood zones increases due to the fact that many towns are traversed by rivers. The chapter on Water Services which deals with flooding provides guidance for town centres on managing such flood risks while still allowing adequate flexibility for development to take place.
- 6.7.9 Whilst there may be increased potential for demands on existing infrastructure (roads, water services, etc) through more intensive urban development the effects should be predominantly positive through maximising usage of existing infrastructure. Appropriate mitigation is in place in objectives to counter the effects of excessive development pressures particularly in the transport and water services chapters.
- 6.7.10 Potential also exists for increased pressure for development in town centres to threaten built heritage however similar to other concerns raised it is considered that adequate mitigation is provided to ensure that development that does occur will be in a manner which is appropriate to the context, setting and integrity of heritage buildings.
- 6.7.11 While all development has the potential to impact on the environment, existing development management guidelines and procedures, coupled with the objectives of this plan, should safeguard against significant adverse impacts on human health, biodiversity, soil, public health, heritage and landscape, etc.



Table 6.6 Assessment of Chapter 7 Town Centres and Retail

EPO No.	Objective	+	-	?	Ne	Comment
EPO 1	To ensure the sustainable development of Cork County so the people of Cork have the opportunity to live in communities with high quality residential, working, recreational and natural environments & sustainable travel patterns.	✓				Key aim of the plan is to revitalize and increase the attractiveness of town centres to make them more economically, socially and environmentally sustainable and recognize that they are the best location to provide for retail and other activities.
EPO 2	Human Health :To protect human health from hazards or nuisances arising from traffic & incompatible landuses.	✓				As above
EPO 3	Biodiversity: Conserve and restore ecosystems, habitats and species in their natural surroundings, both inside and outside protected areas and ensure the sustainable management of these areas and the ecological corridors between them.				✓	Objectives contained within plan to ensure Environmental protection and sustainable development by focusing retail developments into brownfield and town centre areas which are already developed.
EPO 4	Soil: Protect the function and quality of the soil resource in the County				✓	Plan promotes the regeneration of brownfield sites and urban areas for town centre and retail development.
EPO 5	Maintain and improve the quality of water resources and improve the management and sustainable use of these resources to comply with the requirements of the WFD.				✓	Objectives contained within plan to ensure Environmental protection and sustainable development.
EPO 6	Protect and improve air quality.	✓				The promotion of town centres, where existing infrastructure is in place, will assist in contributing to reduced reliance on private car transport and ideally contribute to reduced levels of pollution, especially from the transport sector.
EPO 7	Contribute to mitigation of, and adaption to, climate change					
EPO 8	Protect and where appropriate enhance the character, diversity and special qualities of the architectural, archaeological and cultural (including Gaeltachtaí) heritage in County Cork.		✓			The concentration of future of future retail developments in town centres can have a negative impact on the quality of architectural heritage in the County.
EPO 9	Protect and, where appropriate, enhance the character, diversity and				✓	It was determined that the policies in this chapter would not have an impact on landscape character.

Table 6.6 Assessment of Chapter 7 Town Centres and Retail						
EPO No.	Objective	+	-	?	Ne	Comment
	special qualities of landscapes in County Cork					
EPO 10	Make best use of the material assets of the county and promote the sustainable development of new infrastructure to provide for the current and future needs of the population..	✓				The plan seeks to promote and enhance the status of town centres where existing infrastructure is in place.

Conclusions

6.7.12 Implementation of Chapter 7 of the Draft Cork County Development Plan is likely to have many positive environmental benefits for the population and human health but may also place the architectural and cultural heritage of town centres under greater development pressure. While Objective TCR 12-1 does acknowledge the need to promote high quality design in future retail proposals in town centres so as to protect and enhance the architectural and cultural heritage of these areas, this principle should be reflected in Section 7.5 and objective TCR 5-1 which outline the Councils policy on locating retail development. These could be amended to acknowledge the need to promote high quality design in future retail proposals in town centres so as to protect and enhance the architectural and cultural heritage of these areas.

6.8 Chapter 8 Tourism

Key Provisions and expected outcomes of Chapter 8

- 6.8.1 Chapter 8 of the Draft Cork County Development Plan highlights the importance of a successful and well managed tourism industry in Cork and the tourism strategy of the Draft Plan aims to;
- Develop, enhance and protect new and existing tourism assets, products, attractions and tourism infrastructure;
 - Maximise the tourism diversity of the County and promote sustainable tourism-related development;
 - Develop strong, year-round, high quality integrated tourist products and promote the potential of underdeveloped areas for tourism.
 - Highlight the importance of the marine leisure, heritage tourism, cultural tourism and walking/cycling activities to the overall tourism provision for the County.
 - Increase tourist visitor numbers to County Cork.
 - Protect key tourist assets and attractions from inappropriate development while allowing for orderly expansion / development where appropriate
 - Facilitate the development of additional tourist facilities in particular a network of greenways across the county.



Implications for the Environment

6.8.2 If the development of the tourism sector is poorly planned, it will result in environmental degradation and will impinge upon the quality of life of local communities. In particular,

- Increased visitor numbers will increase the environmental pressure on our higher value landscapes and the more ecologically sensitive environments unless it is carefully managed in a sustainable manner.
- The provision of new or the expansion of existing tourist infrastructure in certain locations may have a significant impact on ecological sites and on water quality.
- The development of a network of greenways for cycling and walking where they pass through or close to ecologically sensitive sites could impact adversely on such sites unless certain precautions are taken to mitigate against such impacts.
- The development of marine leisure infrastructure such as marinas in ecologically sensitive areas can damage such areas.

EPO No.	Objective	+	-	?	Ne	Comment
EPO 1	To ensure the sustainable development of Cork County so the people of Cork have the opportunity to live in communities with high quality residential, working, recreational and natural environments & sustainable travel patterns.	✓				Tourism activities generally benefit the well being of the human population by enhancing employment and economic activity and by adding to the overall quality of life
EPO 2	To protect human health from hazards or nuisances arising from traffic & incompatible landuses.	✓				As above
EPO 3	Conserve and restore ecosystems, habitats and species in their natural surroundings, both inside and outside protected areas and ensure the sustainable management of these areas and the ecological corridors between them.		✓			Although tourism activity can generate a better understanding of the conservation of the natural environment, overall, increased tourism activity represents a threat to the biodiversity of the County. The plan provides some mitigation through the general protection afforded to designated conservation sites.
EPO 4	Protect the function and quality of the soil resource in the County				✓	
EPO 5	Maintain and improve the quality of water resources and improve the management and sustainable use of these resources to comply with the requirements of the WFD.		✓			Increased tourism activity can threaten water quality generally throughout the County. Tourism tends to attract greater numbers of people to remote areas where water and waste water infrastructure may not be designed to cope with a sudden temporary influx of human visitors
EPO 6	Protect and improve air		✓			Increased tourism activity

Table 6.7 Assessment of Chapter 8 Tourism						
EPO No.	Objective	+	-	?	Ne	Comment
	quality.					generally results in increased travel and the carbon emissions associated with this will have a negative impact on air quality and climate change. Mitigation is possible by encouraging greater use of sustainable modes.
EPO 7	Contribute to mitigation of, and adaption to, climate change					As above
EPO 8	Protect and where appropriate enhance the character, diversity and special qualities of the architectural, archaeological and cultural (including Gaeltachtaí) heritage in County Cork.		✓			Although increased tourism activity can promote greater understanding of cultural heritage and even generate funding for cultural projects, overall, increased activity is considered a threat to the character and diversity of many aspects of the Counties Cultural heritage. Mitigation is provided by the plan through the protection of the various designated cultural assets
EPO 9	Protect and, where appropriate, enhance the character, diversity and special qualities of landscapes in County Cork			✓		
EPO 10	Make best use of the material assets of the county and promote the sustainable development of new infrastructure to provide for the current and future needs of the population.			✓		The proposals for tourism related development will increase pressures on water quality and water services infrastructure, however compliance with the policies and objectives to protect water quality and the provision of adequate water services infrastructure as set out in the plan should ensure to that there is no significant adverse impact.

Conclusions

6.8.3 Tourism in many cases is about using what is most interesting, unique and attractive about an area to attract visitors and there is an inherent conflict between using our sensitive natural and heritage resources in this may while simultaneously seeking to protect them from degradation. Implementation of the tourism chapter of the Draft Cork County Development Plan has the potential to impact negatively on a range of environmental receptors including biodiversity, air quality, water quality, landscape and cultural heritage but existing development management guidelines and procedures, coupled with the objectives of this plan, and TO 2-1 in particular, should safeguard against significant adverse impacts.

6.8.4 However Objectives TO 7-1 and TO 9-1 should be modified as follows:



- TO 7-1 should include an additional policy objective requiring that any new walking/ cycling and greenway routes be selected and designed so as to minimise impacts on sensitive habitats and species.
- TO 9-1, this objective needs to be reconsidered. Part b should stress that tourism related developments will not normally be considered in environmentally sensitive locations unless it can be demonstrated that there will be no adverse environmental impacts both in the short and the long term from the proposed development. This section also needs to state that development proposals will not be considered in Natura 2000 sites.

6.9 Chapter 9 Energy and Digital Infrastructure

Key Provisions and Expected Outcomes of Chapter

- 6.9.1 The plan aims to facilitate a major change in the role of the County in relation to energy generation. While maintaining (or even enhancing) the security of supply for the human population, the plan aims to facilitate large scale wind energy development to harness the full potential of the County to contribute to longer term global efforts to reduce carbon emissions in an attempt to help avoid the more serious consequences of climate change.
- 6.9.2 The main provisions or outcomes of this Chapter are:
- To ensure security of energy supply throughout the County, reducing dependence on imported fuels.
 - To identify and protect the Counties critical energy infrastructure, and to facilitate its sustainable development in the future
 - To promote the sustainable development of alternative energy sources, reducing carbon emissions, by harnessing the County's potential for renewable energy sources
 - Provide a plan-led approach to the development of renewable energy and in particular on shore wind energy development in the County
 - Safeguard and support the role and function of the Whitegate area and Whiddy Island oil terminal.
 - Delivery of an optimised network of large scale on-shore wind energy developments located so as to avoid:
 - The main centres of population;
 - Designated nature conservation areas
 - Areas with a high value landscape
 - Provide a framework for the assessment of:
 - Other renewable energy projects
 - Land based infrastructure for ocean and off-shore energy projects
 - Energy infrastructure and transmission networks
 - Provide clear guidance on the provision of electricity and gas transmission and distribution networks around the county.
 - To promote and facilitate the provision and continued development of broadband and ICT infrastructure within the County.

Implications for the Environment

- 6.9.3 Table 6.8 below sets out the details of the environmental impacts arising from the implementation of the energy policies of this plan. The potential benefits are in the areas of population and human health, air quality and climate change. The potential adverse impacts concern (also) population & human health (particularly concerning shadow-flicker effects in smaller settlements and on individual dwellings), biodiversity (particularly impacts on the bird population of the County), cultural heritage and landscape.
- 6.9.4 Global concerns regarding the need to reduce carbon emissions in order to improve air quality and avoid the serious longer term consequences of climate change are considered to be the overriding consideration in relation to energy development. The longer term, global, benefits arising from reduced carbon emissions and efforts to avoid the more serious consequences of climate change are offset against the more immediate adverse impacts on landscape and cultural heritage. Potential adverse impacts on population and human health, especially in smaller settlements and individual dwellings are mitigated through the Ministerial Guidelines to Planning Authorities (under review), which provide a measure of protection.
- 6.9.5 Potential adverse impacts have been mitigated, to an extent, by including policies discouraging wind energy development in the high value landscape areas of the County. The areas most important to the conservation of the County's bird population are also areas where wind energy projects are discouraged.
- 6.9.6 Because of the scale of wind energy installations, it is considered that further mitigation could be provided through the plan by increasing the scale or extent of the area where such development is normally discouraged. However this would reduce the capacity of the County to contribute to the longer term global advantages gained through reduced carbon emissions.

Table 6.8 Assessment of Chapter 9 Energy and Digital Infrastructure						
EPO No.	Objective	+	-	?	Ne	Comment
EPO 1	To ensure the sustainable development of Cork County so the people of Cork have the opportunity to live in communities with high quality residential, working, recreational and natural environments & sustainable travel patterns.	✓				The plan supports the provision of a secure & sustainable energy supply for the County and protects the main centres of population from the adverse effects of large scale wind energy development.
EPO 2	To protect human health from hazards or nuisances arising from traffic & incompatible landuses.	✓				See above
EPO 3	Conserve and restore ecosystems, habitats and species in their natural surroundings, both inside and outside protected areas and ensure the sustainable management of these areas and the ecological corridors between them.		✓			Wind energy developments can pose a threat especially disrupting the flight paths of many avian species. The plan provides some mitigation for this by discouraging large scale wind energy in the most important avian habitat areas.
EPO 4	Protect the function and quality of the soil resource in the County		✓			Particularly in upland areas, wind energy development and their supporting infrastructure can have adverse soil impacts.
EPO 5	Maintain and improve the quality of				✓	The main risks to water quality

Table 6.8 Assessment of Chapter 9 Energy and Digital Infrastructure						
EPO No.	Objective	+	-	?	Ne	Comment
	water resources and improve the management and sustainable use of these resources to comply with the requirements of the WFD.					arise during the construction phase of wind energy development and the plan provides for the proper management of water related issues at this stage.
EPO 6	Protect and improve air quality	✓				The overall impact on air quality is positive as the aim is to reduce carbon emissions during the generation of electricity from fossil fuels
EPO 7	Contribute to mitigation of, and adaption to, climate change					As above
EPO 8	Protect and where appropriate enhance the character, diversity and special qualities of the architectural, archaeological and cultural (including Gaeltachtaí) heritage in County Cork.		✓			Although the risks to protected structures and monuments are generally low, the potential for wind energy development to alter the cultural significance of rural or remote landscapes through the introduction of large scale industrialised structures is a significant adverse risk.
EPO 9	Protect and, where appropriate, enhance the character, diversity and special qualities of landscapes in County Cork		✓			Development of large-scale wind energy developments results in significant landscape impacts. Some mitigation is provided in the plan by discouraging development in the area of high landscape value.
EPO 10	Make best use of the material assets of the county and promote the sustainable development of new infrastructure to provide for the current and future needs of the population.	✓				The plan supports the provision of a secure & sustainable energy supply for the County.

Conclusions

- 6.9.7 Implementation of Chapter 9 has the potential to have negative impacts on the environment particularly on biodiversity, soil quality, cultural heritage and landscape emerging from the new approach to wind energy. Further consideration should be given to including the following amendments;
- Figure 9.2 amend areas where wind energy is *normally discouraged* to include all Natura 2000 sites.
 - Objective ED 3-6 should be amended so as to include Natura 2000 as areas where large scale wind energy developments will normally be discouraged.

6.10 Chapter 10 Transport & Mobility

Key Provisions and Expected Outcomes of This Chapter

- 6.10.1 The principle aim of this chapter is to support the delivery of an efficient and integrated transport system that will facilitate progress towards a modal shift target of 55% level of non car based transport for journeys to work within the Cork Gateway, hubs and other Main Towns to complement SWRPG's and Governments

Smarter Travel Policy (20% within rural areas). Key provisions and expected outcomes include:

- Overall improvement of services and networks.
- Walking and cycling will be the key modal shift option for shorter journeys as the most sustainable and cost effective mode of transport.
- Promote the public transport network (bus and rail) as the key mobility option for medium to longer journeys. Ensure connectivity for housing and employment areas to existing and future transport infrastructure (including a requirement for transport assessments for larger developments).
- Protect and manage the capacity of the National and County road network.
- Protect the routes of planned roads from inappropriate development.
- Prioritise planned improvements of National and County road network.
- Ensuring that appropriate provision for car parking is included in new development.

Implications for the Environment

6.10.2 The environmental effects arising from the implementation of the Plan's proposals for Transport are broadly positive. The proposals for increased modal choice will provide immediate benefits to the population and material assets, and bring longer term benefits to the population and biodiversity of the County by reducing carbon emissions and helping avoid the serious consequences of climate change. Other impacts are broadly neutral.

Table 6.9 Assessment of Chapter 10 Transport and Mobility						
EPO No.	Objective	+	-	?	Ne	Comment
EPO 1	To ensure the sustainable development of Cork County so the people of Cork have the opportunity to live in communities with high quality residential, working, recreational and natural environments & sustainable travel patterns.	✓				Implementing the plan will provide an increased choice of more sustainable modes of transport to greater numbers of the County's population thus reducing the need for car based commuting.
EPO 2	To protect human health from hazards or nuisances arising from traffic & incompatible landuses.	✓				See above.
EPO 3	Conserve and restore ecosystems, habitats and species in their natural surroundings, both inside and outside protected areas and ensure the sustainable management of these areas and the ecological corridors between them.		✓			The plan may deliver longer term gains in relation to the reduction of carbon emissions and avoiding adverse effects of climate change on biodiversity, but there may be more immediate adverse impact through the development of new transport routes and infrastructure
EPO 4	Protect the function and quality of the soil resource in the County				✓	It is anticipated that implementation of the policies in this chapter will have a neutral impact on soil quality.
EPO 5	Maintain and improve the quality of water resources and improve the management and sustainable use of these resources to comply with the				✓	It is anticipated that the implementation of the policies in this chapter will have a neutral impact on water quality.

Table 6.9 Assessment of Chapter 10 Transport and Mobility						
EPO No.	Objective	+	-	?	Ne	Comment
	requirements of the WFD.					
EPO 6	Protect and improve air quality	✓				Plan promotes public transport as a viable transport alternative to the car to assist in the achievement of greenhouse gas emission targets set by the government.
EPO 7	Contribute to mitigation of, and adaption to, climate change	✓				As above
EPO 8	Protect and where appropriate enhance the character, diversity and special qualities of the architectural, archaeological and cultural (including Gaeltachtaí) heritage in County Cork.				✓	It is anticipated that the implementation of the policies in this chapter will have a neutral impact on cultural heritage.
EPO 9	Protect and, where appropriate, enhance the character, diversity and special qualities of landscapes in County Cork				✓	It is anticipated that the implementation of the policies in this chapter will have a neutral impact on landscape quality.
EPO 10	Make best use of the material assets of the county and promote the sustainable development of new infrastructure to provide for the current and future needs of the population.	✓				Implementation of this chapter will enhance the material assets of the county.

Conclusions

- 6.10.3 This chapter promotes the use of sustainable forms of transport such as walking, cycling and public transport and its implementation should therefore have many positive impacts on population and human health, air quality, climate change through the reduction in use of the private car, reduced traffic congestion and lower transport emissions.
- 6.10.4 The Assessment of the chapter did however highlight potential conflicts between Objective Tm 2-2, Cycling Objectives and the provision of Countywide Cycle networks and EPO 3, Biodiversity. These networks, particularly the route planned for Cork Harbour, have the potential to result in significant impacts on EU Designated sites located in the harbour primarily from impacts to water quality from road runoff or disturbance to species during construction and operation. Consideration should be given to amending this objective to say that the selection of new routes will in the first instance seek to avoid EU designated sites. If such sites cannot be avoided, they will be designed so as to minimise impacts on sensitive habitats and species.

6.11 Chapter 11 Water Services and Waste

Key Provisions of Chapter

- 6.11.1 The Water Services strategy of the plan aims to identify and prioritise the water services needs of the county to ensure water services infrastructure is sufficient to meets the needs of planned population.

- 6.11.2 The strategy seeks to protect ground water and surface water resources from contamination to ensure a safe supply of drinking water and reduction in risk to public health.
- 6.11.3 Provide a frame work for the provision of sustainable storm water drainage infrastructure and provision of Sustainable Drainage Systems (SUDS) in large-scale development.
- 6.11.4 Provide a frame work for the assessment and management of flood risks.

Implications for the Environment

- 6.11.5 There are significant water services infrastructural deficits in the county which will need to be addressed in order to facilitate the scale of development envisaged by this Plan. If the implementation of this chapter is successful the approach will deliver high quality permanent infrastructure to meet the requirements of the Water Framework Directive and other environmental regulations and ultimately improve overall environmental quality in the County. Objective WS 2-1 states that development may only proceed where appropriate wastewater treatment is available which satisfies the requirements of environmental regulations and complies with EPA licensing. If implemented this objective will safeguard the environment from the adverse impacts associated with inadequate Wastewater treatment infrastructure.
- 6.11.6 The Plan strategy assumes that all the growth detailed in the plan is capable of being assimilated subject to the delivery of new high quality water services infrastructure, thus ensuring compliance with emission standards, but the cumulative impacts of this have not been fully established, especially in sensitive catchments like the Blackwater and Clonakilty harbour. The Natura Impact Report has highlighted a need for more detailed research to be undertaken in this regard (before the plan is adopted) to demonstrate that the development can in fact be accommodated and this work is to be undertaken to inform the next stage of the plan making process.
- 6.11.7 By enabling lands within urban areas to be brought forward for development the plan will enhance the potential for the delivery of the settlement strategy and reduce development pressure on rural areas.

Table 6-10 Assessment of Chapter 11 Water Services and Waste						
EPO No.	Objective	+	-	?	Ne	Comment
EPO 1	To ensure the sustainable development of Cork County so the people of Cork have the opportunity to live in communities with high quality residential, working, recreational and natural environments & sustainable travel patterns.	✓				The policies for water services and waste are aimed at maintaining and improving water quality, directing future investment towards those towns targeted for additional growth and reducing the impacts from and the occurrences of flooding. Such policies will ultimately lead to direct positive impacts on the population.
EPO 2	To protect human health from hazards or nuisances arising from traffic & incompatible landuses.	✓				As above.
EPO 3	Conserve and restore ecosystems, habitats and species in their natural surroundings, both inside and outside			✓		Plan objectives state that development may only proceed where appropriate wastewater treatment is



Table 6-10 Assessment of Chapter 11 Water Services and Waste

EPO No.	Objective	+	-	?	Ne	Comment
	protected areas and ensure the sustainable management of these areas and the ecological corridors between them.					available which satisfies the requirements of environmental regulations and complies with EPA licensing. Additional research on the capacity of the sensitive catchments to accommodate the scale of development proposed is underway and will inform the next stage of the plan making process. The Plan should not therefore exacerbate the situation on the ground and, if fully implemented will deliver additional new infrastructure will lead to a high standard of waste water emissions which will be positive for the environment.
EPO 4	Protect the function and quality of the soil resource in the County.				✓	It was determined that the implementation of the policies in this chapter will have a neutral impact on soil quality.
EPO 5	Maintain and improve the quality of water resources and improve the management and sustainable use of these resources to comply with the requirements of the WFD.			✓		The policies for water services and are aimed at maintaining and improving water quality, directing future investment towards those towns targeted for additional growth. Such policies will ultimately lead to direct positive impacts on water quality. Additional research on the capacity of the sensitive catchments to accommodate the scale of development proposed is underway and will inform the next stage of the plan making process.
EPO 6	Protect and improve air quality.				✓	It was determined that the implementation of the policies in this chapter will have a neutral impact on air quality.
EPO 7	Contribute to mitigation of, and adaption to, climate change.				✓	It was determined that the implementation of the policies in this chapter will have a neutral impact on Climate change adaptation.
EPO 8	Protect and where appropriate enhance the character, diversity and special qualities of the architectural, archaeological and cultural (including Gaeltachtaí) heritage in County Cork.				✓	It was determined that the implementation of the policies in this chapter will have a neutral impact on Cultural Heritage.
EPO 9	Protect and, where appropriate, enhance the character, diversity and special qualities of landscapes in County Cork.				✓	It was determined that the implementation of the policies in this chapter will have a neutral impact on landscape.

Table 6-10 Assessment of Chapter 11 Water Services and Waste						
EPO No.	Objective	+	-	?	Ne	Comment
EPO 10	Make best use of the material assets of the county and promote the sustainable development of new infrastructure to provide for the current and future needs of the population.	✓				This chapter prioritises development in areas that are served by appropriate water and waste water infrastructure. It states that development cannot proceed where infrastructure is not in place thus ensuring existing infrastructure is used at its most efficient capacity.

Conclusions

- 6.11.8 Following the assessment of Chapter 11, Water Services and Waste, it was determined that many of the policies in the chapter will ultimately have positive impacts on many of the EPO's including population and human health, air quality, climate change by ensuring that all future developments are served by appropriate water and wastewater infrastructure. Further research is underway to clarify the capacity of the most sensitive water catchment areas to accommodate the level of growth proposed and / or to explore other options in relation to meeting the necessary standards. The policies in relation to flooding as set out in WS 6-1 will have direct positive impacts on a number of EPO's by ensuring future developments avoid those areas at risk of flooding.
- 6.11.9 Objective WS2-1 recognises that development should not proceed unless appropriate WWT infrastructure is in place. This should be amended to include reference to the availability of appropriate drinking water supply.
- 6.11.10 Consideration should be given to including an additional section on Riparian Corridors. WS 5-2 does acknowledge the need for River Channel Protection but it limits this protection to developments on zoned land. This section should be amended to include a description of riparian corridors, with stronger policies put in place to ensure their protection from all development, not just development on zoned lands.

6.12 Chapter 12 Heritage

Key Provisions and Outcomes of the Chapter

Natural Heritage

- 6.12.1 Heritage strategy of the plan provides protection to all natural heritage sites designated or proposed for designation under National and European legislation and International Agreements. This includes Special Areas of Conservation, Special Protection Areas, Natural Heritage Areas, Statutory Nature Reserves, Refuges for Fauna and Ramsar Sites.
- 6.12.2 The strategy also provides protection for species listed in the Flora Protection Order 1990, on Annexes of the Habitats and Birds Directives, and to animal species protected under the Wildlife Acts in accordance with relevant legal requirements.
- 6.12.3 Strategy seeks to retain areas of local biodiversity value, ecological corridors and habitats that are features of the County's ecological network, and to protect these from inappropriate development. This includes



rivers, lakes, streams and ponds, peatland and other wetland habitats, woodlands, hedgerows, tree lines, veteran trees, natural and semi-natural grasslands as well as coastal and marine habitats.

- 6.12.4 Chapter 12 includes polices to ensure that an appropriate level of assessment is completed in relation to wetland habitats subject to proposals which would involve drainage or reclamation.
- 6.12.5 The chapter also seeks to maintain the conservation value of those features or areas of geological interest and to protect them from inappropriate development.

Archaeological Heritage

- 6.12.6 Chapter seeks to safeguard sites and settings, features and objects of archaeological interest generally and to secure the preservation (i.e. preservation in situ or in exceptional cases preservation by record) of all archaeological monuments including the Sites and Monuments Record (SMR) and the Record or Monuments and Places as established under Section 12 of the National Monuments (Amendment) Act, 1994, as amended and of sites, features and objects of archaeological and historical interest generally.

Architectural Heritage

- 6.12.7 Chapter seeks to protect and enhance the character of the built environment by means of the Record of Protected Structure, Architectural Conservation Areas and the National Inventory of Architectural heritage.

Cultural Heritage

- 6.12.8 Chapter protects and promotes the cultural heritage of County Cork as an important asset.

The Arts and Culture

- 6.12.9 Provide for balanced development of an arts infrastructure that meets the cultural and artistic needs of communities, supports creative activity and enhances cultural, economic and social life in communities.

Implications for the Environment

- 6.12.10 The provisions of this chapter will have a positive impact on the population, human health, quality of life issues etc. Implementation of the existing different pieces of legislation and the objectives of this plan, should safeguard against significant adverse impacts the wider environment.
- 6.12.11 The plan also aims to retain areas of local biodiversity value, ecological corridors and habitats that are features of the County's ecological network, and to protect these from inappropriate development. This includes rivers, lakes, streams and ponds, peatland and other wetland habitats, woodlands, hedgerows, tree lines, veteran trees, natural and semi-natural grasslands as well as coastal and marine habitats. It particularly includes habitats of special conservation significance in Cork as listed in Volume 2 Chapter 3 of the plan.
- 6.12.12 The archaeological and architectural heritage of County Cork is afforded protection through legislation. However, notwithstanding the protection afforded, the cultural heritage of the County can still be impacted upon through development. Development on sites or land adjacent to protected sites can impact upon the context, if not mitigated. Previously unknown archaeology can be damaged as a result of development. Relevant objectives in this plan shall afford protection to sites in question.



6.12.13

Table 6-11 Assessment of Chapter 12 Heritage						
EPO No	Objective	+	-	?	Ne	Comment
EPO 1	To ensure the sustainable development of Cork County so the people of Cork have the opportunity to live in communities with high quality residential, working, recreational and natural environments & sustainable travel patterns.	✓				Protecting the Natural and Built heritage of the County will have a broadly positive impact on the general well being of the population
EPO 2	To protect human health from hazards or nuisances arising from traffic & incompatible landuses.	✓				See above
EPO 3	Conserve and restore ecosystems, habitats and species in their natural surroundings, both inside and outside protected areas and ensure the sustainable management of these areas and the ecological corridors between them.	✓				This chapter contains policies (HE 2-1 to 2-7) which are specifically at protecting natural habitats and species. The implementation of these objectives will serve to protect and enhance natural heritage in the Cork area.
EPO 4	Protect the function and quality of the soil resource in the County	✓				The implementation of those policies aimed at protecting biodiversity and wetlands will have indirect positive benefits on soil quality.
EPO 5	Maintain and improve the quality of water resources and improve the management and sustainable use of these resources to comply with the requirements of the WFD.	✓				The implementation of those policies aimed at protecting biodiversity and wetlands will have indirect positive benefits on water quality.
EPO 6	Protect and improve air quality	✓				The implementation of those policies aimed at protecting biodiversity and wetlands will have indirect positive benefits on air quality.
EPO 7	Contribute to mitigation of, and adaption to, climate change	✓				The implementation of those policies aimed at protecting biodiversity and wetlands will have indirect positive benefits on climate change adaptation.
EPO 8	Protect and where appropriate enhance the character, diversity and special qualities of the architectural, archaeological and cultural (including Gaeltachtaí) heritage in County Cork.	✓				The implementation of specific policies on protecting and enhancing archaeological, architectural and cultural heritage (HE 3-1 to 3-6,4-1,5-1 and 5-3) will have a direct positive impact on this EPO.
EPO 9	Protect and, where appropriate, enhance the character, diversity and special qualities of	✓				The implementation of those policies aimed at protecting biodiversity and wetlands will have indirect positive benefits on

Table 6-11 Assessment of Chapter 12 Heritage						
EPO No	Objective	+	-	?	Ne	Comment
	landscapes in County Cork					landscape.
EPO 10	Make best use of the material assets of the county and promote the sustainable development of new infrastructure to provide for the current and future needs of the population.				✓	It was determined that the implementation of the policies in this chapter will have a neutral impact on material assets.

Conclusions

6.12.14 The environmental analysis of Chapter 12 showed that there were no potential negative impacts on the Environmental Protection Objectives if the objectives in the chapter were implemented. The chapter places a strong emphasis on protecting all facets of Cork County's Heritage including its natural, archaeological, architectural and cultural heritage. Additional protection has been afforded to underwater archaeological.

6.13 Chapter 13 Green Infrastructure and Environment

Key Provisions and Expected Outcomes of this Chapter

6.13.1 The development of a Green Infrastructure Strategy for the County is a new departure for the County Development Plan and will aim to identify, protect, manage and develop Green Infrastructure resources. This will ensure that new development contributes to the protection, management, enhancement and development of existing / new green infrastructure. The implementation of the policies in this chapter will:

- Manage the Green Infrastructure Assets of the County in a sustainable manner.
- Help to develop the recreational potential of the countryside developing of 'Greenway' routes for walking and cycling, and providing a framework for the protection of rights of way in the County Development Plan process and the implementation of walking / cycling strategies.
- Protect and preserve the County's landscape, views and prospects and the amenities of places and features of natural beauty.
- Protect and improve the key natural assets of soil, surface water, ground water and air.

Implications for the Environment

6.13.2 Overall, the development of a green infrastructure strategy for the County which aims to protect and manage green infrastructure assets, will largely have a positive impact on human health, biodiversity and the management / development of green infrastructure resources, soil, water, landscape, air etc.

6.13.3 However, the development the recreational potential of the countryside which would benefit the population and human health may cause some conflicts with the need to protect the biodiversity, soil and other natural assets of the County etc. unless such infrastructure is carefully located, designed and managed.

6.13.4 The preservation of landscape views and prospects will have a positive impact on the environment in sensitive landscape areas.

Table 6-12 Assessment of Chapter 13 Green Infrastructure and Environment

EPO No.	Objective	+	-	?	Ne	Comment
EPO 1	To ensure the sustainable development of Cork County so the people of Cork have the opportunity to live in communities with high quality residential, working, recreational and natural environments & sustainable travel patterns.	✓				One of the key aims (GI 3-1) of this chapter is to ensure that all planning applications for development must have regard to the County's green infrastructure resources in order to ensure that development proposals provide for the protection of existing green infrastructure and, where appropriate, the provision of new green infrastructure in tandem with new development. This objective, combined with GI 4-1, Countryside recreation, will have positive impact on human health by protecting important green spaces.
EPO 2	To protect human health from hazards or nuisances arising from traffic & incompatible landuses.	✓				As above
EPO 3	Conserve and restore ecosystems, habitats and species in their natural surroundings, both inside and outside protected areas and ensure the sustainable management of these areas and the ecological corridors between them.				✓	Broadly, this chapter of the plan will benefit the biodiversity of the County but specific projects could threaten some habitats especially where they are sensitive to human activity. By providing for the identification of mitigating measures at the project stage, the objectives of this Plan seek to ensure that risk from physical development will be minimised.
EPO 4	Protect the function and quality of the soil resource in the County	✓				The implementation of Objective GI 9-1, which ensures the protection and conservation of soil, will have a direct positive impact on soil quality in the County.
EPO 5	Maintain and improve the quality of water resources and improve the management and sustainable use of these resources to comply with the requirements of the WFD.	✓				This chapter has included specific policies aimed at implementing the River Basin Management plans for ground, surface, estuarine, coastal and transitional waters in county Cork (GI 10-1). It has also identified policies aimed at protecting groundwater quality in the County (GI 10-1). These policies combined with the new approach to managing wastewater discharges in unserved areas will have direct positive impacts on water quality.
EPO 6	Protect and improve air quality.	✓				Section 13.12 of this chapter outlines the council's policy on air quality. The implementation of Objective GI 12-1 will have a direct positive impact on air

Table 6-12 Assessment of Chapter 13 Green Infrastructure and Environment						
EPO No.	Objective	+	-	?	Ne	Comment
						quality by ensuring that air quality in the County aligns with EU targets and remains generally good.
EPO 7	Contribute to mitigation of, and adaption to, climate change	✓				As above
EPO 8	Protect and where appropriate enhance the character, diversity and special qualities of the architectural, archaeological and cultural (including Gaeltachtaí) heritage in County Cork.	✓				The implementation of specific policies on protecting landscape (GI 6-1) , important views and prospects (GI 7-1) and countryside recreation (GI 4-1), will have a direct positive impact on this EPO.
EPO 9	Protect and, where appropriate, enhance the character, diversity and special qualities of landscapes in County Cork	✓				The objectives of this chapter, particularly those within Section 13.5 and 13.8, seek to protect those important landscapes from inappropriate development. The implementation of these objectives will have a positive impact on the quality of Cork County's landscape.
EPO 10	Make best use of the material assets of the county and promote the sustainable development of new infrastructure to provide for the current and future needs of the population.	✓				Implementation of this chapter will add to the asset base of the county.

Conclusion

6.13.5 The introduction of this section on green infrastructure will have significant positive impacts on range of environmental protection objectives. The policies will ensure the protection of existing green infrastructure assets and identify where improvements and new green infrastructure is to be provided in the future. The chapter also acknowledges the importance of Cork's landscape and ensure those areas of high sensitivity will be protected from inappropriate development.

6.14 Chapter 14 Land Use and Zoning

Key Provisions and Expected Outcomes of this Chapter

6.14.1 The aim of this chapter is to provide clear guidance on how to manage the appropriate land uses on land zoned for development within the Local Area Plans. It will achieve this by;

- Providing clear guidance on how to manage transitional zones, non conforming uses and ancillary uses
- Providing for the application of the Part V Social Housing provisions to apply to all developments involving a residential element located within the development boundaries of settlements.
- Encouraging the redevelopment of brownfield lands as the first choice option before considering greenfield sites.

- Providing clear guidance of how to deal with new SEVESO II type developments and extensions to existing facilities in order to protect the health and safety of adjoining residents and workers.

- 6.14.2 This chapter also outlines the framework for the zoning categories that will be used in the LAP and SLAPs.
- 6.14.3 The implementation of the policies in this chapter will also lead to a reduction in the development of Greenfield land and a reduction in the amount of undeveloped brownfield land.
- 6.14.4 The chapter also identifies the approach to managing development in proximity to SEVESO II type developments, by ensuring that current and future Seveso II type developments will not give rise to a threat to the occupants of surrounding properties.

Implications for the Environment

- 6.14.5 Industrial, business and enterprise development taking place on unzoned land may give rise to negative impacts on sensitive environments depending on their location and lead to the loss of green field land and consequent impact on biodiversity.
- 6.14.6 The development of brownfield lands where there are hazardous materials could give rise to significant adverse impacts on the environment and human health.
- 6.14.7 If SEVESO II type developments are not properly located this could lead in the event of an accident to large scale damage to the human and natural environment over a wide area.

Table 6-13 Assessment of Chapter 14 Land Use and Zoning						
EPO No.	Objective	+	-	?	Ne	Comment
EPO 1	To ensure the sustainable development of Cork County so the people of Cork have the opportunity to live in communities with high quality residential, working, recreational and natural environments & sustainable travel patterns.	✓				The purpose of the zoning chapter is to indicate the land use objectives for all the lands within the County. The aim is to promote the orderly development of the County by providing opportunities for people to live and work in their community, eliminating potential conflicts between incompatible land uses and to establish an efficient basis for investment in public infrastructure and facilities.
EPO 2	To protect human health from hazards or nuisances arising from traffic & incompatible landuses.	✓				If SEVESO II type developments and developments adjoining such sites are carefully located in accordance with the policies and objectives of this plan then there should be no significant adverse impact on the environment.
EPO 3	Conserve and restore ecosystems, habitats and species in their natural surroundings, both inside and outside protected areas and ensure the sustainable management of these areas and the ecological corridors between them.		✓			The carrying out of development on zoned land will bring increased pressure on biodiversity, water quality and water services infrastructure. However compliance with the policies and objectives to protect water quality and ensure the provision of adequate water services infrastructure as set out

Table 6-13 Assessment of Chapter 14 Land Use and Zoning						
EPO No.	Objective	+	-	?	Ne	Comment
						in the plan should ensure that there is no significant impact
EPO 4	Protect the function and quality of the soil resource in the County		✓			As above
EPO 5	Maintain and improve the quality of water resources and improve the management and sustainable use of these resources to comply with the requirements of the WFD.		✓			The carrying out of development on zoned land will bring increased pressure on water service infrastructure and on water quality. however compliance with the policies and objectives to protect water quality and ensure the provision of adequate water services infrastructure as set out in Chapter 11 of the plan should ensure that there is no significant impact
EPO 6	Protect and improve air quality.	✓				The promotion of the orderly development of the County and the provision of opportunities for people to live and work in their communities will serve to improve air quality by reducing the need for commuting.
EPO 7	Contribute to mitigation of, and adaption to, climate change	✓				The integration of the flood risk guidelines and the approach to zoning, which seeks to avoid the zoning of land in areas at risk of flooding, will ensure that future development will not be negatively impacted upon as a result of the impacts of climate change.
EPO 8	Protect and where appropriate enhance the character, diversity and special qualities of the architectural, archaeological and cultural (including Gaeltachtaí) heritage in County Cork.	✓				The implementation of the policies in this plan, particularly ZU 2-5, will ensure that regard is given to the character of development in adjoining zones, in particular more architectural, archaeological and environmentally sensitive zones, in assessing development proposals for lands in the vicinity of zoning boundaries.
EPO 9	Protect and, where appropriate, enhance the character, diversity and special qualities of landscapes in County Cork	✓				The development of zoned land in preference to unzoned land outside settlements should help to protect the overall landscape.
EPO 10	Make best use of the material assets of the county and promote the sustainable development of new infrastructure to provide for the current and future needs of the population.	✓				The purpose of the zoning chapter is to indicate the land use objectives for all the lands within the County. The aim is to promote the orderly development of the County by providing opportunities for people to live and work in their community, eliminating potential conflicts between incompatible

Table 6-13 Assessment of Chapter 14 Land Use and Zoning						
EPO No.	Objective	+	-	?	Ne	Comment
						land uses and to establish an efficient basis for investment in public infrastructure and facilities.

Conclusions

- 6.14.8 Implementation of Chapter 14 of the plan should have a largely positive interaction with the environment as the chapter places a strong emphasis on promoting the orderly development of the County by eliminating potential conflicts between incompatible land uses and to establish an efficient basis for investment in public infrastructure and facilities. It sets out the appropriate uses for each of the different land use categories and has additional objectives that ensure appropriate regard is given to character of development in adjoining zones, in particular more architectural, archaeological and environmentally sensitive zones, when assessing development proposals for lands in the vicinity of zoning boundaries.
- 6.14.9 The carrying out of development on zoned greenfield land has the potential for negative impact on biodiversity, water quality and soil quality. However it is anticipated that the existing development management guidelines and procedures, coupled with the objectives of this plan, should safeguard against significant adverse impacts.

6.15 Chapter 15 Putting the Plan into Practise

Key Provisions and Expected Outcomes of this Chapter

- 6.15.1 This chapter sets out the responsibilities of the Local Authority **and** the other statutory stakeholder to deliver the aims and objectives of this plan. It highlights the fact that the delivery of the plan will require a number of agencies to take ownership of the plans vision and work towards achieving that vision by providing in particular the key critical water service and transportation infrastructure required.
- 6.15.2 In order to help achieve the plans vision, this chapter identifies the critical infrastructure delivery priorities in the short and medium/long term. The chapter goes on to;
- Outline the likely funding streams to deliver the plan targets.
 - Set out the overall approach to monitoring progress towards implementation of the plan.
 - Set out the overall approach to Local Area Plans, Special Local Area Plans and other plans.
- 6.15.3 If implemented, it is expected that the objectives of this chapter will facilitate;
- The provision of the entire required critical infrastructure at the appropriate time to ensure delivery of the plan targets.
 - Improvement in water quality on foot of the provision of key water services infrastructure.
 - Improvements in quality of life and air quality due to improved public transport provision.
 - Stronger economic recovery and growth due to improved accessibility and connectivity for goods and services and people.
 - Increased use of public transport leading to a reduction in car usage and a consequent reduction in green house gas emissions.



Implications for the Environment

- 6.15.4 The delivery of the critical infrastructure will allow the targets set out in the plan to be achieved. This will result in improved water quality and a reduction in green house gas emissions.
- 6.15.5 Failure to deliver the critical infrastructure will lead to increased pressure on water quality, increased greenhouse gas emissions, make our main settlements where the majority of our future population growth is targeted to less attractive, leading to increased numbers of individual rural houses which in turn will lead to unsustainable commuting patterns and reduced potential for economic recovery and growth.

EPO No	Objective	+	-	?	Ne	Comment
EPO 1	To ensure the sustainable development of Cork County so the people of Cork have the opportunity to live in communities with high quality residential, working, recreational and natural environments & sustainable travel patterns.	✓				This section focuses on the delivery and priorities for infrastructure required to facilitate the planned economic and population growth, both in the Cork 'Gateway' area of the County, and elsewhere, as set out in this plan. The priorities are tailored so as to ensure people can live and work in sustainable communities.
EPO 2	To protect human health from hazards or nuisances arising from traffic & incompatible landuses.	✓				The priorities set out in this chapter are aimed at maintaining and improving the sustainability of those key settlements across the County. Such policies will ultimately lead to direct positive impacts on the human health.
EPO 3	Conserve and restore ecosystems, habitats and species in their natural surroundings, both inside and outside protected areas and ensure the sustainable management of these areas and the ecological corridors between them.	✓				The delivery of those water and wastewater infrastructure priorities set out in this chapter are aimed at maintaining and improving water quality across the County. Such policies will ultimately lead to direct positive impacts on the aquatic habitats and ecosystems.
EPO 4	Protect the function and quality of the soil resource in the County				✓	Provision of all the infrastructure envisaged by the plan will result in the removal of soil in main areas. As discussed in Chapter 3 plan should include a requirement for the reuse of this soil on or off site.
EPO 5	Maintain and improve the quality of water resources and improve the management and sustainable use of these resources to comply with the requirements of the WFD.	✓				The delivery of those water and wastewater infrastructure priorities set out in this chapter are aimed at maintaining and improving water quality across the County
EPO 6	Protect and improve air quality.	✓				The priorities are tailored so as to ensure people can live and work in sustainable communities. Improvements to the public transport infrastructure of the county will provide an alternative to car based transport.
EPO 7	Contribute to mitigation of, and adaption to, climate change	✓				

Table 6-14 Assessment of Chapter 15 Putting the Plan into Practice						
EPO No	Objective	+	-	?	Ne	Comment
EPO 8	Protect and where appropriate enhance the character, diversity and special qualities of the architectural, archaeological and cultural (including Gaeltachtaí) heritage in County Cork.				✓	
EPO 9	Protect and, where appropriate, enhance the character, diversity and special qualities of landscapes in County Cork				✓	
EPO 10	Make best use of the material assets of the county and promote the sustainable development of new infrastructure to provide for the current and future needs of the population.	✓				Implementation of the chapter will enhance the asset base of the county

Conclusions

6.15.6 Implementation of Chapter 14 of the plan should have a largely positive interaction with the environment.

6.16 Overview of Impacts of Draft Plan

6.16.1 A summary of the impacts of each chapter of the plan is provided in Table 6.15. The SEA process has highlighted that there is an inherent tension in some areas between competing national objectives as established by higher level plans and the need to meet broader objectives on environmental quality, and achieving the right balance can be very difficult. This tension is particularly evident in terms of developing the Cork Gateway and the Mallow Hub, where significant development is needed to accommodate the growth targets but this needs to be balanced against significant environmental sensitivities.

6.16.2 It can be seen that overall the plan is very positive for population, human health and material assets. Many of the chapters have a potentially negative impact on biodiversity and further mitigation is needed. The research outstanding in relation to the most sensitive catchment areas of the Blackwater, Cork Harbour and Clonakilty means that the likely impact of some aspects of the plan on biodiversity and water quality is still uncertain. Chapter 6 Economy and Chapter 8 tourism have significant impacts also, as a result of their policies advocating development of the resources of the county. Many chapters are considered to have a neutral impact on some of the EPO's.



Table 6.15 Chapter Assessment														
EPO No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15
EPO 1 Population	+	+	+	+	+	+	+	+	+	+	+	+	+	+
EPO 2 Human Health	+	+	+	+	+	+	+	+	+	+	+	+	+	+
EPO 3 Biodiversity	-	-	+	-	-	ne	-	-	ne	un	+	ne	-	+
EPO 4 Soil	-	-	+	ne	-	ne	ne	-	ne	ne	+	+	-	ne
EPO 5 Water	un	+	+	ne	-	ne	-	ne	ne	un	+	+	-	+
EPO 6 Air	un	+	+	ne	-	+	-	+	+	ne	+	+	+	+
EPO 7 Climate	+	+	+	ne	-	+	un	+	un	ne	+	+	+	+
EPO 8 Cultural Heritage	ne	ne	ne	+	ne	-	-	-	ne	ne	+	+	+	ne
EPO 9 Landscape	-	-	+	ne	-	ne	un	-	ne	ne	+	+	+	ne
EPO 10 Material Assets.	+	+	ne	+	+	+	un	+	+	+	+	+	+	+

6.17 Recommendations for changes to the Draft Plan :

Biodiversity / Environmental Protection

6.17.1 Many Chapters of the Plan have the potential to have negative impacts on biodiversity/environmental quality. In many cases objectives advocate development without reference to the need to protect biodiversity/environmental quality. The Plan places considerable emphasis on the economic, tourism and recreation potential of Cork harbour for example, but does not highlight the natural heritage/ biodiversity value of the area to the same extent or take sufficient account of the potential of adverse cumulative impacts of the intensification of activity across a range of sectors. In addition to impacts on the environment, impacts on residential amenity and quality of life factors for the communities living around the harbour also need to be evaluated. The sections dealing with agriculture, diversification of the rural economy and tourism are also very pro-development without due regard to cumulative impacts on the environment. National Policy requires biodiversity to be mainstreamed as part of decision making and for biodiversity loss to be reduced and for substantial recovery to be achieved by 2020. EPA's report on the State of the Environment for 2012 highlights the need to decouple economic growth/development from environmental pressure and ensure that environmental resources are protected and are not degraded or exhausted.

- 6.17.2 There are many challenges ahead in terms of meeting our obligations under the water framework directive, restoring water to good status, ensuring compliance with WWTP emission standards etc. All but two of the water bodies to which the WWTP of the main settlements discharge effluent to are “at risk” of not achieving good status by 2021. Many settlements with discharges licensed under the Urban Waste Water Treatment Regulations do not meet the requirements of their licenses, reflecting the lack of investment in water services infrastructure in some locations and the new and increasingly stringent and complex environmental standards now applicable to such discharges. The Plan strategy assumes that all the growth detailed in the plan is capable of being assimilated subject to the delivery of new high quality water services infrastructure, thus ensuring compliance with emission standards, but the cumulative impacts of this have not been fully established, especially in sensitive catchments like the Blackwater and Clonakilty harbour. The Natura Impact Report has highlighted a need for more detailed consideration/ further assessment of the issues facing these catchments before the plan is adopted in order to clarify if the scale of development proposed can in fact be accommodated, or if an alternative approach is required.
- 6.17.3 Against this background it is considered that further research is required to demonstrate that the scale and spatial distribution of development proposed in the plan can in fact be accommodated. Allied to this, the environmental principles of the plan need to be more explicit, development priorities clarified and development objectives modified accordingly.
- 6.17.4 **Recommendation 1:** Further research is required in support of the core strategy, to demonstrate that the various receiving waters have the capacity to accommodate the proposed scale of development while restoring water to good status, protecting biodiversity and the conservation interests of Natura 2000 sites. If constraints remain, other solutions to the issue may need to be considered. This information needs to be available to inform the amendment stage of the plan making process.
- 6.17.5 **Recommendation 2:** The principles of the plan should be amended to give a more explicit focus to the need to mainstream biodiversity / environmental protection/ heritage issues into our decision making so that they guide and underpin our decisions, rather than present them solely as compliance issues / obligations. The objectives of the plan should be amended accordingly. Need to signal a move toward a more fundamental recognition of the importance of these resources.
- 6.17.6 **Recommendation 3** Some sections of the plan are very pro development in relation to resources which are also sensitive from an environmental / biodiversity / heritage perspective and objectives need to be qualified by reference to protecting these resources (particularly in the chapters dealing with economic and tourism development and for areas like Cork Harbour).
- 6.17.7 **Recommendation 4** . Objective HE1-1 re implementation of the Biodiversity Action Plan should be amended to omit reference to the availability of funding and other resources.
- 6.17.8 **Recommendation 5** – Need a boarder objective in Heritage chapter reflecting the value placed on biodiversity and the natural environment as resources for the county generally and the need to integrate their protection into our decision making , as a guiding principle.
- 6.17.9 **Recommendation 6** - Need a reference in Chapter 14 advising of the need to consult with the specific objectives of other chapters of the plan dealing with heritage, green infrastructure so that plan chapters are better linked..
- 6.17.10 **Recommendation 7** – Chapter 11 on Water Services is very focused on *delivering* infrastructure to meet



planned development. The strategy assumes that all the growth can be assimilated by delivering all the infrastructure but the cumulative impacts of this have not been fully established. Chapter 11 needs to be amended to have regard to the outcome of the research recommended at recommendation 1 above and to acknowledge the complexity of the issues influencing water services provision, compliance issues and cumulative impacts.

- 6.17.11 **Recommendation 8** As there are high risks associated with the delivery of all the necessary water services infrastructure, plan should deal with how this will be managed, in the event that key elements are not delivered as envisaged by this plan
- 6.17.12 **Recommendation 9** –Plan should recognise the need for an environmental assessment of the carrying capacity of Cork harbour/ need for separate plan for the harbour area.
- 6.17.13 **Recommendation 10** Development will inevitably result in the loss of small areas of habitat, for example hedgerow remove to accommodate rural housing. Plan should include a specific objective requiring habitats lost in the development process to be replaced on site e.g. replacement hedgerows to compensate for those removed.

Core Strategy / Priorities

- 6.17.14 Strategy seeks to direct 89% of future population growth to the towns. No clear strategy in the plan for securing this target overall or the targets for the individual towns or for monitoring development trends in this context. The Core Strategy itself does not seem to explicitly prioritise development of some towns over others. Significant investment is needed in Water Services to enable development to take place. Some locations are inherently more sustainable than others and investing in them would represent a more efficient uses of resources.
- 6.17.15 There is also a danger that strategy of the plan will be undermined by the extensive nature of the settlement network which provides a huge number of alternative locations in which development can take place. If the infrastructural investment required to deliver development within the towns is delayed or does not happen then there is a danger that development will disperse to other locations, either within the settlement network or into rural housing which would increase environmental pressures in these areas/ reduce quality of life/ increased commuting/ landscape impacts etc. (As outlined in section 3.26-3.28 this already happened in the period to 2011.)
- 6.17.16 There seems to be a conflict between the development priorities needed to secure the population distribution advocated by the Core Strategy (prioritising locations with public transport and in a way that brings people and jobs closer together) and the infrastructural investment priorities dictated by the need to address the non compliance / inadequate nature of the waste water treatment facilities in some settlements. These priorities need to be clarified and implications for the core strategy explained.
- 6.17.17 The extensive nature of the settlement network and lack of public transport services reinforces a continued reliance on private car transport. The plan seeks to improve public transport connectivity between centres of employment and residential areas and within the gateway. However, the infrastructural priorities outlined in Chapter 15 show all public transport issues as being in the medium to long term category which will make it difficult to progress targets on modal shift.
- 6.17.18 **Recommendation 11** – Priorities of the plan need to be clarified as regards the priority locations for



growth and the necessary infrastructural investment required to deliver that, relative to the water services infrastructural priorities dictated by environmental compliance issues. Priorities should seek to optimise development opportunities in the most sustainable locations, particularly those with good public transport services and make best uses of resources available. Public transport improvements should be a short term priority and be proactively pursued.

- 6.17.19 **Recommendation 12** –Monitoring is needed to allow implementation of the strategy to be checked so corrective action can be taken as required. Chapter 15 needs to be strengthened to include a list of the key issues than need to be monitored in order to ensure the strategy of the plan is delivered and allow environmental issues to be monitored. Monitoring should track the amount of development taking place in each settlement / amount of rural one offs being granted so trends in meeting targets / constraints imposed by the lack of infrastructure can be monitored. Monitoring is essential and necessary in terms of our environmental obligations and references to it being done “as resources allow” should be omitted.
- 6.17.20 **Recommendation 13:** As there are high risks associated with the delivery of all the necessary water services infrastructure, plan should deal with how this will be managed, in the event that key elements are not delivered as envisaged by this plan.
- 6.17.21 **Recommendation 14:** The County Development Plan will guide the next review of LAPS and may also inform the review of the Regional Planning Guidelines. The Plan should therefore signal the need to re-evaluate the principle of balanced development across such an extensive settlement network. A more concentrated development approach may deliver greater social, economic and environmental benefits for the county and the gateway and should be considered. As the County Plan must be consistent with the Regional Planning Guidelines, change will first need to be promoted at the regional level.
- 6.17.22 **Recommendation 15:** In support of the strategy which seeks to direct 89% of the growth to the towns, the Plan should include an objective re the development of a proactive management approach for the towns and a marketing campaign promoting the advantages of living and working in the towns.

Other Recommendations

- 6.17.23 **Recommendation 16:** In order to conserve soil resources a new objective should be included requiring the sustainable re use (on or off site) of greenfield soils removed as part of the development process.
- 6.17.24 **Recommendation 17:** Objective TO 7-1 should include an additional policy objective requiring that any new walking/ cycling and greenway routes be selected and designed so as to minimise impacts on sensitive habitats and species.
- 6.17.25 **Recommendation 18** Objective TO 9-1 needs to be reconsidered. Part b should stress that tourism related developments will not normally be considered in environmentally sensitive locations unless it can be demonstrated that that there will be no adverse environmental impacts both in the short and the long term from the proposed development. This section also needs to state that development proposals will not be considered in Natura 2000 sites.
- 6.17.26 **Recommendation 19** Figure 9.2 and the relevant policies needs to be amended so that all Natura 2000 sites are within the area where - wind energy is ‘normally discouraged’. .
- 6.17.27 **Recommendation 20** Objective ED 3-6 should be amended so as to include Natura 2000 as areas where



large scale wind energy developments will normally' be discouraged'.

- 6.17.28 **Recommendation 21** Assessment of the transport chapter highlighted potential conflicts between Objective Tm 2-2, Cycling Objectives and the provision of Countywide Cycle networks and EPO 3, Biodiversity. These networks, particularly the route planned for Cork Harbour, have the potential to result in significant impacts on EU Designated sites located in the Harbour. Consideration should be given to amending this objective to say that the selection of new routes will in the first instance seek to avoid EU designated sites. If such sites cannot be avoided, they will be designed so as to minimise impacts on sensitive habitats and species.
- 6.17.29 **Recommendation 22** Consideration should be given to including an additional section on Riparian Corridors. WS 5-2 does acknowledge the need for River Channel Protection but it limits this protection to developments on zoned land. This section should be amended to include a description of riparian corridors, with stronger policies put in place to ensure their protection from all development, not just development on zoned lands.

6.18 Amending the Plan to take account of the recommendations of the SEA Process.

- 6.18.1 A number of internal discussions have been taken place regarding the best way to integrate the recommendations from the SEA process in the Draft County Development Plan. Issues have also arisen as part of the AA process which are documented in the Natura Impact Report and there are outstanding areas of assessment / research that need to be completed.
- 6.18.2 It has been decided that SEA and AA issues will be dealt with at the amendment stage of the plan, following completion of the outstanding areas of assessment and consultation with the statutory bodies and the public. Following the consultation process issues arising from the submissions received from the public /statutory bodies and the issues arising from SEA and AA can be formulated in to a series of material amendments to the plan which will go through a second round of public consultation.

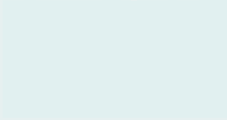
Chapter 7

Monitoring and Next Steps

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7.1 Monitoring

- 7.1.1 The SEA Directive requires that the significant environmental effects of the implementation of plans are monitored in order to identify at an early stage unforeseen adverse effects and to be able to undertake appropriate remedial action. Monitoring can also be used to analyse whether the County Development Plan is achieving its environmental protection objectives and targets, whether such objectives need to be re-examined and whether the proposed mitigation measures are being implemented.
- 7.1.2 Chapter 4 identifies the Strategic Environmental Protection Objectives used in the assessment of the Draft Plan. The chapter also identifies a number of indicators that will be used to assess the environmental impact of implementing the plan. In addition to the indicators set out in this Chapter, the evaluation of the plan also sets out additional indicators that can be used to monitor the impacts of the plan. A completed list of indicators that will be used to monitor the predicted environmental impacts of implementing the plan will be set out in the Environmental Statement that will be prepared in the final stages of the SEA process. .
- 7.1.3 It is envisaged that the Statutory Managers Report on the implementation of the plan, which takes place 2 years after the adoption of the plan, will include information in relation to the progress on and the results of monitoring the significant environmental impacts of implementing the plan. If any policy is found to be having a significant adverse impact, consideration should be given to varying the plan to address the conflict.

7.2 Next Steps

- 7.2.1 This Environmental Report forms a key element of the Strategic Environmental Assessment (SEA). However, the preparation of the environmental report does not bring the SEA process to an end. The SEA process should continue from the time the environmental report is completed through to the time Cork County Council monitors the implementation of the County Development Plan and will act as an important reference point for the continuing SEA of all policies, plans, strategies and programmes carried out by the Council.

**Table 7-1: General Overview of the Process
after the Environmental Report**

A - Preparing the Environmental Report
B - Consulting on the Environmental Report & Draft Plan
C - Response of Consultation Authorities & the Public
D - Taking Account of Consultation Opinion
E - Adopting plan
F - Providing Information
G - Monitoring plan

Preparing the Environmental Report

- 7.2.2 This Environmental Report has been produced to comply with the requirements of the Guidance for Regional Authorities and Planning Authorities on the Implementation of the SEA Directive (2001/42/EC). The Baseline analysis outlined the current state of the environment and was prepared using the most up to date information from a wide variety of state agencies. The evaluation of the plan as set out in chapter 6, identifies a number of concerns with policies as they are presented in the draft plan and has suggested a number of changes that should be incorporated at the amendments stage of the plan preparation process.



Consulting on the Environmental Report and the Draft Plan

7.2.3 Consultation is an important element of the SEA process. The Environmental Report will be part of the consultation exercise for the Draft Cork County Development Plan. Consultation will be carried out with a range of statutory bodies, including the Environmental Protection Agency and the National Parks and Wildlife Service and the public. As well as having an opportunity to comment on the Draft Plan, these bodies will have an opportunity to comment on the content of the environmental report and the overall SEA process.

Taking account of the consultation opinion

7.2.4 It is recognised that the opinion expressed through the public consultation exercise can be very useful in improving the quality of the plan being prepared. In order to track these changes, the consultation exercise will aim to include documentation of all the comments and the changes made.

Adopting Plan

7.2.5 The overriding aim of the SEA process is to improve the quality of the draft County Development Plan and to ensure that it protects the environment; it is important that the relevant findings in the environmental report and any outcomes from the consultation process are incorporated into the plan before its adoption.

Providing information

7.2.6 Once the draft County Development Plan is adopted a number of post-adoption steps are required to conclude the SEA process. The essence of this stage is to provide information regarding the difference the SEA process has made to the plan. This will involve the publication of an Environmental Statement which will specify: -

- how environmental considerations have been integrated into the plan;
- how the environmental report has been taken into account;
- how opinions expressed during various consultations have been taken into account;
- the reasons for choosing the plan as adopted in the light of other reasonable alternatives; and
- measures to monitor significant environmental effects.

Monitor Plan

7.2.7 Once the plan is adopted and the necessary information is provided, the County Council will seek to monitor the significant environmental effects identified through the SEA process. The detail of the monitoring process will be included in the environmental statement. The framework for monitoring used in the environmental report /statement will be used to identify unforeseen adverse effects at an early stage so that, if necessary, the appropriate remedial action can be undertaken.



7.3 How to make a Submission

- 7.3.1 You can become involved by making a submission or observation on any aspect of the Draft Plan, Environmental Report or Natura Impact Report.
- 7.3.2 Submissions can be made from the 9th of December 2013, to 4pm on the 26th of February 2014. Submissions can be lodged with the council in a number of ways as detailed in the next paragraph.
- 7.3.3 Please make your submission by one medium only either electronic or hard copy.
- **By making an on-line submission**, just log onto our website www.corkcoco.ie and follow the instructions provided or
 - **By making a written submission** and addressing it to:

Senior Planner
Planning Policy Unit
Floor 13
County Hall
Cork

- 7.3.4 The deadline for receipt of all submissions is **4pm on Wednesday the 26th of February 2014**. For legal reasons we cannot accept submissions for this stage outside these dates and times. It is important that you include your name and address when you send us your views.





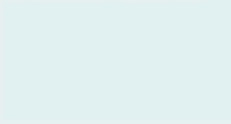
Chapter 8

Non Technical Summary

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8.1 Introduction

- 8.1.1 The environmental report on the strategic environment assessment of the draft Cork County Development Plan 2013 describes the assessment of the likely significant effects on the environment of implementing the draft Plan. The SEA process seeks to predict and evaluate the likely environmental effects of implementing a plan, in order to ensure that these effects are appropriately addressed at the earliest stage of decision-making on a par with economic and social considerations.
- 8.1.2 Preliminary scoping for the SEA was undertaken as part of the preparation of the Section 11 Consultation Document published in January 2013 which was circulated to all the prescribed authorities. None of the submissions received in response to the Section 11 document related to the SEA process.
- 8.1.3 The process then continued with the collection and evaluation of baseline data on the current state of the environment with respect to the main environmental receptors - biodiversity, population, human health, fauna, flora, soil, water (surface freshwater, coastal, transitional, groundwater, bathing and water services (drinking water and waste water treatment), air, climatic factors, material assets (roads, transportation, energy etc), cultural heritage (including architectural and archaeological heritage) and landscape. As the data was compiled and plan policies evolve the likely significant effects of implementing the plan on these receptors were identified, described and evaluated and this is described in the Environmental Report.
- 8.1.4 A Habitats Directive assessment (Natura Impact Screening) and Strategic Flood Risk Assessment were also carried out as part of the preparation of the Draft Plan.

8.2 Draft County Development Plan

- 2.1.1 In accordance with the Planning and Development Act, 2000 a planning authority is legally obliged to prepare a Development Plan (CDP) for its functional area every six years and, not later than four years after the preparation of this plan, a planning authority must give notice of its intention to review that plan and prepare a new plan. The current Cork County Development Plan was adopted in 2009 and fell due for review in 2013.
- 2.1.2 The Draft County Development Plan provides a blueprint for the development of County Cork for the latter part of this decade and the early years of the next and is set within the context of National and Regional Planning Policy and legislation. The plan sets out principles on which the development strategy for the county is based. The Core Strategy identifies a target growth in population of 70,820 for the county as a whole for the period 2011-2022 and sets out the target distribution of this population growth with 11% of the total new growth allocated to the villages and rural areas and 89% to the towns. Priority is given to the development of the Metropolitan Area given in role in the development of the Cork Gateway and 61% of total population growth is assigned to the Metropolitan area. The plan includes specific chapters dealing with Housing, Rural, Coastal and Island Communities, Social and Community Infrastructure, Economy and Employment, Town Centres and Retail; Tourism, Energy, Transport, Water Services, Heritage, Green infrastructure, Zoning and implementation.



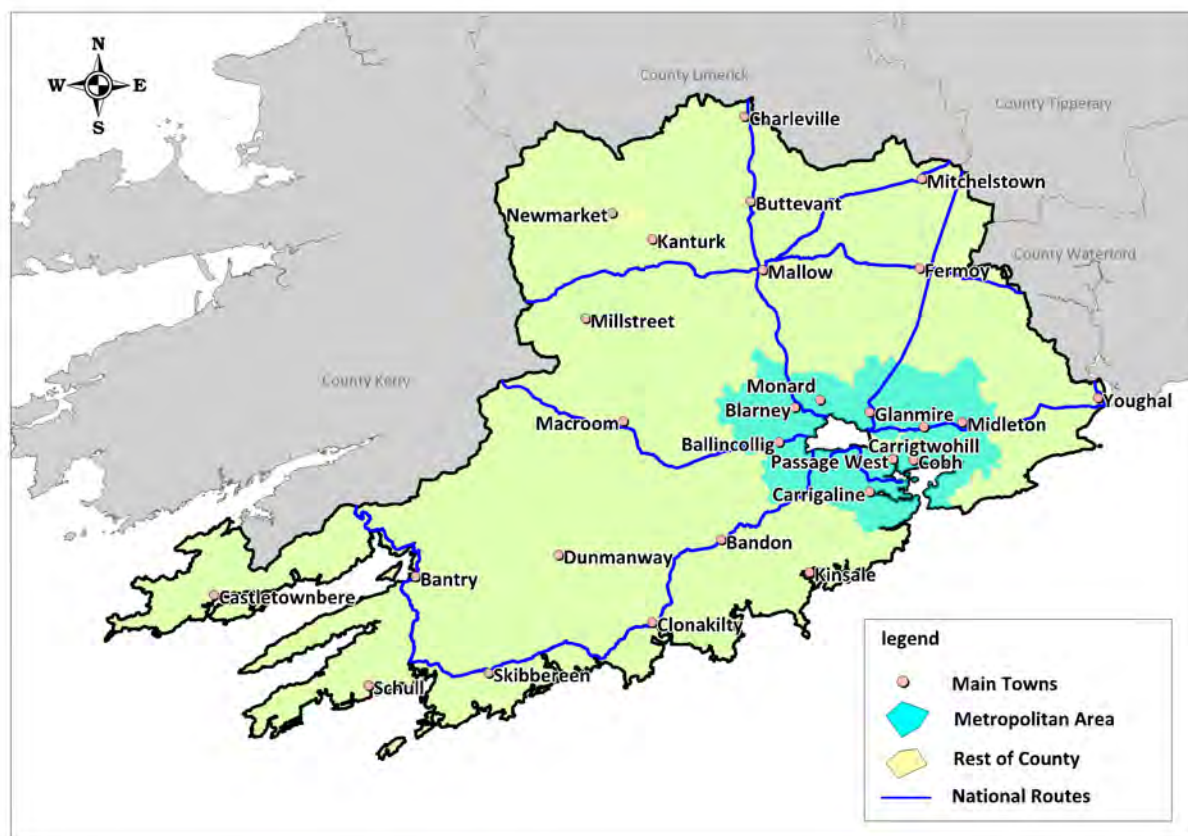


Figure 8-1: Map of County Cork

2.1.3 The Draft County Development Plan provides a blueprint for the development of County Cork for the latter part of this decade and the early years of the next and is set within the context of National and Regional Planning Policy and legislation. The plan sets out principles on which the development strategy for the county is based. The Core Strategy identifies a target growth in population of 70,820 for the county as a whole for the period 2011-2022 and sets out the target distribution of this population growth with 11% of the total new growth allocated to the villages and rural areas and 89% to the towns. Priority is given to the development of the Metropolitan Area given its role in the development of the Cork Gateway and 61% of total population growth is assigned to the Metropolitan area. The plan includes specific chapters dealing with Housing, Rural, Coastal and Island Communities, Social and Community Infrastructure, Economy and Employment, Town Centres and Retail; Tourism, Energy, Transport, Water Services, Heritage, Green infrastructure, Zoning and implementation.

8.3 Environmental Baseline

8.3.1 One of the main elements of the Environmental Report is to outline the environmental context within which the Cork County Development Plan will operate through the identification of key environmental baseline data. The principle environmental issues considered in the Baseline line are;

Population and Human Health

8.3.2 The 2011 Census identified a population of 519,032 for Cork County as a whole, equivalent to 11% of the national population and the second largest county in the state after Dublin. Excluding the city, the population of the county area was 399,802, an increase of just under 38,000 persons (10.5%) on the 2006 Census figure of 361,877. There was a modest decline in the population of the city over the same period.

- 8.3.3 The population of the county is spread across an extensive network of settlements comprising 26 'main towns', the North and South City Environs, a network of 275 villages and smaller settlements and the rural areas. The main towns and city environs together account for 46% of the population of the county in 2011. The greatest concentration of population is within the City South Environs (2011 population of 32,635). Ballincollig is the largest town in the County, followed by Carrigaline, Cobh, Midleton and Mallow.
- 8.3.4 Analysis of population change by Strategic Planning Area shows that population growth in the period to 2011 diverged from the adopted growth strategy for the county as expressed in the County Development Plan 2007, and as envisaged by the Regional Planning Guidelines.
- 8.3.5 The Metropolitan area (including Cork City) recorded a significant under-performance (16,852 persons or -49%) relative to the target population growth of 34,050 set by the South West Regional Planning Guidelines.
- 8.3.6 A significant over-performance in population growth was recorded in the CASP Ring, with population growth exceeding the 2011 target by 10,724 persons or 406%. This means that the Metropolitan area is growing at about half the rate intended by the SWRPG, and at the same time, the CASP Ring area is growing at over four times the rate intended by the SWRPG. In addition, despite the strong urban structure of the CASP Ring, only 37% of the growth occurred within the towns, with the remaining 63% occurring in the villages and rural areas. Within this period a high rate (2,816) of one-off housing was recorded within the CASP Ring representing a population equivalent of over 7,500 persons.
- 8.3.7 The North Strategic Planning Area recorded positive growth, exceeding the 2011 SWRPG target by 34%. The distribution of the growth, however, represented a 38:62 urban/villages and rural split.
- 8.3.8 The West Strategic Planning Area slightly underperformed (-16%) in meeting its 2011 growth target. The distribution of growth between the urban and rural areas was 36:64, similar to that recorded in North. Of significance in these figures is the high rate of one-off housing recorded and also high vacancy rate which suggests many of the houses are used as second/holiday homes. This trend is also evident in the other scenic, coastal locations in the country.
- 8.3.9 The population and housing targets for the county for the period to 2022 are detailed below.

Table 8-1: Population and Housing Requirements, Town Villages and Rural Areas

Strategic Planning Area	Towns : 2011-2022			Villages and Rural 2011-2022			Total for County		
	Pop growth	New housing units Required	Available supply (housing units)	Pop growth	New housing units Required	Available supply (housing units)	Pop growth	New units Required	Available supply (housing units)
County Metro	42,621	27,235	32,811	761	3,803**	3,809	43,382	31,038	41,207
CASP	13,427	8,601	14,323	37	4,805**	5,661	13,464	13,406	19,984
North	4,024	2,615	4,048	1,490	3,074	3,094	5,514	5,689	7,142
West	6,006	3,742	5,534	2,454	4,130	4,182	8,460	7,872	9,716
Total	66,078	42,193	56,716	4,724	15,821	16,746*	70,820	58,005	77,869

Note: * This figure includes provision for 8,919 units within the villages and an estimated 7,827 rural one off houses.

**Although population growth target is low, falling household size means more houses are needed to accommodate the same quantum of population.



- 8.3.10 As illustrated in Table 8-1, 89% of the growth in population across the county as a whole is directed at the mains towns of the county, with 11% going to the villages and rural areas.
- 8.3.11 In order to ensure that the strategy is achieved and the trends experienced in the period to 2011 are not repeated, it is essential that the water services, public transport and roads infrastructure required to release development land at the preferred urban locations (as identified by the core strategy) is prioritised and delivered on time. Otherwise there is danger that the growth will disperse to other less sustainable locations around the county.
- 8.3.12 The dispersed spatial pattern presents many challenges for the future in terms of trying to grow and develop the Cork Gateway as the competitive, cost efficient engine for economic growth in the region. A number of larger settlement with targeted for growth do not have the water and waste water infrastructure to meet the additional demands. The dispersed nature of the population coupled with the concentration of many employment opportunities within the metropolitan area and the towns, gives rise to a continued dependency on private car transport with its associated potential for adverse impacts on air quality and climatic factors. The provision of viable public transport services is very difficult in these circumstances.
- 8.3.13 High levels of dispersed rural one off housing can also have adverse impacts on environmental quality because it is more carbon intensive and car dependent than more urban living patterns. Rural housing itself leads to the loss of agricultural lands and natural undeveloped areas with cumulative impacts on landscape character. Dispersed rural housing can also hinder the delivery of alternative energy developments such as windfarms.

Biodiversity – Flora and Fauna

- 8.3.14 There are various categories of protected sites/areas in addition to undesignated wildlife corridors and ecological networks in County Cork. National and international designations within Cork include 8 Natural Heritage Areas (NHAs), 30 Special Areas of Conservation (SAC), 18 Special Protection Areas (SPA) and 5 Ramsar Sites. Additional species and habitats are also protected under the Wildlife Acts, the Flora Protection Order, 1999 and Tree Preservation Orders.
- 8.3.15 There are a number of protected aquatic habitats including 4 designated Salmonid Waters, 14 designated shellfish waters and a number of Fresh Water Pearl Mussel catchments.
- 8.3.16 In County Cork habitat loss, fragmentation, and disturbance to wildlife caused by changing land uses and development, agricultural, forestry and recreational activity are probably the greatest threats, with climate change and invasive species also important issues. Aquatic habitats and species are particularly vulnerable to deterioration in water quality and discharges from WWTP are an issue across the county given their potential impacts on biodiversity. The scale and spread of development proposed in the plan will increase pressure on biodiversity.
- 8.3.17 One of the main challenges in preparing the baseline assessment was the lack of information on all areas of local biodiversity value and ecological corridors in the county. This information is necessary to inform future planning policy and environmental assessments.



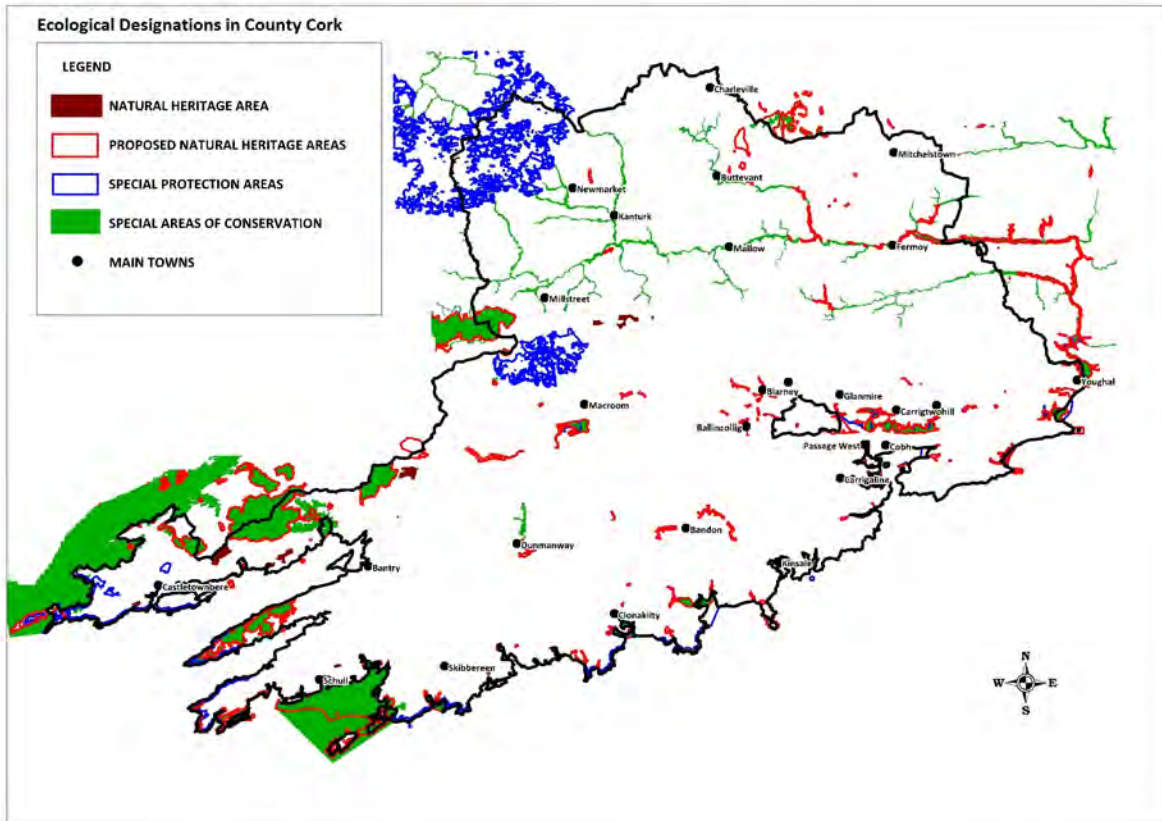


Figure 8-2: Ecological designations, County Cork



Figure 8-3: Shellfish Waters in County Cork

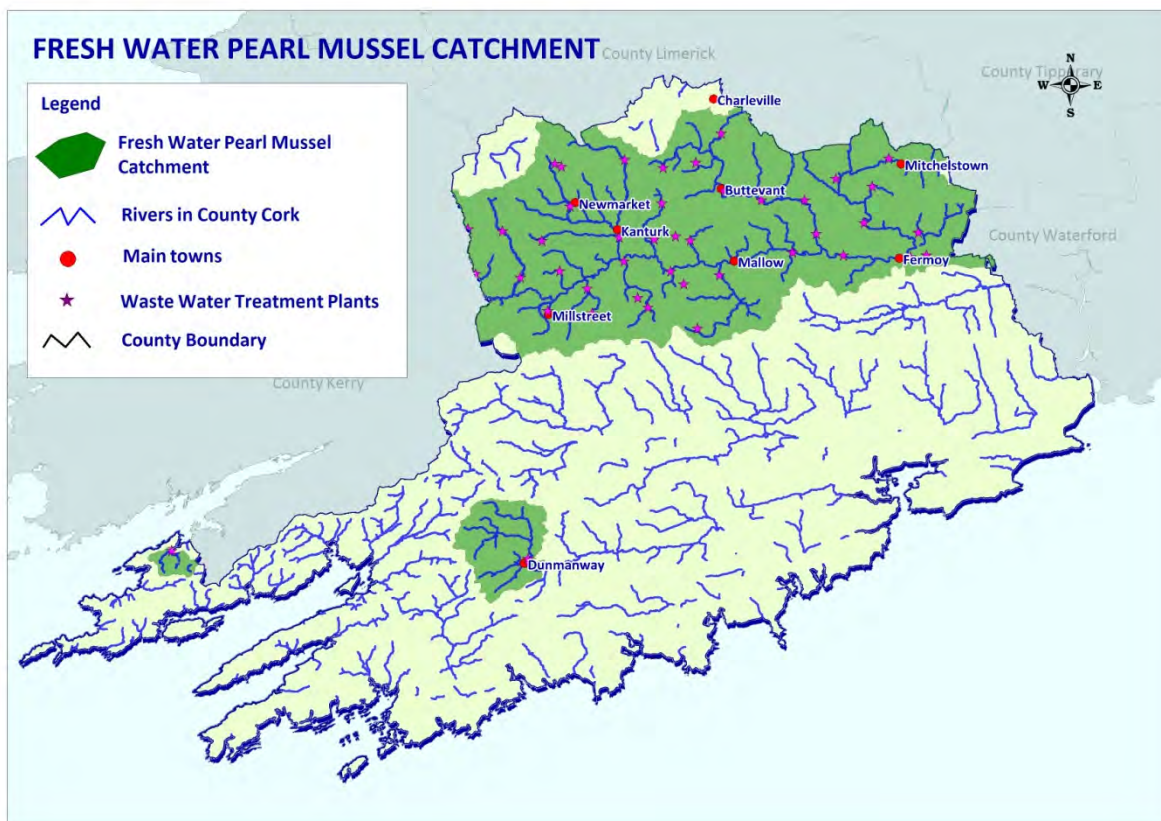


Figure 8-4: Freshwater Pearl Mussel Catchment

Soil

- 8.3.18 The most dominant soil types in County Cork are Brown Podzolics and Grey Brown Podzolics which are medium to heavy texture with a great depth of profile. These soils are located in the southern and eastern parts of the county. The general consensus is that soil quality is good. The long growing season and temperate climate with plenty rainfall is good for the soil. In addition the lack of heavy industry means that soils have not suffered significant amounts of contamination. The large percentage of permanent pasture lands also protected soil from serious degradation. (EPA 2012).
- 8.3.19 The environmental report does identify a number of issues in relation to soil quality. The best soils in the county are in the areas of highest development pressure and this land will be lost to agricultural production once development takes place. Increasing demands for food and fuel from a growing population along with pressures for more land for new housing and infrastructure and most significantly climate change can all pose a threat to the quantity and quality of soil available. Poorly maintained septic tanks are also likely to have an impact on local soil pollution. Soil can also be polluted and contaminated by agriculture and industrial activities. Managing the impact of construction and development on soils' essential functions, like absorbing rainwater, is also vital.

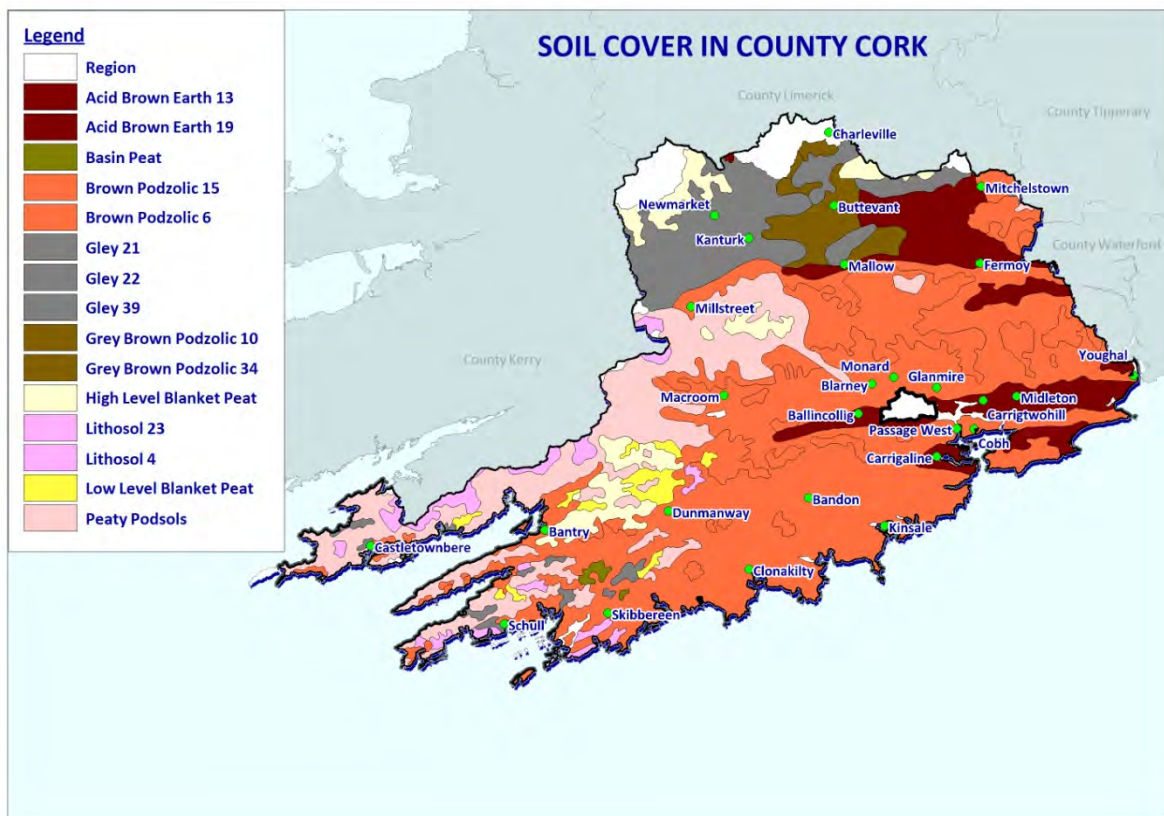


Figure 8-5: Soil

Water

8.3.20 Water is both a receptor and pathway of environmental pollution and hence its importance as an environmental consideration in this context cannot be overstated. The Water Framework Directive requires the status of water bodies to be classified as high, good, moderate, poor or bad. Water bodies are rivers, lakes, estuaries, coastal waters out to 1 nautical mile and groundwater.

Rivers

8.3.21 Rivers are a very important habitat within the county and are also an important source of drinking water. In Cork, there are 885 river water bodies. Of these, 291 river water bodies or 33% were determined to be in the "High" status category, 319 river water bodies or 36% were in the "good" category, 216 or 24% were in the "moderate" category and 59 or 7% were in the "poor" category. The implementation of the Water Framework Directive led to the introduction of this classification process. The directive requires that all European Union Member States must aim to achieve good status in all waters by 2015 and must ensure that status does not deteriorate in any waters.

Groundwater

8.3.22 Ground water is important as a source of drinking water in Ireland, providing approximately 25% of all drinking water nationally (EPA2012). Ground water quality in county Cork is largely of good status. There is an area of poor status to the east of the city around Carrigtwohill.

Estuaries and Coastal Waters

- 8.3.23 Estuaries (or transitional waters) are waters near river mouths which are saline as a result of being beside coastal waters, but which are influenced by fresh water flow. Coastal waters, under the WFD, are surface waters up to one nautical mile from the coast. There are 43 estuarine water bodies identified within the SWRBD. Of these 14 were considered to be of “Moderate Status”. The remainder have not been classified to date.

Protected Areas

- 8.3.24 In addition to the Waterbodies outlined above, there are a number of designated Waterbodies that require specific protection. In Cork County they include shellfish waters such as Bantry Bay and Roaringwater Bay, bathing waters such as Redbarn and Barleycove beaches, nutrient sensitive areas, such as Bandon Estuary, Special Areas of Conservation and Special Protection Areas such as the Bandon River.

Water Supply Infrastructure

- 8.3.25 Cork County Council treats and supplies water to approximately 40,000 non-domestic customers and 115,000 homes across the county through of network of approximately 4,500km of distribution mains. Water is sourced from groundwater contained in rock or gravel aquifers or from surface waters i.e. rivers and lakes. Population growth targets for County Cork for the period to 2022 provide for an additional 70,820 persons and an additional 52,493 new households. Of the twenty eight main settlements targeted for growth, including the city environs, only six settlements have sufficient drinking water production capacity to cater for future demands – South City Environs, Cobh, Glanmire, Fermoy, Kanturk, and Millstreet. Significant investment is required to cater for the full extent of growth required in the other settlements.

Wastewater Treatment

- 8.3.26 The treatment of wastewater in Cork is principally through wastewater treatment plants or individual septic tank units. Outside of the larger towns and villages within the County, most developments are not connected to a public wastewater disposal system. One of the principal requirements of the 2001 Urban Waste Water Regulations is to monitor the outflow from treatment plants. The results of this monitoring for Cork County for 2012 for settlements with a population equivalent of greater than 500 PE indicates that forty one of the seventy seven urban centres subject to monitoring failed to meet the required standards (See details in Appendix B) . In many cases this is because the there are no treatment facilities in place or the mandatory secondary or tertiary treatment standard required has not been provided.
- 8.3.27 Of the 28 main towns in the county, only nine have existing waste water infrastructure with sufficient capacity to meet the demands of target growth set out in the Draft County Development Plan. Eleven of the towns are already at capacity and require further investment to cater for any additional development, including Carrigaline and Carrigtwohill which are within the Metropolitan area and are targeted for significant growth.

Current Issues

- 8.3.28 There are considerable pressures on the existing water quality of the county and the deadlines for achieving good status have been extended to 2021 in many cases. Those water bodies that are defined as being ‘at risk’ are unlikely to meet the required quality standards as set out in the Water Framework



Directive and /or are unlikely to be restored to “Good” status by 2021.

- 8.3.29 In order to accommodate the additional population provided for by the Draft Plan significant investment is required across the settlement network to deliver the necessary water supply and waste water treatment facilities. The Plan strategy assumes that all the growth detailed in the plan is capable of being assimilated subject to the delivery of new high quality water services infrastructure, thus ensuring compliance with emission standards, but the cumulative impacts of this have not been fully established, especially in sensitive catchments like the Blackwater, Cork Harbour and Clonakilty harbour. The Natura Impact Report has highlighted a need for more detailed assessment to be undertaken in this regard (before the plan is adopted) to demonstrate that the development can in fact be accommodated and this work is to be undertaken to inform the next stage of the plan making process.
- 8.3.30 If this investment is not made, most of the growth targeted for some of the larger settlements cannot happen any may end up being dispersed to less sustainable locations.

Air and Climatic factors

- 8.3.31 Air pollution can damage health and reduce life expectancy and can also damage the environment. Emissions of pollutants from vehicles, power stations, industry, domestic fuel burning and agriculture can have international, national or local effects. Emissions of carbon dioxide and other greenhouse gases are enhancing the greenhouse effect and causing global warming.
- 8.3.32 Air quality is generally good in the County and Cork is located in an area with a relatively mild climate and has an almost continuous movement of clean air. It is now evident that, due mainly to the very significant increase of vehicles on the public roads, the biggest threat now facing air quality in urban areas is emissions from road traffic. Given reliance on car based transport, which is facilitated by the extensive network of settlements across the county and the concentration of employment opportunities in the Metropolitan area, this will continue to be a problem unless measures are introduced to reduce car use and emissions from vehicles.
- 8.3.33 Climate change has an impact on habitats, species, fisheries, aquaculture, tourism, water quality, water safety, infrastructure, flood risk and people. Minor changes in climate can result in higher probability of droughts in summer resulting in water shortages and increased flooding events in winter. Of increasing concern is the issue of flooding of rivers, estuaries and coastal areas. Along the coast, salt marshes and sand dunes will be particularly vulnerable. These are important habitats for many species of migratory birds. Changes in sea level and/or changes in the occurrence of severe rainfall events as a result of climate change could adversely impact upon the county’s population, its biodiversity and its economy. Changing climatic factors can have serious implications on the carrying capacity of the drainage network and can threaten critical infrastructure such as transport corridors, bridges etc. throughout the county.

Material Assets

Roads Infrastructure

- 8.3.34 The road network within the county comprises national, regional and local roads. Several National routes serve the county and many converge on the Southern Ring Road N40 which bypasses the city centre to the south. This ring road plays an important role in providing strategic connectivity for the region, connecting the Rosslare/Waterford (N25) and Dublin Roads (M8) with the city and southwards to Ringaskiddy (N28), the



Airport and West Cork (N27 and N 71) and westwards to Kerry (N22). There are issues with the Road Network primarily; capacity issues at Dunkettle, capacity issues on the N28, the lack of a Northern Ring Road, the suspension of the M20 Cork- Limerick Motorway project, capacity issues on the N22 Ovens to Ballyvourney Road. In addition to the national road network, there are 1,321 km of regional roads in the county with a further 10,261 km of local roads that Cork County Council must maintain.

Public Transport Infrastructure

- 8.3.35 Parts of Cork County are well served by intercity rail services. The rail infrastructure linking Cork City and Dublin has seen significant investment with 14 inter-city services each day at hourly intervals. The suburban services serve the Cork to Cobh and Cork to Midleton line linking many of the Metropolitan towns to Cork and Mallow. The network currently serves Little Island, Glounthaune, Carrigtwohill, Midleton, Fota, Carrigaloe, Rushbrook and Cobh, and will in future serve Blarney and Dunkettle. Cork Airport is located 5km to the south of the City and now serves more than 40 scheduled and charter destinations across the UK, Europe and beyond. A new passenger terminal, three times the size of the original, opened to passengers in August 2006.

Port of Cork

- 8.3.36 The National Ports Policy (2013) identifies three ports in Ireland -Dublin, Cork and Shannon Foynes - as being Ports of National Significance (Tier 1). These are the ports that are responsible for at least 15% to 20% of overall tonnage through Irish ports, and have clear potential to lead the development of future port capacity in the medium and long term. The continued commercial development of these three Ports of National Significance (Tier 1) is a key objective of National Ports Policy.

Waste Management

- 8.3.37 There are 22 civic amenity sites in Cork County, located at Ballincollig, Bandon, Bantry, Carrigaline, Carrigtwohill, Castletownbere, Charleville, Clonakilty, Cobh, Dunmanway, Fermoy, Glanmire, Kinsale, Macroom, Mallow, Midleton, Millstreet, Mitchelstown, Newmarket, Schull, Skibbereen and Youghal. A network of 157 bring banks (BB) has also been provided throughout the county for the collection of dry recyclables.

Issues

- 8.3.38 Addressing the deficiencies in the public transport network is essential to ensuring the negative environmental affect associated with increased levels of car dependency can be overcome. Development needs to be prioritised in areas when investment in public transport infrastructure has already been made. Within the wider city hinterland existing public transport services do not provide a realistic alternative to the car for journeys to work and in the absence of improvements to the basic service this is unlikely to change significantly.
- 8.3.39 The continued development of the Port of the Cork and the development of employment uses within the wider harbour area would confer many benefits on the county and the region, this growth must The harbour is also home to many important habitats and species which are designated for protection and is an area rich in biodiversity, culture and heritage generally. The cumulative impacts of the intensification of all these activities within the harbour area is potentially very significant and can have a very significant negative impact on the many important habitats and species within the harbour. There is a need for a more



detailed and focused strategy/development plan to guide the development of the entire harbour area.

Cultural Heritage

- 8.3.40 Cork County has a rich and diverse cultural heritage that includes archaeological sites, villages and townscapes. The County has the highest concentration of National Monuments (58 in total). Within the network of settlements designated for growth, a number of towns are subject to zones of archaeological potential for their historic significance. These include Bandon, Buttevant, Clonakilty, Cobh, Fermoy, Kinsale, Macroom, Mallow, Midleton, Skibbereen and Youghal. County Cork has a wealth of industrial archaeology and this is protected through the archaeological record.

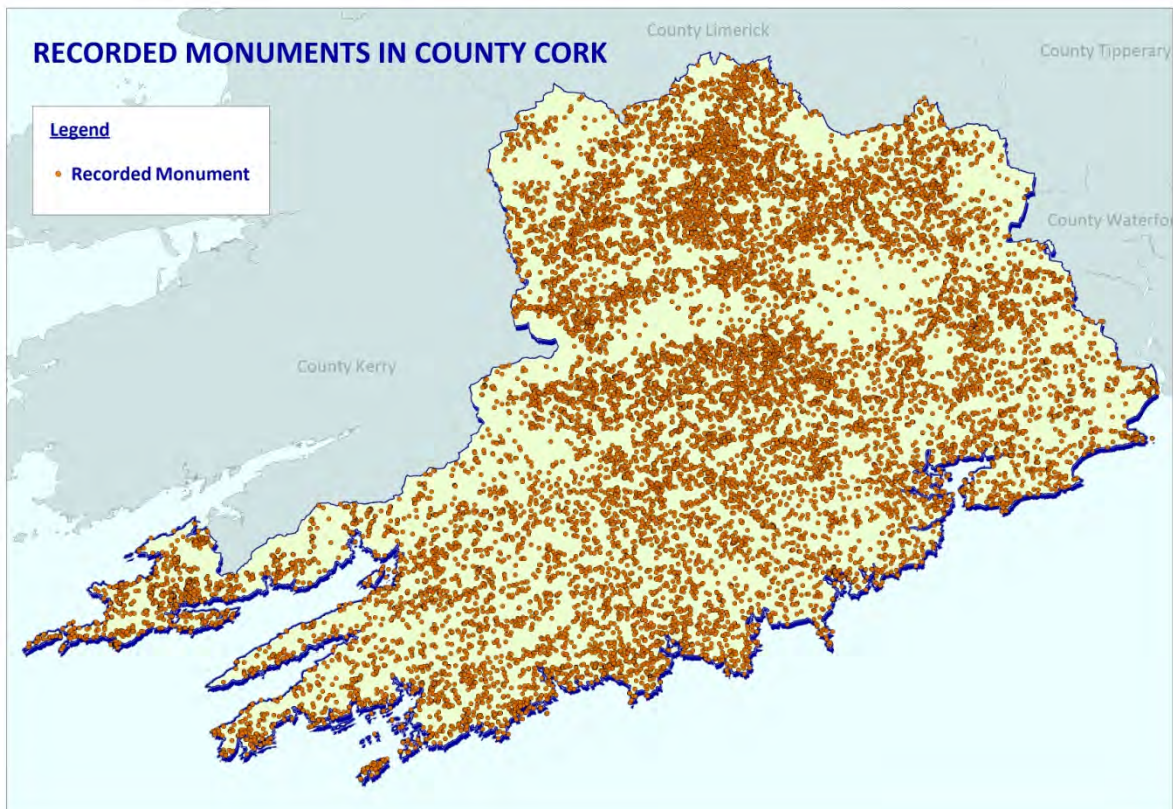


Figure 8-6: Recorded Monuments

- 8.3.41 There are currently 1,296 structures on the RPS as part of the County Development Plan 2009 and a further 1,462 structures currently designated as part of the 9 no. Town Council Plans. A variety of structures are protected and these include bridges, mansions, shop fronts, post offices, gate lodges and buildings dating from the 1500s to the 1990s. There are 43 Architectural Conservation Areas designated within the County Development Plan 2009 and all of the town councils contain 1 or more Architectural Conservation Areas within their boundaries.
- 8.3.42 The archaeological heritage of the county is a non replaceable resource which is generally protected by legislation. Increased development pressure raises the potential for impact on the archaeological resource of the county unless properly assessed, managed and mitigated.
- 8.3.43 The completion of the NIAH has highlighted that there is an extensive list of additional buildings which may be worthy of inclusion, some of which are deemed to be of national importance. If these remain outside the RPS they may be vulnerable to inappropriate alteration, extension or intervention and may lead to loss

of important elements of our cultural heritage

Landscape

8.3.44 Landscape sensitivity is a measure of a landscape's ability to accommodate change or intervention without suffering unacceptable effects to its character and values. The Landscape Character Assessment has categorised sensitivity into the following and are mapped below:

- Low sensitivity landscapes - robust landscapes with strong efficiency of resistance, accommodates pressure changes.
- Medium sensitivity landscapes - can accommodate development pressure, but with limitation.
- High sensitivity landscapes - vulnerable landscapes with low limitation of development pressure acceptances.
- Very high sensitivity landscapes - extra vulnerable landscapes (seascape area with national importance).

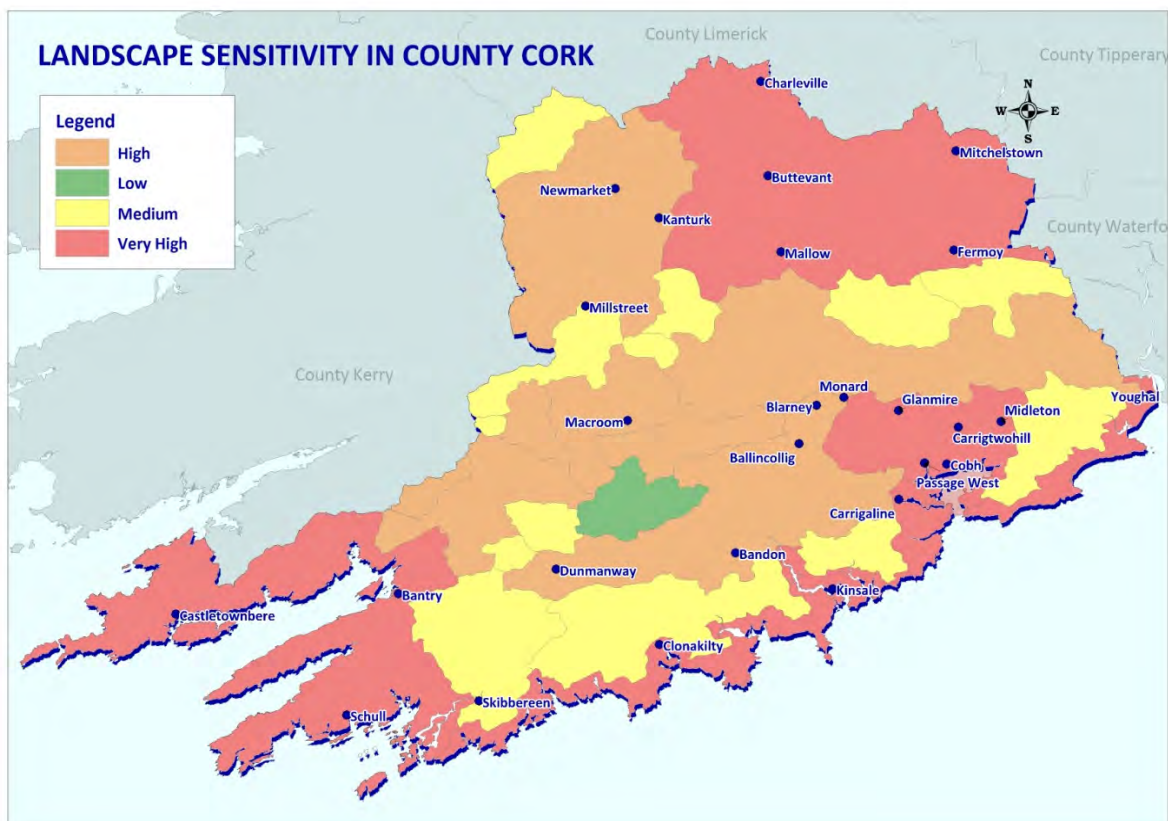


Figure 8-7: Landscape Sensitivity

8.3.45 In areas of the County with high landscape sensitivity, the capacity to accommodate development without adverse impacts on the environment would be more limited. New developments in the landscape, may not in itself have an adverse visual impact, however, the cumulative impact of many similar developments could have the potential to adversely affect the landscape.

8.4 Environmental Protection Objectives

8.4.1 Key part of the preparation of the Environmental Report was the identification of Environmental Protection Objectives (EPOs). These are broad objectives which provide a benchmark against which the environmental effects of the draft Plan can be tested. In this instance, a number of EPOs has been developed with regard to national, European and international policy documents, strategies, guidelines and Directives and were evaluated against the draft Plan during the SEA process. The EPO's for each of the main environmental considerations are set out below.

Table 8-2: EPO Analysis		
Environmental Protection Objective	Targets	Indicators
<p>Population</p> <p>EPO 1: To ensure the sustainable development of Cork County so the people of Cork have the opportunity to live in communities with high quality residential, working and recreational environments with sustainable travel patterns.</p>	<ul style="list-style-type: none"> • Increase population growth in the main settlements of the county and particularly within Metropolitan Cork. • Reduce the number of new residential properties in the areas where it is difficult to provide services. • Ensure new development is located where it can access a choice of transport modes to connect to the main centres of employment. • Decrease journey time and distance travelled to work during the lifetime of the plan. • All large scale housing development to be accompanied by a Design Statement. 	<ul style="list-style-type: none"> • Significant increase in the population of the main towns. • Distance and mode of transport to work/ school. • No. of new houses in rural areas. • No of new houses/ employment development built within 1km of the Cork Suburban rail line or within 400m of a bus route. • Increased high frequency bus service provision as measured by the amount (route kilometers) of bus services with a 15 minute frequency.
<p>Human Health</p> <p>EPO 2: To protect and enhance human health and manage hazards or nuisances arising from traffic & incompatible land uses.</p>	<ul style="list-style-type: none"> • Avoid incompatible development nears SEVESO sites or IPPC licensed sites • Ensure new development is well served with community facilities and facilitates including walking and cycling routes. • 	<ul style="list-style-type: none"> • No of planning permissions granted within the consultation distance of Seveso sites/IPPC facilities. • No of new primary health care/schools/creches/ community facilities provided. • Amount of (Km) new cycleways provided.
<p>Biodiversity, Flora and Fauna</p> <p>EPO 3: Throughout the county, conserve and restore ecosystems, habitats and species</p>	<ul style="list-style-type: none"> • Maintain the favourable conservation status of all habitats and species, especially those protected under national and 	<ul style="list-style-type: none"> • Number of developments receiving planning permission within designated sites or within the consultation distance of designated sites

<p>in their natural surroundings, and ensure their sustainable management, including the ecological corridors between them.</p>	<p>international legislation.</p> <ul style="list-style-type: none"> • Implement the actions of the Cork County Biodiversity Action Plan. • Establishment of a Green Infrastructure Strategy for the County • Protect habitats from invasive species 	<p>where the HDA process identified potential for impacts.</p> <ul style="list-style-type: none"> • Reduction in the quantum of greenfield land in the county as measured by the increase in the amount of brownfield land associated with each settlement and the no. of one off houses being built in the countryside. • Number of actions achieved in Biodiversity Action Plan • Progress on Green Infrastructure strategy
<p>Soil</p> <p>EPO 4: Protect the function and quality of the soil resource in County Cork</p>	<ul style="list-style-type: none"> • Reduce the use of greenfield land by encouraging the reuse of brownfield sites. • Encourage sustainable extraction of non-renewable sand, gravel and rock deposits and the reuse and recycling of construction and demolition waste. 	<ul style="list-style-type: none"> • No of brownfield sites that have been redeveloped. • Volume of construction and demolition waste recycled. • Reduction in number of vacant and derelict buildings.
<p>Water (W)</p> <p>EPO 5: Maintain and improve the quality of water resources and improve the management and sustainable use of these resources to comply with the requirements of the WFD.</p>	<ul style="list-style-type: none"> • To achieve 'good' status in all bodies of surface waters (lakes rivers, transitional and coastal waters). • Achieve compliance with Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC (protection of groundwater). • Not to permit development where it would result in a WWTP exceeding the terms of its discharge license. • Encourage future population growth in areas served by urban waste water treatment plants and public water supplies. 	<ul style="list-style-type: none"> • Trends in classification of overall status of surface water under Surface Water Regulations 2009 (SI No 272 of 2009) • Trends in Classification of Bathing Waters as set by Directive 2006/7/EC. • Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC. • No of households served by urban waste water treatment plants/ septic tanks/ individual WWTP or other systems. • No of households served by public water supplies. • % of water unaccounted for.
<p>Air Quality and Climate (AQ/C)</p> <p>EPO 6: Protect and improve air quality.</p> <p>EPO 7: Contribute to mitigation of, and adaptation to, climate change.</p>	<ul style="list-style-type: none"> • Ensure air quality monitoring results are maintained within appropriate emission limits. • Increase modal shift in favour of public transport, walking and cycling. • Encourage production and use of renewal energy. • Encourage energy efficiency in building design and construction. 	<ul style="list-style-type: none"> • Trends in Air Quality monitoring data. • Percentage of population travelling to work by public transport, walking or cycling. • No of wind turbines permitted. • No of developments permitted within areas at risk of flooding.



	<ul style="list-style-type: none"> • Provide flood protection measures where appropriate. • Avoid inappropriate development in areas of flood risk. 	
<p>Cultural Heritage (CH)</p> <p>EPO 8: Protect and, where appropriate, enhance the character, diversity and special qualities of architectural, archaeological and cultural heritage (including Gaeltachtaí) in County Cork.</p>	<ul style="list-style-type: none"> • No loss of or adverse impact on the fabric or setting of monuments on the Record of Monuments (RMP). • No loss of or adverse impact on the architectural heritage value or setting of protected structures. • No loss of or adverse impact on structures recorded on the National Inventory of Architectural Heritage. • Implement the Cork County Heritage Plan 	<ul style="list-style-type: none"> • Loss of or adverse impact on monuments on the Record of Monuments (RMP). • Loss of or adverse impact on protected structures included on the RPS or structures included on the NIAH.
<p>Landscape (L)</p> <p>EPO 9: Protect and, where appropriate, enhance the character, diversity and special qualities of landscapes in County Cork.</p>	<ul style="list-style-type: none"> • No large scale development permitted in areas of high landscape value. 	<ul style="list-style-type: none"> • Number of large scale developments permitted in areas of high landscape value.
<p>Material Assets (MA)</p> <p>EPO 10 Make best use of the material assets of the county and promote the sustainable development of new infrastructure to provide for the current and future needs of the population.</p>	<ul style="list-style-type: none"> • Develop the road, rail and public transport infrastructure of the county to facilitate sustainable growth and travel patterns. • Ensure appropriate water services infrastructure is delivered in areas targeted for population growth. • Protect and optimise the use of the existing building stock. • Facilitate the sustainable expansion of production facilities to enable economic growth and create new employment opportunities. • Protect and enhance green infrastructure. • Protect existing recreational facilities and green infrastructure. 	<ul style="list-style-type: none"> • New critical infrastructural projects completed (projects identified by the CDP).



8.5 Alternative Scenarios

- 8.5.1 The SEA Directive and Regulations require the Environmental Report to consider ‘reasonable alternatives taking into account the objectives and geographical scope of the plan or programme’ and the significant environmental effects of the alternatives selected. The alternatives must be reasonable and capable of implementation within the statutory and operational requirements of the Plan.
- 8.5.2 Three alternative scenarios have been considered during the drafting process for the preparation of the Cork County Development Plan 2015. The scenarios considered in preparing this Draft Plan were framed having regard to the policies set out in the National Spatial Strategy and the Regional Planning Guidelines for the South West region. The overall level of growth allocated to each Strategic Planning Area is the same for each scenario. The scenarios look at options for development *within* each SPA. Scenarios which would be inconsistent with this approach, by focusing more growth on the metropolitan area for example, were not been considered.

Scenario 1 Public Transport

- 8.5.3 This scenario seeks to focus development within Metropolitan Cork within the city suburbs in the first instance and then along an east/ west public transport corridor between Midleton/Cork City/Ballincollig to facilitate greater use of public transport infrastructure and underpin additional investment in public transport services. In the Ring, North and West Strategic Planning Areas the scenario focuses a greater proportion of development in a smaller number of settlements to enhance the viability of bus based inter-urban public transport services. Under this scenario the potential for growth is still dispersed over the entire settlement network but a greater proportion of the growth is focused on a smaller number of locations.
- 8.5.4 Within Metropolitan Cork this scenario looks at directing higher levels of growth to the environs of the City and the towns along the Midleton- Cork City – Ballincollig transport corridor. In the short term significant levels of growth are focused on the North and South Environs where it can be underpinned by existing public transport / public services and provide a platform for further investment in these services. The second phase of growth would concentrate development increasingly along a west east corridor, from Ballincollig - Cork City – Midleton. High density development, both residential and employment related would be encouraged along the route corridor, on brownfield and greenfield lands.
- 8.5.5 Very little growth has been allocated to the rural area under this scenario. In the Greater Cork Ring, North and West Areas, this scenario concentrates growth in fewer settlements. In the Ring SPA, Mallow is the principle growth centre and 77% of all growth is directed to the town. Again very little growth, 2.5%, is directed to the villages and rural areas. This pattern of growth reflects not only Mallow’s “Hub” status, as set out in the NSS, but also the need to regulate growth in the rural areas of the Ring in order to avoid the replication of previous trends.
- 8.5.6 In the North and West SPA’s, most of the growth is directed towards Charleville, Mitchelstown, Clonakilty and Skibbereen with the aim of delivering a sufficient critical mass of population in these towns so as to justify further investments in primarily bus based public transport around the county and growth in rural areas is curtailed.

Environmental impacts of Scenario 1

- 8.5.7 Scenario One allocates *some* growth to *every* settlement in the network and to villages and rural areas, while seeking to concentrate a greater proportion of the growth in a smaller number of settlements. Many of these settlements have inadequate drinking water supply and/or waste water treatment infrastructure. This dispersed pattern of growth will generally give rise to some cumulative impacts on ground and surface water quality, heritage, landscape and biodiversity and will lead to increased levels of environmental effects associated with additional commuting such as increased energy consumption, emissions to air, road traffic noise etc.
- 8.5.8 In those areas where more intense levels of growth are promoted, there is greater potential for negative environmental impacts on soil, air quality, biodiversity and landscape. However lower development pressures in other areas, particularly the villages and rural areas which will lead to less pressure on biodiversity, groundwater resources, flora and fauna etc. and the general rural amenities of the county.

Scenario 2 Employment Led Growth

- 8.5.9 This Scenario looks at employment-led growth which focuses development in key locations where employment growth is more likely to be delivered and differs from previous Plan strategies which spread growth more evenly across all the Main Settlements. This strategy continues to focus the greatest proportion of population growth to the Metropolitan Area which is the employment focus for the Cork City Gateway.
- 8.5.10 Within the Cork Ring the growth strategy is adjusted to focus higher levels of growth in a fewer number of settlements where accessibility to good roads infrastructure is available and these towns can perform an important sub-regional focus. This is offset by lower levels of growth in the remaining Ring Towns. Mallow is allocated the highest level of growth because of its designation as a “hub” town. It also enjoys access to planned M20, has a regional employment role and an existing hospital.
- 8.5.11 Within the North SPA this scenario allocates 91% of the growth to the towns and 9% to the Villages and Rural while seeking to concentrate development in the towns of Kanturk, Charleville and Mitchelstown. Within the West Cork SPA this scenario focuses growth in Clonakilty & Bantry with reduced growth targets in Castletownbere and Dunmanway.

Environmental impacts of Scenario 2

- 8.5.12 Scenario Two allocates growth across the full settlement network, while seeking to concentrate a greater proportion of the growth in a smaller number of settlements where economic/employment growth may be more easily achieved. Many of these settlements have inadequate drinking water supply and/or waste water treatment infrastructure. As with Scenario 1, this dispersed pattern of growth will generally give rise to some cumulative impacts on ground and surface water quality, heritage, landscape and biodiversity and will lead to increased levels of environmental effects associated with additional commuting such as increased energy consumption, emissions to air, road traffic noise etc.
- 8.5.13 This scenario concentrates economic growth and employment growth in a smaller number of settlements, making them more self sufficient but may lead to reduced levels of investment in the other areas which may have negative impacts on quality of life and the quality of the urban environment if there are higher levels of vacancy and reduced employment opportunities at these locations.



Scenario 3 Balanced Growth

- 8.5.14 In this scenario, significant growth is allocated across the main settlements with lower levels of growth in the villages and rural areas. The principle strength of this scenario lies in the balanced approach allowing for the majority of growth to take place in the main settlements but at the same time allowing for continued, more modest growth in the villages and rural areas, continuing to support the economies of these areas to underpin local services and quality of life.
- 8.5.15 Within the Metropolitan area significant levels of growth are targeted at Midleton and Carrigtwohill which are along the suburban railway corridor and at Blarney, Ballincollig and Carrigaline and the North Environs of the city. Within the Ring Area, Mallow as the hub town is allocated the greatest proportion of growth. In the North, Mitchelstown, Charleville and Buttevant are assigned the highest levels of growth. In West Cork, the majority of the growth is assigned to Clonakilty.

Environmental impacts of Scenario 3

- 8.5.16 The concentration of both population and employment growth in the main urban areas of the County would serve to reduce commuting patterns as more people would be afforded greater opportunities to live closer to their places of employment and/or travel using high quality public transport links. Focusing population growth across the settlement network will necessitate significant investment in water services infrastructure.
- 8.5.17 While allowing for growth in rural areas, this scenario will result in some negative impacts on the environment. It is unlikely that developments in rural area will be connected to public wastewater treatment networks. While not as significant on their own, the cumulative impact of rural development could have significant negative impacts both on biodiversity and particularly on water quality.

Evaluation of Alternative Scenarios

- 8.5.18 The evaluation of the three proposed alternative scenarios for their respective impacts on the environment was undertaken utilising the Environmental Protection Objectives (EPOs) identified in section 8.6. the findings of the analysis are set out in the table below.

Table 8-3: Alternative Scenarios interaction with Environmental Protection Objectives				
	Positive <i>Interaction with status of EPOs</i>	Negative <i>Interaction with status of EPOs</i>	Uncertain <i>Interaction with status of EPOs</i>	Neutral <i>Interaction with status of EPOs</i>
Scenario 1	EPO 2, 6, 7, 10	EPO1 3, 5		EPO 4, 8, 9
Scenario 2	EPO 2, 6, 7, 10	EPO 1, 3, 5		EPO 4, 8, 9
Scenario 3	EPO 1, 2, 6, 7, 10	EPO 3, 5		EPO 4, 8,9

The Preferred Scenario

8.5.19 The alternatives considered are all rather similar in promoting balanced development across the county and have relatively similar impacts. Scenario 3 is the one that places the most emphasis on building on what has already been achieved within the county in terms of supporting the network of settlements, the established employment areas and public transport investment along the rail corridor and within the metropolitan area while continuing to support the development of villages and rural areas and it was therefore chosen as the preferred scenario.

8.6 Environmental Evaluation of Adopted draft Plan

8.6.1 In a method similar to the evaluation of three draft Plan Alternative Scenarios, the policies and objectives of the preferred draft Plan were evaluated against the EPOs to demonstrate the interactions between the EPOs and the policies and objectives of the draft Plan, illustrating the environmental effects of implementing the draft Plan.

Table 6.15 Chapter Assessment														
EPO No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15
EPO 1 Population	+	+	+	+	+	+	+	+	+	+	+	+	+	+
EPO 2 Human Health	+	+	+	+	+	+	+	+	+	+	+	+	+	+
EPO 3 Biodiversity	-	-	+	-	-	ne	-	-	ne	un	+	ne	-	+
EPO 4 Soil	-	-	+	ne	-	ne	ne	-	ne	ne	+	+	-	ne
EPO 5 Water	un	+	+	ne	-	ne	-	ne	ne	un	+	+	-	+
EPO 6 Air	un	+	+	ne	-	+	-	+	+	ne	+	+	+	+
EPO 7 Climate	+	+	+	ne	-	+	un	+	un	ne	+	+	+	+
EPO 8 Cultural Heritage	ne	ne	ne	+	ne	-	-	-	ne	ne	+	+	+	ne
EPO 9 Landscape	-	-	+	ne	-	ne	un	-	ne	ne	+	+	+	ne
EPO 10 Material Assets.	+	+	ne	+	+	+	un	+	+	+	+	+	+	+

8.6.2 It can be seen that overall the plan is very positive for population, human health and material assets. Many of the chapters have a potentially negative impact on biodiversity and water quality and further research / assessment is underway on these issues. Chapter 6 Economy and Chapter 8 Tourism have significant impacts also, as a result of their policies advocating development of the resources of the county.



Recommended Changes

- 8.6.3 Following the chapter assessment, a number of changes to the plan were recommended. A total of 22 recommendations were made and these are set out in detail in Chapter 6 of the SEA. Principle amongst these is the need for further assessment to be carried out on the ability of sensitive catchments such as the Blackwater River, Cork Harbour and Clonakilty Bay to assimilate the scale of growth envisaged. Other recommendations relate to the need to make the environmental principles of the plan more explicit and to mainstream biodiversity / environmental protection/ heritage issues into our decision making so that they guide and underpin our decisions, rather than present them solely as compliance issues / obligations. In addition the SEA recommends that those sections of the plan with a pro development focus are to be qualified so as to ensure the protection of those areas and resources that are sensitive from an environmental / biodiversity / heritage perspective.
- 8.6.4 In relation to the growth strategy advocated in the plan, the SEA recommends that the priorities of the plan need to be clarified as regards the priority locations for growth. Priorities should seek to optimise development opportunities in the most sustainable locations, particularly those with good public transport services and make best uses of resources available. Public transport improvements should be a short term priority and be proactively pursued.

8.7 Monitoring

- 8.7.1 The purpose of monitoring is to assess the effects of the draft Cork County Development Plan which have been predicted during the SEA process. In addition, monitoring may also help identify some effects which may not have been envisaged, including positive and other medium and long-term effects.
- 8.7.2 Chapter 4 of the Environmental Report identifies a number of indicators that will be used to assess the environmental Impact of implementing the plan. In addition to the indicators set out in this Chapter, the evaluation of the plan also sets out additional indicators that can be used to monitor the impacts of the plan. A completed list of indicators that will be used to monitor the predicted environmental impacts of implementing the plan will be set out in the Environmental Statement that will be prepared in the final stages of the SEA process.



Appendix A

Strategic Flood Risk Assessment

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1.1 Introduction

- 1.1.1 This Strategic Flood Risk Assessment (SFRA) was prepared in accordance with 'The Planning System and Flood Risk Management Guidelines (including Technical Appendices)' published by the DoEHLG and the OPW in November 2009 and having specific regard to the location of areas at risk of flooding, mapped in the 2011 Electoral Area Local Area Plan and in the Draft Preliminary Flood Risk Assessment (PFRA) carried out by the OPW for the entire County.
- 1.1.2 The Guidelines state that a plan at county level will not normally have to undertake detailed flood risk assessment involving the production of a flood risk map for all watercourses or coastal frontage. In general, the guidelines state that this will only be necessary if it is intended to zone land for development or identify the location of future strategic infrastructure within flood risk areas. The Guidelines state that where flooding is not a major issue in the location of new development, as will be the case in many county development plans, a less detailed approach will be required than in core urban areas with high development pressures and significant flood risk issues.
- 1.1.3 Therefore, in accordance with the guidelines, this SFRA will provide more detailed information on the spatial distribution of flood risk, including details of how the sequential approach should be applied in key settlements and where it will be necessary to apply the Justification Test.
- 1.1.4 This assessment should be read in conjunction with the mapping of areas at risk of flooding in the network of settlements outlined in the 2011 Electoral Area Local Area Plans and the Draft PFRA's which cover the entire County, including all rural areas.
- 1.1.5 This SFRA was carried out in parallel with the Strategic Environment Assessment (SEA) process of the Draft plan.

1.2 Legislative and Policy Framework

- 1.2.1 The Planning System and Flood Risk Management Guidelines were issued by the Minister of the Environment, Heritage and Local Government under Section 28 of the Planning and Development Act 2000 (as amended). Planning Authorities are required to have regard to the Guidelines in carrying out their functions under the Planning Acts.
- 1.2.2 The purpose of the Guidelines is to ensure that, where relevant, flood risk is a key consideration for Planning Authorities in preparing development plans and local area plans and in the assessment of planning applications. The Guidelines state that the key principles planning authorities should adopt are, to avoid flood risk where possible, substitute less vulnerable uses where avoidance is not possible and mitigate and manage flood risk where avoidance and substitution are not possible.
- 1.2.3 The 'Floods Directive 2007/60/EC' requires Member States to undertake a national preliminary flood risk assessment by 2011 to identify areas where significant flood risk exists or might be considered likely to occur. The Directive requires the preparation of catchment-based Flood Risk Management Plans (FRMPs), by 2015, which will set out flood risk management objectives, actions and measures. The OPW is responsible for the overall implementation of the Floods Directive.

1.3 Process and Purpose of Strategic Flood Risk Assessment

- 1.3.1 The Guidelines identify the importance of including robust flood risk policies in the development plan and state the need for planning authorities to take all practicable steps to ensure the prior identification of any areas at risk of flooding.
- 1.3.2 Flood risk assessments can be undertaken at a range of scales relevant to the planning process which are
- Regional (for regional planning guidelines);
 - Strategic (for city or county development plans or local area plans);
 - Site specific (for master plans and individual site planning applications).
- 1.3.3 The purpose of this SFRA is to provide a broad (area-wide) assessment of all types of flood risk to inform strategic land-use planning decisions.
- 1.3.4 This SFRA also reviewed the text and policies in the Draft County Development Plan in relation to flooding and proposes changes and improvements where required.
- 1.3.5 The assessment and appraisal of flood risk in this plan adopted a staged approach in accordance with the recommendations outlined in the Guidelines.

1.4 Cork County Development Plan Settlement Strategy

- 1.4.1 The County Development Plan is a strategic document which sets out the county settlement strategy, in accordance with the Core Strategy. The County Development Plan does not zone or otherwise designate specific lands for development. The zoning objectives and maps for all the settlements in the County are set out in the relevant Local Area Plan or Special Local Area Plan.
- 1.4.2 The Core Strategy for the County is prepared in line with guidance, strategies and policies at national and regional level. The main issues which faced the County in the preparation of this Core Strategy included; the overall planning strategy, population, housing, rural housing, retail development and town centres, transport and infrastructure and employment. One of the key requirements for this County Development Plan is to demonstrate how its policies and objectives are consistent with meeting national and regional population targets.
- 1.4.3 There are four main strategic planning areas in the county which are as follows; County Metropolitan Strategic Planning Area, Greater Cork Ring Strategic Planning Area; North Cork Strategic Planning Area and the West Cork Strategic Planning Area. The Network of Settlements identified in the Core Strategy includes the higher order settlements of Cork Gateway, Mallow Hub town and the other Main Settlements in the County. The lower order settlements will be identified in the relevant Local Area Plans. Figure * sets out the key elements of the Core Strategy and presents them on one diagrammatic map which draws together the strategic infrastructural assets of the County with its Settlement Hierarchy and also presents the different types of rural areas in the County, which are also set out in this plan.

- 1.4.4 The Guidelines provide comprehensive guidance on the incorporation of flood risk identification, assessment and management measures into the development plan and development management processes.
- 1.4.5 This SFRA will need to reflect the broad, strategic nature of this County Development Plan and apply the Planning System and Flood Risk Management Guidelines for Planning Authorities (2009) at a strategic level.
- 1.4.6 Having regard to the provisions of the Guidelines and the requirements of the EU Floods Directive 2007, an assessment of flood risks has formally been taken into account in the preparation of this Draft County Development Plan and the corresponding Local Area Plans published in 2011.

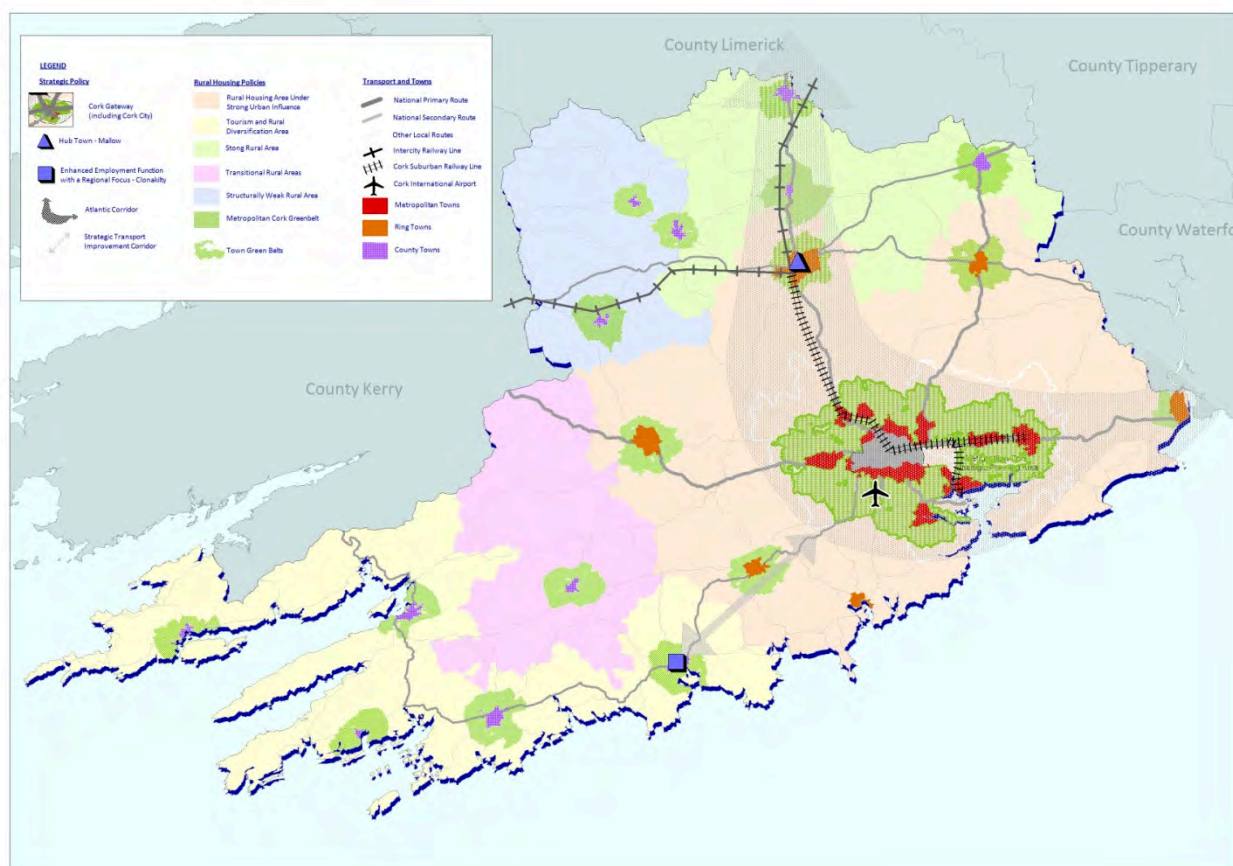


Figure A-1 Core Strategy Diagram for County Cork

1.5 Strategic Flood Risk Assessment of the Draft County Development Plan

Stages in the Assessment of Flood Risk

1.5.1 The stages of the Assessment of Flood Risk outlined in the Guidelines are as follows:

- Stage 1 - Flood Risk Identification,
- Stage 2 - Initial flood risk assessment,
- Stage 3 - Detailed risk assessment.

Stage 1 - Flood Risk Identification

1.5.2 The aim of this stage is to identify whether there may be any flooding or surface water management issues relating to the plan area that may warrant further investigation. This assessment examined a range of sources in order to establish the existence of flood risk in the plan area.

1.5.3 The County Council, in close association with the Office of Public Works (OPW), compiled a series of indicative maps which underlay and inform the 2011 Electoral Area Local Area Plans for towns, villages and smaller settlements showing areas that could be at risk from flooding. The Information about flood risks that was used in the preparation of these plans was collated from a number of sources including:

- Draft River Lee Catchment Flood Risk Assessment and Management Study (Lee CFRAMS),
- 'Floodmaps.ie' – The national flood hazard mapping website operated by the Office of Public Works,
- 'Flood Hazard Mapping' for fluvial and tidal areas commissioned by Cork County Council from Consultants JBA Associates. These indicative flood extent maps provide flood extent information for river catchments where a more detailed CFRAMS study is not currently available.

1.5.4 The OPW have commenced the National Catchment Flood Risk Assessment and Management (CFRAM) Programme which is designed to assess and map the country's river systems to identify areas at risk of significant flooding which will enable the County Council to meet the requirements of the EU Floods Directive. The first step in the process is the Draft PFRA, which aims to identify areas at risk of significant flooding. The Draft PFRA provides maps showing areas deemed to be at risk for the entire County.

1.5.5 The County is vulnerable to the following sources of flooding:

- Coastal flooding from tidal surge,
- Fluvial flooding from rivers,
- Pluvial flooding from intense rainfall,
- Groundwater flooding.



Stage 2 – Initial Flood Risk Assessment

2011 Electoral Area Local Area Plans

- 1.5.6 The 2011 Local Area Plans for the County, set out the approach to flood risk management within the settlement network of the County, in line with the Guidelines for Planning Authorities 'The Planning System and Flood Risk Management' issued by the Minister for the Environment. The aim of this approach was to:
- Avoid development in areas at risk of flooding; and
 - Where development in floodplains cannot be avoided, to adopt a sequential approach to flood risk management based on avoidance, reduction and mitigation of risk.
- 1.5.7 In line with advice from the OPW, the County Council amalgamated the information from these sources into a single 'Indicative Flood Extent Map' for all the settlements in each electoral area. These maps are used as the basis for the flood risk assessment for each settlement identified in the settlement network. The 2011 Local Area Plans which map these areas at risk of flooding are also available to view online at www.corkcoco.ie. With regard to specific settlements, the relevant sections of the local area plans include objectives, some of which relate to specific land parcels, giving effect to this overall approach to addressing flood risk in accordance with the guidelines.
- 1.5.8 The 2011 Electoral Area Local Area Plans assessed the risk of flooding in every parcel of zoned land in the County. Table * summarises the risk of flooding in residential, employment, town centre and special policy area land-use zoning designations for each of the main settlements in the County and outlines the assessment criteria used where the Planning Authority zoned these sites for development.
- 1.5.9 Where land either subject to a specific zoning objective or otherwise located within the development boundary of a settlement, is affected by the 'Indicative Flood Extent Maps' in the 2011 Local Area Plans, a site specific detailed flood risk assessment is required at the project stage. Precautionary text was included in the specific zoning objectives highlighting the need for a detailed flood risk assessment to be carried out at project stage, where certain Local Area Plan zonings were included in areas at risk of flooding. These issues are outlined in more detail in the following section which deals with flood risk and Development Management, Chapter 11 of this Plan and the Flood Risk Management Guidelines (including Technical Appendices) which outline the requirements of site-specific flood risk assessments (Stage 3) to be carried out at project stage.

Mapping of Flood Risk

- 1.5.10 The Draft PFRA which aims to identify areas at risk of significant flooding provides maps showing areas deemed to be at risk for the entire County and these maps are available to view at <http://www.cfram.ie>. The Draft PFRA, maps areas at risk of significant pluvial, fluvial, coastal and groundwater flooding and are used to assist as a decision making tool in the assessment of proposed developments. The areas deemed to be at risk (referred to as Areas for Further Assessment, or 'AFAs') are where more detailed assessment is required on the extent and degree of flood risk, under the CFRAM Studies. There are 3 River Basin Districts in County Cork. The South West CFRAMS covers the largest area but there are also some smaller areas of the County which are covered by the Shannon CFRAMS and the South East CFRAMS.

- 1.5.11 The Indicative Flood Extent Map shown on the zoning maps in the local area plans, the PRFA maps and the proposed CFRAM programme maps, provide information on two main areas of flood risk which are described in Section 3 of the Guidelines for Planning Authorities 'The Planning System and Flood Risk Management':
- Flood Zone A – High Probability of Flooding: Most areas of the County that are subject to flood risks fall into this category. Here, most types of development would be considered inappropriate. Development in this zone should be avoided and/or only considered in exceptional circumstances, such as in major urban or town centres, or in the case of essential infrastructure that cannot be located elsewhere. A Justification Test set out in Ministerial Guidelines applies to proposals in this zone. Only water-compatible development, such as docks and marinas, dockside activities that require a waterside location, amenity open space, outdoor sports and recreation, would be considered appropriate in this zone.
 - Flood Zone B – Moderate Probability of Flooding: In most parts of the County this designation applies only to limited areas of land (In only a few locations do significant sites fall into this category). Here, highly vulnerable development, such as hospitals, residential care homes, Garda, fire and ambulance stations, dwelling houses and primary strategic transport and utilities infrastructure, would generally be considered inappropriate. Less vulnerable development, such as retail, commercial and industrial uses, sites used for short-let for caravans and camping and secondary strategic transport and utilities infrastructure, and water-compatible development might be considered appropriate in this zone.
 - Elsewhere, localised flooding from sources other than rivers and the coast can still occur and may need to be taken into account at the planning application stage.

Draft County Development Plan

- 1.5.12 Chapter 11, Section 11.6, and specifically objectives WS 6-1 and WS 6-2 of the Draft County Development Plan outline the overall approach of Cork County Council to addressing flood risk within the settlement network and the rural areas of the County outside development boundaries.
- 1.5.13 In areas where there is a high probability of flooding - 'Zone A' - it is an objective of the Draft plan to avoid development other than 'water compatible development' as described in Section 3 of the Guidelines. In areas where there is a moderate probability of flooding - 'Zone B' - it is an objective of the Draft plan to avoid 'highly vulnerable development' described in section 3 of the Guidelines.
- 1.5.14 The majority of towns, villages and smaller settlements have a river or stream either running through the built-up area or close by and are inevitably exposed to some degree of flood risk when those rivers or streams overflow their normal course. Similarly, in coastal areas flooding can periodically occur following unusual weather or tidal events. It should be noted that the Draft Plan does not designate any new settlements.
- 1.5.15 The Draft plan states that generally where proposals for new zoning significantly conflict with the 'Indicative Flood Extent Maps' they should not be included as zoned land unless the proposed use or development satisfied the 'Justification Test for Development Plans' set out on page 37 of the Ministerial Guidelines.

- 1.5.16 In line with the approach set out in the Ministerial Guidelines, areas 'zoned' for town-centre development comprise the main category of future development 'zoning' that often satisfy the requirements of the 'Justification Test for development plans'. Development proposals in these 'town-centre zonings' will need to follow the procedures indicated in Paragraph 11.6.16 of the Draft County Development Plan at planning application stage with a view to developing appropriate flood-mitigation measures at the project stage.
- 1.5.17 In relation the impacts of climate change, the Draft County Development Plan has included policy measures which address the importance of 'Climate Change Adaptation', under objective CS 5-1 in Chapter 2: Core Strategy.
- 1.5.18 The individual chapters of the Draft Plan have also been prepared in a manner which has regard to the wider issue of Climate Change. The Draft Plan has included a set of policies in Chapter 4: Rural, Coastal and islands (Paragraphs 4.8.18, 4.8.19 and Objective RCI 8-3) which highlight the importance of protecting our coastal areas from the impacts of predicted sea level rise due to climate change. In addition, the importance of reducing and managing surface water run-off is addressed in Section 11.5 of the Draft Plan, by ensuring that all new developments incorporate Sustainable Drainage Systems (SUDS).

Table A1: Flood Risk by Main Settlements

Settlement	Local Area Plan Zonings within Flood Zone A or B				
	Flood Risk	Residential	Employment	Town Centre	Special Policy Area
Ballincollig	YES	X	X	X	✓ Justification Test
Blarney	YES	X	X	✓ Justification Test	✓ Justification Test
Carrigaline	YES	X	✓ Historical Zonings	✓ Justification Test	X
Carrigtwohill	YES	✓ Historical Zonings	✓ Justification Test, Historical Zonings.	✓ Justification Test	✓ Justification Test
Cork City South Env	YES	✓ Historical Zonings	X	X	✓ Justification Test
Cork City North Env	YES	X	X	✓ Justification Test	X
Glanmire	YES	X	X	✓ Justification Test	X
Monard (SDZ)	YES	-	-	-	SDZ
Cobh	NO	X	X	X	X
Midleton	YES	✓	✓	X	✓

		Historical Zonings	Historical Zonings		Historical Zonings, Justification Test.
Settlement	Flood Risk	Residential	Employment	Town Centre	Special Policy Area
Passage West	YES	X	X	X	✓ Justification Test
Bandon	YES	✓ Historical Zonings	X	✓ Justification Test	✓ Justification Test
Fermoy	YES	X	X	X	X
Mallow	Under Review				
Macroom	YES	X	✓ Historical Zonings	X	X
Kinsale	YES	X	X	X	X
Youghal	YES	X	✓ Historical Zonings	X	✓ Historical Zonings
Buttevant	YES	X		✓ Justification Test	✓ Small portion of site, included by resolution.
Charleville	YES	✓ Historical Zonings	✓ Historical Zonings	✓ Historical Zonings	X
Kanturk	YES	X	✓ Historical Zonings	✓ Justification Test	
Millstreet	YES	✓ Historical Zonings	✓ Historical Zonings, Included By Resolution.	✓ Justification Test	
Mitchelstown	YES	X	X	✓ Justification Test	X
Newmarket	YES	X	✓ Historical Zonings	X	
Bantry	YES	✓ Historical Zonings, Small portion of site included.	✓ Historical Zonings	✓ Justification Test	✓ Justification Test

Castletownbere	YES	✓ Historical Zonings	✓ Justification Test	✓ Justification Test	X
Settlement	Flood Risk	Residential	Employment	Town Centre	Special Policy Area
Clonakilty	YES	X	X	X	X
Dunmanway	YES	✓ Historical Zonings, portion of site included.	✓ Historical Zonings	✓ Justification Test	X
Schull	YES	X	✓ Historical Zonings	✓ Justification Test	X
Skibbereen	YES	✓ Historical Zonings	✓ Historical Zonings	X	X
Other Strategic Employment Areas					
Little Island	YES	X	✓ Justification Test, Historical Zonings.	X	X
Ringaskiddy	YES	X	✓ Historical Zonings.	X	X
* Excludes Town Council Zoning					

1.6 Flood Risk and Development Management

- 1.6.1 All applications for planning permission falling within Flood Zones 'A' or 'B' will need to comply with Chapter 5 of the Ministerial Guidelines – 'The Planning System and Flood Risk Management and, in particular, a site-specific flood risk assessment will be required. In order to reflect the possibility that the 'Indicative Flood Extent Maps' may inevitably include some localised uncertainties, the site-specific flood risk assessment process is divided into two stages.
- 1.6.2 The initial stage in the process is intended to be capable of being carried out relatively quickly and at modest expense involving a desk-top review of relevant flood risk information, where applicable, the preparation of site levels or cross sections, the preparation of a commentary on site specific issues including the nature of any localised uncertainty in existing sources of information and, finally, a recommendation on the appropriate course of future action. These issues are covered in detail in paragraph 11.6.16 of the Draft Plan. Where the first stage of the site-specific flood risk assessment indicates further study then the normal course of action will be to carry out a detailed site specific flood risk assessment in line with Chapter 5 of the Ministerial Guidelines before an application for planning permission can be considered.

- 1.6.3 Where it can be satisfactorily shown in the detailed site-specific flood risk assessment that the proposed development, and its infrastructure, will avoid significant risks of flooding in line with the principles set out in the Ministerial Guidelines, then, subject to other relevant proper planning considerations, permission may be granted for the development. Where the site does not benefit from a specific zoning objective and there are significant residual flood risks to the proposed development or its occupiers, conflicting with the approach recommended in the Ministerial Guidelines, it is unlikely that permission will be granted unless the criteria set out in objective WS 6-2 of the Draft Plan are satisfied.

Future Flood Risk Information

- 1.6.4 The CFRAM has a target to have flood maps available for the region by the end of 2013. The Draft Flood Risk Management Plans (FRMP's) are intended to be in place by 2014 with final FRMP's in place by end of 2015. The information contained in the Draft County Development Plan, Local Area Plans and this SFRA is based on currently available data and it is recommended that on completion of the CFRAM Study and the FRMP, that these publications will supersede all existing flood maps. The Council will consider the advice of the OPW in this regard. The county development plan will also implement the recommendations of the South Western CFRAM study.

1.7 Recommendations

- 1.7.1 The zoning of land or the designation of other lands or settlements for development is not being considered in this Draft County Development Plan. Therefore, this SFRA has been prepared at a strategic level, providing information on the spatial distribution of flood risk within the County settlement network, including details of the adoption of the sequential approach to flood risk management and identify where the justification approach was applied. This SFRA has also provided a strategic assessment of all types of flood risk and existing information and data sources to inform strategic land-use planning decisions.
- 1.7.2 It is recommended that where land-use planning decisions are made in areas identified at risk of flooding in any Local Area Plan or Special Local Area Plan, more detailed flood risk assessments will need to be carried out.
- 1.7.3 In areas identified as being at risk from flooding, this SFRA recommended the inclusion of suitable text in Chapter 11 of the Draft County Development Plan to develop a county wide framework to address the issue of flood risk and to ensure that development proposals shall be the subject of a site-specific Flood Risk Assessment and be carried out in line with the Ministerial Guidelines.
- 1.7.4 In some cases, the 2011 local area plans included certain zonings in areas at risk of flooding as a response to a desire to retain zonings where planning permission had been granted of where the zoning had already been made in a previous plan. These zonings were retained with precautionary 'flooding text' included in the specific zoning objective, because the PFRA's were not published and there was uncertainty regarding the quality of flooding data available at the time. It is recommended that should these sites not come forward for development prior to the next review of the local area plans, consideration be given to either removing the existing zoning for all types of development or replacing the existing zoning with a zoning objective for a less vulnerable water compatible use.



Appendix B

Protected Species in County Cork

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1.1 Table B1 Protected Animal Species occurring in Cork (excluding Birds)

Protected Animal Species Occurring in Cork (except Birds)				
Species	Wildlife Act*	Habitats Directive Annex II**	Habitats Directive Annex IVa***	Habitats Directive Annex V****
Hedgehog	✓			
Pygmy Shrew	✓			
Irish Hare	✓			✓
Red Squirrel	✓			
Pine Marten	✓			✓
Irish Stoat	✓			
Badger	✓			
Otter	✓	✓	✓	
Red Deer	✓			
Sika Deer	✓			
Fallow Deer	✓			
Lesser Horseshoe Bat	✓	✓	✓	
Whiskered Bat	✓		✓	
Brandt's Bat	✓		✓	
Daubenton's Bat	✓		✓	
Common Pipistrelle Bat	✓		✓	
Soprano Pipistrelle Bat	✓		✓	
Nathusius Pipistrelle Bat	✓		✓	
Leisler's Bat	✓		✓	
Brown Long-eared Bat	✓		✓	
Natterer's Bat	✓		✓	
Grey Seal	✓	✓	✓	
Common Seal	✓	✓	✓	
Bottlenose Dolphin	✓	✓	✓	
Harbour Porpoise	✓	✓	✓	
Common Lizard	✓			
Common Frog	✓			✓
Common Newt	✓			
White-clawed Crayfish	✓	✓	✓	
Marsh Fritillary		✓		
Freshwater Pearl Mussel	✓	✓	✓	
Kerry Slug	✓	✓	✓	
River Lamprey		✓	✓	
Brook Lamprey		✓	✓	
Sea Lamprey		✓	✓	
Allis Shad		✓	✓	
Twaite Shad		✓	✓	
Atlantic Salmon		✓	✓	

(Species highlighted in green are species which have been identified to be of special conservation significance in Cork, Cork County Biodiversity Action Plan).

***Listing under Wildlife Acts:** These species are protected under Section 20 of the Wildlife Act 1976. Any person who hunts or injures these species, or who wilfully interferes with their breeding or resting places is guilty of an offence under the Wildlife Act under Section 23 of the Act. Section 23 does not apply where unintentional injury or harm is caused to an animal or its breeding site or resting place during construction activities or other work, or where the activity/works have been permitted under license or given other statutory consent (eg planning permission). A derogation license is required from the National Parks and Wildlife Service to allow work to proceed where it is known that it could cause injury to a species on this list, or harm to their breeding sites or resting places. Where a derogation license is required in relation to development for which planning permission is also required, the license must be in place prior to the granting of the planning permission.

****Listing under Annex II Habitats Directive:** Species listed under Annex II of the Habitats Directive require the designation of Special Areas of Conservation for their protection. A number of Special Areas of Conservation in Cork are designated for the protection of species which occur in this Annex. In accordance with the Habitats Directive, all plans and projects must be assessed prior to being authorised and undertaken, to determine the potential for these to give rise to adverse impacts on the qualifying features of these sites. The qualifying features of the site can include

species listed in this Annex.

*****Listing on Annex IVa Habitats Directive:** Species listed on Annex IV of the Habitats Directive are strictly protected wherever they occur both inside and outside designated sites. Any person who deliberately captures or kills these species particularly during the period of breeding, rearing, hibernation and migration, or who deliberately takes or destroys eggs, or who damages or destroys a breeding site or resting place of such an animal (intentionally or unintentionally) shall be guilty of an offence, notwithstanding any consent for works or development given to a person by a public authority. A derogation license may be sought from the National Parks and Wildlife Service to allow work to proceed where it is known that it could cause injury to species on this list, or harm to their breeding sites or resting places, providing there is no satisfactory alternative, and provided the derogation is not detrimental to the maintenance of the population of the species at a favourable conservation status. Where a derogation license is required in relation to development for which planning permission is also required, the license must be in place prior to the granting of the planning permission.

******Listing on Annex V of the Habitats Directive:** Species listed under this Annex are those whose taking in the wild may be subject to management measures.

1.2 Table B2: Bird Species of Conservation Concern and Special Conservation Significance Occurring in Cork

Bird Species of Conservation Concern and Special Conservation Significance Occurring in Cork			
Species	Birds of Conservation Concern	Listed on Annex I of Birds Directive	Sites which for which species marked with * in column A are listed as features of special conservation interest
Arctic Tern	✓	✓	
Balearic Shearwater			
Bar-tailed Godwit*	✓	✓	Ballycotton Bay SPA, Ballymacoda Bay SPA, Blackwater Estuary SPA, Cork Harbour SPA, Courtmacsherry Bay SPA
Black-headed Gull*	✓		Ballymacoda Bay SPA, Cork Harbour SPA, Courtmacsherry Bay SPA
Black-necked Grebe	✓		
Black-tailed Godwit*	✓		Ballycotton Bay SPA, Ballymacoda Bay SPA, Blackwater Estuary SPA, Cork Harbour SPA, Clonakilty Bay SPA, Blackwater Callows SPA, Courtmacsherry Bay SPA
Barn Owl	✓		
Bewick's Swan	✓	✓	
Black Guillemot	✓		
Brent Goose	✓		
Chough*	✓	✓	Beara Peninsula SPA, Sheep's Head to Toe Head SPA, Galley Head to Duneen Point SPA, Seven Heads SPA
Common Gull*	✓		Ballycotton Bay SPA, Ballymacoda Bay SPA, Cork Harbour SPA, Courtmacsherry Bay SPA
Common Scoter	✓		
Common Tern*	✓	✓	Cork Harbour SPA
Coot*	✓		The Gearagh SPA
Cormorant*	✓		Cork Harbour SPA, Sovereign Islands SPA
Curlew*	✓		Ballycotton Bay SPA, Ballymacoda Bay SPA, Blackwater Estuary SPA, Cork Harbour SPA, Clonakilty Bay SPA, Courtmacsherry Bay SPA
Cuckoo	✓		
Dunlin*	✓		Ballymacoda Bay SPA, Blackwater Estuary SPA, Cork Harbour SPA, Clonakilty Bay SPA, Courtmacsherry Bay SPA
Fulmar*			Beara Peninsula SPA
Gannet*	✓		The Bull and the Cow Rocks
Goldeneye	✓		
Golden Plover*	✓	✓	Ballycotton Bay SPA, Ballymacoda Bay SPA, Blackwater Estuary SPA, Cork Harbour SPA, Courtmacsherry Bay SPA
Grasshopper Warbler	✓		
Great Crested Grebe*	✓		Cork Harbour SPA,
Great Northern Diver*	✓	✓	Courtmacsherry Bay SPA
Greenland White-fronted Goose	✓	✓	
Grey Heron*			Cork Harbour SPA
Grey Plover*	✓		Ballycotton Bay SPA, Ballymacoda Bay SPA, Cork Harbour

Bird Species of Conservation Concern and Special Conservation Significance Occurring in Cork			
Species	Birds of Conservation Concern	Listed on Annex I of Birds Directive	Sites which for which species marked with * in column A are listed as features of special conservation interest
			SPA
Guillemot*	✓		Old Head of Kinsale SPA
Hen Harrier*	✓	✓	Stacks to Mullaghareirks, Mount Eagle Bog and West Limerick Hills SPA and Mullaghanish to Musheramore SPA
Herring Gull			
Jack Snipe	✓		
Kingfisher	✓	✓	
Kittiwake*			Old Head of Kinsale SPA
Knot	✓		
Lapwing*	✓		Ballycotton Bay SPA, Ballymacoda Bay SPA, Blackwater Estuary SPA, Cork Harbour SPA, Courtmacsherry Bay SPA
Lesser Black-backed Gull*			Ballycotton Bay, Ballymacoda Bay SPA, Cork Harbour SPA
Little Egret	✓	✓	
Little Grebe*			Cork Harbour
Mallard*			The Gearagh SPA
Merlin	✓	✓	
Nightjar	✓	✓	
Oystercatcher*			Cork Harbour SPA
Peregrine Falcon*	✓	✓	Sheep's Head to Toe Head SPA
Pintail*	✓		Cork Harbour SPA
Pochard	✓		
Puffin*			The Bull and the Cow Rocks
Razorbill	✓		
Red Grouse	✓		
Redpoll	✓		
Redshank*	✓		Ballymacoda Bay SPA, Blackwater Estuary SPA, Cork Harbour SPA
Reed Warbler	✓		
Red-breasted Merganser*	✓		Cork Harbour SPA, Courtmacsherry Bay SPA
Red-throated Diver	✓	✓	
Ringed Plover*			Ballycotton Bay SPA, Ballymacoda Bay SPA,
Sanderling*			Ballymacoda Bay SPA
Sand Martin	✓		
Sandwich Tern	✓	✓	
Shag			
Shelduck*	✓		Cork Harbour SPA, Clonakilty Bay SPA, Courtmacsherry Bay SPA
Short-eared Owl	✓	✓	
Shoveler*			Cork Harbour SPA, Kilcolman Bog SPA
Skylark	✓		
Snipe	✓		
Sooty Shearwater	✓		
Spotted Flycatcher	✓		
Stock Dove	✓		
Stonechat	✓		
Storm Petrel*	✓	✓	Bull and the Cow Rocks SPA,
Swallow	✓		
Teal*	✓		Ballycotton Bay SPA, Ballymacoda Bay SPA, Cork Harbour SPA, Blackwater Callows SPA, Kilcolman Bog SPA, the Gearagh SPA
Tufted Duck	✓		
Turnstone*			Ballycotton Bay SPA, Ballymacoda Bay SPA
Water Rail	✓		
White-tailed Sea Eagle	✓		
Whooper Swan*	✓	✓	Blackwater Callows SPA, Kilcolman Bog SPA
Wigeon*	✓		Ballymacoda Bay SPA, Blackwater Estuary SPA, Cork Harbour SPA, Blackwater Callows SPA, the Gearagh SPA, Courtmacsherry Bay SPA
Woodcock	✓		
Yellowhammer	✓		

All wild bird, their nests and eggs are protected under the Wildlife Act (1976) and the Wildlife (Amendment) Act 2000. The following table lists the wild bird species that have been identified to be of particular conservation concern in Ireland, that occur in County Cork. These are rare, threatened or vulnerable species.

Bird Species of Conservation Concern and Special Conservation Significance Occurring in Cork			
Species	Birds of Conservation Concern	Listed on Annex I of Birds Directive	Sites which for which species marked with * in column A are listed as features of special conservation interest
Species listed on Annex I of the Birds Directive are species for which Special Protection Areas must be established. *denotes species which are listed as features of special conservation interest for one or more SPA in Cork. Species highlighted in green are species which have been identified to be of special conservation significance in Cork (ref Cork County Biodiversity Action Plan).			



1.3 Table B3 Protected Plant Species Occurring in Cork

Protected Plant Species Occurring in Cork				
Species	Flora Protection Order*	Habitats Directive Annex II**	Habitats Directive Annex IVa***	Habitats Directive Annex V****
Flowering Plants				
Orange Foxtail	✓			
Starved Wood-sedge	✓			
Lesser Centaury	✓			
Slender Cottongrass	✓			
Small Cudweed	✓			
Meadow Barley	✓			
Irish St. John's Wort	✓			
Sea Pea	✓			
Mudwort	✓			
Hairy Bird's-foot-trefoil	✓			
Pennyroyal	✓			
Recurved Sandwort	✓			
Weasel's-snout	✓			
Tufted Salt-marsh Grass	✓			
Annual Knawel	✓			
Kerry Lily	✓			
Irish Lady's Tresses	✓			
Betony	✓			
Pale Dog-violet	✓			
Lanceolate Spleenwort	✓			
Fir Clubmoss				✓
Marsh Clubmoss	✓			✓
Killarney Fern	✓	✓	✓	
Bryophytes - mosses and liverworts				
<i>Orotrichum pallens</i>	✓			
<i>Orthotrichum sprucei</i>	✓			
<i>Orotrichum stramineum</i>	✓			
<i>Plagiochila atlantica</i>	✓			
<i>Tortula wilsonii</i>	✓			
Sphagnum mosses (22 spp)				✓

Species highlighted in green are species which have been identified to be of special conservation significance in Cork (ref Cork County Biodiversity Action Plan).

Flora Protection Order: Plants that are protected under the Flora Protection Order cannot be wilfully cut, picked, collected, uprooted or damaged nor can parts of the plants be removed.

Plants listed on Annex II of the Habitats Directive: Species listed under Annex II of the Habitats Directive require the designation of Special Areas of Conservation for their protection. There is plant species which is listed in Annex II of the Habitats Directive which occurs in Cork. This is the Killarney Fern. Four Special Areas of Conservation in Cork are designated for the protection of this species. In accordance with the Habitats Directive, all plans and projects must be assessed prior to being authorised and undertaken, to determine the potential for these to give rise to adverse impacts on the qualifying features of these sites. The qualifying features of the site can include species listed in this Annex.

Plants listed on Annex IV of the Habitats Directive: Species listed under this Annex are those whose taking in the wild may be subject to management measures.

Appendix C
Effluent Results for Licenced
WWTP Cork 2012



Table C1: Effluent Results for Licensed WWTP 2012

Effluent Results re Urban Waste Water Treatment Regulations for Metropolitan Cork SPA 2012 –									
Cork County Council 2012 Urban Area	Pass or Fail (persistent=X)	Reason for failure	Urban area (p.e) loading	WWTP (PE) (Design)	Level of treatment provided Update)	Receiving water	Sensitive area		
Ballincollig	Pass		21,000	26,000	Secondary ; NR; Denitrification	River			
Blarney	Pass		13,000	13,000	Secondary ; NR; P removal. Denitrification	River			
Blarney -	Pass		6,100	13,000	Secondary ; NR				
Cloghroe	Fail X	Quality	600	600	Secondary	River			
Carrigtwohill	Fail	Quality	12,000	8,500	Secondary	Estuarine	X		
Cloyne	Pass		1,200	1,400	Secondary	River			
Cobh (TownCouncil)	No secondary		12,000		No treatment	Coastal			
North Cobh	Pass		850	2,000	Secondary; P removal.	Coastal	X		
Dripsey	Pass		390	600	Secondary	River			
Kileens	Pass		860	1,200	Secondary	River			
Midleton WWTP	Pass		12,000	10,000	Secondary;NR; Denitrification; UV	Coastal	X		
Passage-Monkstown	No secondary		7,600		No treatment	Estuarine	X		
Ringaskiddy Village	No secondary		797	797	Preliminary	Coastal			
Ringaskiddy- Crosshaven- Carrigaline	No secondary		25,200		Preliminary	Coastal			
Whitegate-Aghada	No secondary		1,953		No treatment	Coastal			

Effluent Results re Urban Waste Water Treatment Regulations Cork Ring Strategic Planning Area 2012							
Cork County Council 2012 Urban Area	Pass or Fail (persistent=X)	Reason for failure	Urban area (p.e) (loading)	WWTP (PE) (Design)	Level of treatment provided	Receiving water	Sensitive area
Ballyclough	Pass		600	800	Secondary	River	
Ballycotton	No secondary		1,000		No treatment	Coastal	
Bandon	Pass		8,200	20,000	Secondary	River	
Bweeng	Pass		500	500	Secondary. P removal	River	
Carrignavar	Fail X	Quality	500	500	Secondary	River	
Castlelyons	Pass		400	1200	Secondary; P removal	River	
Castlemartyr	Pass		1,938	2,000	Secondary	River	
Clondulane	Pass		450	700	Secondary	River	X
Cloughduv	Fail X	Q	200	1,500	Secondary. P removal	River	
Coachford	No secondary		726	600	Primary	Lake	
Dromahane	Pass		1,150	1,000	Secondary	River	
Fermyo	Pass		14,000	20,000	Sec. & nutrient	River	
Glenville	Fail X	Quality	500	500	Secondary	River	
Innishannon	No secondary		887	833	Primary	River	
Kilbrittan	Fail	Quality	598	800	Secondary	River	
Killeagh	Fail	Quality	1,000	1,990	Secondary	River	
Kilworth	Fail	Sample No.	1,200	2,500	Sec. & nutrient	River	
Kinsale	Pass		8,000	10,000	Sec. & nutrient	Estuarine	X
Ladysbridge	Fail	Q	650	950	Secondary	River	
Macroon	Pass		6,600	5,200	Secondary	River	
Mallow	Pass		14,000	18,000	Sec. & nutrient	River	X
Mogeely	Pass		616	1,200	Sec. & nutrient	River	
Rathcormac	Fail	Quality and Sample No	2,500	4,000	Sec. & nutrient	River	
Riverstick	Fail X	Q	550	550	Sec. & nutrient	River	
Watergrasshill	Pass		1,600	3,000	Sec. & nutrient	River	
Youghal	No secondary		9,600		No treatment	Estuarine	X

Effluent Results re Urban Waste Water Treatment Regulations North Cork Strategic Planning Area 2012									
Cork County Council 2012 Urban area	Pass or Fail persistent=X	Reason for failure	Urban area (p.e) (loading)	WWTP (PE) (Design)	Level of treatment provided	Receiving water	Sensitive area		
Ballyhooley	Fail X	Quality	545	750	Secondary	River	X		
Banteer	Pass		700	700	Secondary	River			
Boherbue	Fail	Sample no.	800	600	Sec. & nutrient	River	X		
Buttevant	Pass		1,700	3,150	Secondary	River			
Castletownroche	Pass		950	1000	Secondary	River			
Charleville	Pass		3,696	7,500	Secondary	River			
Churchtown	Pass		600	936	Secondary	Ground			
Conna	Fail	Quality	510	800	Secondary	River			
Doneraile	Pass		941	1,675	Secondary	River			
Glanworth	Fail X	Quality	607	800	Secondary	River			
Kanturk	Pass		2,354	3,500	Secondary	River			
Kildorrery	Fail X	Q	500	850	Secondary	River			
Killavullen	Pass		700	1,000	Secondary	River			
Millstreet	Pass		2,252	1,600	Secondary	River			
Mitchelstown	Pass		4,100	7,000	Sec. & nutrient	River			
Newmarket	Pass		1,100	1,500	Secondary	River			

Effluent Results re Urban Waste Water Treatment Regulations West Cork Strategic Planning Area 2012									
Cork County Council 2012 Urban area	Pass or Fail (persistent=X)	Reason for failure	Urban area (p.e) (loading)	WWTP (PE) (Design)	Level of treatment provided	Receiving water	Sensitive area		
Ballineen & Enniskeane	Pass		840	660	Secondary	River			
Ballingeary	No secondary		650	600	Primary	River			
Ballydehob	No secondary		560	700	Primary	Coastal			
Ballymakeera	No secondary		1,600	1,400	Primary	River			
Baltimore	Pass		1,684	3,600	Secondary; UV.	Estuarine			
Bantry	Pass		5,647	6000	Sec.& nutrient	Coastal			
Castletownbere	No secondary		1,300		No treatment	Coastal			
Castletownshend	No secondary		450		No treatment	Coastal			
Clonakilty	Fail	Quality	15,000	15,000	Secondary	Estuarine	X*		
Courtmacsherry	No secondary		1,380	500	Primary	Estuarine			
Drimoleague	Fail X	Quality	635	500	Secondary	River			
Dunmanway	Fail X	Quality	2,404	3,000	Secondary	River			
Glengariff	No secondary		750	1,000	Primary	Coastal			
Rosscarbery- Owenahincha	No secondary		4,051	5,239	Primary	Coastal			
Schull	No secondary		1,680	1,266	Primary	Coastal			
Skibbereen	Pass		3,000	4,700	Secondary; NR; denitrification.	Estuarine			
Timoleague	No secondary		592		No treatment	Estuarine			
Unionhall	No secondary		634	344	Primary	Estuarine			



Appendix D
Sample Settlement
Enhancement Measures



1.1.1 Settlement Enhancement Measures

- 1.1.2 A sample of potential measures for enhancing the sustainability of these settlements is set out in Table D1 below. The key areas where the Plan can deliver enhanced sustainability outcomes are in the areas of transportation and Water and wastewater. The Plan's transportation policies now place a strong emphasis on modal shift targets to sustainable forms of movement especially prioritising walking and cycling for shorter trips and better access to public transport within the towns. A number of towns scored poorly in terms of settlement walkability and recommendations are made to undertake a movement audit at these locations. The audit of the pedestrian and cycling environment of the town should focus on improving the quality, safety, connectivity and attractiveness of the movement network within the town together with a complementary set of traffic calming and parking measures.
- 1.1.3 The provision of good quality public transport provision is inherently linked to density within the service catchment of an operator. Most of the County is starting from a low public transport base but a revised approach to density in the Plan should make the delivery of a more extensive high frequency bus service viable within the Metropolitan area where the largest proportion of the target growth is allocated. The integration of public transport services is also a key consideration at some locations to encourage modal shift together with the provision of stops at convenient locations. The delivery of these enhancement measures will help increase a modal shift to green travel modes and should consequently reduce car based commuting and associated CO2 emissions.
- 1.1.4 The Plan has identified the infrastructure status of all the main settlements allocated growth within the County. Where deficiencies have been identified the Plan has specified that development may only proceed where appropriate infrastructure is available which satisfies the environmental regulations and complies with EPA licensing. Water conservation is also identified as a key priority area of investment in the Plan and a number of Category 3 settlements in North Cork have been identified with significant water leakage issues. While investment in these deficiencies will be outside the scope of the Council, the Plan will not exacerbate the existing situation.

Table D1: Sample Sustainability Enhancement Measures

Town	SDI score	Livability		Infrastructure & Location		Water & Wastewater			Population & Urban Form		Transport & Energy	
		Provide public park	Local employment opportunities	Improve infrastructure Capacity	Provision of recycling facilities	Improve water quality	Compliance with Urban wastewater treatment	Water conservation measures	Address Housing Vacancy	Increase pop density	Improve walking & cycling network	Improve public transport
Ballincollig	1											X
Blarney	1										X	
Carrigaline	1			X								
Carrigtwohill	1					X					X	X
Midleton	1			X	X	X			X		X	
Cobh	1		X	X	X			X			X	X
Bandon	1	X	X								X	X
Mallow	1		X				X				X	X
Glanmire	1				X		X			X	X	X
Bantry	1	X		X								X
Clonakilty	2		X	X			X					X
Kinsale	2				X						X	X
Fermy	2					X						X
Passage West	2			X	X						X	X
Macroom	2			X					X	X		
Buttevant	2		X	X					X	X		
Schull	2			X					X	X		
Mitchelstown	2		X	X				X				
Charleville	3		X						X	X	X	X
Newmarket	3			X								X
Skibbereen	3			X					X	X		
Youghal	3		X									X
Dunmanway	3			X					X	X		X
Castletownbere	3	X		X				X				
Millstreet	3	X		X				X				
Kanturk	3		X	X			X	X	X	X		



Section 2:

Natura Impact Report





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Chapter 1 Introduction

1.1 Context

1.1.1 Cork County Council is in the process of preparing the draft County Development Plan which will set out planning strategy and other policy for the County of Cork for the next six years.

1.1.2 In accordance with requirements under the EU Habitats Directive (43/92/EEC) and EU Birds Directive (79/409/EEC), the impacts of the policies and objectives of all statutory land use plans on certain sites that are designated for the protection of nature (Natura 2000 sites¹), must be assessed as an integral part of the process of drafting of the plan. This is to determine whether or not the implementation of plan policies could have negative consequences for the habitats or plant and animal species for which these sites are designated. This assessment process is called a Habitats Directive Assessment (HDA) and must be carried out at all stages of the plan making process.

1.2 Legislative Background Habitats Directive Assessment

1.2.1 Habitats Directive Assessment is an iterative process which runs parallel to and informs the plan making process. It involves analysis and review of draft policies as they emerge during each stage of plan making, to ensure that their implementation will not impact on sites designated for nature conservation, nor on the habitats or species for which they are designated. Within this process, regard is had to the potential for policies to contribute to impacts which on their own may be acceptable, but which could be significant when considered in combination with the impacts arising from the implementation of other plans or policies.

1.2.2 The process may result in the development of new policy areas and/or the modification or removal of certain policies to be presented in the final plan. The results of this analysis and review are presented in Habitats Directive Reports which are produced for each iteration of plan and its policies. At the end of the plan making process, a Habitats Directive Conclusion Statement will be produced which will contain a summary of how ecological considerations in relation to Natura 2000 sites have been integrated into the plan. The final Natura Impact Report and a declaration in relation to the potential for the plan to affect the integrity of Natura 2000 sites within its potential impact zone will also be produced at that time.

¹ Natura 2000 sites include Special Areas of Conservation designated under the Habitats Directive and Special Protection Areas designated under the Birds Directive. Special Areas of Conservation are sites that are protected because they support particular habitats and/or plant and animal species that have been identified to be threatened at EU community level. Special Protection Areas are sites that are protected for the conservation of species of birds that are in danger of extinction, or are rare or vulnerable. Special Protection Areas may also be sites that are particularly important for migratory birds. Such sites include internationally important wetlands.

1.2.3 The European Union has provided guidance as to how to complete a Habitats Directive Assessment for land use plans which identifies four main stages in the process as follows:

Stage One: Screening

The process which identifies what might be likely impacts arising from a plan on a Natura 2000 site, either alone or in combination with other projects or plans, and considers whether these impacts are likely to be significant.

Stage Two: Appropriate assessment

Where the possibility of significant impacts has not been discounted by the screening process, a more detailed assessment is required. This is called an appropriate assessment and involves the consideration of the impact of the plan on the integrity of the Natura 2000 site, either alone or in combination with other projects or plans, having regard to the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, it involves an assessment of the potential mitigation of those impacts.

Stage Three: Assessment of alternative solutions

Should the conclusion of the appropriate assessment be that there are likely to be impacts which will affect the overall integrity of the Natura 2000 site, then it is required to examine alternative ways of achieving the objectives of the project or plan that avoids such adverse impacts. Stage three of a Habitats Directive Assessment involves the assessment of alternative solutions.

Stage Four: Assessment where no alternative solutions exist and where adverse impacts remain

Should it be found there are no viable alternative solutions to avoid adverse impacts on the Natura 2000 site, and should it be agreed that the project/plan can proceed despite such impacts (which can only be for overriding reasons of public interest), then compensatory measures must be put in place in advance of the implementation of the plan/project. The fourth stage of the habitats directive assessment process involves the assessment of the proposed compensatory measures.

The assessment may stop at any of the above stages depending on the outcomes of the stage..

1.2.4 This document represents the first phase of the Habitats Directive Assessment process for the Cork County Development Plan. All Natura 2000 sites within the County, and within 15km of the County, have been screened to determine whether there is potential for the plan to give rise to significant impacts on any Natura 2000 site, or to give rise to adverse impacts on any Natura 2000 site having regard to their conservation objectives.

Chapter 2

How this Report Was Prepared

2.1 Working Methods

2.1.1 The approach taken in the making of this assessment follows European Communities, Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites, Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, 2002, and on Local Government and Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities, 2009.

2.1.2 The draft County Development Plan was prepared by a team of planners based in the Planning Policy Unit of Cork County Council under the direction of the Planning Policy Group which is made up of senior management staff in the Council.

2.1.3 The Natura Impact Report for the draft plan was prepared by Cork County Councils ecologist, who worked alongside the Development Plan team throughout the development phase for the plan.

2.1.4 There was interaction between the County Development Plan Team and the ecologist through the development phase for the plan. The purpose of this interaction was to encourage the development of strong sustainable biodiversity policy in the County Development Plan; to identify potential conflicts between the protection of designated sites and emerging landuse policies at an early stage, and to provide an opportunity to resolve potential areas of conflict prior to the finalisation of draft plan policy.

2.1.5 Full assessment of the draft plan was completed following production of the Members Draft in October 2013. Particular attention was given to the development of policies relating to the allocation of population in settlements within sensitive water catchments, renewable energy, water, waste water and roads infrastructure, and to policies relating to the development of tourism facilities and initiatives, and other recreational amenities, as these were identified to be key policy areas which could give rise to impacts on Natura 2000 sites. A number of recommendations were made on foot of this assessment, which are included in Chapter 4 of this report.

2.2 Consultation

2.2.1 Cork County Council consulted with the National Parks and Wildlife Service at a number of stages during the writing of the draft plan, in order to identify potential difficulties with emerging policy and to discuss possible solutions where potential impacts on Natura 2000 sites were identified.

2.2.2 This report, with the draft County Development Plan and the Environmental Report is available for consideration by the general public, and has been referred to all statutory consultees during the public consultation phase.

2.3 Gaps, Limitations and Difficulties

2.3.1 The information contained in this report is based on a desktop review of information relating to these sites and to the habitats and species that they support. References and data used are cited in the back of this report.

2.3.2 The draft Plan, and particularly the Core Strategy of the plan have been informed by the National Spatial Strategy 2002-2020, and by the South West Regional Planning Guidelines. These documents set the population targets for each of the Strategic Planning Areas within the County, and there is limited scope within the County Development Plan to deviate from these targets. The National Spatial Strategy (NSS) identified Metropolitan Cork as a Gateway and Mallow as a Hub town. Gateways and Hub towns have been identified in the NSS to have a critical role in delivering future economic growth, and the consequences of these designations are that significant population expansion and development is targeted at these areas. The Gateway and Hub town settlements are located in the vicinity and upstream of Natura 2000 sites for which a high standard of water quality is considered to be a key environmental condition needed to support site integrity. The National Spatial Strategy was not subject to Habitats Directive Assessment.

2.3.3 The South West Regional Planning Guidelines were adopted in 2010 and set out the agreed population targets for growth to 2022. These guidelines reiterate the objectives of the National Spatial Strategy relating to the designation of Mallow as a Hub Town, and the area around Cork Harbour as a development Gateway. The guidelines were subject to Habitats Directive Assessment, however, while the particular sensitivities of individual sites were identified in the assessment, it did not include a detailed assessment of the capacity of the relevant catchments to be able to accommodate the proposed population targets, having regard to Natura 2000 designations, and the respective qualifying features supported by these catchments.

2.3.4 There is a concern that the relatively high levels of growth and development that are proposed within the catchment of the Blackwater River, much of it focused on the designated hub town of Mallow, and which has emanated from higher level plans, is likely to interfere with the achievement of one of the conservation objectives which has been set for this SAC. The conservation objectives for the Blackwater River SAC were published in July 2012, and require the restoration of the favourable conservation condition of the Freshwater Pearl Mussel along the entire length of the Blackwater, and a number of its tributaries (168km of river channel within the SAC). Prior to the publication of the Conservation Objectives, Council had been working to the assumption that this standard would apply upstream of Mallow only. Having regard to the size of the catchment and the number of settlements which are located along the river, it is questionable as to whether the very high standards of water quality which need to be achieved to restore conditions favourable for the restoration of a breeding population of Freshwater Pearl Mussel along the river are attainable, even if no additional growth were proposed for the catchment in the draft CDP.

2.3.5 Cork County Council is consulting with the Department of Arts, Heritage and the Gaeltacht to agree the parameters of further detailed assessments which may be required to establish whether there is sufficient assimilative capacity in the Blackwater River to absorb the additional growth which is proposed, or to explore other possible solutions to this issue. The results of these consultations and/or assessments, may result in a requirement to further modify the plan at the amendments stage.

2.3.6 It is an assumption of the draft development plan, that the population targets which are set for settlements, in the Gateway, within the catchment of Cork Harbour can be accommodated without having an impact on the qualifying features of the designated sites around these. This is dependent on the following;

- that waste water treatment facilities can be designed to ensure that discharges of effluent will be of a standard which ensures that there will be no impact on the qualifying features of relevant Natura 2000 sites;
- that the required infrastructure will be provided prior to the commencement of discharges from new developments and
- that license conditions set by the EPA are sufficient to ensure that discharges will not have negative impacts on water sensitive Natura 2000 sites.

2.3.7 In addition, there are significant proposals relating to the redevelopment of the Port of Cork which has been identified as one of the key pillars of the Cork Gateway in the National Spatial Strategy, and has been identified in the National Ports Policy (2013) as being one of three ports in the country that is of national significance. The continued commercial development of the nationally important ports is a key objective of the National Ports Policy. Redevelopment plans for the Port of Cork are currently being prepared, having regard to the need to comply with the Habitats Directive.

Chapter 3

Screening Assessment

3.1 Screening Methodology

3.1.1 EU Guidelines (2001) set out a process for screening landuse plans, which involves four main steps as follows:

- a) Provide a description of the proposed plan.
- b) Provide a description of the receiving environment.
- c) Identify relevant Natura 2000 sites, and compile information on their qualifying interests and conservation objectives.
- d) Identify the potential effects of the plan on the identified Natura 2000 sites.
- e) Assess the significance of any effects on identified Natura 2000 sites, having regard to potential for 'in combination' effects.

3.1.2 This process is applied to all proposed plans or projects except those which are directly connected with the necessary management of a Natura 2000 site or sites. This report follows the steps set out above.

3.2 Description of the draft Plan

3.2.1 Chapter 1 Introduction. This chapter details the principles on which the draft plan is based, the National and Regional Planning Policy and the legislative context within which the draft Plan was prepared. It describes the structure of the plan and the process for completing the plan making process.

The chapter indicates that the vision and main aims for the County will be underpinned by the core principles of

- **sustainability** - the plan promotes and encourages the integration of economic, environmental, social and cultural issues into the policies and objectives of the plan to ensure the needs of urban and rural communities are met.
- **social inclusion** - the plan strives towards achieving a more socially inclusive society by seeking the provision of good quality affordable housing, community infrastructure and improving access to information and resources.
- **quality of design** – the plan promotes high quality design by encouraging its integration into every aspect of the plan
- **climate change adaptation** - the plan addresses the main areas where this can be achieved in the sections dealing with energy, land use planning, transport, waste management and biodiversity.

3.2.2 Chapter 2 Core Strategy. This chapter identifies key aims for the development of the county as a whole as follows

- enhanced quality of life for all;
- sustainable patterns of growth in urban and rural areas;
- sustainable and balanced economic investment;
- an effective physical and community infrastructure;
- a quality built environment;
- a network of enhanced natural resources;
- responsible guardianship of the County.

3.2.3 The Core Strategy identifies a target growth in population of 70,820 for the county as a whole for the period 2011-2022 and sets out the target distribution of this population growth with 11% of the total new growth allocated to the villages and rural areas and 89% to the towns. The county is divided into four Strategic Planning Areas. Priority is given to the development of the Metropolitan Strategic Planning Area which is around the city, given in role in the development of the Cork Gateway and 61% of total population growth is assigned to this area, equivalent to 43,382 persons. A corresponding need for 31,038 additional housing units is also recognised. The Ring Strategic Planning Area is assigned 19% of total population growth, equivalent to 13,464 persons with a housing requirement of 13,406 units; the North Strategic Policy Area gets 8% of

total population growth equivalent to 5,514 persons with a need for 5,689 housing units, while in the West population growth is equivalent to 12% of the total for the county at 8,460 persons and there is a requirement for 7,872 housing units. The core strategy assumes that household formation rates continue to decline and a rate of 2.41 people per household has been applied to the targets for 2022.

3.2.4 This chapter also sets out the Settlement Hierarchy for the county comprising the Cork Gateway, Hub Town, Ring Towns, County Towns, Key Villages, Villages, Village Nuclei and other locations, and the West Cork Island Communities, and the strategic objectives for the development of each Strategic Planning Area.

3.2.5 Chapter 3 Housing. This chapter seeks to ensure that all new development within the County supports the achievement of sustainable residential communities, promoting high quality design, good housing mix and development which prioritise walking and cycling provision. The chapter also sets out the revised density requirements for housing development in the county which aim to broaden the range of house types that can be built on zoned land, so that in future more households will be attracted to locate in the towns (especially within the County Metropolitan Area). The chapter also deals with specialised housing needs.

3.2.6 Chapter 4 Rural, Coastal and Islands. This chapter sets out policies applicable to the management of housing in rural, coastal and island areas. The chapter identifies different rural area types within the county and sets out detailed criteria that will be used to assess applications for rural housing within each area. Chapter also outlines policies in relation to greenbelts and deals with the protection, management and development of coastal resources.

3.2.7 Chapter 5 Social and Community. This chapter sets out standards for the provision of social and community facilities to meet current and future needs of all age cohorts of the population including childcare, education, health, amenity and recreational facilities. Also includes a new section on planning for the ageing population.

3.2.8 Chapter 6 Economy and Employment. This chapter outlines the strategy for the economic development of the county which seeks to achieve balanced economic development and improved employment choices across the county. Plan sets out a hierarchy of employment locations, which is informed by the Core Strategy, and deals with employment development in (a) the Gateway locations (Metropolitan Cork) and Mallow Hub, (b) other towns and key villages and, (c) Rural Areas. The strategy aims to ensure new employment opportunities are developed in tandem with the provision of housing and infrastructure so that people have the opportunity to live closer to where they work. The strategy also supports key employment sectors including agriculture and mineral sector and promotes the special economic role of Cork Harbour.

3.2.9 Chapter 7 Town Centres and Retail. This chapter includes policies aimed at strengthening and reinventing town centres and details the retail hierarchy of the county and future retail needs.

- 3.2.10 Chapter 8 Tourism. This chapter identifies the main tourism assets and attractions within the county and includes policies for the development of the tourism sector, including marine leisure and walking and cycling. The chapter also focuses on rural tourism and the development of tourism facilities and tourism accommodation.
- 3.2.11 Chapter 9 Energy and Digital Economy. This chapter sets out policies aimed at ensuring that sufficient energy and related infrastructure is available to meet the existing and future needs of the county, recognising the importance of exploiting the renewable energy resources of the county. Chapter includes specific policies on renewable energy development including wind.
- 3.2.12 Chapter 10 Transport and Mobility. Transport policies seek to manage overall transport demand and provide better linkages between homes, schools, employment and other destinations. Chapter also focuses on promoting and facilitating more walking and cycling within communities and includes a new approach to car parking standards.
- 3.2.13 Chapter 11 Water Services and Waste. This chapter includes an assessment of water services capacity within the main settlements and seeks to ensure the delivery of the infrastructure required to meet the future population targets and support continued economic development of the county. Chapter also details the approach to flood risk management and sets out policy in relation to the management of wastes within the County.
- 3.2.14 Chapter 12 Heritage. This chapter deals with the protection of natural, architectural, archaeological and cultural heritage.
- 3.2.15 Chapter 13 Green Infrastructure and Environment. This chapter sets the scene for the development of a green infrastructure strategy for the county to identify, protect, manage and develop green infrastructure resources. Chapter also set out the framework for protecting the most sensitive landscape areas of the County, scenic views, water and air quality.
- 3.2.16 Chapter 14 Zoning and Land Use. This chapter provides clear guidance on how to manage the appropriate land-uses on zoned land within the County including the management of uses within transitional zones, dealing with non-conforming uses and encouraging the re-use of brownfield land. It also outlines the Part V requirements and the approach to development within Seveso consultation zones.
- 3.2.17 Chapter 15 Putting This Plan Into Practise. This chapter assigns responsibility for the implementation of the Plan's policies to various agencies including the Local Authority. It also sets out the expected timeframes for the delivery of physical and social infrastructure, including the assignment of Plan priorities and funding streams necessary to secure key development objectives. It also outlines the approach to monitoring and how the Plan will inform lower tiers Plans within it's functional area.

3.3 Description of the Receiving Environment

3.3.1 The draft County Development Plan covers Cork County excluding the administrative area of the City. The County hosts a diverse range of ecosystem types, including marine, freshwater and terrestrial ecosystems, reflecting its geographical position on the southern coast of the country, its geology which is dominated by sandstone ridges and limestone valley floors, and the influence of the people who have settled here. The county supports thirty sites which have been designated, or proposed for designation as Special Areas of Conservation under the Habitats Directive, and a further ten sites which have been designated as Special Protection Areas under the Birds Directive. This report focuses on these sites and on sites occurring in adjacent counties within 15km of the Co. Cork border. A total of ten SAC's, and two SPA's that are located within 15km of Co. Cork have been identified for assessment in this report. These are shown in Figure 1.

3.3.2 The county also supports over one hundred proposed Natural Heritage Areas and eight Natural Heritage Areas, which are proposed to be designated under the Wildlife (Amendment) Act 2000. These sites, and other areas or habitat types which have been identified to be of high biodiversity importance are dealt with in the Environmental Report which accompanies the draft County Development Plan.

3.3.3 Table 1 sets out the Natura 2000 sites which are subject to screening in this report. It includes all Natura 2000 sites within the plan boundary area, and all Natura 2000 sites within 15km of the plan boundary. The habitats and species for which these sites are designated are also listed in Table 1. Figure 1 shows the locations of these sites in relation to the plan area. The potential for Natura 2000 sites that are >15km from the plan boundary area to be affected by policies set out in the draft plan was also considered. This could include sites which are hydrologically connected to watercourses or water bodies within the plan boundary area. No such sites were identified.

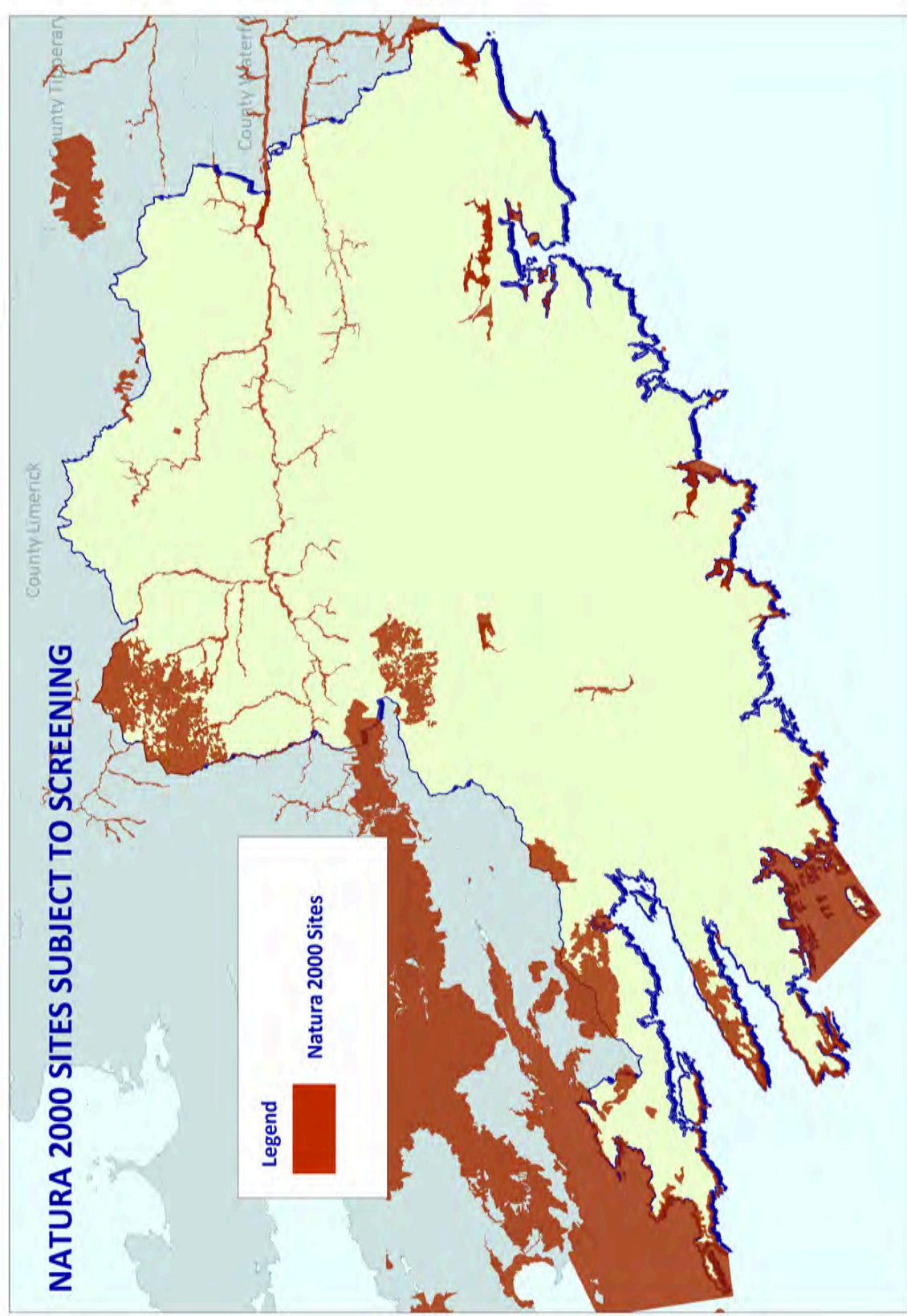


Figure 1: Natura 2000 Sites in Co. Cork and within 15km of Co. Cork.

Table 1: Natura 2000 Sites In Co. Cork and Within 15km of Co. Cork

Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
0077	Ballymacoda (Clonpriest and Pillmore) SAC	Estuaries; Mudflats and sandflats not covered by seawater at low tide; <i>Salicornia</i> and other annuals colonising mud and sand; Atlantic salt meadows	This site is also designated as a Special Protection Area. It is an important site for coastal and estuarine habitats as well as wintering wetland bird species. Ballymacoda (Clonpriest and Pillmore) SAC Site Data	Maintain or restore a high standard of water quality in discharging rivers and transitional coastal zones in bay area; Prevent direct loss of estuarine habitats within the SAC; Prevent drainage of wetland habitats; Prevent contamination or deterioration of estuarine habitats.
0090	Glengarriff Harbour and Woodland SAC	Old sessile Oak Woodlands with <i>Ilex</i> and <i>Blechnum</i> ; Alluvial forest with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> . Kerry slug; Lesser horseshoe bat; Otter; Common (Harbour) seal	This is a diverse site which supports woodland, upland, freshwater and coastal habitats and species. Glengarriff Harbour and Woodland SAC Site Data	Maintain or restore a high standard of water of water quality in discharging rivers and transitional coastal zones in harbour area; Prevent direct loss of estuarine, woodland and upland habitats within SAC;

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Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
0091	Clonakilty Bay SAC	Mudflats and sandflats not covered by seawater at low tide; Annual vegetation of drift lines, Embryonic shifting dunes; Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes); Fixed coastal dunes with herbaceous vegetation (grey dunes); Atlantic decalcified fixed dunes (Calluno-Ulicetea)	<p>This coastal site supports a range of coastal and estuarine habitats. It supports an extensive wetland with a diverse range of habitats. It overlaps with the Clonakilty Bay SPA. It is an important site for wintering wetland bird species.</p> <p>Clonakilty Bay SAC Site Data</p>	<p>Prevent drainage of wetland habitats;</p> <p>Prevent contamination or deterioration of estuarine habitats;</p> <p>Protect marine mammals from disturbance in particular at haul outs and breeding sites.</p> <p>Maintain / restore a high standard of water quality in discharging rivers and transitional coastal zones in bay area;</p> <p>Prevent direct loss of terrestrial and estuarine habitats within the SAC;</p> <p>Prevent drainage of wetland habitats;</p> <p>Prevent contamination or deterioration of estuarine habitats.</p>

Table 1: Natura 2000 Sites In Co. Cork and Within 15km of Co. Cork

Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
0093	Caha Mountains SAC	Blanket Bog and Active Blanket Bog; Northern Atlantic wet heath with <i>Erica tetralix</i> ; Siliceous rocky slopes with chasmophytic vegetation; <i>Alpine and Boreal</i> heath; Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoëto-Nanojuncetea; Killarney fern; Kerry slug	This upland site supports rare plant species and number of upland bird species of conservation value. Caha Mountains SAC Site Data	Prevent direct loss of upland habitats within the SAC; Prevent drainage of upland habitats within SAC; Regulate visitor access / human use with potential to cause path erosion on upland habitats within SAC.
0097	Lough Hyne Nature Reserve & Environs SAC	Large shallow inlets and bays; Reefs; Submerged sea caves	This coastal marine site supports a range of rare marine plant and animal species. The terrestrial portion of the site is also diverse with woodland, marsh and heath habitats and associated plant and animal species. Lough Hyne Nature Reserve & Environs SAC Site Data	Maintain / restore a high standard of water quality in discharging rivers and streams and transitional coastal zones in lough area; Prevent direct loss marine habitats within the SAC; Prevent contamination or deterioration of marine habitats.

Table 1: Natura 2000 Sites In Co. Cork and Within 15km of Co. Cork

Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
0101	Roaringwater Bay & Islands SAC	Large shallow inlets and bays; Reefs; Vegetated sea cliffs of the Atlantic and Baltic coasts; European dry heaths; Submerged or partially submerged sea caves; Harbour porpoise; Otter; Grey seal	<p>This coastal marine site supports a diversity of marine and terrestrial habitats. It is notable for the presence of a number of rare plant species and also supports important sea bird colonies.</p> <p>Roaringwater Bay & Islands SAC Site Data</p>	<p>Maintain or restore a high standard of water of water quality in discharging rivers and transitional coastal zones in harbour area;</p> <p>Prevent direct loss of terrestrial and estuarine habitats within the SAC;</p> <p>Prevent drainage of wetland habitats;</p> <p>Prevent contamination or deterioration of marine habitats;</p> <p>Protect marine mammals from disturbance in particular at haul outs and breeding sites;</p> <p>Regulate visitor access / human use with potential to cause path erosion on upland habitats within SAC.</p>

Table 1: Natura 2000 Sites In Co. Cork and Within 15km of Co. Cork

Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
0102	Sheep's Head Head SAC	Northern Atlantic wet heaths with <i>Erica tetralix</i> ; European dry heaths; Kerry slug	This coastal heathy headland supports the rare and legally protected plant species Pale Dog-violet and Spotted Rock-rose. It also has a small sea breeding seabird population and overlaps with the Seven Heads to Toe Head SPA Sheep's Head to Toe Head SAC Site Data	Prevent direct loss of terrestrial habitats within the SAC; Prevent drainage of wetland habitats; Regulate visitor access / human use with potential to cause path erosion on heathland habitats within SAC.
0106	St. Gobnet's Wood SAC	Old Sessile Oak Woodlands with <i>Ilex</i> and <i>Blechnum</i> ; Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae)	This woodland is a good example of a native woodland typical of the south-west. It contains old oak woodlands and supports rich herb and bryophyte communities. The Sullane River which runs through the woodland supports a population of Salmon and a population of Freshwater Pearl Mussel. St. Gobnet's Wood SAC Site Data	Prevent direct loss of woodland habitats within the SAC; Maintain open channels to allow the free passage of fish in freshwater habitats; Maintain a high standard of water of water quality Sullane River.

Table 1: Natura 2000 Sites In Co. Cork and Within 15km of Co. Cork

Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
0108	The Gearagh SAC	Water courses of plain to montane levels with the <i>Ranunculus fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation; Old sessile oak woodlands with <i>Ilex</i> and <i>Blechnum</i> ; Alluvial forest with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> ; Otter	This is an internationally important wetland site which is designated as a RAMSAR site as well as an SPA. It is the only extensive alluvial woodland in Ireland or Britain, and supports rare plants as well as internationally important numbers of a variety of species of wetland birds. The Gearagh SAC Site Data	Maintain or restore a high standard of water of water quality in watercourses; Prevent direct loss of terrestrial and freshwater habitats within the SAC; Prevent drainage of wetland habitats; Prevent disturbance to Otter or Otter habitat; Prevent contamination or deterioration of terrestrial and freshwater habitats.
0109	Three Castle Head to Mizen Head SAC	Vegetated sea cliffs of the Atlantic and Baltic coasts; European dry heaths	This SAC has two coastal headlands which supports heathy habitats and sea cliffs. It supports two vascular plant species listed in the Red Data Book, Spotted Rock-rose and Pale Dog-violet. The site also supports wetland habitats and overlaps with the Sheeps Head to Toe Head SPA. Three Castle Head to Mizen Head SAC Site Data	Prevent direct loss of terrestrial habitats within the SAC; Prevent drainage of wetland habitats; Regulate visitor access /

Table 1: Natura 2000 Sites In Co. Cork and Within 15km of Co. Cork

Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
0353	Old Domestic Buildings, Dromore SAC	Lesser horseshoe bat		human use with potential to cause path erosion on heathland habitats within SAC.
			This SAC is in Co. Kerry. It consists of a large stone building situated in Dromore Wood. It is an important hibernation site of the Lesser Horseshoe Bat. Old Domestic Buildings, Dromore SAC Site Data	Prevent disturbance to roost site; Protect surrounding woodland habitat.
0364	Kilgarvan Ice House SAC	Lesser horseshoe bat	This SAC is in Co. Kerry. The site contains three buildings and also covers an area of woodland which is designated Lesser Horseshoe Bats. The ice-house is one of the largest hibernating sites for this species in Europe, while the two other buildings within the SAC serve as summer maternity roosts for this species. Kilgarvan Ice House SAC Site Data	Prevent disturbance to roost site; Protect surrounding woodland habitat.
0365	Killarney National Park, Magillicuddy Reeks and Caragh River Catchment SAC	Depressions on peat substrates of the Rhynchosporion; Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae); Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletalia uniflorae and/or of the Isoëto-Nanojunceteta ;	This is a very large SAC, most of which is located in Co. Kerry. The eastern most portion of this SAC in the Paps Mountain range is within Co. Cork. This portion of the site supports the largest mountain Blanket Bog site in the South West at Caherbarnagh, and supports upland peatland and freshwater habitats including	Maintain or restore a high standard of water of water quality in surface waters in SAC;

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Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
		<p>Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation; European dry heaths; <i>Juniperus communis</i> formations on heaths or calcareous grasslands; Calaminarian grasslands of <i>Violetalia calaminariae</i>; <i>Molinia</i> meadows on calcareous, peaty or clayey-silt laden soils; Blanket bog (*Active only); Old sessile oak woodlands with <i>Ilex</i> and <i>Blechnum</i>; Alpine and Boreal heaths; Northern Atlantic wet heath with <i>Erica tetralix</i>; Twaitte shad; Killarney fern; Slender naiad; Kerry slug; Marsh Fritillary; Lesser horseshoe bat; Sea lamprey; Salmon; River lamprey; Freshwater pearl mussel; Otter.</p>	<p>upland streams and rivers as well as a number of lakes including Lough Murtagh, Gortavehy Lough and Kippagh Lough.</p> <p>Killarney National Park, Magillicuddy Reeks and Caragh River Catchment SAC Site Data</p>	<p>Maintain stable hydrological regime in surface waters in SAC;</p> <p>Maintain open channels to allow the free passage of fish in freshwater habitats;</p> <p>Prevent direct loss of peatland, woodland and freshwater habitats within SAC;</p> <p>Prevent drainage of wetland habitats;</p> <p>Prevent contamination or deterioration of freshwater habitats in SAC;</p> <p>Prevent disturbance to Otter or Otter habitat.</p> <p>Prevent disturbance to bat roosts.</p>

Table 1: Natura 2000 Sites In Co. Cork and Within 15km of Co. Cork

Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
0646	Galtee Mountains SAC	European dry heaths, Alpine and Boreal heaths, Species-rich <i>Nardus</i> grasslands, on siliceous substrates in mountain areas, Blanket bog (*active only), Calcareous rocky slopes with chasmophytic vegetation, Siliceous rocky slopes with chasmophytic vegetation	This SAC is in Co's Limerick and Tipperary. This is a large upland site which supports heath and other upland habitats, as well as arctic-alpine plant communities including some rare and protected plant species. The site is also important for a number of upland bird species including Peregrine Falcon. Galtee Mountains SAC Site Data	Prevent direct loss of upland habitats within the SAC; Prevent drainage of upland habitats within SAC; Regulate visitor access / human use with potential to cause path erosion on upland habitats within SAC.
1040	Barley Cove to Ballyrisode Point SAC	Mudflats and sandflats not covered by seawater at low tide; Perennial vegetation of stony banks; <i>Salicornia</i> and other annuals colonising mud and sand; Atlantic salt meadows; Mediterranean salt meadows; Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes). Fixed coastal dunes with herbaceous vegetation (grey dunes); European dry heaths	This site is situated on the Mizen Peninsula. It is a coastal site, important for estuarine habitats, dune and heathy habitats. It supports rare plants including Sea Kale, Hairy Bird's-foot-trefoil, Lanceolate Spleenwort, Pale Dog-violet, Green-winged Orchid, Bird's-foot and Spotted Rock-rose. It is also an important site for Cough, and overlaps with the Sheeps Head to Toe Head SPA. Barley Cove to Ballyrisode Point SAC Site Data	Maintain or restore a high standard of water of water quality in discharging rivers and transitional coastal zones; Prevent direct loss of terrestrial and estuarine habitats within the SAC; Prevent drainage of wetland habitats; Prevent contamination or deterioration of marine habitats which could be

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Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
1043	Cleanderry Wood SAC	Northern Atlantic wet heaths with <i>Erica tetralix</i> ; European dry heaths; Old sessile oak woodlands with <i>Ilex</i> and <i>Blechnum</i> ; Killarney fern	<p>This site is located on the western side of the Beara peninsula. It supports woodland and heath habitats, and also includes Derryvegal Lough. The site also supports the protected species Killarney Fern. It is of exceptional value as it contains no introduced species, and for the proliferation of moisture loving plant species that occur in the woodland.</p> <p>Cleanderry Wood SAC Site Data</p>	<p>caused by certain activities permitted in intertidal/marine or coastal areas;</p> <p>Regulate visitor access / human use with potential to cause path erosion on heathland habitats within SAC.</p> <p>Prevent direct loss of woodland habitat within the SAC;</p> <p>Prevent drainage of wetland habitats;</p> <p>Regulate visitor access / human use with potential to cause path erosion on heathland habitats within SAC.</p>

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Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
1058	Great Island Channel SAC	Estuaries; Mudflats and sandflats not covered by seawater at low tide; Spartina swards; Atlantic salt meadows.	<p>This site centres on the North Channel of Cork Harbour. It is of conservation importance for its estuarine habitats. It overlaps with the Cork Harbour SPA, and is a site of international importance based on the large numbers and variety of wintering birds which are dependent upon it.</p> <p>Great Island Channel SAC Site Data</p>	<p>Maintain/restore a high standard of water quality in discharging rivers and transitional coastal zones within Cork Harbour;</p> <p>Prevent direct loss of estuarine habitats within the SAC;</p> <p>Prevent drainage of wetland habitats;</p> <p>Protect estuarine habitats from risk of toxic contamination arising from industrial and port related activities common in the harbour area.</p>
1061	Kilkeran Lake and Castlefreke Dunes SAC	Coastal lagoons; Embryonic shifting dunes; Shifting dunes along with shorelines with <i>Ammophila arenaria</i> (white dunes); Fixed coastal dunes with herbaceous vegetation (grey dunes).	<p>This site which is west of Clonakilty, supports good examples of a variety of dune habitat types. It also supports wetland habitats including freshwater marsh, fen and swamp, as well as Kilkeran Lake itself which is a natural sedimentary lagoon. It has rare plants including Sharp-leaved Fluellen. The lake supports low numbers of waterfowl as well as breeding ducks and swans.</p>	<p>Maintain /restore a high standard of water quality in lagoon and in waters discharging to lagoon;</p> <p>Prevent direct loss of coastal and wetland habitats within</p>

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Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
1070	Myross Wood SAC	Killarney fern	<p>Kilkeran Lake and Castlefreke Dunes SAC Site Data</p> <p>This is a small site near Leap, comprising mixed woodland habitat. It has a diverse ground flora, and is of particular importance for its presence of the Annex II species Killarney Fern.</p> <p>Myross Wood SAC Site Data</p>	<p>the SAC;</p> <p>Prevent contamination of wetland habitats;</p> <p>Prevent drainage of wetland habitats;</p> <p>Prevent disturbance to birds;</p> <p>Regulate visitor use/human access to coastal habitats.</p> <p>Prevent direct loss of woodland habitat within the SAC;</p> <p>Prevent drainage of wetland habitats;</p> <p>Regulate visitor access / human use within SAC.</p>
1230	Courtmacsherry Estuary SAC	Estuaries; Mudflats and sandflats not covered by seawater at low tide; Annual vegetation of drift lines; Perennial vegetation of stony banks; <i>Salicornia</i> and other annuals colonising muds and sand; Atlantic salt meadows; Mediterranean salt meadows; Embryonic shifting dunes; Shifting dunes along the shoreline with <i>Ammophila</i>	<p>This site supports estuarine habitats including extensive mudflats and saltmarsh, as well as dune habitat types. The rare plant Sea-kale occurs within the site. This SAC overlaps with Courtmacsherry Estuary SPA, and is an important site for wintering waterfowl.</p>	<p>Maintain/restore a high standard of water of water quality in discharging rivers and transitional coastal zones in harbour area;</p>

Table 1: Natura 2000 Sites In Co. Cork and Within 15km of Co. Cork

Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
1547	Castletownshend SAC	<i>arenaria</i> (white dunes); Fixed coastal dunes with herbaceous vegetation (grey dunes). Killarney fern.	Courtmacsherry Estuary SAC Site Data This is mixed woodland site near Castletownshend, which is of conservation importance for its population of Killarney Fern. Castletownshend SAC Site Data	Prevent direct loss of coastal and estuarine habitats within the SAC; Prevent drainage of wetland habitats; Prevent contamination or deterioration of marine habitats; Regulate visitor access / human use with potential to cause path erosion on heathland and dune habitats within SAC. Prevent direct loss of woodland habitat within the SAC; Prevent drainage of wetland habitats; Regulate visitor access / human use within SAC.

Table 1: Natura 2000 Sites In Co. Cork and Within 15km of Co. Cork

Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
1873	Derryclogher (Knockboy) Bog SAC	Blanket Bog (*Active) only	<p>This is an upland site whose main conservation interest is intact active mountain blanket bog. Other habitats that occur on site include heath and grassland habitats, upland streams and exposed rock.</p> <p>Derryclogher Bog Site Data</p>	<p>Prevent direct loss of upland habitats within the SAC;</p> <p>Prevent drainage of upland habitats within SAC;</p> <p>Regulate visitor access / human use with potential to cause path erosion on upland habitats within SAC.</p>
1879	Glanmore Bog SAC	Oligotrophic Waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>); Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation; Northern Atlantic wet heaths with <i>Erica tetralix</i> ; Blanket bog (*active) only; Freshwater pearl mussel; Killarney fern.	<p>This diverse site on the Beara Peninsula, supports a range of upland peaty habitats and freshwater habitats and species of very high conservation importance. In addition to its qualifying features it supports breeding Chough and number of other upland bird species, as well as very good diversity of plant species.</p> <p>Glanmore Bog SAC Site Data</p>	<p>Maintain/restore a high standard of water of water quality in surface waters in SAC;</p> <p>Maintain stable hydrological regime in surface waters in SAC;</p> <p>Maintain open channels to allow the free passage of fish in freshwater habitats;</p> <p>Prevent direct loss of peatland or freshwater habitats within SAC;</p>

Table 1: Natura 2000 Sites In Co. Cork and Within 15km of Co. Cork

Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
1881	Maulagowna Bog SAC	Blanket bog (*active only)	<p>This upland site is located within Co. Kerry in the Caha Mountains. It supports intact active Blanket Bog, as well Cumber Lough. The Annex I (Birds Directive) species, Chough breeds in this site.</p> <p>Maulagowna Bog SAC Site Data</p>	<p>Prevent drainage of wetland habitats;</p> <p>Prevent contamination or other deterioration of freshwater habitats in SAC;</p> <p>Regulate visitor access / human use with potential to cause path erosion on upland habitats within SAC.</p> <p>Prevent direct loss of upland habitats within the SAC;</p> <p>Prevent drainage of upland habitats within SAC;</p> <p>Regulate visitor access / human use with potential to cause path erosion on upland habitats within SAC.</p>

Table 1: Natura 2000 Sites In Co. Cork and Within 15km of Co. Cork

Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
1890	Mullaghanish Bog SAC	Blanket Bog (*active only)	This upland site is located on the Cork Kerry border and is centred on Mullaghanish Mountain near Millstreet. It supports intact Blanket Bog habitat. Mullaghanish Bog SAC Site Data	Prevent direct loss of upland habitats within the SAC; Prevent drainage of upland habitats within SAC; Regulate visitor access / human use with potential to cause path erosion on upland habitats within SAC.
2036	Ballyhoura Mountains SAC	Northern Atlantic wet heaths with <i>Erica tetralix</i> ; European dry heaths; Blanket bog (*active only)	Situated on the Limerick Cork border, this SAC supports upland peaty habitats including heath and blanket bog. It is of note for upland bird species including Peregrine Falcon and Hen Harrier. Ballyhoura Mountains SAC Site Data	Prevent direct loss of upland habitats within the SAC; Prevent drainage of upland habitats within SAC; Regulate visitor access / human use with potential to cause path erosion on upland habitats within SAC.
2037	Carrigeenamronety Hill SAC	Northern Atlantic wet heaths with <i>Erica tetralix</i> ; Killarney fern	This upland site is situated on the Limerick Cork border. It supports heath and <i>Molinia</i> grassland habitats, and is of primary importance for its population of Killarney Fern. Carrigeenamronety Hill SAC Site Data	Prevent direct loss of upland habitats within the SAC; Prevent drainage of upland habitats within SAC;

Table 1: Natura 2000 Sites In Co. Cork and Within 15km of Co. Cork

Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
2041	Old Domestic Building, Curraglass Wood SAC	Lesser horseshoe bat	This site consists of a derelict building in Curraglass Wood in Co. Kerry, which is used as a nursery site by Lesser Horseshoe Bats. The surrounding woodland provides important foraging habitat for this species. Old Domestic Building, Curraglass Wood SAC Site Data	Regulate visitor access / human use with potential to cause path erosion on upland habitats within SAC. Prevent disturbance to roost site; Protect surrounding woodland habitat.
2123	Ardmore Head SAC	Vegetated sea cliffs of the Atlantic and Baltic coasts; European dry heaths	This is a small headland east of Ardmore Co. Waterford. It is of conservation importance for its coastal heath habitat, and for the range of seabirds that breed here. Ardmore Head SAC Site Data	Prevent direct loss of terrestrial habitats within the SAC; Prevent drainage of wetland habitats; Regulate visitor access / human use with potential to cause path erosion on heathland habitats within SAC.

Table 1: Natura 2000 Sites In Co. Cork and Within 15km of Co. Cork

Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
2137	Lower River Suir SAC	Mediterranean salt meadows (<i>Juncetalia maritimi</i>), Water courses of plain to montane levels with the the <i>Ranunculus fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation; Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels; Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles; Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus</i> (<i>Alno-Padion</i> <i>Alnion incanae</i> , <i>Salicion albae</i>); <i>Taxus baccata</i> woods of the British Isles; Freshwater pearl mussel; White-clawed crayfish; Sea lamprey; Brook lamprey; River lamprey; Allis shad; Twaite shad; Salmon; Otter	This is a large freshwater site which is located in Co's Kilkenny, Tipperary and Waterford. It supports a wide range of freshwater and terrestrial habitats as well as coastal and estuarine habitats. It also supports a number of protected plant species, and is important for wintering waterfowl and a range of fish and mammal species. Lower River Suir SAC Site Data	Maintain/restore a high standard of water quality in surface waters in SAC; Maintain stable hydrological regime in surface waters in SAC; Maintain open channels to allow the free passage of fish in freshwater habitats; Prevent direct loss of freshwater habitats within SAC; Prevent drainage of wetland habitats; Prevent contamination or other deterioration of freshwater habitats in SAC.
2158	Kenmare River SAC	Large shallow inlets and bays; Reefs; Perennial vegetation of stony banks; Vegetated sea cliffs of the Atlantic and Baltic coasts; Atlantic salt meadows; Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes); Fixed dunes with herbaceous vegetation (grey dunes);	This is a large coastal site which is located in Co's Cork and Kerry. It is of special importance for its estuarine and coastal habitats and species, some of which are very rare and known only from this area in Ireland. It is also of high importance for the occurrence of a very rare habitat type (Calamarianian	Maintain or restore a high standard of water of water quality in discharging rivers and transitional coastal zones in harbour area;

Table 1: Natura 2000 Sites In Co. Cork and Within 15km of Co. Cork

Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
		European dry heaths; Calaminarian grassland of the <i>Violetalia calaminariae</i> ; Submerged or partially submerged sea caves; Whorl snail; Lesser horseshoe bat; Otter; Common (harbour) seal.	grassland) associated with old mine works at Allihies. This grassland is the only Irish site for a number of exceptionally rare lichen species. The bay supports a breeding population of Arctic/Common Tern, and overlaps with the Beara Peninsula SPA which is designated for a breeding population of Chough. Kenmare River SAC Site Data	Prevent direct loss of habitat within SAC; Prevent drainage of wetland habitats; Prevent contamination or deterioration of wetland habitats; Protect marine mammals from disturbance in particular at haul outs and breeding sites; Prevent disturbance to Otter or their breeding sites.
2165	Lower River Shannon SAC	Large shallow inlets and bays; Estuaries; <i>Salicornia</i> and other annuals colonising mud and sand; Vegetated sea cliffs of the Atlantic and Baltic coasts; Coastal lagoons; Mudflats and sandflats not covered by seawater at low tide; Atlantic salt meadows; Sandbanks (slightly covered by seawater at all times); Reefs; Perennial vegetation	This is a very extensive SAC which is located primarily in Co. Limerick. However, the upper catchment of the River Feale which forms part of this large SAC is located in North West Co. Cork. Lower River Shannon SAC Site Data	Maintain or restore a high standard of water of water quality in surface waters in SAC; Maintain open channels to allow the free passage of fish

Table 1: Natura 2000 Sites In Co. Cork and Within 15km of Co. Cork

Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
		<p>of stony banks; Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-batrachion vegetation; <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils; Alluvial forest with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i>; River lamprey; Brook lamprey; Sea lamprey; Atlantic salmon; Freshwater pearl mussel; Bottle-nosed dolphin; Otter</p>		<p>in freshwater habitats;</p> <p>Maintain stable hydrological regime in surface waters in SAC;</p> <p>Prevent direct loss of freshwater habitats within SAC;</p> <p>Prevent drainage of wetland habitats;</p> <p>Prevent contamination or other deterioration of freshwater habitats in SAC;</p> <p>Prevent disturbance to marine mammals, particularly at haul outs and breeding sites;</p> <p>Prevent disturbance to Otter and Otter habitat.</p>

Table 1: Natura 2000 Sites In Co. Cork and Within 15km of Co. Cork

Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
2170	Blackwater River (Cork/Waterford) SAC	Mudflats and sandflats not covered by seawater at low tide; Perennial vegetation of stony banks; <i>Salicornia</i> and other annuals colonising mud and sand; Atlantic salt meadows; Mediterranean salt meadows; Water courses of plain to montane levels with the <i>Ranunculus fluitantis</i> and <i>Callitriche-batrachion</i> vegetation; Alluvial forest with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> ; Old sessile oak woodlands with <i>Ilex</i> and <i>Blechnum</i> ; <i>Taxus baccata</i> woods. Freshwater pearl mussel; White-clawed crayfish; Sea lamprey; Brook lamprey; River lamprey; Twaite shad; Atlantic Salmon; Otter	This is a very large Special Area of Conservation which extends from the western to the eastern boundaries of the north of the Cork. It has been designated for the conservation of a range of freshwater, terrestrial (woodland) and coastal and estuarine habitats and species. It overlaps with two Special Protection Areas, the Blackwater Callows downstream of Fermoy, and the Blackwater Estuary. It supports three protected plant species, Starved Wood Sedge, Killarney Fern and Pennyroyal as well as other species listed in the Irish Red Data Book, Bird's –nest Orchid, Golden Dock and Bird Cherry, as well as many native Irish animal species including mammals, birds and amphibians. Blackwater River SAC Site Data	Restore a high standard of water of water quality in surface waters in SAC; Maintain open channels to allow the free passage of fish in freshwater habitats; Maintain stable hydrological regime in surface waters in SAC; Prevent direct loss of freshwater habitats within SAC; Prevent drainage of wetland habitats; Prevent contamination or other deterioration of freshwater habitats in SAC; Prevent disturbance to Otter and Otter habitat.

Table 1: Natura 2000 Sites In Co. Cork and Within 15km of Co. Cork

Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
2171	Bandon River SAC	Water courses of plain to montane levels with the <i>Ranunculus fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation; Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-padion, Alnion incanae, Salicion albae); Freshwater pearl mussel; Brook lamprey.	This site consists of adjoining stretches of the upper Bandon and Caha rivers. It is designated for its examples of Alluvial woodland, and Floating River vegetation habitat types, as well as a range of freshwater species, including the Freshwater Pearl Mussel. In addition to the qualifying features, some very rare, and some protected plant species have also been recorded from this site. The river is also important for a range of wetland bird species. Bandon River SAC Site Data	Maintain or restore a high standard of water of water quality in surface waters in SAC; Maintain open channels to allow the free passage of fish in freshwater habitats; Maintain stable hydrological regime in surface waters in SAC; Prevent direct loss of freshwater habitats within SAC; Prevent drainage of wetland habitats; Prevent contamination or other deterioration of freshwater habitats in SAC.
2173	Blackwater River (Kerry) SAC	European dry heaths; Kerry slug, Freshwater pearl mussel; Salmon; Lesser horseshoe bat; Otter	This is a large freshwater SAC located within Co. Kerry. It is designated for a range of freshwater as well as terrestrial habitats and species. The site is also visited by a number of bird species of conservation importance.	Maintain or restore a high standard of water of water quality in surface waters in SAC;

Table 1: Natura 2000 Sites In Co. Cork and Within 15km of Co. Cork

Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
			Blackwater River (Kerry) SAC Site Data	<p>Maintain open channels to allow the free passage of fish in freshwater habitats;</p> <p>Maintain stable hydrological regime in surface waters in SAC;</p> <p>Prevent direct loss of freshwater habitats within SAC;</p> <p>Prevent drainage of wetland habitats;</p> <p>Prevent contamination or other deterioration of freshwater habitats in SAC;</p> <p>Prevent disturbance to Otter and Otter habitat.</p> <p>Prevent disturbance to bat roosts within SAC.</p>

Table 1: Natura 2000 Sites In Co. Cork and Within 15km of Co. Cork

Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
2189	Farranamanagh Lough SAC	Coastal lagoons; Perennial vegetation of stony banks.	This is a relatively small site located on the Sheep's Head peninsula. It is designated for the occurrence of a small shallow lagoon in a natural condition, which supports lagoonal specialist species, and for its fine example of vegetated stony bank habitat. The site also supports heath, wet grassland, freshwater marsh, scrub and woodland habitats. Kerry Slug has been recorded within the site. Farranamanagh Lough SAC Site Data	Maintain or restore a high standard of water of water quality in lagoon and in waters discharging to lagoon; Prevent direct loss of coastal and wetland habitats within the SAC; Prevent contamination of wetland habitats; Prevent drainage of wetland habitats.
2098	Old Domestic Building, Askive Woods SAC	Lesser horseshoe bat	This is a small SAC located in Co. Kerry. It is a breeding site of the Lesser Horseshoe Bat. The site also includes woodland habitat which provides suitable foraging habitats for the population of bats which use this roost site. Old Domestic Building Askive Woods SAC Site Data	Prevent disturbance to bat roost; Protect foraging woodland habitat within SAC.
2257	Moanour Mountain SAC	Species-rich <i>Nardus</i> grasslands on siliceous substrates in mountain areas (and submountain areas, in Continental Europe)	This site is located in Co. Tipperary on the edge of the Galtee Mountains. It is designated as it supports good quality example of an acid grassland habitat type. The site also supports heath habitats. Moanour Mountain SAC Site Data	Prevent direct loss of upland habitats within the SAC; Prevent drainage of upland habitats within SAC;

Table 1: Natura 2000 Sites In Co. Cork and Within 15km of Co. Cork

Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
2280	Dunbeacon Shingle SAC	Perennial vegetation of stony banks	<p>This is a small coastal site located at the head of Dunmanus Bay near Durrus. It is of high conservation importance for the diversity of habitats and species that it supports. These include saltmarsh, wet and dry heath, lake, freshwater marsh, tidal estuarine creeks, scrub woodland and wet woodland. The site provides valuable feeding habitat for several bird species, and is also used by Otter.</p> <p>Dunbeacon Shingle SAC Site Data</p>	<p>Regulate visitor access / human use with potential to cause path erosion on upland habitats within SAC.</p> <p>Prevent direct loss of coastal and wetland habitats within the SAC;</p> <p>Maintain a high standard of water of water quality in freshwater habitats within SAC;</p> <p>Prevent contamination of wetland habitats;</p> <p>Prevent drainage of wetland habitats;</p> <p>Prevent disturbance to birds.</p>
2281	Reen Point Shingle SAC	Perennial vegetation of stony banks.	<p>This is a small site which is designated as it supports a good example of shingle beach habitat. Other habitats which occur on the site include lagoon habitat, saltmarsh, marsh/scrub and heath. These add to the overall value of the SAC.</p> <p>Reen Point Shingle SAC Site Data</p>	<p>Prevent direct loss of coastal and wetland habitats within the SAC;</p> <p>Prevent drainage of wetland habitats;</p>

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Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
2315	Glanlough Woods SAC	Lesser horseshoe bat	This site is located in Co. Kerry. It consists of a derelict farmhouse and adjacent out-buildings. The buildings support an important Lesser horseshoe bat maternity roost. Glanlough Woods SAC Site Data	Prevent disturbance to bat roost; Protect bat foraging habitat.
4021	Old Head of Kinsale SPA	Guillemot and Kittiwake (nationally important numbers)	This is a headland site which has been designated for the protection of important breeding populations of two sea bird species, Guillemot and Kittiwake. Other species that have breed here include Fulmar, Shag, Herring Gull and Razorbill, while Chough and Peregrine Falcon also breed nearby. Old Head of Kinsale SPA Site Data	Prevent disturbance to breeding birds.
4022	Ballycotton Bay SPA	Teal; Ringed Plover; Golden Plover; Grey Plover; Lapwing; Black-tailed Godwit; Bar-tailed Godwit; Curlew; Turnstone; Common Gull; Lesser Black-backed Gull; Wetlands and Waterbirds	This site comprises two sheltered inlets which receive the flows of a number of small rivers. It supports a range of estuarine habitat types including a formerly lagoonal lake, saltmarsh, sand and mudflats and some shallow marine water. It supports an excellent diversity of wintering waterfowl species, and it is well known location for passage waders in the autumn. Ballycotton Bay SPA Site Data	Prevent disturbance to wintering birds; Maintain a high standard of water quality in discharging rivers and transitional coastal zones in bay area; Prevent direct loss of estuarine habitats within the SAC;

Table 1: Natura 2000 Sites In Co. Cork and Within 15km of Co. Cork

Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
4023	Ballymacoda Bay SPA	Wigeon; Teal; Ringed Plover; Golden Plover; Grey Plover; Lapwing; Sanderling; Dunlin; Black-tailed Godwit; Bar-tailed Godwit; Curlew; Redshank; Turnstone; Black-headed Gull; Common Gull; Lesser Black-backed Gull; Wetlands and Waterbirds	This site comprises the estuary of the Womanagh River. It supports mudflats and saltmarsh habitats as well as wet fields, all of which are of importance for a range of wintering bird species that use this site. The site regularly supports >20,000 wintering waterfowl. It has internationally important numbers of Bar-tailed Godwit, supports large flocks of Golden Plover. It has nationally and regionally important numbers of a range of other species including Brent Goose. This site overlaps with Ballymacoda (Clonpriest) Pillmore SAC. Ballymacoda Bay SPA Site Data	Prevent drainage of wetland habitats; Prevent contamination or deterioration of estuarine habitats. Prevent disturbance to wintering birds; Maintain a high standard of water quality in discharging rivers and transitional coastal zones in bay area; Prevent direct loss of estuarine habitats within the SAC; Prevent drainage of wetland habitats; Prevent contamination or deterioration of estuarine habitats.
4028	Blackwater Estuary SPA	Wigeon; Golden plover; Lapwing; Dunlin; Black-tailed godwit; Bar-tailed godwit; Curlew; Redshank; Wetlands and Waterbirds	This is a sheltered south-facing estuary, located on the eastern boundary of Co. Cork. The principle habitat types are mudflats and sandflats, with	Prevent disturbance to wintering birds;

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Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
4030	Cork Harbour SPA	<p>Little Grebe; Great Crested Grebe; Cormorant; Grey Heron; Shelduck; Wigeon; Teal; Pintail; Shoveler; Red-breasted Merganser; Oystercatcher; Golden Plover; Grey Plover; Lapwing; Dunlin; Black-tailed Godwit; Bar-tailed Godwit; Curlew; Redshank; Black-headed Gull; Common Gull; Lesser Black-backed Gull; Common Tern; Wetlands and Water Birds</p>	<p>saltmarsh fringing the estuarine channels. The site is of high ornithological importance for its variety and numbers of wintering waterfowl, in particular its internationally important population of Black-tailed Godwit, as well as a range of other species. This site overlaps with the Blackwater River SAC. Blackwater Estuary SPA Site Data</p>	<p>Maintain or restore a high standard of water quality in discharging rivers and transitional coastal zones in bay area; Prevent direct loss of estuarine habitats within the SAC; Prevent drainage of wetland habitats; Prevent contamination or deterioration of estuarine habitats.</p>
			<p>This is a large site which is made up of a number of discrete sheltered river estuarine systems discharging to Cork Harbour. The primary habitats of the SPA are intertidal mudflats which are of very high importance for the high numbers and variety of wintering waterfowl species which occur here. The SPA also has a nationally important breeding colony of Common Tern. Cork Harbour SPA Site Data</p>	<p>Prevent disturbance to wintering birds; Maintain/restore a high standard of water quality in discharging rivers and transitional coastal zones in bay area;</p>

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Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
4038	Killarney National Park SPA	Merlin, Greenland White-fronted Goose	This site is located within Co. Kerry. This is an upland SPA which has been designated as it supports a wintering population of Greenland White-fronted Goose, and breeding Merlin. Killarney National Park SPA Site Data	Prevent direct loss of estuarine habitats within the SAC; Prevent drainage of wetland habitats; Prevent contamination or deterioration of estuarine habitats.
4066	Bull and the Cow SPA	Storm Petrel; Gannet; Puffin	This site comprises to small rock islands and surrounding water situated off Dursey Head. It is an important site for breeding populations of Storm Petrel, Gannet and Puffin. Other seabirds which also breed on the islands include Gull spp, Cormorant, Kittiwake, Guillemot, Fulmar and Razorbill. Bull and the Cow Rocks SPA Site Data	Prevent disturbance to breeding birds.

Table 1: Natura 2000 Sites In Co. Cork and Within 15km of Co. Cork

Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
4081	Clonakilty Bay SPA	Shelduck; Dunlin; Black-tailed Godwit; Curlew; Wetlands and Waterbirds	<p>This site overlaps with Clonakilty Bay SAC. It is a coastal wetland site which supports a range of coastal / estuarine habitats, brackish grasslands and freshwater marsh. Over 8,000 birds of a variety of species are recorded in the estuary annually.</p> <p>Clonakilty Bay SPA Site Data</p>	<p>Prevent disturbance to wintering birds;</p> <p>Maintain / restore a high standard of water quality in discharging rivers and transitional coastal zones in bay area;</p> <p>Prevent direct loss of estuarine habitats within the SAC;</p> <p>Prevent drainage of wetland habitats;</p> <p>Prevent contamination or deterioration of estuarine habitats.</p>
4094	River Blackwater Callows SPA	Whooper swan; Wigeon; Teal; Black-tailed Godwit; Wetlands and Waterbirds	<p>This wetland site is located downstream from Fermoy, and overlaps with the Blackwater River SAC. It consists of seasonally flooded grassland within the flood plain of the Blackwater. It is of conservation value on account of the occurrence of significant numbers of wintering waterfowl within the site.</p> <p>River Blackwater Callows SPA Site Data</p>	<p>Prevent disturbance to wintering birds;</p> <p>Maintain / restore a high standard of water quality in river;</p> <p>Prevent drainage of wetland habitats.</p>

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Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
4095	Kilcolman Bog SPA	Whooper Swan; Teal; Shoveler; Wetlands and Waterbirds	<p>This site supports quaking fen, lake, reed swamp, freshwater marsh and wet grassland habitat. It is of conservation value due to the occurrence of nationally important numbers of number of species of wintering waterfowl.</p> <p>Kilcolman Bog SPA Site Data</p>	<p>Prevent direct loss of wetland habitat;</p> <p>Prevent disturbance to wintering birds;</p> <p>Prevent drainage of wetland habitats.</p>
4109	The Gearagh SPA	Teal; Wigeon; Mallard; Coot; Wetland and Waterbirds	<p>This is an internationally important wetland site which is designated as a RAMSAR site as well as an SAC. It is the only extensive alluvial woodland in Ireland or Britain, and supports rare plants as well as internationally important numbers of a variety of species of wetland birds.</p> <p>The Gearagh SPA Site Data</p>	<p>Prevent disturbance to birds;</p> <p>Maintain a high standard of water of water quality in watercourses;</p> <p>Prevent direct loss of terrestrial and freshwater habitats within the SAC;</p> <p>Prevent drainage of wetland habitats;</p> <p>Prevent contamination or deterioration of terrestrial and freshwater habitats.</p>

Table 1: Natura 2000 Sites In Co. Cork and Within 15km of Co. Cork

Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
4124	Sovereign Islands SPA	Cormorant	<p>This is a marine site consisting of two small islets at the entrance to Oysterhaven Bay. The islands are important for breeding seabirds, including Cormorant, Great Black-backed Gulls and Herring Gulls.</p> <p>Sovereign Islands SPA Site Data</p>	Prevent disturbance to breeding birds.a
4155	Beara Peninsula SPA	Fulmar; Chough	<p>This SPA includes sea cliffs and the land behind these as well as several upland areas further inland of the coast. A large population of Chough have been recorded from this site. They are breeding both on the sea cliffs and at the old copper mines at Allihies. The SPA protects Chough feeding and breeding sites, as well as areas where birds flock in the wintertime. The site is also important for breeding seabird species including Fulmar, Black Guillemot, Shag, Gull spp and Razorbill.</p> <p>Beara Peninsula SPA Site Data</p>	<p>Prevent disturbance to breeding birds;</p> <p>Maintain Chough feeding, wintering and breeding habitat.</p>
4156	Sheeps Head to Toe Head SPA	Peregrine Falcon; Chough	<p>This site encompasses high coast and sea cliffs on the SW coast including Sheeps Head, Mizen Head, Brow Head and Crookhaven, Baltimore, Tragumna, Gokane Point and Toe Head. It includes sea cliff and land inward from these. It also includes areas of sand dune at Barley Cove and Crookhaven. It includes breeding, feeding and flocking areas for an</p>	<p>Prevent disturbance to breeding birds;</p> <p>Protect breeding habitat for Chough and Peregrine Falcon;</p>

Table 1: Natura 2000 Sites In Co. Cork and Within 15km of Co. Cork

Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
4161	Stacks to Mullaghareirks Mountains, West Limerick Hills and Mountain Eagle SPA	Hen Harrier	<p>important population of Chough. It also supports breeding sea birds and an important population of Peregrine Falcon. It overlaps with five SACs being Lough Hyne Nature Reserve and Environs SAC, Roaringwater Bay and Islands SAC, Barley Cove to Ballyrisode SAC, Three Castle Head to Mizen Head SAC and the Sheeps Head SAC.</p> <p>Sheeps Head to Toe Head SPA Site Data</p>	<p>Protect feeding and flocking sites / habitats used by Chough.</p>
			<p>This is a very large upland site which is located in Cork, Kerry and Limerick. This site supports the largest concentration of breeding Hen Harrier in the country. Short-eared Owl, a species which is very rare in Ireland and also listed on Annex I of the Birds Directive has also been known to breed in this site.</p> <p>Stacks to Mullaghareirks Mountains, West Limerick Hills and Mountain Eagle SPA Site Data</p>	<p>Prevent disturbance to breeding birds;</p> <p>Protect feeding and breeding habitat of Hen Harrier.</p>
4162	Mullaghanish to Musheramore Mountains SPA	Hen Harrier	<p>This is an upland site located near Millstreet. It supports an important population of breeding Hen Harrier. It also supports a breeding population of Merlin, a species that is also listed on Annex I of the Birds Directive.</p> <p>Mullaghanish to Musheramore Mountains SPA Site Data</p>	<p>Prevent disturbance to breeding birds;</p> <p>Protect feeding and breeding habitat of Hen Harrier.</p>

Table 1: Natura 2000 Sites In Co. Cork and Within 15km of Co. Cork

Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
4190	Galley Heat to Duneen Point SPA	Chough	<p>This site is located south-west of Clonakilty. The site encompasses the sea cliffs where Chough and a number of other bird species breed, and land adjacent to the cliffs which provide feeding habitat for Chough. The site is used by breeding seabirds including Fulmar, Gull spp and Cormorant. It is also a breeding site for the Annex I species, Peregrine Falcon.</p> <p>Galley Heat to Duneen Point SPA Site Data</p>	<p>Prevent disturbance to breeding birds;</p> <p>Maintain Chough breeding and feeding habitat within SPA.</p>
4191	Seven Heads SPA	Chough	<p>This site is located south-west of Courtmasherry. It supports an important population of breeding Chough. The SPA includes grassland and heath, freshwater marsh and arable land behind the cliffs which are used as feeding areas by this species. Site also supports breeding seabirds including Fulmar; Gull spp, Cormorant as well as breeding Peregrine Falcon.</p> <p>Seven Heads SPA Site Data</p>	<p>Prevent disturbance to breeding birds;</p> <p>Maintain Chough breeding and feeding habitat within SPA.</p>
4192	Helvick Head to Ballyquin SPA	Cormorant; Peregrine Falcon; Herring Gull; Kittiwake; Chough	<p>This site which runs along the SW coast of Co. Waterford. The site includes sea cliffs which are used by breeding sea birds, and coastal heath behind the cliffs. The site supports a population of Chough, as well as an important breeding seabird population which includes Cormorant, Gull spp., Kittiwake, Razorbill, Fulmar, Shag, Guillemot and Black</p>	<p>Prevent disturbance to breeding birds;</p> <p>Prevent disturbance to breeding birds;</p>

Table 1: Natura 2000 Sites In Co. Cork and Within 15km of Co. Cork

Site Code	Site Name	Qualifying Interests	Features of biodiversity note and links to site data	Key planning requirements to protect / restore site integrity
4219	Courtmacsherry Estuary SPA	Great Northern Diver; Shelduck; Wigeon; Red-breasted Merganser; Golden Plover; Lapwing; Dublin; Black-tailed Godwit; Curlew; Wetlands and Waterbirds	<p>Guillemot. It also supports a population of breeding Peregrine Falcon.</p> <p>Helvick Head to Ballyquin SPA Site Data</p> <p>This is a largely estuarine in nature and consists of the drowned valley of the Argideen and Kilbrittain Rivers. The site overlaps with Courtmacsherry SAC. It is of particular importance for the range and numbers of wintering birds that feed on the wetland habitats of the estuary some of which occur in nationally and internationally important numbers.</p> <p>Courtmacsherry Estuary SPA Site Data</p>	<p>Maintain Chough breeding and feeding habitat within SPA.</p> <p>Prevent disturbance to wintering birds;</p> <p>Maintain /restore a high standard of water quality in discharging rivers and transitional coastal zones in bay area;</p> <p>Prevent direct loss of estuarine habitats within the SAC;</p> <p>Prevent drainage of wetland habitats;</p> <p>Prevent contamination or deterioration of estuarine habitats.</p>

3.4 Screening Assessment

- 3.4.1 The draft County Development Plan was examined to determine whether it could give rise to impacts on any of the Natura 2000 sites listed above. In the first instance, the plan was reviewed to identify policies of the plan which could give rise to:
- o direct impacts on habitats listed on Annex I of the Habitats Directive and for which any site is designated;
 - o reduction in the area of any habitats within any of the sites identified;
 - o direct or indirect damage to the physical quality of the environment (e.g. water quality) within Natura 2000 sites;
 - o serious or ongoing disturbance to species for which any of the above listed Natura 2000 site is selected (e.g. increased noise, illumination, human activity);
 - o direct or indirect damage to the size, characteristics or reproductive ability of populations of species for which any Natura 2000 site is designated;
 - o activities which interfere with mitigation measures put in place for other plans or projects.
- 3.4.2 Particular attention was paid to
- o the Core Strategy in **Chapter 2** of the plan which sets the population targets and strategic aims for each of the four Strategic Planning Areas of the County;
 - o policies contained in **Chapter 4** of the plan which identify a number of categories of rural area types for the County, and sets out settlement policy for these;
 - o policies contained in **Chapter 6** of the Plan relating to economy and employment, particularly those which relate to Cork Harbour;
 - o tourism development policies set out in **Chapter 8** of the plan;
 - o policies set out in **Chapter 9** of the plan, particularly those relating to development of renewable energy resources;
 - o policies set out in **Chapter 10** of the plan, particularly those relating to the development of new roads infrastructure;
 - o policies set out in **Chapter 11** of the plan, particularly those relating to the provision of drinking water, waste water services and the County Waste Management Strategy; and
 - o **Chapter 15** which sets out priorities in terms of delivering infrastructure to facilitate future development within the county.
- 3.4.3 Screening reports for each Natura 2000 site are contained in Appendix A of this plan. The following section contains a summary of the key issues identified during the screening assessment.

3.5 Summary of Key Issues Identified During Screening

3.5.1 The draft County Development Plan targets significant levels of population growth into a number of sensitive catchments in the County including the catchments of a number of Natura 2000 sites. To facilitate this growth, these areas are also targeted for the development of employment opportunities relating to industrial, business and port related enterprises. Those catchments identified to be likely to come under the highest levels of pressure from additional development proposed in the draft plan are the Blackwater River, which hosts three Natura 2000 sites and supports a number of settlements into which significant levels of growth are targeted; Cork Harbour which hosts two Natura 2000 sites, and around which there are a high number of settlements into which significant levels of growth are targeted; and Clonakilty Bay which also hosts two Natura 2000 sites and which is located immediately adjacent to Clonakilty Town which is proposed for designation as a Strategic Employment Centre, and for which a sizeable population increase is planned.

3.5.2 Significant population growth in sensitive catchments will increase pressure on water quality, as a consequence of increased construction activities associated with development of lands to facilitate population growth; increasing levels of discharges of treated waste waters to surface waters from public waste water systems; increasing discharges to groundwater from private waste water treatment systems; and increasing levels of surface water run-off from built up areas.

3.5.3 In order to minimise the potential for such impacts to arise, the draft Plan includes policies which aim to

- prevent development in flood risk zones;
- make it a requirement for new developments to incorporate Sustainable Urban Drainage Systems or other surface water attenuation measures to prevent development giving rise to increased levels of surface water run-off;
- prevent growth taking place within targeted settlements until such time as wastewater treatment facilities are provided to standards necessary to protect water quality; and
- reduce the level of development of one off houses reliant on private waste water treatment systems in all parts of the county, and ensure that those which are permitted in rural areas to be compliant with the Groundwater Protection Plan and EPA license conditions.

3.5.4 Notwithstanding these policies, there is a concern that the relatively high level of growth and development that is proposed within the catchment of the Blackwater River, much of it focused on the designated hub town of Mallow, is likely to interfere with the achievement of one of the conservation objectives which has been set for this SAC, which requires the restoration of the favourable conservation condition of the Freshwater Pearl Mussel within 168km of river channel within the SAC. Having regard to the size of the catchment and the number of settlements which are located along the river, it is questionable as to whether the very high standards of water quality which need

to be achieved to restore conditions favourable for the restoration of a breeding population of Freshwater Pearl Mussel along the river are attainable, even if no additional growth were proposed for the catchment in the draft CDP.

3.5.5 It will be critical that the provision of effective wastewater treatment infrastructure is prioritised, and is provided in advance of progressing development in settlements with insufficient capacity at present, in order to ensure that EPA license standards can be consistently met on an ongoing basis. Higher standards of treatment are likely to be required for treatment plants within this catchment than might be required for plants in other less sensitive catchments. This is in order to protect the river and ensure that water quality standards required to restore the favourable conservation status of Freshwater Pearl Mussel can be met, and to ensure compliance with the Water Framework Directive.

3.5.6 Recommendations are made in this report, that the plan include a commitment to prioritise the delivery of wastewater infrastructure for settlements where deficiencies have been identified within the Blackwater catchment and in the catchments of Cork Harbour and Clonakilty Bay. Priority needs to be given to resolving capacity or other issues with treatment plants, not just in the settlements described in the draft CDP, but in all other settlements within these catchments.

3.5.7 Consultation is currently underway with the Department of Arts, Heritage and the Gaeltacht to agree the parameters of further detailed assessments which will be required to establish whether there is sufficient assimilative capacity in the Blackwater River to absorb the additional growth which is proposed for these catchments, or to explore whether there are other possible solutions to issues arising. In addition, an assimilative capacity assessment will be completed for Clonakilty Bay in house. The results of these consultations and/or assessments, may result in a requirement to further modify the plan at the amendments stage.

3.5.8 Increased provision of drinking water will be required in order to facilitate the population growth targets for the settlements identified in the plan. It is stated in the plan that priority will be placed on maximising returns from current abstractions by reducing water losses along the existing network. This will minimise the requirement to increase levels of abstraction from existing sources, and minimise any requirement to find new drinking water sources. However, new drinking water sources will be required for a number of settlements identified in the plan. Some of these are currently supplied from sources within Natura 2000 sites, or within the catchments of Natura 2000 sites where the retention of stable hydrological processes has been identified to be critical to maintaining their favourable conservation status. It is recommended in this document that caution be applied where new drinking water supplies are sought to be sourced from within the catchments of sensitive Natura 2000 sites, and that such developments should only progress following Environmental Impact and Habitats Directive Assessment, and where it can be shown that new abstractions would not affect water levels in sensitive Natura 2000 sites. Abstraction of surface waters from EU designated rivers or lakes is unlikely to be compatible with the conservation objectives of such sites. It is recommended that this is clearly stated in the plan.

3.5.9 A requirement to upgrade some of the existing County roads infrastructure has been identified in the plan, with key routes identified in terms of priority. Some of these routes are located within, or adjacent to Natura 2000 sites, or will require river or channel crossings with potential to directly affect designated habitats, or give rise to impacts on water quality. It is anticipated that adherence to best environmental practise in relation to planning, design, construction and management of these routes, will mean that most of these can be progressed without having negative impacts on Natura 2000 sites. However, significant impacts on the Cork Harbour SPA, and the Great Island Channel SAC have been identified to be likely to arise in relation to one of the routes prioritised in the plan, the R624 to Cobh, and it is recommended in this report, that this route be omitted until such time as a route and bridge crossing which will not give rise to adverse impacts on the integrity of either the SPA or the SAC has been planned and designed.

3.5.10 The draft County Development Plan supports significant development initiatives within the area of Cork Harbour relating to

- the movement of Port activities to new locations within the harbour;
- the intensification of Port related activities within the Harbour;
- the development of energy production related activities in the Whitegate area;
- the intensification of industrial related activities Strategic Employment Centres around the harbour at Little Island, Ringaskiddy, Whitegate and Carrigtwohill;
- the development or upgrade of roads infrastructure around the Harbour;
- the promotion of marine leisure activities within the Harbour; and
- the development of Greenways around the Harbour area.

3.5.11 Many of these initiatives have the potential to increase human access to estuarine habitats within the harbour to levels which may be unsustainable, having regard in particular to the potential for such development to give rise to disturbance impacts on birds. It is recommended in this report that no further proposals for development of walking routes or cycleways around Cork Harbour, which increase human activity on or adjacent to shoreline habitats within the Cork Harbour SPA be progressed until such time as the overall capacity of the SPA to absorb such development has been assessed. Other recommendations are included in this report to amend certain policies within the plan, to ensure that other development within the area of Cork Harbour is planned and progressed in a manner which prevents adverse impacts on either the Great Island Channel SAC, or on the Cork Harbour SPA.

3.5.12 A number of Special Areas of Conservation are located within an area that has been identified in Chapter 9 Figure 9-2, where large scale wind energy developments are Open to Consideration (St. Gobnet's Wood, Mullaghanish Bog, Bandon River and the Blackwater River). The associated text states that Natura 2000 sites and Natural

Heritage Areas within this area are not generally considered suitable for wind farm developments, and policy ED 3-5 state that large scale wind energy developments in these areas are open to consideration where they can avoid adverse impacts on Natura 2000 sites and Natural Heritage Areas. It is considered that there is a lack of consistency between Figure 9-2 and policy ED 3-5, and that Figure 9-2 as shown currently, could encourage prospective developers to seek to progress large scale wind energy developments within a number of European Sites, and that this position is not compatible with the conservation objectives for any of these SACs (St. Gobnet's Wood, Mullaghanish Bog, Blackwater River and the Bandon River). Recommendations for amendments to clarify policy in relation to this issue are made in chapter 4 below.

3.5.13 One Special Area of Conservation is located partially within an area that has been identified in Chapter 9 Figure 9-2, where large scale wind energy developments are Acceptable in Principle (Lough Hyne). It is considered that this position is not compatible with the conservation objectives for this SAC. Recommendations for amendments to clarify wind energy policy in or affecting Natura 2000 sites are made in chapter 4 below.

3.5.14 A number of Special Protection Areas within the county are located within relatively close proximity to areas where large scale wind energy developments are Acceptable in Principle, or Open to Consideration. The coastal SPAs are designated for species that are vulnerable to impacts from wind turbines, some of which display evidence of avoidance of habitat around turbines at distances of up to 800m from turbines (Drewitt and Langston, 2006). Upland SPAs are designated for a species that displays evidence of habitat avoidance around turbines at distances of up to 500m (Pearce-Higgins et al 2009). It is considered that the current policy could encourage the development of large scale wind energy projects within close proximity to areas sensitive for birds, and could result in habitat avoidance or elevated collision risk to qualifying species for which SPAs are designated. Recommendations for amendments to clarify policy in relation to this issue are made in chapter 4 below.

3.5.15 Some parts of the county which are identified to be within the 'Open to Consideration' zone for large scale wind energy developments, are also located within large scale wind energy developments in sensitive catchments of riverine SACs which require the maintenance of high standards of water quality in order to maintain their favourable conservation status. Recommendations are included in this report for amendments to be made Chapter 9 to highlight this issue, and to seek protect such sites from negative impacts relating to the development of large scale wind energy projects.

3.5.16 There is a strong emphasis within the plan on the development of the tourism industry, and in particular the development of the heritage tourism sector, including the development of walking and cycling routes and facilities, as well as the development of the marine leisure sector. Such developments are likely to have an important contribution to the economy of the County, but could have the potential to increase pressures on certain Natura 2000 sites which may not have the capacity to absorb certain types or scales of development. Recommendations have been made to amend the wording of some of the text in the Tourism chapter, in order to ensure that the policy does not encourage development of tourism initiatives in areas where it could have negative impacts on Natura 2000 sites generally.

Table 2: Summary of Screening Assessment, Completed for Natura 2000 Sites Within and Adjacent to Co. Cork
(for detailed screening, go to Appendix A)

Site Name	Policies Which Could Give Rise To Direct Impacts Causing Habitat Loss	Policies Which Could Give Rise to Indirect Impacts Affecting Habitat Quality	Policies Which Could Cause Disturbance to Qualifying Species	Policies Which Could Cause Reduction In Qualifying Species Richness/Density	Policies Which Could Cause Changes In Indicators Of Conservation Value	Screening Conclusion
0077 Ballymacoda (Clonpriest and Pillmore) SAC	None	None	None	None	None	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP.
0090 Glengarriff Harbour and Woodland SAC	None	None	None	None	None	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP.
0091 Clonakilty Bay SAC	None	Possible	None	None	Possible	Significant population increase and designation of Clonakilty as a Strategic Employment Centre likely to increase pressures on SAC, particularly relating to protection of water quality. Amendments to draft plan recommended (chapter 4).

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0093 Caha Mountains SAC	None	None	None	None	None	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP.
0097 Lough Hyne Nature Reserve & Environs SAC	Possible	None	None	None	None	Chapter 9 Onshore wind energy map identifies part of this SAC within area of county where large scale wind energy developments are acceptable in principle. Amendments recommended to draft plan (see chapter 4).
0101 Roaringwater Bay & Islands SAC	Possible	Possible	Possible	Possible	Possible	Policies promoting economic development RCI 9-2 and RCI 9-3 and tourism development could have the

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0102 Sheep's Head to Toe Head SAC	None	None	None	None	None	potential to increase pressure for development on the inhabited islands of this SAC. Policies relating to development of marine leisure tourism activity have potential to increase disturbance risk to marine mammals. Amendments recommended, see chapter 4.
0106 St. Gobnet's Wood SAC	Possible	Possible	None	None	Possible	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP. Changes recommended to Wind Energy Map recommended, see chapter 4.

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Site Name	Policies Which Could Give Rise To Direct Impacts Causing Habitat Loss	Policies Which Could Give Rise to Indirect Impacts Affecting Habitat Quality	Policies Which Could Cause Disturbance to Qualifying Species	Policies Which Could Cause Reduction In Qualifying Species Richness/Density	Policies Which Could Cause Changes In Indicators Of Conservation Value	Screening Conclusion
0108 The Gearagh SAC	None	None	None	None	None	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP.
0109 Three Castle Head to Mizen Head SAC	None	None	None	None	None	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP.
0353 Old Domestic Buildings, Dromore SAC	None	None	None	None	None	No impacts identified.
0364 Kilgarvan Ice House SAC	None	None	None	None	None	No impacts identified.
0365 Killarney National Park, Magillicuddy Reeks and Caragh River Catchment SAC	None	None	None	None	None	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP.

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(for detailed screening, go to Appendix A)

Site Name	Policies Which Could Give Rise To Direct Impacts Causing Habitat Loss	Policies Which Could Give Rise to Indirect Impacts Affecting Habitat Quality	Policies Which Could Cause Disturbance to Qualifying Species	Policies Which Could Cause Reduction In Qualifying Species Richness/Density	Policies Which Could Cause Changes In Indicators Of Conservation Value	Screening Conclusion
0646 Galtee Mountains SAC	None	None	None	None	None	No impacts identified.
1040 Barley Cove to Ballyrisode Point SAC	None	None	None	None	None	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP.
1043 Cleanderry Wood SAC	None	None	None	None	None	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP.
1058 Great Island Channel SAC	Possible	Possible	None	None	Possible	Potential for impacts identified relating to Port activities, designation of Strategic Employment Centres, Core Strategy, upgrading of roads infrastructure within and around the Harbour, allocation of increased population around Harbour,

Table 2: Summary of Screening Assessment, Completed for Natura 2000 Sites Within and Adjacent to Co. Cork
 (for detailed screening, go to Appendix A)

Site Name	Policies Which Could Give Rise To Direct Impacts Causing Habitat Loss	Policies Which Could Give Rise to Indirect Impacts Affecting Habitat Quality	Policies Which Could Cause Disturbance to Qualifying Species	Policies Which Could Cause Reduction In Qualifying Species Richness/Density	Policies Which Could Cause Changes In Indicators Of Conservation Value	Screening Conclusion
1061 Kilkerran Lake and Castlefreke Dunes SAC	None	None	None	None	None	policies relating to tourism and recreation. Amendments recommended in chapter 4. No impacts identified, subject to implementation of environmental protection policies contained in draft CDP.
1070 Myross Wood SAC	None	None	None	None	None	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP.
1230 Courtmacsherry Estuary SAC	None	None	None	None	None	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP.

Table 2: Summary of Screening Assessment, Completed for Natura 2000 Sites Within and Adjacent to Co. Cork
(for detailed screening, go to Appendix A)

Site Name	Policies Which Could Give Rise To Direct Impacts Causing Habitat Loss	Policies Which Could Give Rise to Indirect Impacts Affecting Habitat Quality	Policies Which Could Cause Disturbance to Qualifying Species	Policies Which Could Cause Reduction In Qualifying Species Richness/Density	Policies Which Could Cause Changes In Indicators Of Conservation Value	Screening Conclusion
1547 Castletownshend SAC	None	None	None	None	None	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP.
1873 Derryclogher (Knockboy) Bog SAC	None	None	None	None	None	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP.
1879 Glanmore Bog SAC	None	None	None	None	None	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP.
1881 Maulagowna Bog SAC	None	None	None	None	None	No impacts identified. No further assessment required.

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(for detailed screening, go to Appendix A)

Site Name	Policies Which Could Give Rise To Direct Impacts Causing Habitat Loss	Policies Which Could Give Rise to Indirect Impacts Affecting Habitat Quality	Policies Which Could Cause Disturbance to Qualifying Species	Policies Which Could Cause Reduction In Qualifying Species Richness/Density	Policies Which Could Cause Changes In Indicators Of Conservation Value	Screening Conclusion
1890 Mullaghanish Bog SAC	Possible	Possible	None	None	Possible	Changes recommended to Wind Energy Map.
2036 Ballyhoura Mountains SAC	None	None	None	None	None	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP.
2037 Carrigeenamronety Hill SAC	None	None	None	None	None	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP.
2041 Old Domestic Building, Curraglass Wood SAC	None	None	None	None	None	No impacts identified.
2123 Ardmore Head SAC	None	None	None	None	None	No impacts identified.
2137 Lower River Suir SAC	None	None	None	None	None	No impacts identified.

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Site Name	Policies Which Could Give Rise To Direct Impacts Causing Habitat Loss	Policies Which Could Give Rise to Indirect Impacts Affecting Habitat Quality	Policies Which Could Cause Disturbance to Qualifying Species	Policies Which Could Cause Reduction In Qualifying Species Richness/Density	Policies Which Could Cause Changes In Indicators Of Conservation Value	Screening Conclusion
2158 Kenmare River SAC	None	None	None	None	None	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP.
2165 Lower River Shannon SAC	None	None	None	None	None	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP.
2170 Blackwater River (Cork/Waterford) SAC	Possible	Possible	None	Possible	Possible	Potential for significant impacts to arise relating in particular to Core Strategy, Wind Energy Strategy, and provision of roads infrastructure. Amendments recommended to chapters 2, 4, 6, 8, 9, 10, 11 and 15 of the plan to deal with impacts identified.

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(for detailed screening, go to Appendix A)

Site Name	Policies Which Could Give Rise To Direct Impacts Causing Habitat Loss	Policies Which Could Give Rise to Indirect Impacts Affecting Habitat Quality	Policies Which Could Cause Disturbance to Qualifying Species	Policies Which Could Cause Reduction In Qualifying Species Richness/Density	Policies Which Could Cause Changes In Indicators Of Conservation Value	Screening Conclusion
2171 Bandon River SAC	Possible	Possible	None	Possible	Possible	Potential impacts identified relating to waste water discharges, and wind energy policy. Amendments recommended to be made to plan re wind energy policy and waste water treatment infrastructure in Dunmanway Town.
2173 Blackwater River (Kerry) SAC	None	None	None	None	None	No impacts identified.
2189 Farranamanagh Lough SAC	None	None	None	None	None	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP.
2098 Old Domestic Building, Askive Woods SAC	None	None	None	None	None	No impacts identified.

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Site Name	Policies Which Could Give Rise To Direct Impacts Causing Habitat Loss	Policies Which Could Give Rise to Indirect Impacts Affecting Habitat Quality	Policies Which Could Cause Disturbance to Qualifying Species	Policies Which Could Cause Reduction In Qualifying Species Richness/Density	Policies Which Could Cause Changes In Indicators Of Conservation Value	Screening Conclusion
2257 Moanour Mountain SAC	None	None	None	None	None	No impacts identified.
2280 Dunbeacon Shingle SAC	None	None	None	None	None	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP.
2281 Reen Point Shingle SAC	None	None	None	None	None	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP.
2315 Glanlough Woods SAC	None	None	None	None	None	No impacts identified. No further assessment required.
4021 Old Head of Kinsale SPA	None	None	None	None	None	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP.

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 (for detailed screening, go to Appendix A)

Site Name	Policies Which Could Give Rise To Direct Impacts Causing Habitat Loss	Policies Which Could Give Rise to Indirect Impacts Affecting Habitat Quality	Policies Which Could Cause Disturbance to Qualifying Species	Policies Which Could Cause Reduction In Qualifying Species Richness/Density	Policies Which Could Cause Changes In Indicators Of Conservation Value	Screening Conclusion
4022 Ballycotton Bay SPA	None	None	None	None	None	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP. No further assessment required.
4023 Ballymacoda Bay SPA	None	None	Possible	None	None	Amendments recommended in chapter 4 re wind energy policy
4028 Blackwater Estuary SPA	None	Possible	Possible	Possible	Possible	Potential impacts identified relating to inadequate treatment of wastewater and tourism policies. Amendments recommended.
4030 Cork Harbour SPA	Possible	Possible	Possible	Possible	Possible	Potential for impacts identified relating to Port activities, designation of Strategic Employment Centres, Core Strategy, upgrading

Table 2: Summary of Screening Assessment, Completed for Natura 2000 Sites Within and Adjacent to Co. Cork
(for detailed screening, go to Appendix A)

Site Name	Policies Which Could Give Rise To Direct Impacts Causing Habitat Loss	Policies Which Could Give Rise to Indirect Impacts Affecting Habitat Quality	Policies Which Could Cause Disturbance to Qualifying Species	Policies Which Could Cause Reduction In Qualifying Species Richness/Density	Policies Which Could Cause Changes In Indicators Of Conservation Value	Screening Conclusion
4038 Killarney National Park SPA	None	None	None	None	None	of roads infrastructure within and around the Harbour, allocation of increased population around Harbour, policies relating to tourism and recreation. Amendments recommended in chapter 4.
4066 Bull and the Cow SPA	None	None	None	None	None	No impacts identified. No further assessment required.
4081 Clonakilty Bay SPA	Possible	Possible	Possible	Possible	Possible	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP. Amendments recommended to draft plan re wind energy policy and provision of waste water infrastructure (see chapter 4).

Table 2: Summary of Screening Assessment, Completed for Natura 2000 Sites Within and Adjacent to Co. Cork
 (for detailed screening, go to Appendix A)

Site Name	Policies Which Could Give Rise To Direct Impacts Causing Habitat Loss	Policies Which Could Give Rise to Indirect Impacts Affecting Habitat Quality	Policies Which Could Cause Disturbance to Qualifying Species	Policies Which Could Cause Reduction In Qualifying Species Richness/Density	Policies Which Could Cause Changes In Indicators Of Conservation Value	Screening Conclusion
4094 River Blackwater Callows SPA	None	None	None	None	None	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP.
4095 Kilcolman Bog SPA	None	None	None	None	None	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP.
4109 The Gearagh SPA	None	None	Possible	None	None	Amendments recommended to draft plan re wind energy policy and provision of waste water infrastructure (see chapter 4).
4124 Sovereign Islands SPA	None	None	None	None	None	No impacts identified, subject to implementation of environmental

Table 2: Summary of Screening Assessment, Completed for Natura 2000 Sites Within and Adjacent to Co. Cork
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Site Name	Policies Which Could Give Rise To Direct Impacts Causing Habitat Loss	Policies Which Could Give Rise to Indirect Impacts Affecting Habitat Quality	Policies Which Could Cause Disturbance to Qualifying Species	Policies Which Could Cause Reduction In Qualifying Species Richness/Density	Policies Which Could Cause Changes In Indicators Of Conservation Value	Screening Conclusion
4155 Beara Peninsula SPA	None	None	None	None	None	protection policies contained in draft CDP. No further assessment required.
4156 Sheeps Head to Toe Head SPA	None	None	None	None	None	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP.
4161 Stacks to Mullaghareirks Mountains, West Limerick Hills and Mountain Eagle SPA	None	None	Possible	None	None	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP. Amendments recommended to draft plan re wind energy policy and provision of waste water infrastructure (see chapter 4).

Table 2: Summary of Screening Assessment, Completed for Natura 2000 Sites Within and Adjacent to Co. Cork
 (for detailed screening, go to Appendix A)

Site Name	Policies Which Could Give Rise To Direct Impacts Causing Habitat Loss	Policies Which Could Give Rise to Indirect Impacts Affecting Habitat Quality	Policies Which Could Cause Disturbance to Qualifying Species	Policies Which Could Cause Reduction In Qualifying Species Richness/Density	Policies Which Could Cause Changes In Indicators Of Conservation Value	Screening Conclusion
4162 Mullaghanish to Musheramore Mountains SPA	None	None	Possible	None	None	Amendments recommended to draft plan re wind energy policy and provision of waste water infrastructure (see chapter 4).
4190 Galley Head to Duneen Point SPA	None	None	None	None	None	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP.
4191 Seven Heads SPA	None	None	None	None	None	No impacts identified, subject to implementation of environmental protection policies contained in draft CDP.

Table 2: Summary of Screening Assessment, Completed for Natura 2000 Sites Within and Adjacent to Co. Cork
 (for detailed screening, go to Appendix A)

Site Name	Policies Which Could Give Rise To Direct Impacts Causing Habitat Loss	Policies Which Could Give Rise to Indirect Impacts Affecting Habitat Quality	Policies Which Could Cause Disturbance to Qualifying Species	Policies Which Could Cause Reduction In Qualifying Species Richness/Density	Policies Which Could Cause Changes In Indicators Of Conservation Value	Screening Conclusion
4192 Helvick Head to Ballyquin SPA	None	None	None	None	None	No impacts identified.
4219 Courtmacsherry Estuary SPA	None	None	Possible	None	None	Amendments recommended to draft plan re wind energy policy and provision of waste water infrastructure (see chapter 4).

3.6 Screening Conclusion

3.6.1 On the basis of the assessment which is documented in this report, it is concluded that the draft County Development Plan could have the potential to give rise or contribute to negative impacts which could be significant on a number of Natura 2000 sites in the County (see Table 2).

3.6.2 These impacts relate primarily to the Natura 2000 sites located along the Blackwater River, those located within Cork Harbour, and those located near Clonakilty. Impacts that are likely to arise are primarily associated with the proposed settlement strategy for the County, which is based largely on the National Spatial Strategy, the South West Regional Planning Guidelines, and the Strategic Development Plan for the Port of Cork, which focuses a significant level of development around Cork Harbour and into towns within the catchment of the Blackwater, and will put increasing pressure on water resources, as well as having the potential to increase pressure for development of land within or adjacent to these sites for recreational or other purposes.

3.6.3 As there is limited scope to change the overall approach in terms of future development of the County, having regard to the fact that this has emanated from higher level plans, recommendations that are included in chapter 4 of this report focus on providing commitments in the plan that prioritisation will be given to the resolution of deficiencies in water and waste water infrastructure within sensitive catchments, and to providing the necessary upgrades to water and wastewater infrastructure, which are of a design standard that can ensure that increased volumes of treated effluent will not cause or contribute to negative impacts on any Natura 2000 site.

3.6.4 Other recommendations are included in chapter 4, particularly relating to development around Cork Harbour, to ensure that full regard is had to the environmental sensitivities of the harbour as plans for redevelopment of Port facilities are progressed, and to ensure that any such development is progressed in compliance with the requirements of the Habitats Directive. It is also recommended that no further development of walkways or cycle routes, or other facilities which increase human use/access to intertidal areas within the Cork Harbour SPA be planned or progressed until such time as the overall carrying capacity of the harbour for this type of development is better understood.

3.6.5 A recommendation has been made to amend the Wind Energy Maps to exclude all Natura sites from areas of the County where the development of large scale wind energy projects will be encouraged, and to include suitable buffers around the Special Protection Areas to ensure that Council policy is clear, and does not encourage the development of such projects in areas which could give rise to impacts on some of the qualifying species for which these sites are designated.

3.6.6 The report includes a recommendation to remove the upgrade of the R624 from the list of infrastructure projects to be prioritised, as all previously identified route options would be likely to give rise to significant negative impacts on both the Cork Harbour SPA and on the Great Island Channel SAC.

3.6.7 The report includes other more general recommendations to ensure that there is recognition in the plan of the proposals for future developments within or near Natura 2000 sites are planned and progressed in a manner that is compatible with the protection of these sites.

Chapter 4 Appropriate Assessment

4.1 The following table identifies the policy areas which have been identified through the preliminary screening process to have the potential to give rise to negative impacts on one or more Natura 2000 sites. It includes proposals for the amendments to be made to the draft County Development Plan, in order to mitigate these impacts. Many of these recommendations will have beneficial consequences for water quality particularly, and for the environment generally when integrated into the County Development Plan.

Table 3: Identification Of Policy Areas Which Have The Potential To Give Rise Or Contribute To Negative Impacts On The County Cork Natura 2000 Network.

	Issue	Recommendation
<p>Chapter 2: Core Strategy</p>	<p>Objective CS 3-1</p> <p>The Core Strategy for the draft plan proposes an increase in the population of the settlements of the Blackwater Catchment of approximately 14,000 people, an increase in the population of Cork Harbour of approximately 43,000 people to 2022, and an increase in the population of catchment of Clonakilty Bay of 2,497 people.</p> <p>Deficiencies in waste water infrastructure have been identified for a number of the settlements which are located within these catchments. In the Blackwater catchment, these are the hub town of Mallow; the ring towns of Fermoy and Youghal; and the County Towns of Millstreet, Mitchelstown and Newmarket, (water quality along the main channel of the SAC is assessed to be poor to moderate status); in the catchment of Cork Harbour, these are Cobh, Midleton, Carrigaline, Carrigtwohill and Passage West (water quality in the North Channel is assessed to be eutrophic); and in the catchment of Clonakilty Bay, this refers to Clonakilty Town.</p> <p>Consultation is currently underway with the Department of Arts, Heritage and the Gaeltacht to determine the parameters of further detailed assessments for the Blackwater River to be completed to examine the capacity of each of these catchments to absorb the proposed population increases, or to explore other possible solutions to this issue. An in house assimilative capacity study is underway for Clonakilty Bay. Further amendments may be</p>	<p>In order to facilitate the planned growth which is targeted for the Blackwater Catchment, the catchment of Cork Harbour, and for Clonakilty Town, upgrades to the waste water infrastructure serving all settlements within their receiving catchments must be prioritised.</p> <p>Wastewater treatment facilities for the listed towns must be operational prior to the commencement of discharges from new development facilitated by the plan. The facilities must be designed to operating standards which can ensure that Emission Limit Values for discharges, which are required to achieve the required water quality status can be met.</p> <p>It will be required to prepare a surface water and waste water management plan for the Blackwater River. All development facilitated by the CDP in the catchment of the Blackwater will be required to develop surface water management strategies which comply with this plan.</p> <p>It is recommended that the Core Strategy be amended to ensure that the constraints identified here are acknowledged in this chapter, and that the requirements for infrastructure provision to facilitate the planned growth for the settlements within this catchment are included in the priority list in chapter 15 of the plan. It should be clear in this chapter that development required to achieve the targets set by the plan cannot proceed until such infrastructure is provided.</p> <p>Reason: To prevent impacts on water quality in the Blackwater River SAC; Great Island Channel SAC; Cork Harbour SPA, the Clonakilty Bay SAC, and the Clonakilty Bay SPA.</p>

Table 3: Identification Of Policy Areas Which Have The Potential To Give Rise Or Contribute To Negative Impacts On The County Cork Natura 2000 Network.

	required to be made to the settlement policy of the plan arising from this assessment.	
CS 4-1	Metropolitan Cork surrounds Cork Harbour, an area which hosts two Natura 2000 sites. A very significant proportion of the growth which is targeted for the county will be located within this area. It is considered that there is a lack of sufficient acknowledgement of the environmental sensitivities associated with the harbour in this objective, which could give rise to pressure for excessive or inappropriate development within or around the harbour.	<p>It is recommended that the protection of the environmental and heritage resources of this area be stated to be a basic principle guiding the future development of this Strategic Planning Area at the top of the objective.</p> <p>Reason: To acknowledge the environmental sensitivities of the area, in particular those associated with nature conservation designations in Cork Harbour.</p>
Objective CS 4-1 d)		<p>It is recommended that CS 4-1 d) be amended as follows: In the Cork Harbour area generally, to protect and enhance the area's natural and built heritage, and establish a sustainable balance between competing land-uses to maximise the areas overall contribution to Metropolitan Cork, while protecting the environmental resources of the Harbour.</p> <p>Reason: To prevent direct or indirect impacts to the quality or extent of estuarine habitats in the Great Island Channel SAC or the Cork Harbour SPA; to prevent disturbance to species for which the Cork Harbour SPA is designated; and to prevent loss of habitat upon which species for which the SPA is designated are dependant.</p>
CS 4-2 and CS 4-3	Many of the settlements in the Greater Cork Ring, and the North Cork Strategic Planning areas are located along the Blackwater River. A significant proportion of the growth which is targeted for the county is proposed to be located within this area forming part of the Cork Gateway. It is considered that there is a lack of sufficient acknowledgement of the environmental sensitivities associated with the area included in this objective which could give rise pressure for excessive or inappropriate	<p>It is recommended that the protection of the Blackwater River SAC be stated to be a basic principle guiding the future development of these Strategic Planning Areas at the top of objectives 4-2 and 4-3.</p> <p>Reason: To acknowledge the environmental sensitivities of the area, in particular those associated with nature conservation designations in the Blackwater River catchment.</p>

Table 3: Identification Of Policy Areas Which Have The Potential To Give Rise Or Contribute To Negative Impacts On The County Cork Natura 2000 Network.

<p>Objective CS 4-2 a)</p>	<p>development within this sensitive catchment.</p>	<p>It is recommended that CS 4-2 a) be amended as follows: Recognise the importance of the role to be played by Mallow as a Hub Town in the implementation of the National Spatial Strategy, and the Atlantic Gateways Initiative [to] focus growth in North Cork; to promote its sustainable development as a major centre of employment and population where there is a high standard of access to educational and cultural facilities; and to provide the necessary infrastructure to ensure that the expansion of Mallow can be achieved without having adverse impacts on the receiving environment.</p> <p>Reason: To prevent impacts on water quality and water levels in the Blackwater River, and in particular to prevent impacts on qualifying features of the Blackwater River SAC or on the Blackwater Callows SPA.</p>
<p>Objective CS 4-2 d)</p>		<p>It is recommended that CS 4-2 d) be amended as follows: Facilitate the sustainable development of the villages as set out in the local areas plan's so that the rate of future population growth complements the strategy to achieve a critical mass of population in the towns and provide protection for those areas recognised as under pressure from urban development.</p> <p>Reason: To prevent impacts on Natura 2000 sites, and on the environment generally.</p>
<p>CS 4-4</p>	<p>The West Cork Strategic Planning Area hosts a large number of the counties Natura 2000 sites. A significant proportion of the growth which is targeted for the county is proposed to be located within this area, and it is considered that there is a lack of sufficient acknowledgement of the environmental sensitivities associated with area included in this objective which could give rise to pressure for excessive or inappropriate development within or near Natura 2000 sites located here.</p>	<p>It is recommended that the protection of the environmental and heritage resources of this area be stated to be a basic principle guiding the future development of Strategic Planning Area at the top of this objective.</p> <p>Reason: To acknowledge the environmental sensitivities of the area, in particular those associated with nature conservation designations.</p> <p>It is recommended that CS 4-4a) be amended as follows: Recognise the importance of the role to be played by Clonakilty as a 'West Cork Strategic Employment Centre' to promote its development as a major centre of employment and population where there is a high standard of access to</p>
<p>Objective CS 4-4 a)</p>		

Table 3: Identification Of Policy Areas Which Have The Potential To Give Rise Or Contribute To Negative Impacts On The County Cork Natura 2000 Network.

	<p>educational and cultural facilities, and provide the necessary infrastructure to ensure that this can be achieved while protecting the environmental quality of Clonakilty Bay.</p> <p>Reason: To prevent direct or indirect impacts to the quality or extent of estuarine habitats in Clonakilty Bay; to prevent disturbance to species for which the Clonakilty Bay SPA is designated; and to prevent loss of habitat upon which species for which the Clonakilty Bay SPA is designated, are dependant.</p>
<p>Chapter 4: Rural, Coastal and Islands</p>	
<p>Chapter 4.3.8</p>	<p>The area identified in the plan as a Structurally Weaker Area in the plan is described as being of relatively low environmental sensitivity, despite being located within two sensitive water catchments (catchment of the Blackwater River, and catchment of the Feale River), as well as supporting the largest Special Protection Area in the County.</p> <p>Reason: To acknowledge the environmental sensitivities of the area, in particular those associated with nature conservation designations.</p>
<p>Chapter 4.8 Coastal Areas Cork Harbour Study</p>	<p>There has been a significant level of development to facilitate the marine leisure sector, to defend land, and to develop other marine activities within Cork Harbour. Some of this increases human activity within or close to intertidal habitats, and reduces the area of undeveloped intertidal habitat which is available for species of birds for which the SPA has been designated. There is a concern that any further development which increases the level of access to estuarine habitats, or reduces the area of intertidal habitat available to birds within the SPA, may be unsustainable, having regard to the potential for such development to give rise to impacts on birds.</p> <p>It is recommended that an additional paragraph be included in the plan which identifies this issue.</p> <p>It is recommended that it be stated in the plan that assessment of future proposals for development which could cause increases in human activity on shoreline habitats within the Cork Harbour SPA, or which could reduce the area of intertidal habitat available to birds must take account of the overall capacity of the SPA to absorb such development, and that future development of coastal recreation facilities in the harbour should only be permitted where it is found that the development will not affect populations or distributions of birds.</p> <p>Reason: To prevent direct or indirect impacts on the Cork Harbour SPA, and to prevent disturbance to birds for which the SPA is designated.</p>

Table 3: Identification Of Policy Areas Which Have The Potential To Give Rise Or Contribute To Negative Impacts On The County Cork Natura 2000 Network.

<p>Chapter 4.9 Islands</p>	<p>Many of the islands referred to in section 4.9 of the plan are located within Natura 2000 sites and have other biodiversity/heritage values. This section of the plan promotes and encourages economic development on the islands, but does not highlight the potential constraints on same, or the need for any such development to have regard to the environmental sensitivities. This could give rise to pressure for development of initiatives which might not be compatible with nature conservation designations.</p>	<p>It is recommended that this section include a paragraph which describes the environmental/biodiversity/heritage resources of the islands.</p> <p>Reason: To acknowledge the environmental sensitivities of the area, in particular those associated with nature conservation designations.</p>
<p>Objective RCI 9-2</p>		<p>It is recommended that RCI 9-2 be amended as follows: Support the economic development of the islands for the benefit of island communities generally and to encourage the development of speciality or niche economic sectors that might be appropriate to different islands, in a manner that is compatible with environmental and landscape sensitivities as well as nature conservation designations pertaining to the islands.</p> <p>Reason: To prevent direct or indirect impacts to the quality or extent of habitats for which the Roaringwater Bay and Islands SAC is designated; to prevent disturbance to species for which the SAC is designated; and to prevent disturbance to species for which the Beara Peninsula SPA is designated.</p>
<p>Objective RCI 9-3 a)</p>		<p>It is recommended that RCI 9-3 a) be amended as follows: Support sustainable development proposals that are compatible with environmental and landscape sensitivities as well as nature conservation designations pertaining to the islands; and that contribute to the long term economic and social development of the islands.</p> <p>Reason: To prevent direct or indirect impacts to the quality or extent of habitats within the Roaringwater Bay and Islands SAC; to prevent disturbance to species for which this SAC is designated; and to prevent disturbance to species for which the Beara Peninsula SPA is designated.</p>

Table 3: Identification Of Policy Areas Which Have The Potential To Give Rise Or Contribute To Negative Impacts On The County Cork Natura 2000 Network.

Chapter 6: Economy and Employment	
<p>Section 6.4.1 Objective EE 4-1</p>	<p>Most of the Strategic Employment Centre's identified in the plan are located around Cork Harbour, and development within these areas has the potential to give rise to negative impacts on the Cork Harbour SPA and/or on the Great Island Channel SAC. Impacts could be caused by increasing risk of contamination of surface waters; by giving rise to increased levels of activity within or adjacent to coastal or estuarine habitats, or by increasing pressure for development within the designated sites themselves.</p> <p>It is recommended that EE 4-1 be amended as follows: Promote the development of Strategic Employment Areas suitable for large scale developments at Carrigtwohill, Kilbarry, Little Island, Ringaskiddy and Whitegate where such development is compatible with relevant environment, nature and landscape protection policies as they apply around Cork Harbour.</p> <p>Reason: To prevent direct or indirect impacts to the quality or extent of estuarine habitats in the Great Island Channel SAC or the Cork Harbour SPA; to prevent disturbance to species for which the Cork Harbour SPA is designated; and to prevent loss of habitat upon which species for which the SPA is designated are dependant; and to protect the environmental resources of Cork Harbour generally.</p>
<p>Objective EE 4-4</p>	<p>This objective promotes the development of industry in 'appropriate' locations within the county, and identifies certain criteria to identify these locations. However, the criteria which are included in the objective, are relatively limited and make no reference to including consideration of impacts on the environment. It is considered that the objective as worded could encourage pressure for development of industry in environmentally sensitive locations including in Natura 2000 sites, particularly if these areas fulfill the other criteria as listed in the objective.</p> <p>Reason: To prevent direct or indirect impacts to the quality or extent of habitats for which Natura 2000 sites are designated; to prevent disturbance to species for which Natura 2000 sites are designated; to protect water quality in SACs requiring maintenance of high water standards; and to protect the environmental resources of the County generally.</p> <p>It is recommended that it be stated in this objective that one of the criteria to be used to identify suitable locations for industrial development in the county would be to locate it in areas of low environmental sensitivity.</p>
<p>Section 6.6</p>	<p>This section of the plan focuses on the economic role of Cork Harbour, and sets out Councils support for the relocation of Port infrastructure in the Harbour. It is considered that there is insufficient acknowledgement of the biodiversity value/nature conservation status of the Harbour included in the section, and that the section as</p> <p>It is recommended that an additional paragraph be included in section 6-6 EE 6-1 to emphasise that the protection of the environmental/heritage resources of Cork Harbour will be a guiding principle in the future development of the economic role of the Harbour, and that that special role of Cork Harbour should include recognition of its environmental/ heritage/ ecological values, as well as its economic/employment values.</p>

Table 3: Identification Of Policy Areas Which Have The Potential To Give Rise Or Contribute To Negative Impacts On The County Cork Natura 2000 Network.

<p>worded does not sufficiently flag the environmental sensitivities which may constrain intensification of development activities in the harbour area, as is appropriate to the location.</p>	<p>Reason: To ensure that the protection of environmental/heritage resources of harbour are given a high priority in context of pressures for development for industrial/port related activity that exist in the area.</p> <p>It is recommended that section 6.6.5 be amended as follows: Cork County Council is committed to the relocation of port facilities to Ringaskiddy and Marino Point, where this can be achieved in a manner that is compatible with environmental, landscape and nature conservation designations that pertain to the harbour area, and is in compliance with Article 6 of the Habitats Directive.</p> <p>Reason: To prevent direct or indirect impacts to the quality or extent of estuarine habitats in the Great Island Channel SAC or the Cork Harbour SPA; to prevent disturbance to species for which the Cork Harbour SPA is designated; and to prevent loss of habitat upon which species for which the SPA is designated are dependant.</p> <p>It is recommended that it be stated at the top (rather than at the end) of this objective EE 6-2, that it is a key principle guiding future development of Cork Harbour, that the environmental and heritage resources of the harbour would be protected.</p> <p>Reason: To ensure that the protection of environmental/heritage resources of harbour are given a high priority in context of pressures for development for industrial / port related activity that exist in the area.</p>
<p>Objective EE 6-1</p> <p>Objective EE 6-2</p>	

Table 3: Identification Of Policy Areas Which Have The Potential To Give Rise Or Contribute To Negative Impacts On The County Cork Natura 2000 Network.

Objective EE 9-1	<p>This objective relates to the promotion of business development in rural areas. It is considered that the objective as currently worded does not provide any safeguards in terms of environmental protection, and could promote pressure for development within areas of high environmental sensitivity, which could give rise to negative impacts on the environment generally, and on Natura 2000 sites in particular.</p>	<p>It is recommended that an additional bullet point be included with EE 9-1 as follows: The development of appropriate new businesses in rural areas will normally be encouraged in areas of low environmental sensitivity especially where:</p> <ul style="list-style-type: none"> • The proposal will not adversely affect the environment or areas designated for nature conservation. <p>Reason: To prevent impacts on Natura 2000 sites.</p>
<h3>Chapter 8: Tourism</h3>		
Section 8.2	<p>This section of the plan states Council policy in relation to the protection of tourism assets, and the development of the tourism industry based around heritage resources. However, it is considered that section 8.2.2 as currently worded could be taken to suggest that all heritage assets have the potential to be developed as tourism resources, and that this could give rise to pressure for development of tourism initiatives within sensitive locations increasing potential for negative impacts on heritage resources, including potential for negative impacts on Natura 2000 sites.</p>	<p>It is recommended that paragraph 8.2.2 be amended as follows: ‘Some of these areas may have the potential for future tourism growth based on a supply of resources and features around which the tourism product can be built. It is important to ensure that other development generally and tourism development in these areas does not have a negative impact on the overall character of such areas. Development of ‘heritage’ related tourism activity should be directed only to areas that have been identified to have capacity to absorb increased visitor activity, without causing damage or deterioration to the heritage features of the site or area, or to the surrounding landscape.</p> <p>Reason: To prevent impacts on Natura 2000 sites, and on heritage resources generally.</p>
Section 8.4	<p>This section of the plan promotes the development of marine infrastructure, to facilitate the continued development of the marine leisure tourism industry. There is a particular reference to the importance of Cork Harbour in the development of this sector.</p> <p>In relation to Cork Harbour, there is a concern that any further development which increases the level of access to estuarine habitats, or reduces the area of intertidal habitat available to birds within the Cork Harbour SPA, may be</p>	<p>It is recommended that an additional paragraph be included into this section, which establishes protection of the environment generally, and sites designated for nature conservation particularly as a guiding principle which will inform how the marine leisure industry will be developed in the County.</p> <p>Reason: To prevent direct or indirect impacts on Natura 2000 sites which have been designated for nature conservation.</p>

Table 3: Identification Of Policy Areas Which Have The Potential To Give Rise Or Contribute To Negative Impacts On The County Cork Natura 2000 Network.

	<p>unsustainable, having regard to the potential for such development to give rise to impacts on birds.</p> <p>While there are particular concerns relating to Cork Harbour, there are other sites within the county where there is pressure for the development of marine infrastructure within sites designated for nature conservation.</p> <p>This section of the plan relates to the promotion of Greenways along disused railway routes in the County. One of these routes is located along the periphery of Cork Harbour.</p> <p>A significant portion of the land around the Cork Harbour SPA has been developed for cycling/walking routes, and access to coastal habitats has been increased for purposes relating to other types of human use. There is a concern that any further development which increases the level of access to estuarine habitats within the harbour may be unsustainable, having regard to the potential for such development to give rise to disturbance impacts on birds.</p> <p>This section of the plan relates to the development of tourism facilities. However, the wording of TO 9-1 b) could be taken to imply that the development of tourism facilities is encouraged within environmentally sensitive areas. It is considered that this wording, could increase pressure for development of such facilities within sensitive areas, including sites designated for nature conservation.</p>	<p>It is recommended that the plan would include text to acknowledge this issue and that it would contain a commitment that no further proposals for development of walking routes or cycleways around Cork Harbour, or for other developments which would increase human activity within the Cork Harbour SPA will be progressed until such time as the overall capacity of the SPA to absorb such development has been assessed.</p> <p>Reason: To prevent disturbance related impacts on species for which the Cork Harbour SPA is designated.</p> <p>It is recommended that TO 7-1 be amended as follows: Promote the development of walking and cycling routes throughout the County in a manner that is compatible with nature conservation and other environmental policies.</p> <p>Reason: To prevent impacts on Natura 2000 sites, and on heritage resources generally.</p> <p>It is recommended that TO 9-1 b) be amended to avoid directing tourism development into environmentally sensitive areas, as follows ‘Consider tourism-related developments outside settlements, in environmentally sensitive locations at an appropriate scale and balance having regard to the pertaining environmental conditions and sensitivities, scenic amenity and availability of services.’</p> <p>Reason: To prevent impacts on Natura 2000 sites, and on heritage resources generally.</p>
<p>Section 8.7 and TO 7-1</p>		
<p>Objective TO 9-1b)</p>		

Table 3: Identification Of Policy Areas Which Have The Potential To Give Rise Or Contribute To Negative Impacts On The County Cork Natura 2000 Network.

Chapter 9: Energy and Digital Economy	
Section 9.3.14	<p>This section of the plan sets out the general principles which will apply in relation to areas of the County where applications for the development of large scale commercial wind energy projects will be generally Open to Consideration. Amendments are suggested to clarify the requirements where such applications are made within sensitive catchments, particularly Freshwater Pearl Mussel Catchments within this zone.</p> <p>It is recommended that sentence 5 paragraph 9.3.14 be amended as follows to highlight the particular sensitivities of freshwater pearl mussel catchments, and to establish the standards which will be required for development in these areas.</p> <p>‘Developers proposing wind energy projects within Freshwater Pearl Mussel Sub Basin Catchments, or in other sensitive catchments, must be able to demonstrate that they have been designed in a manner which</p> <ul style="list-style-type: none"> • prevents any risk of peat slippage or erosion; and which can • ensure the ongoing protection of water quality and levels to standards required to prevent impacts on relevant receptor habitats or species. <p>Higher design standards in terms of environmental protection measures are likely to be required to be included in projects at design stage in sensitive catchments, than might be required in other catchments.’</p> <p>Reason: To prevent impacts on water quality and water levels in catchments of relevant Natura 2000 sites, particularly the Blackwater River SAC, Glanmore Bog SAC, the Bandon River SAC, and the Lower River Shannon SAC.</p>
Figure 9-2 ED 3-5 and section 9.3.14	<p>A number of SACs are show on Figure 9-2 to be located within areas where large scale wind energy developments Open to Consideration, and part of one has been shown within the Acceptable in Principle Zone. The associated text (9.3.14) states that Natura 2000 sites and Natural Heritage Areas within Acceptable In Principle Areas are not generally considered suitable for wind farm developments, and policy ED 3-5 states that large scale wind energy developments in these areas are open to consideration where they can avoid adverse impacts on Natura 2000</p> <p>It is recommended that Figure 9-2 be amended to show all Natura 2000 sites within the ‘Normally Discouraged’ wind energy category (ie remove Lough Hyne SAC from the Acceptable in Principle Zone, and remove St. Gobnet’s Wood SAC, Mullaghanish Bog SAC, Blackwater River SAC and the Bandon River SAC from the Open to Consideration Zone) to ensure that the plan maps are compatible with plan policy, and to ensure that the plan does not encourage individuals to seek to develop a large scale wind energy project within any Natura 2000 site.</p> <p>Reason: To minimise pressure for development of large scale wind energy projects within the following SACs Lough Hyne, St. Gobnet’s Wood, Mullaghanish Bog, Blackwater River and Bandon River; and to ensure that map is consistent with</p>

Table 3: Identification Of Policy Areas Which Have The Potential To Give Rise Or Contribute To Negative Impacts On The County Cork Natura 2000 Network.

<p>sites and Natural Heritage Areas. It is considered that there is a lack of consistency between Figure 9-2 and policy ED 3-5, and that the figure as shown currently could encourage prospective developers to develop proposals for wind energy development within a number of Natura 2000 sites. It is considered that this position is not compatible with the conservation objectives for these sites, and it is recommended, in the interest of clarity, to show all Natura 2000 sites within the 'Normally Discouraged' wind energy category on figure 9-2.</p>	<p>Council policy in relation to this zone.</p> <p>It is recommended that paragraph 9.3.14 be amended to reflect the recommended changes in Figure 9-2).</p> <p>Reason: To prevent risk of disturbance to species for which SPAs have been designated. To minimise pressure for development of large scale wind energy projects within Natura 2000 sites;</p>
<p>Some SPAs are located within close proximity to areas where large scale wind energy developments are Open to Consideration. A number of species for which the coastal/wetland SPAs are designated display evidence of avoidance of habitat around turbines at distances of up to 800m. Having regard to such evidence, it is recommended in chapter 4 of this report that the boundary of the 'Open to Consideration' area be amended to ensure that all parts of these SPAs are >800m from this zone.</p>	<p>It is recommended that the boundary of the 'Open to Consideration' wind energy zone be amended ensure that all parts of coastal and inland wetland SPAs within the county are a minimum of 800m from 'Acceptable in Principle' or 'Open to Consideration' zones, and that all parts of the upland SPAs are a minimum of 500m from these zones (Amendments required around Ballymcode Bay SPA, Cork Harbour SPA, Clonakilty Bay SPA, the Gearagh SPA (800m) and to the Stack's to Mullaghareirks, West Limerick Hills and Mount Eagle Bog SPA and Mullaghanish to Mushermore SPA (500m)).</p> <p>Reason: To ensure that the plan does not increase pressure for development of large scale wind energy developments in locations where they could give rise to disturbance related impacts on the qualifying features of a number of SPAs.</p>
<p>Two SPAs have been designated for Hen Harrier. There is evidence that this species avoids suitable breeding/foraging habitat within 500m of turbines. Both of the Hen Harrier SPAs are located within 300m of areas where large scale wind energy developments are open to consideration.</p>	<p>It is considered that the map as shown has the potential to promote development in areas where disturbance to birds could be caused within SPAs.</p>

Table 3: Identification Of Policy Areas Which Have The Potential To Give Rise Or Contribute To Negative Impacts On The County Cork Natura 2000 Network.

<p>Section 9.3.16</p>	<p>This section of the plan encourages proposals for the generation and consumption of electricity in a single premises in all areas of the County, and contains a particular reference to Strategic Employment Centres around Cork Harbour. A number of these SECs are located adjacent to the Cork Harbour SPA, and the development of large scale turbines, even those for the generation and supply of electricity on site, could have the potential to have negative impacts on species of birds for which the SPA is designated.</p>	<p>It is recommended that the fact that most of the SECs are located within close proximity to the Cork Harbour SPA be recorded in this section, and that it be stated in the plan that account will be taken of the potential for any such developments within these areas to affect the SPA as part of the planning assessment.</p> <p>Reason: To protect the Cork Harbour SPA.</p>
<p>Chapter 10: Transport and Mobility</p>		
<p>Objective TM 3-1</p>	<p>This section of the plan relates to the provision/upgrading of nationally important roads infrastructure for the County, and TM 3-1 sets out Councils intentions to seek the support of the NRA to implement a number of roads projects seen to be key to ensuring the success of the Core Strategy. Some of these routes run within or adjacent to Natura 2000 sites, or will require new river crossings within sensitive catchments (M20), and these could have the potential to give rise to negative impacts on a number of Natura 2000 sites (see Appendix A). None of them have been identified to be likely to give rise to direct loss of habitat within Natura 2000 sites. Adherence to high environmental standards will be required during the planning, design and construction phases of these projects, however, at this point, it is considered that these proposals can be progressed without having or contributing to negative impacts on any Natura 2000 site, subject to compliance with appropriate environmental codes of practise (CIRIA Guidelines) and assuming that no significant proposals for</p>	<p>It is recommended that TM 3-1 include an additional bullet point as follows:</p> <p>a) Ensure all upgrades to listed routes are planned, designed and constructed to avoid and prevent significant negative impacts on sites designated for nature conservation, and other environmental or heritage resources.</p> <p>Reason: To prevent impacts on Natura 2000 sites identified to be located within, adjacent or close to routes identified in this objective: Clonakilty Bay SAC, Clonakilty Bay SPA and Roaringwater-Bay and Islands SAC (N71); St. Gobnet's Wood (N22); Great Island Channel SAC and Cork Harbour SPA (Dunkettle Interchange; Cork Northern Ring Road; N28); Blackwater River SAC and Blackwater Callows SPA (M20; N22; Mallow Northern Relief Road; Mallow Fermoy Road); and Blackwater Estuary SPA (N25).</p>

Table 3: Identification Of Policy Areas Which Have The Potential To Give Rise Or Contribute To Negative Impacts On The County Cork Natura 2000 Network.

	<p>new route development through Natura 2000 sites is proposed. Very high standards of environmental mitigation will be required to be incorporated into road design in the catchment of the Blackwater River, than may be required for similar developments in less sensitive catchments. It is considered that this needs to be emphasised in the plan.</p>	
<p>Objective TM 3-2</p>	<p>This section of the plan relates to the provision/upgrading of regionally important roads infrastructure for the County, and TM 3-2 sets out Councils intentions in terms of the implementation of a number of regional roads projects. Some of these routes run within or adjacent to Natura 2000 sites, or will require new channel crossings within sensitive catchments, and these could have the potential to give rise to negative impacts on a number of sites (see Appendix A).</p>	<p>It is recommended that the upgrade of the R624 be removed from this list until such time as a viable option for the route has been designated, has been identified and subject to Appropriate Assessment if required.</p> <p>Reason: To prevent impacts on the Cork Harbour SPA, and the Great Island Channel SAC.</p> <p>It is recommended that TM 3-1 include an additional bullet point as follows:</p> <ul style="list-style-type: none"> a) Ensure all upgrades to listed routes are planned, designed and constructed to avoid and prevent significant negative impacts on sites designated for nature conservation, other environmental or heritage resources. <p>Reason: To prevent impacts on Natura 2000 sites identified to be located within, adjacent or close to routes identified in this objective: Glengarriff Harbour and Woodlands SAC and Caha Mountains SAC (R572), Great Island Channel SAC and Cork Harbour SPA (Midleton Waterrock access road; Midleton Northern Relief Road; R630 Midleton to Whitegate; Carrigaline Inner Relief Road); Bandon River SAC (R586).</p>
<p>Objective TM 3-2</p>	<p>It is considered that most of these can be progressed without having or contributing to negative impacts on any Natura 2000 site, subject to sensitive planning, design, construction and management. However, in the case of the R624 Cobh road, no route / channel crossing has been identified to date which avoids the potential to give rise to direct loss of annexed habitats within the Great Island Channel SAC. For that reason, it is recommended that this proposal be omitted from the plan until such time as the scheme has been developed in further detail and has been subjected to Habitats Directive Assessment.</p> <p>Adherence to high environmental standards will be required for the planning, design and construction phases of these projects, and this needs to be emphasised within the text of the plan. Higher standards of environmental</p>	

Table 3: Identification Of Policy Areas Which Have The Potential To Give Rise Or Contribute To Negative Impacts On The County Cork Natura 2000 Network.

	<p>mitigation will be required to be incorporated into road design in the catchment of the Blackwater and the Bandon Rivers, than may be required for similar developments in less sensitive catchments, and it is recommended that this be reflected in the plan.</p>	
<p>Port of Cork Section</p> <p>Objective TM 5-2</p>	<p>This section of the plan relates to the role of Cork Harbour as a nationally important Port, and sets out Councils position in terms of supporting Port of Cork proposals for the relocation of Port facilities to Marino Point and Ringaskiddy. It is considered that there is a lack of sufficient acknowledgement of the environmental sensitivities associated with Cork Harbour included in this objective which could give rise pressure for excessive or inappropriate development within the harbour area.</p>	<p>It is recommended that an additional paragraph be included in this section, highlighting the environmental/heritage resources of the Port, and emphasising that the protection of these resources is a key principle which will guide future development of these resources.</p> <p>Reason: To prevent impacts on the Cork Harbour SPA, and on the Great Island Channel SAC.</p> <p>It is recommended that bullet point TM 5-2 c) be amended as follows: Support Ringaskiddy as the preferred location for the relocation of the majority of port related activities. Also recognising the key role that Marino Point can play in providing an alternative relocation option for some of the port related uses that could best be served by rail transport. The Council is committed to engage with the Port of Cork and other relevant stakeholders in achieving this objective in a manner that is compatible with environmental, landscape and nature conservation designations that pertain to the harbour area.</p> <p>Reason: To prevent impacts on the Cork Harbour SPA, and on the Great Island Channel SAC.</p>
<p>Chapter 11: Water Services and Waste</p>		
<p>Water Services Investment Programme</p>	<p>This section of the plan relates closely to the Core Strategy and sets out Councils policy relating to the provision of water and waste water services identifying priorities in terms of the provision of infrastructure to the Cork Gateway, Hub and Main Towns to complement the overall strategy for economic and population growth.</p>	<p>It is recommended that WS 2-1 a) be amended to ensure that WWTPs causing or contributing to negative impacts on nature conservation sites be included in the priority list for the County. Suggested text for amendment as follows:</p> <p>Prioritise the provision of water services infrastructure in</p>

Table 3: Identification Of Policy Areas Which Have The Potential To Give Rise Or Contribute To Negative Impacts On The County Cork Natura 2000 Network.

	<p>The objective as currently worded does not prioritise the delivery of wastewater treatment facilities for a number of settlements within the catchments of the Blackwater River, Cork Harbour and Clonakilty Bay, including some that are currently overloaded, are failing to meet license conditions, or have insufficient capacity to meet future needs. It is considered that a failure to prioritise the provision of adequate waste water services within settlements in these catchments would be likely to interfere with the achievement of the conservation objectives that apply to the Natura 2000 sites occurring in them. This position is not compatible with obligations of the Water Framework Directive or the Habitats Directive, and it is recommended that the plan be amended to give priority to the resolution of these issues.</p>	<ul style="list-style-type: none"> all settlements where services are not meeting current needs, are failing to meet existing license conditions, and where these deficiencies are <ul style="list-style-type: none"> interfering with Councils ability to meet the requirements of the Water Framework Directive; or having negative impacts on Natura 2000 sites; and the Gateway, Hub and Main Towns to complement the overall strategy for economic and population growth while ensuring appropriate protection of the environment <p>Reason: To prevent negative impacts on water quality in catchments of the Blackwater River SAC, the Great Island Channel SAC, Cork Harbour SPA, Clonakilty Bay SAC and Clonakilty Bay SPA.</p>
<p>Table 11.1</p>	<p>This table identifies the current status of water and waste water services in the main settlements of the County, and identifies at a broad level what the requirements are to bring infrastructure up to a standard to allow planned development to progress. It is considered that the wording for the red and orange coded settlements does not provide sufficient clarity to ensure the full protection of water resources in sensitive catchments, and amendments to the wording are recommended to provide additional clarity in relation to these issues.</p> <p>The settlements of Cobh, Carrigtwohill and Clonakilty do not have the capacity to meet current or future needs, and discharges from these settlements are to waterbodies within water sensitive Natura 2000 sites. In addition the</p>	<p>It is recommended that Table 11.1 be amended as follows:</p> <p><i>Change wording of orange coding to reflect the following:</i></p> <p>Some new development may proceed where this can take place without overloading existing waste water treatment systems, or cause a breach in discharge license conditions; and where the development will not require increasing levels of abstraction from surface waters within sensitive catchments which would give rise to negative impacts on Natura 2000 sites, or prevent compliance with the Water Framework Directive.</p> <p><i>Change wording of red coding to reflect the following:</i></p> <p>Strategic Infrastructure Deficit. Planned development will require further infrastructure investment to allow projected development to proceed.</p>

Table 3: Identification Of Policy Areas Which Have The Potential To Give Rise Or Contribute To Negative Impacts On The County Cork Natura 2000 Network.

<p>towns of Carrigtwohill and Clonakilty are currently failing to meet license conditions for discharges. The orange coding on these sites could suggest that some development can proceed in these towns, however having regard to the fact that the current treatment regime in each of these towns is likely to be causing or contributing to negative impacts within water sensitive Natura catchments, it is recommended that the waste water treatment coding for these towns be changed to red. It is further recommended that the coding of Dunmanway be changed to red, as plant is currently breaching license conditions, and discharge point is to Bandon River within water sensitive SAC.</p>	<p>In relation to wastewater, this must be provided prior to the commencement of discharges from new development, and to operating specifications which can ensure that license discharge limits set by the EPA to prevent impacts on water quality for settlements within the sensitive catchments including the catchments of Natura 2000 sites. These specifications are likely to be higher in sensitive catchments.</p> <p>New surface water abstractions or increased abstraction levels from existing sources within sensitive catchments should only progress following Environmental Impact and Habitats Directive Assessment, and where it can be shown that these would not affect water levels in water sensitive Natura 2000 sites. Direct abstraction of surface waters from EU designated rivers or lakes is unlikely to be compatible with the conservation objectives of such sites.</p>
<p>It is recommended that coding of Cobh, Carrigtwohill and Clonakilty be changed to red for waste water, as these towns do not have the capacity to meet current or future needs, and discharges from these settlements are to waterbodies within water sensitive Natura 2000 sites. Carrigtwohill and Clonakilty are currently failing to meet license conditions for discharges.</p>	<p>It is recommended that the coding of Dunmanway be changed red, as plant is currently breaching license conditions, and discharge point is to Bandon River within water sensitive SAC.</p>
<p>Reason: To prevent impacts on the following sites arising from wastewater discharges: Blackwater River SAC, Blackwater Callows SPA, Blackwater Estuary SPA, Bandon River SAC, Cork Harbour SPA, Great Island Channel SAC, Clonakilty Bay SAC, Clonakilty Bay SPA. To prevent impacts on the following sites arising from excessive abstraction of surface waters within their catchments: Glanmore Bog SAC, Blackwater River SAC, Bandon River SAC.</p>	<p>Reason: To prevent impacts on the following sites arising from wastewater discharges: Blackwater River SAC, Blackwater Callows SPA, Blackwater Estuary SPA, Bandon River SAC, Cork Harbour SPA, Great Island Channel SAC, Clonakilty Bay SAC, Clonakilty Bay SPA. To prevent impacts on the following sites arising from excessive abstraction of surface waters within their catchments: Glanmore Bog SAC, Blackwater River SAC, Bandon River SAC.</p>

Table 3: Identification Of Policy Areas Which Have The Potential To Give Rise Or Contribute To Negative Impacts On The County Cork Natura 2000 Network.

<p>Section 11.5</p>		<p>Reason: It is recommended that a new objective/text be inserted to prepare a surface water management plan for the catchment of the Blackwater, to ensure that surface water run-off is managed in order to prevent impacts on this SAC.</p> <p>Reason: To protect the Blackwater River SAC.</p>
<p>Objective WS 5-2 Section 11.5 and Objective WS 5-3</p>	<p>This objective relates to the protection of river banks and channels and sets out Council position in relation to development within or near river banks. However, the objective refers only to development within zoned land, and it is considered that it does not provide sufficient protection to river banks or riparian areas outside zoned areas. It is considered that the policy as worded fails to provide adequate protection to watercourses and has the potential to give rise to negative impacts on water quality. It is recommended that the policy be amended to apply restrictions to development adjacent to watercourses to all land, not just land that is zoned for development. From an AA perspective this should apply to water sensitive Natura catchments, but it may be appropriate to apply to all catchments from SEA perspective.</p>	<p>It is recommended that objective WS 5-2 be amended to apply restriction in relation to development adjacent to watercourses to all land outside urban areas, not just zoned land.</p> <p>Reason: To prevent impacts on water quality and hydrology in Natura 2000 sites which require the maintenance of high standards of water quality and the protection of stable hydrological regimes in order to ensure the protection of their favourable conservation status.</p>
<p>Objective WS 6-2</p>	<p>Section 11.6 sets out Councils flood risk policy, and objective 6-2 sets out policy in relation to flood risk areas. Development within flood risk areas not only has the potential to impact on buildings or other infrastructure, or to affect flood storage capacity in river systems, but it also has the potential to give rise to negative impacts on downstream Natura 2000 sites who require the maintenance of high standards of water quality, and/or the protection of stable hydrological regimes to maintain their</p>	<p>It is recommended that objective WS 6-2 be amended to include a further caveat to ensure that development within flood plains of Natura 2000 sites designated for species or habitats requiring the protection of high standards of water quality to ensure the protection of their favourable conservation status, shall only be permitted where they have been assessed and found not to have the potential to give rise to significant negative impacts, or adverse impacts on such sites.</p> <p>Reason: To prevent impacts on water quality and hydrology in Natura 2000 sites which require the maintenance of high standards of water quality and the protection of stable hydrological regimes in order to ensure the protection of their</p>

Table 3: Identification Of Policy Areas Which Have The Potential To Give Rise Or Contribute To Negative Impacts On The County Cork Natura 2000 Network.

<p>favourable conservation status. It is recommended that the policy be amended to deal with this issue.</p>	<p>favourable conservation status.</p>
<p>Chapter 13: Green Infrastructure</p> <p>It is considered that policy relating to the protection of surface waters, coastal waters or transitional waters is less clearly stated in this chapter than policy in relation to the protection of groundwater (GI 1—2 and GI 1-3). It is recommended that Council policy in relation to the protection of all water should be clearly stated in the plan.</p> <p>It is recommended that new sections / policies be inserted into this chapter relating to the protection of surface waters and transitional waters (as per the section dealing with Groundwater) with particular emphasis on protection of surface waters in sensitive catchments, including Natura 2000 catchments.</p> <p>Reason: To clarify Councils position in relation to protection of all water, not just groundwater.</p>	
<p>Chapter 14: Landuse and Zoning</p> <p>This section of the plan relates to the Seveso II Directive which relates to the minimisation of risk and the limitation of consequences of industrial accidents at manufacturing and storage facilities involving dangerous substances. Objective ZU 5-2 sets out the criteria that Council will have regard to when assessing applications for development of new ‘Seveso’ industries. It is considered that the objective to does not put sufficient emphasis on the need to have regard to negative impacts on the environment generally, or on Natura 2000 sites in particular when considering appropriate locations for such industries, which could give rise to pressure for development of inappropriate industries in areas of high environmental sensitivity, particularly if these areas fulfil the other criteria set out in the objective. It is recommended that the objective be amended to include consideration of the environment as one of the key criteria in identifying appropriate locations for ‘Seveso’ developments.</p> <p>It is recommended that an additional bullet point be included here as follows:</p> <ul style="list-style-type: none"> • Potential adverse impacts on the environment <p>Reason: To clarify Councils position in relation to the location of new developments processing hazardous substances, and protection of the environment.</p>	

Table 3: Identification Of Policy Areas Which Have The Potential To Give Rise Or Contribute To Negative Impacts On The County Cork Natura 2000 Network.

Chapter 15: Putting this Plan Into Practise

Table 15.2

As per recommendations set out in this table, it is recommended that amendments be made to the critical infrastructure list to include waste water treatments plants in sensitive settlements, to exclude the R624 and to ensure that the relocation of the discharge point for the Dunmanway WWTP to a site downstream from the Bandon River SAC, in the interest of ensuring the protection of a number of Natura 2000 sites, where potential for impacts have been identified through the screening process.

It is recommended that table 15.2 be amended as follows:

- Remove R624 upgrade until viable route and river crossing has been designed;
- Include all WWTPs that are currently failing to meet license requirements, or have insufficient capacity to meet current needs and where that failure has the potential to have adverse impacts on EU designated sites, on the critical infrastructure short term priority list (add Clonakilty);
- Prioritise the relocation of the discharge point for Dunmanway to downstream from the SAC.

Reason:To prevent impacts on the following sites arising from wastewater discharges: Blackwater River SAC; Blackwater Callows SPA, Blackwater Estuary SPA, Bandon River SAC, Cork Harbour SPA, Great Island Channel SAC, Clonakilty Bay SAC, Clonakilty Bay SPA.

Chapter 5

Appropriate Assessment Conclusion

- 5.1 It is envisaged that all of the recommendations for changes to the plan which are contained in this report will be made post the Public Consultation phase.
- 5.2 However, there remains uncertainty whether there is sufficient assimilative capacity in the Blackwater River or the Clonakilty Bay to facilitate the growth projected in the plan. Consultation is underway with the Department of Arts, Heritage and the Gaeltacht to agree the parameters for assessment of the assimilative capacity of the Blackwater River to determine whether the harbour has sufficient capacity to cope with the proposed population increase, or to explore whether other solutions can be found to address this issue. An in house assimilative capacity study is currently underway for Clonakilty Bay. Further amendments may be required to be made to the plan arising from these assessments.
- 5.3 Subject to the changes which are recommended in this report, and any further changes required to settlement policy in the Blackwater River and Clonakilty Bay catchments being made, it is considered that the potential for the plan to give rise to adverse impacts on the integrity of any Natura 2000 site can be ruled out.

Chapter 6

Next Steps

- 6.1 The draft plan, the environmental report, and this report will go on public display for a minimum period of ten weeks from the 9th December 2013 to 26th February 2014, during which time submissions and observations will be invited from the general public and from statutory agencies.
- 6.2 Issues raised by the submissions received on the draft plan, or its accompanying reports will be examined by the Manager who will make recommendations in relation to same in the Manager's Report to Members which will be produced at the end of the Public Consultation phase. It is envisaged that the recommended amendments which are contained in this report, and any further amendments which may be required following the detailed catchment assessments which are currently underway, will be included in the Managers Report to Council members. The Council will then consider the report with a view to amending the draft plan if required.
- 6.3 A further phase of Public Consultation will follow, should the Council propose to make material amendments to the plan. Any amendments proposed to be made by the members will be assessed to determine whether they could have the potential to give rise or contribute to negative impacts on Natura 2000 sites which could be significant, and a Natura Impact Screening Report, or a second Natura Impact Report will issue at that point.
- 6.4 Issues raised in submissions on any amendments will be compiled and included in a second Managers report, which will be produced at the end of the second Public Consultation phase, if such a phase is required. These submissions, and any recommendations made by the Manager on same will be considered by Council members at the final stage of plan making to determine whether any modifications to the amendments are required. This decision will lead to the formal making of the new plan by the Council, not later than the 8th of January, 2015.

6.5 A final Natura Impact Report, or Natura Impact Screening Report will be published as part of the new plan when it is made. This will contain an assessment of the potential for any final modifications which are being made to give rise to negative impacts on Natura 2000 sites. It will also summarise how the recommendations arising from the initial Natura Impact Reports, and how ecological considerations generally have been integrated into the Development Plan, and will contain a Habitats Directive Conclusion Statement, which will make a final conclusion in relation to the potential for the plan to give rise to negative impacts on the Natura 2000 network.

Chapter 7

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Appendix A

Screening Reports for Natura 2000 Sites

The following tables describe each of the Natura 2000 sites which have been assessed to identify potential for impacts, in the context of the principle policies which will shape development within Cork County over the coming decade.

Ballymacoda (Clonpriest and Pillmore) SAC 0077

Qualifying Interests	Estuaries, Mudflats and sandflats not covered by seawater at low tide; <i>Salicornia</i> and other annuals colonising mud and sand; Atlantic salt meadows.
Strategic Planning Area	Greater Cork Ring - target population increase of 13, 464 to 2022 to be directed primarily to main settlements within the Greater Cork Ring.
Main Settlements identified in draft CDP which occur within the catchment of the SAC	None
Rural Housing Policy Area	This SAC is within the area identified as a Rural Area under Strong Urban Influence in Chapter 5 of the draft CDP. Policy permitting settlement in this area is aimed at restricting development of one off rural housing only for people who can demonstrate that they have a rural generated housing need based on social of economic links to the area.
Renewable Energy Policy Area	This SAC and its catchment is located within an area where it has been identified that large scale wind energy developments will normally be discouraged.
Proposed Roads Infrastructure Projects Within The Catchment Of The SAC	National Road Network: N25 Carrigtowhill – Midleton – Youghal.

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<p>Other Policies Identified Which Could Give Rise To Impacts On SAC</p>	<p>Chapter 4 and Chapter 8 Marine Tourism policies have the potential to increase pressure for development of walking, cycling, fishing facilities within this SAC. Intensification of these activities within the SAC increases the risk of deterioration of coastal habitat quality.</p>
<p>Other Plans Or Programmes Which Could Affect This SAC</p>	<p>Midleton Electoral Area Local Area Plan 2011.</p>
<p>Screening Conclusion</p>	<p>Water quality status in the sub-catchments of this SAC, and in Ballymacoda Bay has been assigned poor and moderate status, and it is important that new development within the catchment does not contribute to any further pressures on water quality in the bay.</p> <p>While some of the villages to which growth is assigned are located within in the catchment, none of the main settlements identified in the draft CDP which occur within the Greater Cork Ring Strategic Planning Area occur within the catchment of this SAC. Additionally, the policy for this rural housing area is restrictive, and it is envisaged that this will serve to reduce the rate of development of one off houses within this catchment.</p> <p>Having regard to the above, and subject to implementation of environmental protection policies contained in the plan including policy HE 2-1 relating to the protection of sites designated for nature conservation, policy WS 3-1 relating to wastewater disposal, and policy WS 6-1, restricting development in flood risk areas, it is concluded that the Core Strategy or Settlement Policies contained in the draft plan are unlikely to give rise to pressures for development of housing within the SAC, or to compromise the protection of water quality in the catchment of this SAC.</p> <p>It is draft CDP policy to support the NRA to implement an upgrade to the N25 which passes through the catchment of this SAC. However the road is approximately 4km from the SAC, and it is considered unlikely that upgrades to this road could affect the SAC.</p> <p>The SAC is located within an area that has been identified to be not normally permissible for wind energy developments. No issues arise.</p> <p>Tourism policies RCI 8-4 and TO 4-1 (developing the marine leisure sector), could have the potential to increase pressure for development of marine leisure facilities and marine recreational use within this SAC. However it is an objective of the plan, to</p>

Ballymacoda (Clonpriest and Pillmore) SAC 0077

	<p>protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and both RCI 8-4 and TO 4-1 include caveats which recognise that such developments must be located in appropriate locations where they are compatible with environmental and heritage sensitivities, and avoid adverse impacts on Natura 2000 sites. In addition, a recommendation is made in chapter 4 of this report to amend the wording of some of the text in the Tourism chapter, in order to ensure that tourism initiatives are developed only in areas with capacity to absorb increased human activity without affecting natural (or other heritage) resources.</p> <p>Having regard to all of the above, it is considered that the potential for the development to give rise to negative impacts on this SAC can be screened out.</p>
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Glengarriff Harbour and Woodlands SAC 0090

<p>Qualifying Interests</p> <p>Strategic Planning Area</p> <p>Main Settlements identified in draft CDP which occur within the catchment of the SAC</p> <p>Rural Housing Policy Area</p> <p>Renewable Energy Policy Area</p>	<p>Old sessile oak woodlands with <i>Ilex</i> and <i>Blechnum</i>; Alluvial forest with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i>; Kerry slug; Lesser horseshoe bat; Otter; Common seal</p> <p>West - target population increase of 8,460 to 2022 to be directed primarily to main settlements within the Western Strategic Policy Area.</p> <p>None</p> <p>This SAC is within the area identified as a Tourism and Rural Diversification Area in Chapter 5 of the draft CDP. Policy permitting settlement in this area is aimed at reducing the number of permissions granted for one off holiday homes in the countryside, and restricting permissions for the development of rural housing to applicants who have demonstrated a genuine need for rural housing based on their social and /or economic links to the area.</p> <p>This SAC and its catchment is located within an area where it has been identified that large scale wind energy developments will normally be discouraged.</p>
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Glengarriff Harbour and Woodlands SAC 0090

<p>Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC</p>	<p>Objective TM 5-2 - Seek funding for upgrading of R752 Glengarriff to Castletownbere regional road. This road runs adjacent to the SAC.</p>
<p>Other policies identified which could give rise to impacts on SAC</p>	<p>Chapter 4 and Chapter 8 and tourism policies have the potential to increase pressure for development of walking, cycling, fishing facilities, or the development or expansion of marine leisure activities within this SAC.</p>
<p>Other plans or programmes which could affect this SAC</p>	<p>Skibbereen Electoral Area Local Area Plan 2011. Marine Leisure Infrastructure Strategy, West Cork (2008)</p>
<p>Screening Conclusion</p>	
<p>None of the main settlements which occur within the West Strategic Planning Area occur within the catchment of this SAC, however the SAC is located adjacent to one of the villages to which growth will be allocated, Glengarriff. A new WWTP is planned for Glengarriff which has been subjected to an AA process and is due to be constructed shortly. The policy for this rural housing area is restrictive, and it is envisaged that this will serve to reduce the number of one off holiday homes in the catchment and it is considered that draft plan policy will not give rise to significantly increased levels of development within the catchment of this SAC.</p>	
<p>Freshwater surface water quality in the catchment of this SAC has been assigned high and good status, however, Glengarriff Harbour has been assigned moderate status only, and it is important that new development within the catchment does not contribute to any further pressures on water quality in the harbour.</p>	
<p>Having regard to the settlement policy which should limit development of one off housing within the catchment, and subject to the implementation of environmental protection policies contained in the plan including policy HE 2-1 relating to the protection of sites designated for nature conservation, policy WS 3-1 relating to wastewater disposal, and policy WS 6-1, restricting development in flood risk areas, it is concluded that the Core Strategy or Settlement Policies contained in the draft plan are unlikely to give rise to pressures for development of housing within the SAC, or to compromise the protection of water quality in the catchment of this SAC.</p>	
<p>It is draft CDP policy to support the NRA to implement an upgrade to the R572 which is adjacent to this SAC. Unless significant route adjustment or widening is planned, it is considered likely that this upgrade can be achieved without having</p>	

Glengarriff Harbour and Woodlands SAC 0090

negative impacts on the SAC. In addition a recommendation to amend TM 3-2 is included in this document, which relates to sensitive management of route upgrades to regional roads within or near designated sites.

The SAC is located within an area that has been identified to be not normally permissible for wind energy developments. No issues arise.

Glengarriff is a town which is heavily dependent upon the tourism industry, and tourism policies RCI 8-4 and TO 4-1, (developing the marine leisure sector), coupled with objectives of the Marine Leisure Infrastructure Strategy could have the potential to increase pressure for development of marine leisure facilities and marine recreational use within this SAC. This could give rise to increased risk of disturbance related impacts on Common Seals, one of the species for which the SAC is designated. However it is an objective of the plan, to protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and both RCI 8-4 and TO 4-1 include caveats which recognise that such developments must be located in appropriate locations where they are compatible with environmental and heritage sensitivities, and avoid adverse impacts on Natura 2000 sites. In addition, a recommendation is made in chapter 4 of this report to amend the wording of some of the text in the Tourism chapter, in order to ensure that tourism initiatives are developed only in areas with capacity to absorb increased human activity without affecting natural (or other heritage) resources.

Having regard to all of the above, it is considered that the potential for the development to give rise to negative impacts on this SAC can be screened out.

Clonakilty Bay SAC 0091

<p>Qualifying Interests</p>	<p>Mudflats and sandflats not covered by seawater at low tide; Annual vegetation of drift lines, Embryonic shifting dunes; Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes); Fixed coastal dunes with herbaceous vegetation (grey dunes); Atlantic decalcified fixed dunes (<i>Calluno-Ulicetea</i>)</p>
<p>Strategic Planning Area</p>	<p>West - target population increase of 8,460 to 2022 to be directed primarily to main settlements within the Western Strategic Policy Area.</p>
<p>Main Settlements identified in draft CDP which occur within the catchment of the SAC</p>	<p>The SAC is located immediately adjacent to the town of Clonakilty – Target population to increase from 4,721 to 7,218 (+2,497) to 2022.</p> <p>Waste water infrastructure is not currently sufficient to meet the proposed population targets for Clonakilty. Clonakilty Bay shows signs of over enrichment, and any further development which increases nutrient rich discharges to the Bay area, has the potential to cause or contribute to negative impacts on some of the habitats for which this SAC is designated.</p>
<p>Rural Housing Policy Area</p>	<p>This SAC is within the area identified as a Tourism and Rural Diversification Area in chapter 5 of the draft CDP. Policy permitting settlement this area is aimed at reducing the number of permissions granted for one off holiday homes in the countryside, and restricting permissions for the development of rural housing to applicants who have demonstrated a genuine need for rural housing based on their social and /or economic links to the area.</p>
<p>Renewable Energy Policy Area</p>	<p>This SAC and its catchment is located within an area where it has been identified that large scale wind energy developments will normally be discouraged.</p>
<p>Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC</p>	<p>TM 5-1 Seek the support of the NRA in the implementation of an upgrade to the N71 (Cork-Clonakilty-Skibbereen-Bantry) regional route. This route runs adjacent to Clonakilty Bay SAC.</p>
<p>Other policies identified which could give rise to impacts on SAC</p>	<p>Chapters 4 and 8 tourism policies have the potential to increase pressure for development of marine leisure tourism within this SAC.</p>

Clonakilty Bay SAC 0091

<p>Other plans or programmes which could affect this SAC</p>	<p>Greenways Policy TO 6-2 supports the development of the West Cork Railways into Greenways. One of these proposed lines terminates in Clonakilty Town.</p>
<p>Screening Conclusion</p>	<p>Clonakilty Town Plan; Skibbereen Electoral Area Local Area Plan</p> <p>It is considered that some policies of this plan have the potential to give rise to impacts on this SAC. These relate to the significant increase in population which is proposed for Clonakilty, and its designation as a Strategic Employment Centre particularly in the context of its proximity to the SAC, having regard to the current status of its wastewater infrastructure and water quality in the Bay. Recommendations are included in this report to prioritise the delivery of wastewater infrastructure for Clonakilty Town to address this issue.</p> <p>The proposed upgrade to the N71 which is located adjacent to estuarine habitats within the SAC could have the potential to have negative impacts on these. However, a recommendation to amend TM 3-1 is included in this document, which relates to sensitive management of route upgrades to regional roads within or near designated sites.</p> <p>The SAC is located within an area that has been identified where large scale wind energy developments will normally be discouraged. No amendments are required.</p> <p>While one of the proposed Greenways routes terminates in Clonakilty, the termination point is approximately 500m from the SAC and is unlikely to have any impact on the SAC. No amendments to draft policy are required.</p> <p>Tourism policies RCI 8-4 and TO 4-1, (developing the marine leisure sector), could have the potential to increase pressure for development of marine leisure facilities and marine recreational use within this SAC. However it is an objective of the plan, to protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and both RCI 8-4 and TO 4-1 include caveats which recognise that such developments must be located in appropriate locations where they are compatible with environmental and heritage sensitivities, and avoid adverse impacts on Natura 2000 sites. In addition, a recommendation has been made to amend the wording of some of the text in the Tourism chapter, in order to discourage development of tourism initiatives in areas where they could have negative impacts on Natura 2000 sites generally. Having regard to the above, potential for tourism related policy to give rise to negative impacts on this SAC are screened out.</p>

Clonakilty Bay SAC 0091

	<p>Having regard to the impacts identified above, it is considered that the potential for the draft plan to give rise to negative impacts on this Natura 2000 site cannot be screened out. This site is brought forward for Appropriate Assessment, and a number of recommendations have been made to amend the plan, in order to ensure that there is no conflict between plan policy and the protection of this site. These are included in chapter 4 of this report and relate to prioritising the provision of wastewater infrastructure for Clonakilty, sensitive management of the upgrade to the N71, and sensitive management of tourism related activities and developments within and around the bay area.</p> <p>Detailed assessment of the assimilative capacity of Clonakilty Bay is underway to determine whether the Bay has sufficient capacity to cope with the proposed population increase. The details of this assessment may give rise to a requirement to make further amendments to the draft plan.</p>
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Caha Mountains 0093

<p>Qualifying Interests</p>	<p>Blanket Bog and Active Blanket Bog; Northern Atlantic wet heath with <i>Erica tetralix</i>; Siliceous rocky slopes with chasmophytic vegetation; <i>Alpine and Boreal</i> heath; Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoëto-Nanojuncetea; Killarney fern; Kerry slug</p>
<p>Strategic Planning Area</p>	<p>West - target population increase of 8,460 to 2022 to be directed primarily to main settlements within the Western Strategic Policy Area.</p>
<p>Main Settlements identified in draft CDP which occur within the catchment of the SAC</p>	<p>None</p>
<p>Rural Housing Policy Area</p>	<p>This SAC is within the area identified as a Tourism and Rural Diversification Area in chapter 5 of the draft CDP. Policy restricting settlement in this area is aimed at reducing the number of permissions granted for one off holiday homes in the countryside, and restricting permissions for the development of rural housing to applicants who have demonstrated a genuine need for rural housing based on their social and /or economic links to the area.</p>
<p>Renewable Energy Policy Area</p>	<p>This SAC is located partially within an area where it has been identified that large scale wind energy developments will normally be discouraged.</p>

Caha Mountains 0093

<p>Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC</p> <p>Other policies identified which could give rise to impacts on SAC</p> <p>Other plans or programmes which could affect this SAC</p>	<p>Objective TM 5-2 - Seek funding for upgrading of R752 Glengarriff to Castletownbere regional road. This road runs adjacent to the SAC.</p> <p>Chapter 8 Tourism policies have the potential to increase pressure for development of walking tourism in upland areas, including areas within this SAC.</p> <p>None identified.</p>
<p>Screening Conclusion</p>	<p>This SAC is not designated for habitats or species which are dependent upon the protection of water quality to maintain their favourable conservation status, and no policies of the draft CDP direct specific development into this site.</p> <p>It is draft CDP policy to support the NRA to implement an upgrade to the R572 which is adjacent to this SAC. However it is more than likely that this upgrade can be achieved without having negative impacts on the SAC, unless significant widening or route adjustments are planned. A recommendation to amend TM 3-2 is included in this document, which relates to sensitive management of route upgrades to regional roads within or near designated sites.</p> <p>Tourism policy TO 7-1, could have the potential to increase pressure for development of walking routes within this SAC. However it is an objective of the plan, to protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and TO 7-1 includes a caveat which recognises that such developments must be located in appropriate locations where they are compatible with environmental and heritage sensitivities. In addition, a recommendation has been made to amend the wording of some of the text in the Tourism chapter, in order to discourage development of tourism initiatives in areas where it could have negative impacts on Natura 2000 sites generally.</p> <p>Having regard to the above, and subject to implementation of HE 2-1 (protection of sites designated for nature conservation), it is considered that the potential for this plan to give rise to negative impacts on this site can be screened out.</p>

Lough Hyne Nature Reserve and Environs 0097

Qualifying Interests	Large Shallow Inlets and Bays; Reefs; Submerged sea caves.
Strategic Planning Area	West - target population increase of 8,460 to 2022 to be directed primarily to main settlements within the Western Strategic Policy Area.
Main Settlements identified in draft CDP which occur within the catchment of the SAC	None
Rural Housing Policy Area	This SAC is within the area identified as a Tourism and Rural Diversification Area in chapter 5 of the draft CDP. Policy permitting settlement in this area is aimed at reducing the number of permissions granted for one off holiday homes in the countryside, and restricting permissions for the development of rural housing to applicants who have demonstrated a genuine need for rural housing based on their social and /or economic links to the area.
Renewable Energy Policy Area	A small part of this SAC is located within an area where proposals for wind energy development are Acceptable in Principle. Most of the SAC is within an area where large scale wind energy developments will be Normally Discouraged.
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC	None
Other policies identified which could give rise to impacts on SAC	Chapters 4 and 8 tourism policies have the potential to increase pressure for the development of marine leisure tourism within this SAC.
Other plans or programmes which could affect this SAC	None identified.

Lough Hyne Nature Reserve and Environs 0097

Screening Conclusion

None of the main settlements which occur within the West Strategic Planning Area occur within the catchment of this SAC. Additionally, the policy for this rural housing area is restrictive, and it is envisaged that this will serve to reduce the number of one off holiday homes in the catchment. Water quality data for the Lough Hyne area is not currently available.

Having regard to the above, and subject to implementation of environmental protection policies contained in the plan including policy HE 2-1 relating to the protection of sites designated for nature conservation, policy WS 3-1 relating to wastewater disposal, and policy WS 6-1, restricting development in flood risk areas, it is concluded that the Core Strategy or Settlement Policies contained in the draft plan are unlikely to give rise to pressures for development of housing within the SAC, or to compromise the protection of water quality in the catchment of this SAC.

A small part of this SAC is shown on Figure 9-2, Chapter 9 to be located within an area where large scale wind energy developments have been identified to be Acceptable in Principle. It is recommended in chapter 4 of this document that this be changed to exclude all areas within the SAC from the Acceptable in Principle wind energy zone.

Tourism policies RCI 8-4 and TO 4-1, (developing the marine leisure sector), could have the potential to increase pressure for development of marine leisure facilities and marine recreational use within this SAC. However it is an objective of the plan, to protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and both RCI 8-4 and TO 4-1 include caveats which recognise that such developments must be located in appropriate locations where they are compatible with environmental and heritage sensitivities, and avoid adverse impacts on Natura 2000 sites. In addition, a recommendation has been made to amend the wording of some of the text in the Tourism chapter, in order discourage development of tourism initiatives in areas where it could have negative impacts on Natura 2000 sites generally. Having regard to all of the above, it is considered that tourism related policies in the plan are unlikely to give rise to negative impacts on this SAC.

It is considered that the potential for the draft plan to give rise to negative impacts on this Natura 2000 site cannot be screened out. This site is brought forward for Appropriate Assessment, and a recommendation has been made to amend the plan, in order to ensure that there is no conflict between plan policy and the protection of this site. This recommendation relates to amendment of the Wind Energy Map.

Roaringwater Bay and Islands 0101

Qualifying Interests	Large shallow inlets and bays; Reefs; Vegetated sea cliffs of the Atlantic and Baltic coasts; European dry heaths; Submerged or partially submerged sea caves; Harbour porpoise; Otter; Grey seal
Strategic Planning Area	West - target population increase of 8,460 to 2022 to be directed primarily to main settlements within the Western Strategic Policy Area.
Main Settlements identified in draft CDP which occur within the catchment of the SAC	<p>Skibbereen – Target population to increase from 2,670 to 3,035 (+365) to 2022. There is a new waste water treatment plant currently being constructed in Skibbereen which will be sufficient to meet future growth.</p> <p>Schull – Target population to increase from 658 to 748 people to 2022. There is a new waste water treatment plant currently being constructed in Skibbereen which will be sufficient to meet future growth.</p>
Rural Housing Policy Area	This SAC is within the area identified as a Tourism and Rural Diversification Area in chapter 5 of the draft CDP. Policy permitting settlement in this area is aimed at reducing the number of permissions granted for one off holiday homes in the countryside, and restricting permissions for the development of rural housing to applicants who have demonstrated a genuine need for rural housing based on their social and /or economic links to the area.
Renewable Energy Policy Area	This SAC is located within an area where it has been identified that large scale wind energy developments will normally be discouraged.
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC	<p>TM 5-1 Seek the support of the NRA in the implementation of an upgrade to the N71 (Cork-Clonakilty-Skibberen-Bantry) regional route. This route comes within 200m of Roaring Water Bay and Islands SAC at Ballydehob.</p> <p>TM 5-2 Seek funding for the upgrading of the R 586 Bandon to Bantry. This route lies within the catchment of Roaringwater Bay and Islands, but is > 10km from the SAC.</p>
Other policies identified which could give rise to impacts on SAC	Greenways Policy TO 6-2 provides for the development of the West Cork Railway Line which terminates adjacent to SAC at Schull.

Roaringwater Bay and Islands 0101

	<p>A number of the inhabited islands of Co. Cork fall within or partially within this SAC. These include Sherkin, Clear, Long, Hare and Horse Islands. The draft CDP contains policy (RCI 9-3) which promotes economic development on the islands.</p> <p>Chapters 4 and 8 Tourism policies could increase pressure for development of coastal/marine based tourism activities within the vicinity of this SAC, which have the potential to impact on the islands and on shoreline habitats within this SAC, or to cause disturbance to marine mammals species.</p>
<p>Other plans or programmes which could affect this SAC</p>	<p>Skibbereen Electoral Area Local Area Plan 2011.</p>
<p>Screening Conclusion</p>	<p>Two of the settlements into which growth is targeted are located within the catchment of this SAC. New waste water treatment plants are under construction in both of these settlements, which will be capable of treating the projected levels of waste water which would be generated by the increased population. Additionally, the policy for this rural housing area is restrictive, and it is envisaged that this will serve to reduce the number of one off holiday homes in the catchment.</p> <p>Having regard to the above, and to environmental protection policies contained in the plan including policy HE 2-1 relating to the protection of sites designated for nature conservation, policy WS 3-1 relating to wastewater disposal, and policy WS 6-1, restricting development in flood risk areas, it is concluded that the Core Strategy or Settlement Policies contained in the draft plan are unlikely to give rise to pressures for development of housing within the SAC, or to compromise the protection of water quality in the catchment of this SAC.</p> <p>While one branch of the West Cork Railway Greenway is proposed to terminate in Schull, no potential for this development to give rise to negative impacts on the SAC has been identified.</p> <p>Wind energy policy for the area is compatible with the SAC designation. No issues arise.</p> <p>Tourism policies could have the potential to increase pressure for increased levels of development of water based tourism within the bay, which could have the potential to cause disturbance related impacts to species for which the site is designated. However, it is an objective of the plan, to protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and TO 7-1 includes a caveat which recognise that such developments must comply with relevant</p>

Roaringwater Bay and Islands 0101

environmental and heritage objectives. In addition, a recommendation has been made to amend the wording of some of the text in the Tourism chapter, in order to discourage development of tourism initiatives in areas where it could have negative impacts on Natura 2000 sites generally.

Policies promoting economic development RCI 9-2 and RCI 9-3 and tourism development could have the potential to increase pressure for development on the inhabited islands of this SAC. It is recommended in chapter 4 of this document that modifications to this policy be made to ensure that any such development is carried out in a manner that is compatible with this site.

It is considered that the potential for the draft plan to give rise to negative impacts on this Natura 2000 site cannot be screened out. This site is brought forward for Appropriate Assessment, and a recommendation has been made to amend the plan, in order to ensure that there is no conflict between plan policy and the protection of this site. These recommendations relate to RCI 9-2 and RCI 9-3a).

Sheeps Head to Toe Head SAC 0102

Qualifying Interests

Northern Atlantic wet heathlands with *Erica tetralix*; European dry heathlands; Kerry slug

Strategic Planning Area

West - target population increase of 8,460 to 2022 to be directed primarily to main settlements within the Western Strategic Policy Area.

Main Settlements identified in draft CDP which occur within the catchment of the SAC

None.

Rural Housing Policy Area

This SAC is within the area identified as a Tourism and Rural Diversification Area in Chapter 5 of the draft CDP. Policy permitting settlement in this area is aimed at reducing the number of permissions granted for one off holiday homes in the countryside, and restricting permissions for the development of rural housing to applicants who have demonstrated a genuine need for rural housing based on their social and /or economic links to the area.

<p>Renewable Energy Policy Area</p> <p>Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC</p> <p>Other policies identified which could give rise to impacts on SAC</p> <p>Other plans or programmes which could affect this SAC</p> <p>Screening Conclusion</p>	<p>This SAC is located within an area where it has been identified that large scale wind energy developments will normally be discouraged.</p> <p>None</p> <p>Chapters 4 and 8 tourism policies have the potential to increase pressure for the development of tourism/recreational walking routes within this SAC.</p> <p>None identified.</p> <p>This SAC is not designated for habitats or species which are directly dependent upon the protection of water quality to maintain their favourable conservation status, and no policies of the draft CDP direct specific development into this site.</p> <p>Tourism policies could have the potential to increase pressure for increased levels of development of walking tourism along the Sheeps Head way which runs through this site. However, it is an objective of the plan, to protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and TO 7-1 includes a caveat which recognise that such developments must comply with relevant environmental and heritage objectives. In addition, a recommendation has been made to amend the wording of some of the text in the Tourism chapter, in order discourage development of tourism initiatives in areas where it could have negative impacts on Natura 2000 sites generally.</p> <p>Having regard to the above, and to HE 2-1 (protection of sites designated for nature conservation), it is considered that the potential for this plan to give rise to negative impacts on this site can be screened out.</p>
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St. Gobnet's Wood SAC 0106

Qualifying Interests	Old Sessile Oak Woodlands with <i>Ilex</i> and <i>Blechnum</i>
Strategic Planning Area	West - target population increase of 8,460 to 2022 to be directed primarily to main settlements within the Western Strategic Policy Area.
Main Settlements identified in draft CDP which occur within the catchment of the SAC	None.
Rural Housing Policy Area	Transitional Rural Area – Rural parts of western County that are more distant from the major urban areas, which have been identified to have some environmental sensitivities. Rural settlement policy in this area supports the provision of rural housing for people from the local community based on their social and/or economic links to a particular local rural area, but is more relaxed in terms of persons eligible to apply for planning permission for rural housing than other areas of the county.
Renewable Energy Policy Area	This SAC is within an area where it has been identified that large scale wind energy developments are open to consideration.
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC	TM 5-1 Seek the support of the NRA to upgrade the N25 Ballincollig-Macroon-Ballyvourney. The route runs through the SAC.
Other policies identified which could give rise to impacts on SAC	None identified.
Other plans or programmes which could affect this SAC	None identified.
Screening Conclusion	None of the main settlements which occur within the Greater Cork Ring Strategic Planning Area occur within the catchment of this SAC. While the policy for this rural housing area is less restrictive than policy in other parts of the county, the area comes under less pressure for development for rural housing than other areas of the county closer to Cork City.

St. Gobnet's Wood SAC 0106

Having regard to the above, and to environmental protection policies contained in the plan including policy HE 2-1 relating to the protection of sites designated for nature conservation, policy WS 3-1 relating to wastewater disposal, and policy WS 6-1, restricting development in flood risk areas, it is concluded that the Core Strategy or Settlement Policies contained in the draft plan are unlikely to give rise to pressures for development of housing within the SAC, or to compromise the protection of water quality in the catchment of this SAC.

It is draft CDP policy to support the NRA to implement an upgrade to the N25 which passes through this SAC. It is considered likely that this upgrade can be achieved without having negative impacts on the SAC, unless significant widening or route adjustments are planned. A recommendation to amend TM 3-1 is included in this document, which relates to sensitive management of route upgrades to regional roads within or near designated sites.

The SAC is located within an area that has been identified on Figure 9-2, Chapter 9 that large scale wind energy developments are Open to Consideration. The associated text states that Natura 2000 sites and Natural Heritage Areas within this area are not generally considered suitable for wind farm developments, and policy ED 3-5 states that large scale wind energy developments in these areas are open to consideration where they can avoid adverse impacts on Natura 2000 sites and Natural Heritage Areas. It is considered that there is a lack of consistency between Figure 9-2 and policy ED 3-5, and that the figure as shown currently could encourage prospective developers to develop proposals for wind energy development within the SAC. It is considered that this position is not compatible with the conservation objectives for the SAC, and it is recommended, in the interest of clarity, to show this SAC within the 'Normally Discouraged' wind energy category on figure 9-2.

Having regard to the impacts identified above, it is considered that the potential for the draft plan to give rise to negative impacts on Natura 2000 sites cannot be screened out. This site is brought forward for Appropriate Assessment, and a number of recommendations have been made to amend the plan, in order to ensure that there is no conflict between plan policy and the protection of this site.

The Gearagh SAC 0108

Qualifying Interests	Water courses of plain to montane levels with the <i>Ranunculus fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation; Old sessile oak woodlands with <i>Ilex</i> and <i>Blechnum</i> ; Alluvial forest with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> ; Otter
Strategic Planning Area	Greater Cork Ring - target population increase of 13,464 to 2022 to be directed primarily to main settlements within the Greater Cork Ring.
Main Settlements identified in draft CDP which occur within the catchment of the SAC	Macroon, target population increase to 4,536 (+657)
Rural Housing Policy Area	This SAC is located within the Macroon Green Belt and within the area identified to be Rural Area Under Strong Urban Influence. Settlement policy within this Rural Housing Policy Area is more restrictive than other areas closer to Cork City, but less so than areas of the County further away from Cork City. Greenbelt policy for Macroon seeks to prevent town sprawl and ensure a distinction in character between the town and the open countryside.
Renewable Energy Policy Area	This SAC is located within an area where it has been identified that large scale wind energy developments will normally be discouraged. Part of its catchment is located within an area where large scale wind energy developments are acceptable in principle.
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC	None
Other policies identified which could give rise to impacts on SAC	None identified.
Other plans or programmes which could affect this SAC	Macroon Electoral Area Local Area Plan, 2011.

The Gearagh SAC 0108

Screening Conclusion	<p>One settlement (Macrooom) into which growth is targeted is located within the catchment of this SAC. However, the wastewater discharge point for Macrooom is located downstream of the SAC, and therefore poses no threat to the habitats or species for which this SAC is designated. Having regard to the above, and to environmental protection policies contained in the plan including policy HE 2-1 relating to the protection of sites designated for nature conservation, policy WS 3-1 relating to wastewater disposal, and policy WS 6-1, restricting development in flood risk areas, it is concluded that the Core Strategy or Settlement Policies contained in the draft plan are unlikely to give rise to pressures for development of housing within the SAC, or to compromise the protection of water quality in the catchment of this SAC.</p> <p>No other policies of the plan have been identified which could give rise to negative impacts on this SAC, accordingly, it is considered that the potential for the plan to give rise to negative impacts on this site can be screened out.</p>
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Three Castle Head to Mizen Head SAC 0109

Qualifying Interests	Vegetated sea cliffs of the Atlantic and Baltic coasts; European dry heaths
Strategic Planning Area	West - target population increase of 8,460 to 2022 to be directed primarily to main settlements within the Western Strategic Policy Area.
Main Settlements identified in draft CDP which occur within the catchment of the SAC	None.
Rural Housing Policy Area	This SAC is within the area identified as a Tourism and Rural Diversification Area in chapter 5 of the draft CDP. Policy permitting settlement in this area is aimed at reducing the number of permissions granted for one off holiday homes in the countryside, and restricting permissions for the development of rural housing to applicants who have demonstrated a genuine need for rural housing based on their social and /or economic links to the area.
Renewable Energy Policy Area	This SAC is located within an area where it has been identified that large scale wind energy developments will normally be discouraged.

Three Castle Head to Mizen Head SAC 0109

<p>Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC</p> <p>Other policies identified which could give rise to impacts on SAC</p> <p>Other plans or programmes which could affect this SAC</p>	<p>None</p> <p>Chapters 4 and 8 tourism policies have the potential to increase pressure for the development of tourism/recreational walking routes within this SAC.</p> <p>None identified.</p>
<p>Screening Conclusion</p>	<p>This SAC is not designated for habitats or species which are dependent upon the protection of water quality to maintain their favourable conservation status, and no policies of the draft CDP direct specific development into this site.</p> <p>Tourism policies could have the potential to increase pressure for increased levels of development of walking tourism within this SAC. However, it is an objective of the plan, to protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and TO 7-1 includes a caveat which recognise that such developments must comply with relevant environmental and heritage objectives. In addition, a recommendation has been made to amend the wording of some of the text in the Tourism chapter, in order discourage development of tourism initiatives in areas where it could have negative impacts on Natura 2000 sites generally.</p> <p>Having regard to the above, and to HE 2-1 (protection of sites designated for nature conservation), it is considered that the potential for this plan to give rise to negative impacts on this site can be screened out.</p>

Old Domestic Buildings, Dromore SAC 0353

Qualifying Interests	Lesser horseshoe bat
Strategic Planning Area	Not in County
Main Settlements identified in draft CDP which occur within the catchment of the SAC	n/a
Rural Housing Policy Area	n/a
Renewable Energy Policy Area	n/a
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC	n/a
Other policies identified which could give rise to impacts on SAC	n/a
Other plans or programmes which could affect this SAC	None identified
Screening Conclusion	This SAC is in Co. Kerry. It is over 9km from the Cork border. It has no hydrological link to any freshwater catchment originating in Cork. No policies have been identified in the draft CDP which could have negative impacts on this SAC.

Kilgarvan Ice House SAC 0364

Qualifying Interests	Lesser horseshoe bat
Strategic Planning Area	Not in County
Main Settlements identified in draft CDP which occur within the catchment of the SAC	n/a
Rural Housing Policy Area	n/a
Renewable Energy Policy Area	n/a
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC	n/a
Other policies identified which could give rise to impacts on SAC	n/a
Other plans or programmes which could affect this SAC	None identified
Screening Conclusion	This SAC is in Co. Kerry. It is over 9km from the Cork border. It has no hydrological link to any freshwater catchment originating in Cork. No policies have been identified in the draft CDP which could have negative impacts on this SAC.

Killarney National Park, Macgillycuddy Reeks and Caragh River Catchment SAC 0365

<p>Qualifying Interests</p>	<p>Depressions on peat substrates of the Rhynchosporion; Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae); Oligotrophic to mesotrophic standing waters with vegetation of the; Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation; European dry heaths; <i>Juniperus communis</i> formations on heaths or calcareous grasslands; Calaminarian grasslands of Violetalia calaminariae; <i>Molinia</i> meadows on calcareous, peaty or clayey-silt laden soils; Blanket bog (*Active only); Old sessile oak woodlands with <i>Ilex</i> and <i>Blechnum</i>; Alpine and Boreal heaths; Northern Atlantic wet heath with <i>Erica tetralix</i>; Twaite shad; Killarney fern; Slender naiad; Kerry slug; Marsh fritillary; Lesser horseshoe bat; Sea lamprey; Salmon; River lamprey; Freshwater pearl mussel; Otter.</p>
<p>Strategic Planning Area</p>	<p>North - Targeted population increase: 5,514</p>
<p>Main Settlements identified in draft CDP which occur within the catchment of the SAC</p>	<p>None</p>
<p>Rural Housing Policy Area</p>	<p>This SAC is in a Structurally Weaker Rural Area as identified in chapter 5 of the plan. The associated rural settlement policy for this area, RCI 4-6, is aimed at accommodating demand for permanent residential development as it arises.</p>
<p>Renewable Energy Policy Area</p>	<p>The part of this SAC which is located in Cork is within an area where large scale wind energy developments will be normally discouraged. However the upper catchment of the Clydagh River which also forms part of the SAC is within an area where large scale wind energy developments are open to consideration.</p>
<p>Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC</p>	<p>None</p>
<p>Other policies identified which could give rise to impacts on SAC</p>	<p>Chapter 8 tourism policy T-O 7-1 has the potential to increase pressure for development of walking tourism in upland areas, including areas within this SAC.</p>
<p>Other plans or programmes which could affect this SAC</p>	<p>None identified.</p>

Killarney National Park, Macgillycuddy Reeks and Caragh River Catchment SAC 0365

Screening Conclusion	<p>The catchment of the Clydagh River which forms part of the SAC is located within an upland area where large scale wind energy developments are Open to Consideration. A recommendation has been made in this report to include text to clarify the approach to development of large scale wind energy developments within sensitive catchments.</p> <p>Tourism policy TO 7-1 (developing walking and cycling), could have the potential to increase pressure for development of upland walking tourism within this SAC. However it is an objective of the plan, to protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and TO 7-1 includes a caveat which recognises that such developments can only be developed subject to compliance with relevant environmental and heritage related objectives. In addition, a recommendation has been made to amend the wording of some of the text in the Tourism chapter, in order discourage development of tourism initiatives in areas where they could have negative impacts on Natura 2000 sites generally.</p> <p>Subject to the inclusion of the recommended amendment to 9.3.14 to the plan, it is considered that the potential for plan policy to promote development which could affect this SAC can be screened out.</p>
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Galtee Mountains SAC 0646

Qualifying Interests	European dry heaths; Alpine and Boreal heaths; *Species-rich <i>Nardus</i> grasslands on siliceous substrates in mountain areas; Blanket bog (*active only), Calcareous rocky slopes with chasmophytic vegetation; Siliceous rocky slopes with chasmophytic vegetation.
Strategic Planning Area	Not in County
Main Settlements identified in draft CDP which occur within the catchment of the SAC	N/A
Rural Housing Policy Area	N/A
Renewable Energy Policy Area	N/A

Galtee Mountains SAC 0646

Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC	N/A
Other policies identified which could give rise to impacts on SAC	None identified
Other plans or programmes which could affect this SAC	None identified
Screening Conclusion	This SAC is in Co's Tipperary and Limerick. It is over 4km at its nearest point from the Cork border. It has no hydrological link to any freshwater catchment originating in Cork. No policies have been identified in the draft CDP which could have negative impacts on this SAC.

Barley Cove to Ballyrisode Point SAC 1040

Qualifying Interests	Mudflats and sandflats not covered by seawater at low tide; Perennial vegetation of stony banks; <i>Salicornia</i> and other annuals colonising mud and sand; Atlantic salt meadows; Mediterranean salt meadows; Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes). Fixed coastal dunes with herbaceous vegetation (grey dunes); European dry heaths.
Strategic Planning Area	West - target population increase of 8,460 to 2022 to be directed primarily to main settlements within the Western Strategic Policy Area.
Main Settlements identified in draft CDP which occur within the catchment of the SAC	None.
Rural Housing Policy Area	This SAC is within the area identified as a Tourism and Rural Diversification Area in chapter 5 of the draft CDP. Policy permitting settlement this area is aimed at reducing the number of permissions granted for one off holiday homes in the countryside, and restricting permissions for the development of rural housing to applicants who have demonstrated a genuine need for rural housing based on their social and /or economic links to the area.

Barley Cove to Ballyrisode Point SAC 1040

Renewable Energy Policy Area	This SAC and its catchment is located within an area where it has been identified that large scale wind energy developments will normally be discouraged.
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC	None
Other policies identified which could give rise to impacts on SAC	Chapters 4 and 8 tourism policies have the potential to increase pressure for development of marine leisure facilities or recreational activity within this SAC. Intensification of these activities within the SAC increases the risk of deterioration of coastal habitat quality.
Other plans or programmes which could affect this SAC	Skibbereen Electoral Area Local Area Plan 2013
Screening Conclusion	<p>None of the settlements to which growth is targeted are located within the catchment of this SAC. Additionally, the policy for this rural housing area is restrictive, and it is envisaged that this will serve to reduce the number of one off holiday homes in the catchment.</p> <p>Having regard to the above, and to environmental protection policies contained in the plan including policy HE 2-1 relating to the protection of sites designated for nature conservation, policy WS 3-1 relating to wastewater disposal, and policy WS 6-1, restricting development in flood risk areas, it is concluded that the Core Strategy or Settlement Policies contained in the draft plan are unlikely to give rise to pressures for development of housing within the SAC, or to compromise the protection of water quality in the catchment of this SAC.</p> <p>Tourism policies RCI 8-4 and TO 4-1 (developing the marine leisure sector), could have the potential to increase pressure for development of marine leisure facilities and marine recreational use within this SAC. Increased activity in coastal areas has the potential to cause deterioration in the quality of coastal habitats including dune systems. However it is an objective of the plan, to protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and both RCI 8-4 and TO 4-1 include caveats which recognise that such developments must be located in appropriate locations where they are compatible with environmental and heritage sensitivities, and avoid adverse impacts on Natura 2000 sites. In addition, a recommendation has been made to amend the wording of some of the text in the Tourism chapter, in order discourage development of tourism initiatives in areas where they could have negative impacts on Natura 2000 sites generally.</p>

Barley Cove to Ballyrisode Point SAC 1040

Having regard to the above, and to HE 2-1 (protection of sites designated for nature conservation), it is considered that the potential for this plan to give rise to negative impacts on this site can be screened out.

Cleanderry Wood SAC 1043

Qualifying Interests	Old sessile oak woodlands with <i>Ilex</i> and <i>Blechnum</i> ; Killarney fern
Strategic Planning Area	West - target population increase of 8,460 to 2022 to be directed primarily to main settlements within the Western Strategic Policy Area.
Main Settlements identified in draft CDP which occur within the catchment of the SAC	None.
Rural Housing Policy Area	This SAC is within the area identified as a Tourism and Rural Diversification Area in chapter 5 of the draft CDP. Policy permitting settlement in this area is aimed at reducing the number of permissions granted for one off holiday homes in the countryside, and restricting permissions for the development of rural housing to applicants who have demonstrated a genuine need for rural housing based on their social and /or economic links to the area.
Renewable Energy Policy Area	This SAC and its catchment is located within an area where it has been identified that large scale wind energy developments will normally be discouraged.
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC	None
Other policies identified which could give rise to impacts on SAC	None identified.
Other plans or programmes which could affect this SAC	None identified.
Screening Conclusion	This SAC is not designated for habitats or species which are dependent upon the protection of water quality to maintain their favourable conservation status, and no policies of the draft CDP direct specific development into this site.

Cleanderry Wood SAC 1043

Having regard to the above, and to HE 2-1 (protection of sites designated for nature conservation), it is considered that the potential for this plan to give rise to negative impacts on this site can be screened out.

Great Island Channel SAC 1058

Qualifying Interests

Estuaries; Mudflats and sandflats not covered by seawater at low tide; Spartina swards; Atlantic salt meadows

Strategic Planning Area

County Metropolitan Area - Target Population Increase - +43,388

Main Settlements identified in draft CDP which occur within the catchment of the SAC

Cork North Environs (Target population increase from 6,692 to 10,719 +4,027); Glanmire (Target population increase from 8,924 to 10,585 + 1,661); Carrigtwohill (Target population increase from 4,551 to 11,618 +7,067); Midleton (Target population increase from 12,001 to 21,576 +9,575) – total = 20,669

Waste water infrastructure is not currently sufficient to meet the proposed population targets for Carrigtwohill or Midleton, and the Carrigtwohill plant is currently failing to meet license conditions. Water quality within this SAC is identified as potentially eutrophic (EPA Envision Maps, Nov. 2013).

Rural Housing Policy Area

This SAC is within the area identified as a Rural Area under Strong Urban Influence in chapter 5 of the draft CDP and Town Greenbelts. Policy permitting settlement this area is aimed at restricting development of one off rural housing only for people who can demonstrate that they have a rural generated housing need based on social of economic links to the area, and is more restrictive than in other parts of the County under less pressure for development.

Renewable Energy Policy Area

This SAC and much of its catchment is located within an area where it has been identified that large scale wind energy developments will normally be discouraged.

Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC

TM 5-1 Seek the support of the NRA to upgrade the Dunkettle Interchange. The location of the proposed interchange is adjacent to the Great Island Channel at the Glashaboy River and on the south-east shore of Little Island.

TM 5-1 Seek the support of the NRA to upgrade the Cork Northern Ring Road. This route is >1 km from the Great Island Channel SAC.

Great Island Channel SAC 1058

TM 5-2 Seek funding for the development of Midleton (Waterrock) access roads and rail bridge. Waterrock is approximately 2km from the Great Island Channel SAC. The route of access roads is not known.

TM 5-2 Seek funding for the upgrading of the R624 N25 Cobh. This route may require the development of a new crossing of the North Channel of Cork Harbour at Belvelly. This area is within the Great Island Channel SAC.

TM 5-2 Seek funding for the development of the Midleton Northern Relief route. The route for this relief road is not known, however it is within approximately one km of the Great Island Channel SAC.

TM 5-2 Seek funding for the upgrading of the R630 Midleton to Whitegate. This route runs along the eastern shore of Cork Harbour and is adjacent to the Great Island Channel SAC in the northern section.

Other policies identified which could give rise to impacts on SAC

Policy encouraging development of marine leisure facilities RCI 8-4 and TO 4-1; policy relating to the redevelopment of port facilities in Cork Harbour EE 6-2, TM 5-1 b) and TM 5-2; greenways policy TO 6-2; policy promoting the development of Strategic Employment centres in a number of locations adjacent to the SAC (Carrigtwohill and Little Island; and policy relating to the designation of Whitegate as a national energy hub.

Other plans or programmes which could affect this SAC

Cork City Development Plan, Midleton Town Plan, Carrigaline Electoral Area Local Area Plan, Midleton Electoral Area Local Area Plan

Screening Conclusion

It is clear from the above, that a very high level of growth and development is proposed within the area of Cork Harbour, which could have the potential to impact on this site unless it is managed carefully. This includes significant expansion in terms of population in many of the settlements around the Harbour, the development of strategic employment centres at Carrigtwohill and Little Island, the relocation of Port of Cork facilities to Marino Point and Ringaskiddy, and proposals for the designation of Whitegate as a national energy hub.

It will be critical that the provision of effective wastewater treatment infrastructure is prioritised, and is provided in advance of progressing development in settlements within the catchment of this SAC, where there is insufficient capacity at present, in order to ensure that EPA license standards can be consistently met on an ongoing basis. This is in order to prevent development facilitated by this plan causing or contributing to any further deterioration to water quality in this SAC (North Channel currently described as eutrophic). All of the settlements around the harbour where deficiencies have been identified in their wastewater

Great Island Channel SAC 1058

infrastructure are included in the priority infrastructure list contained in chapter 15 of the plan. However, priority needs to be given to resolving capacity or other issues with treatment plants, not just in the settlements described in the draft CDP, but in all other settlements within this catchment. This requirement must be emphasised in the plan.

The proposed upgrades to a large number of roads within the catchment, could have the potential to give rise to negative impacts on this SAC. It is considered that most of these can be progressed without having or contributing to negative impacts on the SAC, subject to sensitive planning, design, construction and management. However, in the case of the R624 Cobh road, no route / channel crossing has been identified to date which avoids giving rise to direct loss of qualifying habitats within the SAC. For that reason, it is recommended that this proposal be omitted from the plan until such time as the scheme has been developed in further detail and has been subjected to Habitats Directive Assessment.

A significant level of change in terms of location of Port facilities is proposed for Cork Harbour which could increase development activity within the vicinity of Marino Point in an area adjacent to the SAC. Recommendations are made in chapter 4 of this report to amend chapters 6, 9 and 10 of the plan to ensure that the significant redevelopment proposals outlined for the harbour are progressed in a manner that is compatible with the protection of the environmental resources (including protection of Natura 2000 sites).

No issues relating to the wind energy policy have been identified which could give rise to impacts on this SAC.

Tourism policies RCI 8-4, TO 4-1 and TO 7-1 could have the potential to increase pressure for development of fishing or boating activities, recreational walking, marine leisure facilities and marine recreational use within this SAC. However it is an objective of the plan, to protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and RCI 8-4, TO 4-1 and TO 7-1 include caveats which recognise that such developments must be located in appropriate locations where they are compatible with environmental and heritage sensitivities, and avoid adverse impacts on Natura 2000 sites. In addition, a recommendation has been made to amend the wording of some of the text in the Tourism chapter, in order to discourage development of tourism initiatives in areas where they could have negative impacts on Natura 2000 sites generally. Having regard to the above, potential for tourism related policy to give rise to negative impacts on this SAC are screened out.

It is considered that the potential for the draft plan to give rise to negative impacts on Natura 2000 sites cannot be screened out. This site is brought forward for Appropriate Assessment, and recommendations have been made to amend the plan, in order to ensure that there is no conflict between plan policy and the protection of this site. These recommendations relate to prioritising the provision of wastewater infrastructure for settlements within the catchment of Cork Harbour, sensitive management of Port

Great Island Channel SAC 1058

	<p>redevelopment, and development of the Strategic Employment Centres around the harbour and sensitive management of tourism related activities and developments within the catchment.</p> <p>Cork County Council is consulting with the Department of Arts, Heritage and the Gaeltacht to agree the parameters of further detailed assessment which may be required to establish whether there is sufficient assimilative capacity in Cork Harbour to absorb the additional growth which is proposed in its catchment. The results of these consultations and any required assessment, may result in a requirement to further modify the plan at the amendments stage.</p>
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Kilkeran Lake and Castlerefreke Dunes SAC 1061

Qualifying Interests	Coastal lagoons; Embryonic shifting dunes; Shifting dunes along with shorelines with <i>Ammophila arenaria</i> (white dunes); Fixed coastal dunes with herbaceous vegetation (grey dunes)
Strategic Planning Area	West - target population increase of 8,460 to 2022 to be directed primarily to main settlements within the Western Strategic Policy Area.
Main Settlements identified in draft CDP which occur within the catchment of the SAC	None.
Rural Housing Policy Area	This SAC is within the area identified as a Tourism and Rural Diversification Area in chapter 5 of the draft CDP. Policy permitting settlement in this area is aimed at reducing the number of permissions granted for one off holiday homes in the countryside, and restricting permissions for the development of rural housing to applicants who have demonstrated a genuine need for rural housing based on their social and /or economic links to the area.
Renewable Energy Policy Area	This SAC and its catchment is located within an area where it has been identified that large scale wind energy developments will normally be discouraged.
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC	None

Kilkeran Lake and Castlefreke Dunes SAC 1061

<p>Other policies identified which could give rise to impacts on SAC</p>	<p>None identified.</p>
<p>Other plans or programmes which could affect this SAC</p>	<p>None identified.</p>
<p>Screening Conclusion</p>	<p>None of the settlements to which growth is targeted are located within the catchment of this SAC. Additionally, the policy for this rural housing area is restrictive, and it is envisaged that this will serve to reduce the number of one off holiday homes in the catchment.</p> <p>Having regard to the above, and to environmental protection policies contained in the plan including policy HE 2-1 relating to the protection of sites designated for nature conservation, policy WS 3-1 relating to wastewater disposal, and policy WS 6-1, restricting development in flood risk areas, it is concluded that the Core Strategy or Settlement Policies contained in the draft plan are unlikely to give rise to pressures for development of housing within the SAC, or to compromise the protection of water quality in the catchment of this SAC.</p> <p>Tourism policies RCI 8-4 and TO 4-1 (developing the marine leisure sector), could have the potential to increase pressure for development of marine leisure facilities and marine recreational use within this SAC. However it is an objective of the plan, to protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and both RCI 8-4 and TO 4-1 include caveats which recognise that such developments must be located in appropriate locations where they are compatible with environmental and heritage sensitivities, and avoid adverse impacts on Natura 2000 sites. In addition, a recommendation has been made to amend the wording of some of the text in the Tourism chapter, in order discourage development of tourism initiatives in areas where it could have negative impacts on Natura 2000 sites generally.</p> <p>Having regard to the above, and to HE 2-1 (protection of sites designated for nature conservation), it is considered that the potential for this plan to give rise to negative impacts on this site can be screened out.</p>

Myross Wood SAC 1070

<p>Qualifying Interests Strategic Planning Area</p>	<p>Killarney Fern West - target population increase of 8,460 to 2022 to be directed primarily to main settlements within the Western Strategic Policy Area.</p>
<p>Main Settlements identified in draft CDP which occur within the catchment of the SAC</p>	<p>None.</p>
<p>Rural Housing Policy Area</p>	<p>This SAC is within the area identified as a Tourism and Rural Diversification Area in chapter 5 of the draft CDP. Policy permitting settlement in this area is aimed at reducing the number of permissions granted for one off holiday homes in the countryside, and restricting permissions for the development of rural housing to applicants who have demonstrated a genuine need for rural housing based on their social and /or economic links to the area.</p>
<p>Renewable Energy Policy Area</p>	<p>This SAC is located within an area where it has been identified that large scale wind energy developments will normally be discouraged.</p>
<p>Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC</p>	<p>None.</p>
<p>Other policies identified which could give rise to impacts on SAC</p>	<p>None identified.</p>
<p>Other plans or programmes which could affect this SAC</p>	<p>None identified.</p>
<p>Screening Conclusion</p>	<p>This SAC is not designated for habitats or species which are dependent upon the protection of water quality to maintain their favourable conservation status, and no policies of the draft CDP direct specific development into this site. Having regard to the above, and to HE 2-1 (protection of sites designated for nature conservation), it is considered that the potential for this plan to give rise to negative impacts on this site can be screened out.</p>

Courtmacsherry Estuary SAC 1230

Qualifying Interests	Estuaries; Mudflats and sandflats not covered by seawater at low tide; Annual vegetation of drift lines; Perennial vegetation of stony banks; <i>Salicornia</i> and other annuals colonising muds and sand; Atlantic salt meadows; Mediterranean salt meadows; Embryonic shifting dunes; Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes); Fixed coastal dunes with herbaceous vegetation (grey dunes)
Strategic Planning Area	Greater Cork Ring and West – target population increase in West (+8,460) and Greater Cork Ring (+13, 464).
Main Settlements identified in draft CDP which occur within the catchment of the SAC	None. However, the Argideen River is eutrophic (EPA Envision maps 2013).
Rural Housing Policy Area	This SAC falls into two rural housing policy areas. The western portion of the SAC and most of its catchment is within the Tourism and Rural Diversification Area, which the eastern portion of the SAC and its catchment falls into the Rural Area Under Strong Urban Influence. Settlement policy for both of these areas is more restrictive than in other parts of the county where pressure for development is weaker.
Renewable Energy Policy Area	This SAC is located within an area where it has been identified that large scale wind energy developments will normally be discouraged.
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC	TM 5-1 Seek the support of the NRA in the implementation of an upgrade to the N71 (Cork-Clonakilty-Skibberen-Bantry) regional route. This route is located within the catchment of this SAC, however it is over 5km from the SAC.
Other policies identified which could give rise to impacts on SAC	Chapters 4 and 8 tourism policies have the potential to increase pressure for development of marine leisure fishing facilities within this SAC. Intensification of these activities within the SAC increases the risk of deterioration of coastal habitat quality.
Other plans or programmes which could affect this SAC	Skibberen Electoral Area Local Area Plan 2011.
Screening Conclusion	None of the settlements to which growth is targeted are located within the catchment of this SAC. Additionally, the policy for this rural housing area has a relatively high level of restrictions comparable to other parts of the county. Having regard to the above, and to environmental protection policies contained in the plan including policy HE 2-1 relating to the protection of sites designated for nature conservation, policy WS 3-1 relating to wastewater disposal, and policy WS 6-1, restricting development in flood risk areas, it is concluded that, despite the eutrophic status of the estuary, the Core Strategy or Settlement Policies contained

Courtmacsherry Estuary SAC 1230

in the draft plan are unlikely to give rise to pressures for development of housing within the SAC, or to further compromise the protection of water quality in the catchment of this SAC.

Tourism policies RCI 8-4 and TO 4-1 (developing the marine leisure sector), could have the potential to increase pressure for development of marine leisure facilities and marine recreational use within this SAC. However it is an objective of the plan, to protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and both RCI 8-4 and TO 4-1 include caveats which recognise that such developments must be located in appropriate locations where they are compatible with environmental and heritage sensitivities, and avoid adverse impacts on Natura 2000 sites. In addition, a recommendation has been made to amend the wording of some of the text in the Tourism chapter, in order discourage development of tourism initiatives in areas where it could have negative impacts on Natura 2000 sites generally.

Having regard to the above, and to HE 2-1 (protection of sites designated for nature conservation), it is considered that the potential for this plan to give rise to negative impacts on this site can be screened out.

Castletownshend SAC 1547

Qualifying Interests

Killarney Fern

Strategic Planning Area

West - target population increase of 8,460 to 2022 to be directed primarily to main settlements within the Western Strategic Policy Area.

Main Settlements identified in draft CDP which occur within the catchment of the SAC

None.

Rural Housing Policy Area

This SAC is within the area identified as a Tourism and Rural Diversification Area in chapter 5 of the draft CDP. Policy permitting settlement in this area is aimed at reducing the number of permissions granted for one off holiday homes in the countryside, and restricting permissions for the development of rural housing to applicants who have demonstrated a genuine need for rural housing based on their social and /or economic links to the area.

Castletownshend SAC 1547

Renewable Energy Policy Area	This SAC is located within an area where it has been identified that large scale wind energy developments will normally be discouraged.
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC	None.
Other policies identified which could give rise to impacts on SAC	None identified.
Other plans or programmes which could affect this SAC	None identified.
Screening Conclusion	This SAC is not designated for habitats or species which are dependent upon the protection of water quality to maintain their favourable conservation status, and no policies of the draft CDP direct specific development into this site. Having regard to the above, and to HE 2-1 (protection of sites designated for nature conservation), it is considered that the potential for this plan to give rise to negative impacts on this site can be screened out.

Derryclogher (Knockboy) Bog SAC 1873

Qualifying Interests	Blanket Bog (*Active) only
Strategic Planning Area	West - target population increase of 8,460 to 2022 to be directed primarily to main settlements within the Western Strategic Policy Area.
Main Settlements identified in draft CDP which occur within the catchment of the SAC	None

Derryclogher (Knockboy) Bog SAC 1873

<p>Rural Housing Policy Area</p>	<p>This SAC is within the area identified as a tourism and rural diversification Area in chapter 5 of the draft CDP. Policy permitting settlement in this area is aimed at reducing the number of permissions granted for one off holiday homes in the countryside, and restricting permissions for the development of rural housing to applicants who have demonstrated a genuine need for rural housing based on their social and /or economic links to the area.</p>
<p>Renewable Energy Policy Area</p>	<p>This SAC is located within an area where it has been identified that large scale wind energy developments will normally be discouraged.</p>
<p>Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC</p>	<p>None</p>
<p>Other policies identified which could give rise to impacts on SAC</p>	<p>Chapter 8 Tourism policies have the potential to increase pressure for development of walking tourism in upland areas, including areas within this SAC.</p>
<p>Other plans or programmes which could affect this SAC</p>	<p>None identified.</p>
<p>Screening Conclusion</p>	<p>This SAC is not designated for habitats or species which are dependent upon the protection of water quality to maintain their favourable conservation status, and no policies of the draft CDP direct specific development into this site.</p> <p>Tourism policy TO 7-1, could have the potential to increase pressure for development of walking routes within this SAC. However it is an objective of the plan, to protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and TO 7-1 includes a caveat which recognises that such developments must be located in appropriate locations where they are compatible with environmental and heritage sensitivities. In addition, a recommendation has been made to amend the wording of some of the text in the Tourism chapter, in order discourage development of tourism initiatives in areas where it could have negative impacts on Natura 2000 sites generally.</p> <p>Having regard to the above, and to HE 2-1 (protection of sites designated for nature conservation), it is considered that the potential for this plan to give rise to negative impacts on this site can be screened out.</p>

Glanmore Bog SAC 1879

Qualifying Interests	Oligotrophic Waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>); Water courses of plain to montane levels with the <i>Ranunculus fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation; Northern Atlantic wet heaths with <i>Erica tetralix</i> ; Blanket bog (*active) only; Freshwater pearl mussel; Killarney fern
Strategic Planning Area	West - target population increase of 8,460 to 2022 to be directed primarily to main settlements within the Western Strategic Policy Area.
Main Settlements identified in draft CDP which occur within the catchment of the SAC	None.
Rural Housing Policy Area	This SAC is within the area identified as a tourism and rural diversification Area in chapter 5 of the draft CDP. Policy permitting settlement in this area is aimed at reducing the number of permissions granted for one off holiday homes in the countryside, and restricting permissions for the development of rural housing to applicants who have demonstrated a genuine need for rural housing based on their social and /or economic links to the area.
Renewable Energy Policy Area	This SAC and its catchment is located within an area where it has been identified that large scale wind energy developments will normally be discouraged.
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC	None.
Other policies identified which could give rise to impacts on SAC	Glenbeg Lough is the source for drinking water on the Beara Peninsula. Current abstraction levels from this lake may be having a negative impact on the Lough. The need to find a new drinking water source for Castletownbere and other settlements on the Beara Peninsula has been identified as a priority requirement in the draft CDP.
Other plans or programmes which could affect this SAC	None identified.
Screening Conclusion	None of the settlements to which growth is targeted are located within the catchment of this SAC. Additionally, the policy for this rural housing area has a relatively high level of restrictions comparable to other parts of the county. Having regard to the above,

Glanmore Bog SAC 1879

and to environmental protection policies contained in the plan including policy HE 2-1 relating to the protection of sites designated for nature conservation, policy WS 3-1 relating to wastewater disposal, and policy WS 6-1, restricting development in flood risk areas, it is concluded that the Core Strategy or Settlement Policies contained in the draft plan are unlikely to give rise to pressures for development of housing within the SAC, or to compromise the protection of water quality in the catchment of this SAC.

It is draft plan policy to prioritise the sourcing of an alternative water supply for the Beara Peninsula, and no increase in abstraction rates from Glenbeg Lough are proposed in the plan. No other policies have been identified which could have the potential to give rise to negative impacts on this site.

Having regard to the above, and to HE 2-1 (protection of sites designated for nature conservation), it is considered that the potential for this plan to give rise to negative impacts on this site can be screened out.

Maulagowna Bog SAC 1881

Qualifying Interests	Blanket bog (*active only)
Strategic Planning Area	Not in County
Main Settlements identified in draft CDP which occur within the catchment of the SAC	N/A
Rural Housing Policy Area	N/A
Renewable Energy Policy Area	N/A
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC	N/A

Maulagowna Bog SAC 1881

Other policies identified which could give rise to impacts on SAC	None identified
Other plans or programmes which could affect this SAC	None identified
Screening Conclusion	This SAC is in Co Kerry. It is approximately 2km the Cork border. It has no hydrological link to any freshwater catchment originating in Cork. No policies have been identified in the draft CDP which could have negative impacts on this SAC.

Mullaghanish Bog SAC 1890

Qualifying Interests	Blanket Bog (*active only)
Strategic Planning Area	West -target population increase of 8,460 to 2022 to be directed primarily to main settlements within the Western Strategic Policy Area.
Main Settlements identified in draft CDP which occur within the catchment of the SAC	None.
Rural Housing Policy Area	Transitional Rural Area – Rural parts of western County that are more distant from the major urban areas, which have been identified to have some environmental sensitivities. Rural settlement policy in this area supports the provision of rural housing for people from the local community based on their social and/or economic links to a particular local rural area, but is more relaxed in terms of persons eligible to apply for planning permission for rural housing than other areas of the county.
Renewable Energy Policy Area	This SAC is within an area where it has been identified that large scale wind energy developments are open to consideration.

Mullaghanish Bog SAC 1890

<p>Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC</p>	<p>None.</p>
<p>Other policies identified which could give rise to impacts on SAC</p>	<p>Chapter 8 Tourism policies have the potential to increase pressure for development of walking tourism in upland areas, including areas within this SAC.</p>
<p>Other plans or programmes which could affect this SAC</p>	<p>None identified.</p>
<p>Screening Conclusion</p>	<p>This SAC is not designated for habitats or species which are dependent upon the protection of water quality to maintain their favourable conservation status, and no policies of the draft CDP direct specific development into this site.</p> <p>Tourism policy TO 7-1, could have the potential to increase pressure for development of walking routes within this SAC. However it is an objective of the plan, to protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and TO 7-1 includes a caveat which recognises that such developments must be located in appropriate locations where they are compatible with environmental and heritage sensitivities. In addition, a recommendation has been made to amend the wording of some of the text in the Tourism chapter, in order discourage development of tourism initiatives in areas where it could have negative impacts on Natura 2000 sites generally.</p> <p>The SAC is located within an area that has been identified on figure 9-2, Chapter 9, that large scale wind energy developments are Open to Consideration. The associated text states that Natura 2000 sites and Natural Heritage Areas within this area are not generally considered suitable for wind farm developments, and policy ED 3-5 states that large scale wind energy developments in these areas are open to consideration where they can avoid adverse impacts on Natura 2000 sites and Natural Heritage Areas. It is considered that there is a lack of consistency between figure 9-2 and policy ED 3-5, and that the figure as shown currently could encourage prospective developers to develop proposals for wind energy development within the SAC. It is considered that this position is not compatible with the conservation objectives for the SAC, and it is recommended, in the interest of clarity, to show this SAC within the 'Normally Discouraged' wind energy category on figure 9-2.</p>

Mullaghanish Bog SAC 1890

It is considered that the potential for the draft plan to give rise to negative impacts on this Natura 2000 site cannot be screened out. This site is brought forward for Appropriate Assessment, and a recommendation has been made to amend the plan, in order to ensure that there is no conflict between plan policy and the protection of this site. This recommendation relates to amendment of the Wind Energy Map.

Ballyhoura Mountains SAC 2036

Qualifying Interests	Northern Atlantic wet heaths with <i>Erica tetralix</i> ; European dry heaths; Blanket Bog (*active only)
Strategic Planning Area	North - Targeted population increase: 5,514
Main Settlements identified in draft CDP which occur within the catchment of the SAC	None
Rural Housing Policy Area	Stronger Rural Area. These areas have been identified to have a stable population based on a traditionally strong agricultural base. Rural settlement policies in this category have are more restrictive than areas where population is declining, but less restrictive than areas under a stronger level of development pressure by virtue of their proximity to Cork City.
Renewable Energy Policy Area	This SAC is located within an area where it has been identified that large scale wind energy developments will normally be discouraged.
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC	None
Other policies identified which could give rise to impacts on SAC	Chapter 8 Tourism policies have the potential to increase pressure for development of walking / cycling tourism in upland areas, including areas within this SAC.

Ballyhoura Mountains SAC 2036

<p>Other plans or programmes which could affect this SAC</p> <p>Screening Conclusion</p>	<p>None identified.</p> <p>This SAC is not designated for habitats or species which are dependent upon the protection of water quality to maintain their favourable conservation status, and no policies of the draft CDP direct specific development into this site.</p> <p>Tourism policy TO 7-1, could have the potential to increase pressure for development of walking routes within this SAC. However it is an objective of the plan, to protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and TO 7-1 includes a caveat which recognises that such developments must be located in appropriate locations where they are compatible with environmental and heritage sensitivities. In addition, a recommendation has been made to amend the wording of some of the text in the Tourism chapter, in order discourage development of tourism initiatives in areas where it could have negative impacts on Natura 2000 sites generally.</p> <p>Having regard to the above, and to HE 2-1 (protection of sites designated for nature conservation), it is considered that the potential for this plan to give rise to negative impacts on this site can be screened out.</p>
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Carrigeenamronety Hill SAC

<p>Qualifying Interests</p> <p>Strategic Planning Area</p> <p>Main Settlements identified in draft CDP which occur within the catchment of the SAC</p> <p>Rural Housing Policy Area</p>	<p>Northern Atlantic wet heaths with <i>Erica tetralix</i>; Killarney Fern</p> <p>North - Targeted population increase: 5,514</p> <p>None</p> <p>Stronger Rural Area. These areas have been identified to have a stable population based on a traditionally strong agricultural base. Rural settlement policies in this category are more restrictive than areas where population is declining, but less restrictive than areas under a stronger level of development pressure by virtue of their proximity to Cork City.</p>
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Carrigeenamronety Hill SAC

Renewable Energy Policy Area	This SAC is located within an area where it has been identified that large scale wind energy developments will normally be discouraged.
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC	None
Other policies identified which could give rise to impacts on SAC	Chapter 8 Tourism policies have the potential to increase pressure for development of walking / cycling tourism in upland areas, including areas within this SAC.
Other plans or programmes which could affect this SAC	None identified.
Screening Conclusion	<p>This SAC is not designated for habitats or species which are dependent upon the protection of water quality to maintain their favourable conservation status, and no policies of the draft CDP direct specific development into this site. Tourism policies could have the potential to increase pressure for development of upland walking or cycling within this SAC, however it is an objective of the plan, to protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and TO 7-1 includes a caveat which recognises that such developments must be located in appropriate locations where they are compatible with environmental and heritage sensitivities. In addition, a recommendation has been made to amend the wording of some of the text in the Tourism chapter, in order discourage development of tourism initiatives in areas where it could have negative impacts on Natura 2000 sites generally.</p> <p>Having regard to the above, and to HE 2-1 (protection of sites designated for nature conservation), it is considered that the potential for this plan to give rise to negative impacts on this site can be screened out.</p>

Old Domestic Buildings Curraglass Wood SAC 2041

Qualifying Interests	Lesser Horseshoe Bat
Strategic Planning Area	Not in County
Main Settlements identified in draft CDP which occur within the catchment of the SAC	None
Rural Housing Policy Area	N/A
Renewable Energy Policy Area	N/A
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC	N/A
Other policies identified which could give rise to impacts on SAC	N/A
Other plans or programmes which could affect this SAC	N/A
Screening Conclusion	This SAC is >6km from Co. Cork. No potential for impacts identified.

Ardmore Head SAC 2123

Qualifying Interests	Vegetated sea cliffs of the Atlantic and Baltic coasts; European dry heaths.
Strategic Planning Area	Not in County
Main Settlements identified in draft CDP which occur within the catchment of the SAC	N/A
Rural Housing Policy Area	N/A
Renewable Energy Policy Area	N/A
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC	N/A
Other policies identified which could give rise to impacts on SAC	N/A
Other plans or programmes which could affect this SAC	N/A
Screening Conclusion	This SAC is >9km from Co. Cork. It has no hydrological connection to any site occurring in Co. Cork. No potential for impacts on this site has been identified.

Lower River Suir 2137

Qualifying Interests	Mediterranean salt meadows (<i>Juncetalia maritimi</i>), Water courses of plain to montane levels with the the <i>Ranunculus fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation; Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels; Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles; Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus</i> (<i>Alno-Padion</i> <i>Alnion incanae</i> , <i>Salicion albae</i>); <i>Taxus baccata</i> woods of the British Isles; Freshwater pearl mussel; White-clawed crayfish; Sea lamprey; Brook lamprey; River lamprey; Allis shad; Twaite shad; Salmon; Otter
Strategic Planning Area	Not in County
Main Settlements identified in draft CDP which occur within the catchment of the SAC	N/A
Rural Housing Policy Area	N/A
Renewable Energy Policy Area	N/A
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC	N/A
Other policies identified which could give rise to impacts on SAC	N/A
Other plans or programmes which could affect this SAC	N/A
Screening Conclusion	This SAC is located >1km from the Co. Cork boundary. However, there is no hydrological connection from Co. Cork to this SAC. No potential for impacts has been identified.

Kenmare River SAC 2158

Qualifying Interests	Large shallow inlets and bays; Reefs; Perennial vegetation of stony banks; Vegetated sea cliffs of the Atlantic and Baltic coasts; Atlantic salt meadows; Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes); Fixed dunes with herbaceous vegetation (grey dunes); European dry heaths; Calaminarian grassland of the <i>Violetalia calaminariae</i> ; Submerged or partially submerged sea caves; Whorl snail; Lesser horseshoe bat; Otter; Common (harbour) seal.
Strategic Planning Area	West - target population increase of 8,460 to 2022 to be directed primarily to main settlements within the Western Strategic Policy Area.
Main Settlements identified in draft CDP which occur within the catchment of the SAC	None.
Rural Housing Policy Area	This SAC is within the area identified as a Tourism and Rural Diversification Area in chapter 5 of the draft CDP. Policy permitting settlement in this area is aimed at reducing the number of permissions granted for one off holiday homes in the countryside, and restricting permissions for the development of rural housing to applicants who have demonstrated a genuine need for rural housing based on their social and /or economic links to the area.
Renewable Energy Policy Area	This SAC and its catchment is located within an area where it has been identified that large scale wind energy developments will normally be discouraged.
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC	None.
Other policies identified which could give rise to impacts on SAC	Chapters 4 and 8 tourism policies have the potential to increase pressure for development of marine leisure fishing facilities within this SAC. Intensification of these activities within the SAC increases the risk of deterioration of coastal habitat quality.
Other plans or programmes which could affect this SAC	Bantry Electoral Area Local Area Plan, 2011.

Screening Conclusion

None of the settlements to which growth is targeted are located within the catchment of this SAC. Additionally, the policy for this rural housing area has a relatively high level of restrictions comparable to other parts of the county. Having regard to the above, and to environmental protection policies contained in the plan including policy HE 2-1 relating to the protection of sites designated for nature conservation, policy WS 3-1 relating to wastewater disposal, and policy WS 6-1, restricting development in flood risk areas, it is concluded that the Core Strategy or Settlement Policies contained in the draft plan are unlikely to give rise to pressures for development of housing within the SAC, or to compromise the protection of water quality in the catchment of this SAC.

Tourism policies RCI 8-4 and TO 4-1 (developing the marine leisure sector), could have the potential to increase pressure for development of marine leisure facilities and marine recreational use within this SAC. However it is an objective of the plan, to protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and both RCI 8-4 and TO 4-1 include caveats which recognise that such developments must be located in appropriate locations where they are compatible with environmental and heritage sensitivities, and avoid adverse impacts on Natura 2000 sites. In addition, a recommendation has been made to amend the wording of some of the text in the Tourism chapter, in order discourage development of tourism initiatives in areas where it could have negative impacts on Natura 2000 sites generally.

Having regard to the above, and to HE 2-1 (protection of sites designated for nature conservation), it is considered that the potential for this plan to give rise to negative impacts on this site can be screened out.

Lower River Shannon SAC 2165

Qualifying Interests	Large shallow inlets and bays; Estuaries; <i>Salicornia</i> and other annuals colonising mud and sand; Vegetated sea cliffs of the Atlantic and Baltic coasts; Coastal lagoons; Mudflats and sandflats not covered by seawater at low tide; Atlantic salt meadows; Sandbanks (slightly covered by seawater at all times); Reefs; Perennial vegetation of stony banks; Water courses of plain to montane levels with the <i>Ranunculus fluitans</i> and <i>Callitriche-batrachion</i> vegetation; <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils; Alluvial forest with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> ; River lamprey; Brook lamprey; Sea lamprey; Atlantic salmon; Freshwater pearl mussel; Bottle-nosed dolphin; Otter
Strategic Planning Area	North - Targeted population increase: 5,514
Main Settlements identified in draft CDP which occur within the catchment of the SAC	None
Rural Housing Policy Area	This SAC is in a Structurally Weaker Rural Area as identified in chapter 5 of the plan. Policy permitting rural settlement this area is aimed at accommodating demand for permanent residential development as it arises.
Renewable Energy Policy Area	This SAC and its catchment is located within an area where it has been identified that large scale wind energy developments are normally discouraged.
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC	None.
Other policies identified which could give rise to impacts on SAC	None identified.
Other plans or programmes which could affect this SAC	None identified.

Lower River Shannon SAC 2165

Screening Conclusion

None of the settlements to which growth is targeted are located within the catchment of this SAC. . Having regard to the above, and to environmental protection policies contained in the plan including policy HE 2-1 relating to the protection of sites designated for nature conservation, policy WS 3-1 relating to wastewater disposal, and policy WS 6-1, restricting development in flood risk areas, it is concluded that the Core Strategy or Settlement Policies contained in the draft plan are unlikely to give rise to pressures for development of housing within the SAC, or to compromise the protection of water quality in the catchment of this SAC. No other policies have been identified which have the potential to give rise to negative impacts on this site, and it is considered that the potential for this plan to give rise to negative impacts on this site can be screened out.

Blackwater River (Cork/Waterford) SAC 2170

Qualifying Interests

Mudflats and sandflats not covered by seawater at low tide; Perennial vegetation of stony banks; *Salicornia* and other annuals colonising mud and sand; Atlantic salt meadows; Mediterranean salt meadows; Water courses of plain to montane levels with the Ranunculus fluitans and Callitriche-batrachion vegetation; Alluvial forest with *Alnus glutinosa* and *Fraxinus excelsior*; Old sessile oak woodlands with *Ilex* and *Blechnum*; *Taxus baccata* woods.

Strategic Planning Area

This site is located partially within the North Cork Strategic Planning Area (target population increase (+5,514), and partly within the Greater Cork Ring Strategic Planning Area (target population increase (+13,464).

Main Settlements identified in draft CDP which occur within the catchment of the SAC

Newmarket, Kanturk, Millstreet, Buttevant, Mallow, Fermoy, Mitchelstown, Youghal

Total proposed increase in population in main settlements of catchment to 2022 is Newmarket (201 people), Kanturk (137), Millstreet (182), Buttevant (556), Mallow (8,395), Fermoy (1,100), Mitchelstown (1,669) and Youghal (1,321) Total: 13,561.

Waste water infrastructure is not currently sufficient to meet the proposed population targets for a number of these settlements (Newmarket, Millstreet, Mallow, Mitchelstown and Youghal). In addition, drinking water supply is not currently sufficient to meet the proposed population targets for a number of these settlements, and increased levels of abstraction from ground or surface water sources within the catchment of the SAC may be required to provide for the population targets for Mallow and Fermoy. The main channel of the Blackwater River has been assigned moderate to poor water quality status along its length.

Rural Housing Policy Area

This SAC and its catchment lies within three rural housing policy areas.

Blackwater River (Cork/Waterford) SAC 2170

The north west catchment of the SAC is within the Structurally Weaker Rural Area identified in chapter 5 of the plan. Policy permitting rural settlement in this area is aimed at accommodating demand for permanent residential development as it arises. This area is identified in the plan to have fewer environmental sensitivities than other areas, and policy allows anyone to apply for rural housing in this area, subject to normal planning considerations.

The northern portion of the catchment east of Kanturk and Banteer lies within the area identified to be a Strong Rural Area. Policy permitting rural settlement in this area is aimed at restricting development of one off rural housing only for people who can demonstrate that they have a rural generated housing need based on economic or social links to the area.

The southern portion of the catchment of this SAC is within the area identified as a Rural Area under Strong Urban Influence in chapter 5 of the draft CDP. Policy permitting settlement in this area is aimed at restricting development of one off rural housing only for people who can demonstrate that they have a rural generated housing need based on social or economic links to the area.

Renewable Energy Policy Area

This SAC and its catchment is located partially within an area within which large scale wind energy developments will normally be discouraged, and partially within area which is open to consideration for wind energy developments.

Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC

TM 5-1 Seek the support of the NRA to upgrade M20 (Blarney-Mallow-Limerick). This route runs through the catchment of the Blackwater River, and will require upgrade or development of a crossing of the river.

TM 5-1 Seek the support of the NRA to upgrade the N22 (Blarney-Mallow-Limerick). This route runs through the catchment of the Blackwater River, and will require upgrade or development of a crossing of the river.

TM 5-1 Seek the support of the NRA to develop the Mallow Northern Relief Road. This route runs through the catchment of the Blackwater River. The location of the route is not known, however it is within 2-3km of the SAC.

TM 5-1 Seek the support of the NRA to upgrade the Mallow to Fermoy road including links to the N73. This route is adjacent to the Blackwater River.

TM 5-2 Seek funding for the upgrading of the Mallow link road and town centre inner relief route. The locations of these routes relative to the SAC is not known.

Other Policies which Could Affect the SAC

Chapter 8 tourism policies have the potential to increase pressure for development of walking, cycling, fishing facilities within this SAC.

Blackwater River (Cork/Waterford) SAC 2170

Other plans or programmes which could affect this SAC

Mallow Town Plan, Mallow Special Local Area Plan, Fermoy Town Plan, Kanturk Electoral Area Local Area Plan, Fermoy Electoral Area Local Area Plan and Middleton Electoral Area Local Area Plan.

Screening Conclusion

It is clear from the above, that a relatively high level of growth and development is proposed within the catchment of the Blackwater River, much of it focused on the designated hub town of Mallow. This development is likely to interfere with the achievement of one of the conservation objectives which has been set for this SAC, which requires the restoration of the favourable conservation condition of the Freshwater Pearl Mussel within 168km of river channel within the SAC. Having regard to size of the catchment and the number of settlements which are located along the river, it is questionable whether the very high standards of water quality which need to be achieved to restore conditions favourable for the restoration of a breeding population of Freshwater Pearl Mussel are attainable even if no additional growth were proposed for the catchment in the draft CDP.

It will be critical that the provision of effective wastewater treatment infrastructure is prioritised, and is provided in advance of progressing development in settlements with insufficient capacity at present, in order to ensure that EPA license standards can be consistently met on an ongoing basis. Higher standards of treatment are likely to be required for treatment plants within this catchment than might be required for plants in other less sensitive catchments. This is in order to protect the river and ensure that water quality standards required to restore its favourable conservation status can be met, and to ensure compliance with the Water Framework Directive. Recommendations are made in this report that the plan include a commitment to prioritise the delivery of wastewater infrastructure for settlements where deficiencies have been identified within the Blackwater catchment. Priority needs to be given to resolving capacity or other issues with treatment plants, not just in the settlements described in the draft CDP, but in all other settlements within this catchment. Further investigation and analysis in relation to the assimilative capacity of the river are currently underway to make a determination as to whether these recommendations will be sufficient to ensure that there is no conflict between the draft CDP and the protection of this SAC. Additional measures or amendments may be required to be made to plan policy in light of this assessment. It is draft plan policy to prioritise the sourcing of an alternative water supply for Mitchelstown, and increases in abstraction rates may be also required to supply other settlements within this catchment. Recommendations are made in chapter 4 of this plan to ensure that new surface water abstractions or increased abstraction levels from existing sources within sensitive catchments should only progress following Environmental Impact and Habitats Directive Assessment, and where it can be shown that these would not affect water levels in water sensitive Natura 2000 sites. Abstraction of surface waters from EU designated rivers or lakes is unlikely to be compatible with the conservation objectives of such sites.

The maintenance of stable hydrological processes is an important requirement in order to maintain or restore the favourable conservation status of a number of the qualifying species for which this SAC is designated. A recommendation is included in

Blackwater River (Cork/Waterford) SAC 2170

chapter 4 of this plan to include an objective to prepare a surface water management plan for the catchment of the Blackwater to address this issue.

The proposed upgrades to a large number of roads within the catchment, some of which may require upgrades to existing river crossings, or development of new river crossings, could have the potential to give rise to negative impacts on this SAC. Adherence to high environmental standards (CIRIA Guidelines) will be required during the construction phase for the planning, design and construction of these projects, however, at this point, it is considered that these can be progressed without having or contributing to negative impacts on the SAC, subject to compliance with appropriate environmental codes of practise. Higher standards of environmental mitigation will be required to be incorporated into road design in this catchment than are required for similar developments in less sensitive catchments.

The SAC is located within an area that has been identified on figure 9-2, Chapter 9, that large scale wind energy developments are Open to Consideration. The associated text states that Natura 2000 sites and Natural Heritage Areas within this area are not generally considered suitable for wind farm developments, and policy ED 3-5 states that large scale wind energy developments in these areas are open to consideration where they can avoid adverse impacts on Natura 2000 sites and Natural Heritage Areas. It is considered that there is a lack of consistency between figure 9-2 and policy ED 3-5, and that the figure as shown currently could encourage prospective developers to develop proposals for wind energy development within the SAC. It is considered that this position is not compatible with the conservation objectives for the SAC, and it is recommended in chapter 4 of the plan, to show this SAC within the 'Normally Discouraged' wind energy category on figure 9-2. A recommendation has also been made to amend wording relating to the development of large scale on shore wind energy projects in sensitive catchments, to ensure that such developments are designed, planned and managed to standards required to ensure that they do not pose a risk to water quality or water hydrology.

Tourism policies RCI 8-4, TO 4-1 and TO 7-1, could have the potential to increase pressure for development of fishing or boating activities, recreational walking, marine leisure facilities and marine recreational use within this SAC. However it is an objective of the plan, to protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and these policies include caveats which recognise that such developments must be located in appropriate locations where they are compatible with environmental and heritage sensitivities, and avoid adverse impacts on Natura 2000 sites. In addition, a recommendation has been made to amend the wording of some of the text in the Tourism chapter, in order to discourage development of tourism initiatives in areas where they could have negative impacts on Natura 2000 sites generally. Having regard to the above, potential for tourism related policy to give rise to negative impacts on this SAC are screened out.

Blackwater River (Cork/Waterford) SAC 2170

It is considered that the potential for the draft plan to give rise to negative impacts on this Natura 2000 site cannot be screened out. This site is brought forward for Appropriate Assessment, and recommendations have been made to amend the plan, in order to ensure that there is no conflict between plan policy and the protection of this site. These recommendations relate to prioritising the provision of wastewater infrastructure for settlements within the Blackwater catchment, the development of a surface water management plan for the Blackwater catchment, sensitive planning for the provision of additional drinking water sources from within the catchment, modifications to the wind energy map, and sensitive management of tourism related activities and developments within the catchment.

Cork County Council is consulting with the Department of Arts, Heritage and the Gaeltacht to agree the parameters of further detailed assessment which may be required to establish whether there is sufficient assimilative capacity in the Blackwater River to absorb the additional growth which is proposed in its catchment and/or to explore other possible resolutions to this issue. The results of these consultations and any required assessment, may result in a requirement to further modify the plan at the amendments stage.

Bandon River SAC 2171

Qualifying Interests

Water courses of plain to montane levels with the *Ranunculus fluitans* and *Callitriche-Batrachion* vegetation; Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-padion*, *Alnion incanae*, *Salicion albae*); Freshwater pearl mussel; Brook lamprey.

Strategic Planning Area

West - target population increase of 8,460 to 2022 to be directed primarily to main settlements within the Western Strategic Policy Area.

Main Settlements identified in draft CDP which occur within the catchment of the SAC

Dunmanway – Target population to increase from 1,585 to 1,976 (+391) to 2022.

The Dunmanway Waste Water Treatment Plant discharges to the Bandon River SAC. The plant is currently failing to meet license conditions applied by the EPA. The Bandon River has been assigned moderate quality.

Rural Housing Policy Area

Transitional Rural Area – Rural parts of western County that are more distant from the major urban areas, which have been identified to have some environmental sensitivities. Rural settlement policy in this area supports the provision of rural housing for

Bandon River SAC 2171

<p>Renewable Energy Policy Area</p>	<p>people from the local community based on their social and/or economic links to a particular local rural area, but is more relaxed in terms of persons eligible to apply for planning permission for rural housing than other areas of the county.</p>
<p>Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC</p>	<p>This SAC is located within an area where it has been identified that large scale wind energy developments are open to consideration.</p>
<p>Other policies identified which could give rise to impacts on SAC</p>	<p>TM 5-2 Seek funding for the upgrading of the R 586 Bandon to Bantry. This route runs through the Bandon River SAC.</p>
<p>Other plans or programmes which could affect this SAC</p>	<p>Chapter 8 Tourism policies have the potential to increase pressure for development of walking, cycling, fishing facilities within this SAC. In particular the West Cork Railways potential greenways route crosses Bandon River within the SAC.</p> <p>It is identified in the plan that a new drinking water source is required for Dunmanway Town. Abstractions from surface waters in the Bandon River, or within the catchment of the Bandon River could have the potential to affect hydrological processes within the SAC.</p>
<p>Screening Conclusion</p>	<p>Skibbereen Electoral Area Local Area Plan</p>
<p></p>	<p>Current water quality status in surface waters of the catchment have been assigned moderate status and the discharge point for Dunmanway town is located within the SAC and the discharge is currently failing to meet license requirements set by the EPA. Recommendations are included in this report to prioritise the relocation of the discharge point for the wastewater treatment plant downstream from the SAC.</p> <p>It is considered that abstraction from the current drinking water source (Coolkelure Lake) is not having any impact on the hydrology of the Bandon River. A new drinking water source is required to supply Dunmanway, however it is not known where this supply is to come from. Recommendations are made in chapter 4 of this plan to ensure that new surface water abstractions or increased abstraction levels from existing sources within sensitive catchments should only progress following Environmental Impact and Habitats Directive Assessment, and where it can be shown that these would not affect water levels in water sensitive Natura 2000 sites. Abstraction of surface waters from EU designated rivers or lakes is unlikely to be compatible with the conservation objectives of such sites.</p>

Bandon River SAC 2171

It is draft CDP policy to support the NRA to implement an upgrade to the R586 which runs through this SAC, and may require changes to the river crossing. While adherence to very high environmental standards will be required to protect water quality during the construction phase for this project, it is considered that the upgrade would be unlikely to have negative impacts on the SAC, assuming best practise is followed, unless significant widening or route adjustments are planned. A recommendation to amend TM 3-2 is included in this document, which relates to sensitive management of route upgrades to regional roads within or near designated sites.

The SAC is located within an area that has been identified on figure 9-2, Chapter 9, that large scale wind energy developments are Open to Consideration. The associated text states that Natura 2000 sites and Natural Heritage Areas within this area are not generally considered suitable for wind farm developments, and policy ED 3-5 states that large scale wind energy developments in these areas are open to consideration where they can avoid adverse impacts on Natura 2000 sites and Natural Heritage Areas. It is considered that there is a lack of consistency between figure 9-2 and policy ED 3-5, and that the figure as shown currently could encourage prospective developers to develop proposals for wind energy development within the SAC. It is considered that this position is not compatible with the conservation objectives for the SAC, and it is recommended, in the interest of clarity, to show this SAC within the 'Normally Discouraged' wind energy category on figure 9-2.

Tourism policy TO 7-1, could have the potential to increase pressure for development of walking routes within this SAC. In particular the West Cork Railways potential greenways route crosses Bandon River within the SAC. It is considered that the development of the greenway in this location could be accommodated without affecting the SAC subject to careful planning, design, construction and management. It is an objective of the plan, to protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and TO 4-1 includes a caveat which recognises that such developments must be located in appropriate locations where they are compatible with environmental and heritage sensitivities. In addition, a recommendation has been made to amend the wording of some of the text in the Tourism chapter, in order to discourage development of tourism initiatives in areas where it could have negative impacts on Natura 2000 sites generally.

The SAC is located within an area that has been identified on figure 9-2, Chapter 9 that large scale wind energy developments are Open to Consideration. The associated text states that Natura 2000 sites and Natural Heritage Areas within this area are not generally considered suitable for wind farm developments, and policy ED 3-5 states that large scale wind energy developments in these areas are open to consideration where they can avoid adverse impacts on Natura 2000 sites and Natural Heritage Areas. It is considered that there is a lack of consistency between figure 9-2 and policy ED 3-5, and that the figure as shown currently, could encourage prospective developers to develop proposals for wind energy development within the SAC. It is considered that this position is not compatible with the conservation objectives for the SAC, and it is recommended, in the interest of clarity, to show this SAC within the 'Normally Discouraged' wind energy category on figure 9-2, and recommendations have been made in chapter 4 of this report to amend this.

Bandon River SAC 2171

It is considered that the potential for the draft plan to give rise to negative impacts on this Natura 2000 site cannot be screened out. This site is brought forward for Appropriate Assessment, and recommendations have been made to amend the plan, in order to ensure that there is no conflict between plan policy and the protection of this site. These recommendations relate to prioritising the provision of relocating the outfall pipe for wastewater discharges in Dunmanway, amendments to figure 9-2 in chapter 9, sensitive management of the upgrade to the R586, and sensitive management of tourism related activities and developments in particular the proposed West Cork Greenways route.

Blackwater River (Kerry) SAC 2173

Qualifying Interests	European dry heaths; Kerry slug, Freshwater pearl mussel; Salmon; Lesser horseshoe bat; Otter
Strategic Planning Area	Not in County
Main Settlements identified in draft CDP which occur within the catchment of the SAC	N/A
Rural Housing Policy Area	N/A
Renewable Energy Policy Area	N/A
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC	N/A

Blackwater River (Kerry) SAC 2173

Other policies identified which could give rise to impacts on SAC	N/A
Other plans or programmes which could affect this SAC	N/A
Screening Conclusion	This site is >3km from the border with Cork County. There is no hydrological link between this SAC and any catchment originating in Co. Cork. No potential for impacts on this site have been identified.

Farranamanagh Lough SAC 2189

Qualifying Interests	Coastal lagoons; Perennial vegetation of stony banks.
Strategic Planning Area	West - target population increase of 8,460 to 2022 to be directed primarily to main settlements within the Western Strategic Policy Area.
Main Settlements identified in draft CDP which occur within the catchment of the SAC	None.
Rural Housing Policy Area	This SAC is within the area identified as a Tourism and Rural Diversification Area in chapter 5 of the draft CDP. Policy permitting settlement in this area is aimed at reducing the number of permissions granted for one off holiday homes in the countryside, and restricting permissions for the development of rural housing to applicants who have demonstrated a genuine need for rural housing based on their social and /or economic links to the area.
Renewable Energy Policy Area	This SAC is located within an area where it has been identified that large scale wind energy developments will normally be discouraged.

Farranamanagh Lough SAC 2189

Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC	None
Other plans or programmes which could affect this SAC	None identified.
Screening Conclusion	This SAC is not designated for habitats or species which are dependent upon the protection of water quality to maintain their favourable conservation status, and no policies of the draft CDP direct specific development into this site. Having regard to the above it is considered that the potential for the development to give rise to negative impacts on this SAC can be screened out.

Old Domestic Buildings, Askive Woods SAC 2098

Qualifying Interests	Lesser Horseshoe Bat
Strategic Planning Area	Not in county
Main Settlements identified in draft CDP which occur within the catchment of the SAC	N/A
Rural Housing Policy Area	N/A
Renewable Energy Policy Area	N/A

Old Domestic Buildings, Askive Woods SAC 2098

Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC	N/A
Other policies identified which could give rise to impacts on SAC	None identified
Other plans or programmes which could affect this SAC	N/A
Screening Conclusion	This SAC is >6km from the Co. Cork border. It has no hydrological connection to any catchment originating in Co. Cork. No potential for impacts has been identified.

Moanour Mountain SAC 2257

Qualifying Interests	Species-rich <i>Nardus</i> grasslands on siliceous substrates in mountain areas (and submountain areas, in Continental Europe)
Strategic Planning Area	Not in County
Main Settlements identified in draft CDP which occur within the catchment of the SAC	N/A
Rural Housing Policy Area	N/A

Moanour Mountain SAC 2257

Renewable Energy Policy Area	N/A
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC	N/A
Other policies identified which could give rise to impacts on SAC	N/A
Other plans or programmes which could affect this SAC	N/A
Screening Conclusion	This SAC which is located in Co. Tipperary is >9km from the Co. Cork border. It has no hydrological connection to any catchment originating in Co. Cork. No potential for impacts has been identified.

Dunbeacon Shingle SAC 2280

Qualifying Interests	Perennial vegetation of stony banks
Strategic Planning Area	West - target population increase of 8,460 to 2022 to be directed primarily to main settlements within the Western Strategic Policy Area.
Main Settlements identified in draft CDP which occur within the catchment of the SAC	None.
Rural Housing Policy Area	This SAC is within the area identified as a Tourism and Rural Diversification Area in chapter 5 of the draft CDP. Policy permitting settlement in this area is aimed at reducing the number of permissions granted for one off holiday homes in the countryside, and restricting permissions for the development of rural housing to applicants who have demonstrated a genuine need for rural housing based on their social and /or economic links to the area.
Renewable Energy Policy Area	This SAC is located within an area where it has been identified that large scale wind energy developments will normally be discouraged.
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC	None.
Other policies identified which could give rise to impacts on SAC	None identified.
Other plans or programmes which could affect this SAC	None identified.
Screening Conclusion	This SAC is not designated for habitats or species which are dependent upon the protection of water quality to maintain their favourable conservation status, and no policies of the draft CDP direct specific development into this site. Having regard to this and to HE 2-1 (protection of sites designated for nature conservation), it is considered that the potential for this plan to give rise to negative impacts on this site can be screened out.

Reen Point Shingle SAC 2281

Qualifying Interests	Perennial vegetation of stony banks.
Strategic Planning Area	West - target population increase of 8,460 to 2022 to be directed primarily to main settlements within the Western Strategic Policy Area.
Main Settlements identified in draft CDP which occur within the catchment of the SAC	None.
Rural Housing Policy Area	This SAC is within the area identified as a Tourism and Rural Diversification Area in chapter 5 of the draft CDP. Policy permitting settlement in this area is aimed at reducing the number of permissions granted for one off holiday homes in the countryside, and restricting permissions for the development of rural housing to applicants who have demonstrated a genuine need for rural housing based on their social and /or economic links to the area.
Renewable Energy Policy Area	This SAC is located within an area where it has been identified that large scale wind energy developments will normally be discouraged.
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC	None.
Other policies identified which could give rise to impacts on SAC	None identified.
Other plans or programmes which could affect this SAC	None identified.
Screening Conclusion	This SAC is not designated for habitats or species which are dependent upon the protection of water quality to maintain their favourable conservation status, and no policies of the draft CDP direct specific development into this site. Having regard to the above and to HE 2-1 (protection of sites designated for nature conservation), it is considered that the potential for this plan to give rise to negative impacts on this site can be screened out.

Glanlough Woods SAC 2315

Qualifying Interests	Lesser horseshoe bat
Strategic Planning Area	Not in county
Main Settlements identified in draft CDP which occur within the catchment of the SAC	N/A
Rural Housing Policy Area	N/A
Renewable Energy Policy Area	N/A
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SAC	N/A
Other policies identified which could give rise to impacts on SAC	N/A
Other plans or programmes which could affect this SAC	N/A
Screening Conclusion	This SAC is >4km from the Co. Cork border. It has no hydrological connection to any catchment originating in Co. Cork. No potential for impacts has been identified.

Old Head of Kinsale SPA 4021

Qualifying Interests	Guillemot; Kittiwake
Strategic Planning Area	Greater Cork Ring - target population increase of 13,464 to 2022 to be directed primarily to main settlements within the Greater Cork Ring
Main Settlements identified in draft CDP which occur within the catchment of the SPA	None
Rural Housing Policy Area	Rural Area Under Strong Urban Influence
Renewable Energy Policy Area	This SPA is located within an area where it has been identified that large scale wind energy developments will normally be discouraged. All areas within an area of > 1 km of the SPA are also within an area where wind energy developments will normally be discouraged.
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SPA	None
Policies potentially directing development within SPA	None identified
Other policies identified which could give rise to impacts on SPA	None identified
Other plans or programmes which could affect this SPA	None identified
Screening Conclusion	No policies of the draft CDP direct specific development into this site. Having regard to HE 2-1 (protection of sites designated for nature conservation), it is considered that the potential for this plan to give rise to negative impacts on this site can be screened out.

Ballycotton Bay SPA 4022

Qualifying Interests	Teal; Ringed Plover; Golden Plover; Grey Plover; Lapwing; Black-tailed Godwit; Bar-tailed Godwit; Curlew; Turnstone; Common Gull; Lesser Black-backed Gull; Wetlands and Waterbirds
Strategic Planning Area	Greater Cork Ring - target population increase of 13,464 to 2022 to be directed primarily to main settlements within the Greater Cork Ring
Main Settlements identified in draft CDP which occur within the catchment of the SPA	None
Rural Housing Policy Area	This SPA is within the area identified as a Rural Area Under Strong Urban Influence in chapter 5 of the draft CDP. Policy permitting settlement this area is aimed at restricting development of one off rural housing for people who can demonstrate that they have a rural generated housing need based on social or economic links to the area.
Renewable Energy Policy Area	This SPA is located within an area where it has been identified that large scale wind energy developments will normally be discouraged. All areas within an area of >1km of the SPA are also within an area where wind energy developments will normally be discouraged.
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SPA	None
Other policies identified which could give rise to impacts on SPA	Chapter 4 and Chapter 8 Marine Tourism policies have the potential to increase pressure for development of walking, cycling, fishing facilities within this SPA. Intensification of these activities within the SAC increases the risk of deterioration of coastal habitat quality, or to cause disturbance to species for which the site is designated.
Other plans or programmes which could affect this SPA	Middleton Electoral Area Local Area Plan 2011.

Ballycotton Bay SPA 4022

Screening Conclusion

None of the main settlements which occur within the Greater Cork Ring Strategic Planning Area occur within the catchment of this SPA. Additionally, the policy for this rural housing area is restrictive, and it is envisaged that this will serve to minimise the number of one off houses which could be developed within the catchment of this SPA.

Having regard to the above, and to environmental protection policies contained in the plan including policy HE 2-1 relating to the protection of sites designated for nature conservation, policy WS 3-1 relating to wastewater disposal, and policy WS 6-1, restricting development in flood risk areas, it is concluded that the Core Strategy or Settlement Policies contained in the draft plan are unlikely to give rise to pressures for development of housing within the SPA, or to compromise the protection of water quality in the catchment of this SPA.

The SPA is located within an area that has been identified to be not normally permissible for wind energy developments. No screening issues arise.

Tourism policies RCI 8-4 and TO 4-1 (developing the marine leisure sector), could have the potential to increase pressure for development of marine leisure facilities and marine recreational use within this SPA. However it is an objective of the plan, to protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and both RCI 8-4 and TO 4-1 include caveats which recognise that such developments must be located in appropriate locations where they are compatible with environmental and heritage sensitivities, and avoid adverse impacts on Natura 2000 sites. In addition, a recommendation has been made to amend the wording of some of the text in the Tourism chapter, in order discourage development of tourism initiatives in areas where it could have negative impacts on Natura 2000 sites generally.

Having regard to all of the above, it is considered that the potential for the draft CDP to give rise to negative impacts on this SPA can be screened out.

Ballymacoda Bay SPA 4023

Qualifying Interests

Wigeon; Teal; Ringed Plover; Golden Plover; Grey Plover; Lapwing; Sanderling; Dunlin; Black-tailed Godwit; Bar-tailed Godwit; Curlew; Redshank; Turnstone; Black-headed Gull; Common Gull; Lesser Black-backed Gull; Wetlands and Waterbirds

Strategic Planning Area

Greater Cork Ring - target population increase of 13,464 to 2022 to be directed primarily to main settlements within the Greater Cork Ring

Ballymacoda Bay SPA 4023

<p>Main Settlements identified in draft CDP which occur within the catchment of the SPA</p>	<p>None</p>
<p>Rural Housing Policy Area</p>	<p>This SPA is within the area identified as a Rural Area under Strong Urban Influence in chapter 5 of the draft CDP. Policy permitting settlement this area is aimed at restricting development of one off rural housing only for people who can demonstrate that they have a rural generated housing need based on social or economic links to the area.</p>
<p>Renewable Energy Policy Area</p>	<p>This SPA is located within an area where it has been identified that large scale wind energy developments will normally be discouraged. However, it is located within 150m of an area where large scale wind energy developments are open to consideration.</p>
<p>Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SPA</p>	<p>National Road Network: N25 Carrigtowhill – Midleton – Youghal.</p>
<p>Other policies identified which could give rise to impacts on SPA</p>	<p>Chapter 4 and Chapter 8 Marine Tourism policies have the potential to increase pressure for development of walking, cycling, fishing facilities within this SAC. Intensification of these activities within the SPA increases the risk of deterioration of coastal habitat quality or of causing disturbance to birds.</p>
<p>Other plans or programmes which could affect this SPA</p>	<p>Midleton Electoral Area Local Area Plan 2011.</p>
<p>Screening Conclusion</p>	<p>None of the main settlements which occur within the Greater Cork Ring Strategic Planning Area occur within the catchment of this SPA. Additionally, the policy for this rural housing area is restrictive, and it is envisaged that this will serve to minimise the number of one off houses which could be developed within the catchment of this SPA.</p> <p>Having regard to the above, and to environmental protection policies contained in the plan including policy HE 2-1 relating to the protection of sites designated for nature conservation, policy WS 3-1 relating to wastewater disposal, and policy WS 6-1,</p>

Ballymacoda Bay SPA 4023

restricting development in flood risk areas, it is concluded that the Core Strategy or Settlement Policies contained in the draft plan are unlikely to give rise to pressures for development of housing within the SPA, or to compromise the protection of water quality in the catchment of this SPA.

It is draft CDP policy to support the NRA to implement an upgrade to the N25 which passes through the catchment of this SPA. However the road is approximately 4km from the SPA, and it is considered unlikely that upgrades to this road could affect the designated site.

A small segment of this SPA on the Womanagh estuary is located within 150m of an area where large scale wind energy developments are Open to Consideration, and a number of species for which this SPA is important display evidence of avoidance of habitat around turbines at distances of up to 800m. It is considered that the potential for the draft plan to give rise to negative impacts on this Natura 2000 site cannot be screened out.

Tourism policies RCI 8-4 and TO 4-1 (developing the marine leisure sector), could have the potential to increase pressure for development of marine leisure facilities and marine recreational use within this SPA. However it is an objective of the plan, to protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and both RCI 8-4 and TO 4-1 include caveats which recognise that such developments must be located in appropriate locations where they are compatible with environmental and heritage sensitivities, and avoid adverse impacts on Natura 2000 sites. In addition, a recommendation has been made to amend the wording of some of the text in the Tourism chapter, in order discourage development of tourism initiatives in areas where it could have negative impacts on Natura 2000 sites generally.

This site is brought forward for Appropriate Assessment, and a recommendation has been made to amend the plan, in order to ensure that there is no conflict between plan policy and the protection of this site. This recommendation relates to amendment of the Wind Energy Map.

Blackwater Estuary SPA 4028

Qualifying Interests	Wigeon; Golden plover; Lapwing; Dunlin; Black-tailed godwit; Bar-tailed godwit; Curlew; Redshank; Wetlands and Waterbirds
Strategic Planning Area	Greater Cork Ring - target population increase of 13,464 to 2022 to be directed primarily to main settlements within the Greater Cork Ring
Main Settlements identified in draft CDP which occur within the catchment of the SPA	The SPA is located adjacent to Youghal. The target population of Youghal is set to increase from 7,794 to 9,115 (+1,321) to 2022. There is no wastewater treatment plant in Youghal, and therefore, there is currently no capacity within the Town to provide for the proposed new development. The deficit in wastewater infrastructure is flagged in Chapter 11 of the plan.
Rural Housing Policy Area	This SPA is within the area identified as a Rural Area under Strong Urban Influence in chapter 5 of the draft CDP and partially within the Youghal Greenbelt. Policy permitting settlement this area is aimed at restricting development of one off rural housing only for people who can demonstrate that they have a rural generated housing need based on social of economic links to the area.
Renewable Energy Policy Area	This SPA is located within an area where it has been identified that large scale wind energy developments will normally be discouraged. All parts of the SPA are >800m from areas where large scale wind energy developments will be 'Open to Consideration'.
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SPA	Upgrade of the N25 Carrigwohill-Midleton-Youghal.
Other policies identified which could give rise to impacts on SPA	Chapters 4 and 8 tourism policies have the potential to increase pressure for development of marine leisure tourism or recreational walking or cycling routes along the coastline within or adjacent to this SPA.
Other plans or programmes which could affect this SPA	Midleton Electoral Area Local Area Plan, 2011. Youghal Town Plan date.

Blackwater Estuary SPA 4028

Screening Conclusion

It is clear from the above, that a relatively high level of growth is planned for the Blackwater catchment as a whole, and for Youghal which is located adjacent to this site, which could have the potential to affect water quality within this SPA.

It will be important that the provision of effective wastewater treatment infrastructure for Youghal is prioritised, and is provided in advance of progressing development in settlements with insufficient capacity at present, in order to ensure that EPA license standards can be consistently met on an ongoing basis. Recommendations are included in this report that the plan would contain a commitment to prioritise the delivery of wastewater infrastructure for settlements where deficiencies have been identified within the Blackwater catchment. Priority needs to be given to resolving capacity or other issues with treatment plants, not just in the settlements described in the draft CDP, but in all other settlements within this catchment.

Tourism policies RCI 8-4 and TO 4-1, (developing the marine leisure sector), could have the potential to increase pressure for development of marine leisure facilities and marine recreational use within this SPA. However it is an objective of the plan, to protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and both RCI 8-4 and TO 4-1 include caveats which recognise that such developments must be located in appropriate locations where they are compatible with environmental and heritage sensitivities, and avoid adverse impacts on Natura 2000 sites. In addition, a recommendation has been made to amend the wording of some of the text in the Tourism chapter, in order discourage development of tourism initiatives in areas where they could have negative impacts on Natura 2000 sites generally. Having regard to the above, potential for tourism related policy to give rise to negative impacts on this SPA are screened out.

It is considered that the potential for the draft plan to give rise to negative impacts on this Natura 2000 site cannot be screened out. This site is brought forward for Appropriate Assessment, and a recommendation has been made to amend the plan, in order to ensure that there is no conflict between plan policy and the protection of this site. These recommendations relate to prioritising the provision of wastewater infrastructure for settlements within the Blackwater catchment, and sensitive management of tourism related activities and developments within or close to this SPA.

Cork Harbour SPA 4030

Qualifying Interests

Little Grebe; Great Crested Grebe; Cormorant; Grey Heron; Shelduck; Wigeon; Teal; Pintail; Shoveler; Red-breasted Merganser; Oystercatcher; Golden Plover; Grey Plover; Lapwing; Dunlin; Black-tailed Godwit; Bar-tailed Godwit; Curlew; Redshank; Black-headed Gull; Common Gull; Lesser Black-backed Gull; Common Tern; Wetlands and Water Birds.

Cork Harbour SPA 4030

<p>Strategic Planning Area</p>	<p>County Metropolitan Area target population 170,509 to 213,891(+43, 382); Greater Cork Ring - target population increase of 13,464 to 2022 - to be directed primarily to main settlements within these areas.</p>
<p>Main Settlements identified in draft CDP which occur within the catchment of the SPA</p>	<p>Cork City South Environs (-1,327); Carrigaline (+3,095); Passage West (+1,175); Midleton (+9,575); Carrigtwohill (+7,067); Cobh (+2,000); Glanmire (+1661) - total 23,246</p>
<p>Rural Housing Policy Area</p>	<p>Metropolitan Green Belt; Rural Area Under Strong Urban Influence and Town Greenbelts.</p>
<p>Renewable Energy Policy Area</p>	<p>This SPA is located within an area where it has been identified that large scale wind energy developments will normally be discouraged. However, a small portion of the SPA is located within 150m of an area where large scale wind energy developments are open to consideration.</p>
<p>Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SPA</p>	<p>TM 5-1 Seek the support of the NRA in the implementation of an upgrade to the the N28 Cork-Ringskiddy. This route is partially located within the catchment of the Owenboy River, the estuary of which forms part of the Cork Harbour SPA. The route is approximately 600m from the SPA at Monkstown Creek.</p> <p>TM 5-1 Seek the support of the NRA to upgrade the Dunkettle Interchange. The location of the proposed interchange is adjacent to the Cork Harbour SPA at the Glashaboy River and on the south-east shore of Little Island.</p> <p>TM 5-1 Seek the support of the NRA in the implementation of an upgrade to the N71 (Cork-Clonakilty-Skibbereen-Bantry) regional route. This route is located within the catchment of the Owenboy River, the estuary of which forms part of the Cork Harbour SPA. The road is > 10km from the SPA.</p> <p>TM 5-1 Seek the support of the NRA to upgrade the Cork Northern Ring Road. This route is >1km from the Cork Harbour SPA.</p> <p>TM 5-2 Seek funding for the upgrading of the Carrigaline Inner Relief Road. This route is located within 1km of the Cork Harbour SPA at Carrigaline.</p> <p>TM 5-2 Seek funding for the development of Midleton (Waterrock) access roads and rail bridge. Waterrock is approximately 2km from the Cork Harbour SPA. The route of access roads is not known.</p> <p>TM 5-2 Seek funding for the upgrading of the R624 N25 Cobh. This route may require the development of a new crossing of the</p>

Cork Harbour SPA 4030

<p>Other policies identified which could give rise to impacts on SAC</p> <p>Other plans or programmes which could affect this SPA</p> <p>Screening Conclusion</p>	<p>North Channel of Cork Harbour at Belvelly. This area is within the Cork Harbour SPA.</p> <p>TM 5-2 Seek funding for the development of the Midleton Northern Relief route. The route for this relief road is not known, however it is within approximately one km of the Cork Harbour SPA.</p> <p>TM 5-2 Seek funding for the upgrading of the R630 Midleton to Whitegate. This route runs along the eastern shore of Cork Harbour and is adjacent to the Cork Harbour in places.</p> <p>Policy encouraging development of marine leisure facilities RCI 8-4 and TO 4-1; policy relating to the redevelopment of port facilities in Cork Harbour EE 6-2, TM 5-1 b) and TM 5-2; greenways policy TO 6-2; policy promoting the development of Strategic Employment centres in a number of locations adjacent to the SAC (Carrigtwohill, Little Island, Ringaskiddy and Whitegate); and policy relating to the designation of Whitegate as a national energy hub.</p> <p>Cork City Development Plan, Midleton Town Plan, Carrigaline Electoral Area Local Area Plan, Midleton Electoral Area Local Area Plan</p> <p>It is clear from the above, that a very high level of growth and development is proposed within the area of Cork Harbour, which could have the potential to impact on this site unless it is managed carefully. This includes significant expansion in terms of population in many of the settlements around the Harbour, the development of strategic employment centres at Carrigtwohill, Whitegate, Ringaskiddy and Little Island, proposals for the designation of Whitegate as a national energy hub, and proposals for the development of walking and cycling routes around the harbour.</p> <p>It will be critical that the provision of effective wastewater treatment infrastructure is prioritised, and is provided in advance of progressing development in settlements within this catchment with insufficient capacity at present, in order to ensure that EPA license standards can be consistently met on an ongoing basis. This is in order to improve water quality (North Channel currently described as eutrophic) in Cork Harbour to ensure that the favourable conservation status of its qualifying species can be maintained, and to ensure compliance with the Water Framework Directive. All of the settlements around the harbour where deficiencies have been identified in their wastewater infrastructure are included in the priority infrastructure list contained in chapter 15 of the plan. However priority needs to be given to resolving capacity or other issues with treatment plants, not just in the settlements described in the draft CDP, but in all other settlements within this catchment.</p> <p>The proposed upgrades to a large number of roads within the catchment, could have the potential to give rise to negative impacts on this SPA. It is considered that most of these can be progressed without having or contributing to negative impacts on the SPA, subject to sensitive planning, design, construction and management. However, in the case of the R624 Cobh road, no</p>
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route / channel crossing has been identified to date which avoids the potential to give rise to significant negative impacts on this SPA. For that reason, it is recommended that this proposal be omitted from the plan until such time as the scheme has been developed in further detail and has been subjected to Habitats Directive Assessment.

Parts of this SPA are located within 150m of an area where large scale wind energy developments are Open to Consideration, and a number of species for which this SPA is important display evidence of avoidance of habitat around turbines at distances of up to 800m. Having regard to such evidence, it is recommended in chapter 4 of this report that the boundary of the 'Open to Consideration' area be amended to ensure that all parts of the SPA are >800m from this zone. Additional text is also recommended to be included to amend a section of text in chapter 9 that relates to proposals for the generation and consumption of electricity in single premises within Strategic Employment Centres around Cork Harbour, as these are located within close proximity to the harbour.

A significant level of change in terms of location of Port facilities is proposed for Cork Harbour which could increase development activity within the vicinity of Marino Point, Whitegate, Little Island and Ringaskiddy within areas close to the SPA. Recommendations are made in chapter 4 of this report to amend chapters 6, 9 and 10 of the plan to ensure that the significant redevelopment proposals outlined for the harbour are progressed in a manner that is compatible with the protection of the environmental resources (including protection of Natura 2000 sites).

Tourism policies RCI 8-4 and TO 4-1, (developing the marine leisure sector), could have the potential to increase pressure for development of fishing or boating activities, recreational walking, marine leisure facilities and marine recreational use within this SAC. In particular proposals for the development greenways and other tourism/recreational policies have the potential to increase human access to estuarine habitats within the harbour to levels which may be unsustainable, having regard in particular to the potential for such development to give rise to disturbance impacts on birds. It is recommended in this report that no further proposals for development of walking routes or cycleways around Cork Harbour, which increase human activity on or adjacent to shoreline habitats within the Cork Harbour SPA be progressed until such time as the overall capacity of the SPA to absorb such development has been assessed. Other recommendations are included in this report to amend certain policies within the plan, to ensure that development within the area of Cork Harbour is planned and progressed without having adverse impacts on either the Great Island Channel SAC, or on the Cork Harbour SPA.

It is considered that the potential for the draft plan to give rise to negative impacts on this Natura 2000 sites cannot be screened out. This site is brought forward for Appropriate Assessment, and a recommendation has been made to amend the plan, in order to ensure that there is no conflict between plan policy and the protection of this site. These recommendations relate to prioritising the provision of wastewater infrastructure for settlements within the catchment of Cork Harbour, sensitive

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management of Port redevelopment, and development of the Strategic Employment Centres around the harbour, modifications to figure 9-2 of chapter 9, and sensitive management of tourism related activities and developments within the catchment. Cork County Council is consulting with the Department of Arts, Heritage and the Gaeltacht to agree the parameters of further detailed assessment which may be required to establish whether there is sufficient assimilative capacity in Cork Harbour to absorb the additional growth which is proposed in its catchment. The results of these consultations and any required assessment, may result in a requirement to further modify the plan at the amendments stage.

Killarney National Park SPA 4038

Qualifying Interests	Merlin; Greenland White-fronted Goose
Strategic Planning Area	Not in County
Main Settlements identified in draft CDP which occur within the catchment of the SPA	N/A
Rural Housing Policy Area	N/A
Renewable Energy Policy Area	This SPA is > 10km from the Cork border.
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SPA	N/A
Policies potentially directing development within SPA	N/A
Other policies identified which could give rise to impacts on SPA	None identified
Other plans or programmes which could affect this SPA	None identified
Screening Conclusion	This SPA is >10km from the border with Co. Cork. It has no hydrological connection to any catchment originating in Cork. It is concluded that the draft CDP will not to give rise to negative impacts on this SPA, which could be considered to be significant.

Bull and the Cow Rocks SPA 4066

Qualifying Interests	Storm Petrel; Gannet; Puffin
Strategic Planning Area	West - target population increase of 8,460 to 2022 to be directed primarily to main settlements within the Western Strategic Policy Area.
Main Settlements identified in draft CDP which occur within the catchment of the SPA	None.
Rural Housing Policy Area	None. Uninhabitated islets.
Renewable Energy Policy Area	This SPA is located within an area where it has been identified that large scale wind energy developments will normally be discouraged. The SPA is > 1 km from any area where applications for large scale wind energy developments will be open to consideration.
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SPA	None identified.
Other policies identified which could give rise to impacts on SPA	None identified.
Other plans or programmes which could affect this SPA	None identified.
Screening Conclusion	No policies of the draft CDP direct specific development into this site. Having regard to this and to HE 2-1 (protection of sites designated for nature conservation), it is considered that the potential for this plan to give rise to negative impacts on this site can be screened out.

Clonakilty Bay SPA 4081

<p>Qualifying Interests</p>	<p>Shelduck; Dunlin; Black-tailed Godwit; Curlew; Wetlands and Waterbirds</p>
<p>Strategic Planning Area</p>	<p>West - target population increase of 8,460 to 2022 to be directed primarily to main settlements within the Western Strategic Policy Area.</p>
<p>Main Settlements identified in draft CDP which occur within the catchment of the SPA</p>	<p>The SPA is located immediately adjacent to the town of Clonakilty – Target population to increase from 4,721 to 7,218 (+2, 497) to 2022.</p>
<p>Rural Housing Policy Area</p>	<p>Waste water infrastructure is not currently sufficient to meet the proposed population targets for Clonakilty. Clonakilty Bay shows signs of over enrichment, and the waste water treatment plant is currently failing to meet license conditions. Any further development which increases nutrient rich discharges to the Bay area has the potential to cause or contribute to negative impacts on some of the habitats upon which species for which the SPA is designated are dependant.</p>
<p>Renewable Energy Policy Area</p>	<p>This SPA is within the area identified as a Tourism and Rural Diversification Area in chapter 5 of the draft CDP. Policy permitting settlement this area is aimed at reducing the number of permissions granted for one off holiday homes in the countryside, and restricting permissions for the development of rural housing to applicants who have demonstrated a genuine need for rural housing based on their social and /or economic links to the area.</p>
<p>Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SPA</p>	<p>This SPA is located within an area where large scale wind energy developments will normally be discouraged. However, parts of the SPA are within 400m of an area where applications for wind energy developments will be open to consideration.</p>
<p>Other policies identified which could give rise to impacts on SPA</p>	<p>TM 5-1 Seek the support of the NRA in the implementation of an upgrade to the N71 (Cork-Clonakilty-Skibbereen-Bantry) regional route. This route runs adjacent to Clonakilty Bay SPA.</p> <p>Chapters 4 and 8 tourism policies have the potential to increase pressure for development of marine leisure tourism, or walking / cycling routes along the coastline within or adjacent to the SPA.</p> <p>Greenways Policy TO 6-2 supports the development of the West Cork Railways into Greenways. One of these lines terminates in</p>

Clonakilty Bay SPA 4081

<p>Other plans or programmes which could affect this SPA</p>	<p>Clonakilty Town.</p> <p>Clonakilty Town Plan; Skibbereen Electoral Area Local Area Plan</p>
<p>Screening Conclusion</p>	<p>It is considered that some policies of this plan have the potential to give rise to impacts on this SPA. These relate to the significant increase in population which is proposed for Clonakilty, and its designation as a Strategic Employment Centre particularly in the context of its proximity to the SPA and having regard to the current status of its wastewater infrastructure and water quality in the Bay. The proposed upgrade to the N71 which is located adjacent to estuarine habitats within the SPA could have the potential to have negative impacts on these, or to cause disturbance to birds during the construction phase. However, a recommendation to amend TM 3-1 is included in this document, which relates to sensitive management of route upgrades to regional roads within or near designated sites.</p> <p>Amendments are recommended to figure 9-2 in chapter 9 to ensure that all areas where wind energy developments are greater than 800m from this SPA.</p> <p>While one of the proposed Greenways routes terminates in Clonakilty, the termination point is approximately 500m from the SAC and is unlikely to have any impact on the SAC. No amendments to draft policy are required.</p> <p>Tourism policies RCI 8-4 and TO 4-1, (developing the marine leisure sector), could have the potential to increase pressure for development of marine leisure facilities and marine recreational use within this SPA. However it is an objective of the plan, to protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and both RCI 8-4 and TO 4-1 include caveats which recognise that such developments must be located in appropriate locations where they are compatible with environmental and heritage sensitivities, and avoid adverse impacts on Natura 2000 sites. In addition, a recommendation has been made to amend the wording of some of the text in the Tourism chapter, in order discourage development of tourism initiatives in areas where they could have negative impacts on Natura 2000 sites generally. Having regard to the above, potential for tourism related policy to give rise to negative impacts on this SPA are screened out.</p> <p>It is considered that the potential for the draft plan to give rise to negative impacts on this Natura 2000 site cannot be screened out. This site is brought forward for Appropriate Assessment, and a recommendation has been made to amend the plan, in order to ensure that there is no conflict between plan policy and the protection of this site. These recommendations relate to prioritising the provision of wastewater infrastructure for Clonakilty, modifications to figure 9-2 in chapter 9, sensitive</p>

Clonakilty Bay SPA 4081

	<p>management of the upgrade to the N71, and sensitive management of tourism related activities and developments within and around the Harbour area.</p> <p>Detailed assessment of the assimilative capacity of Clonakilty Bay is underway to determine whether the Bay has sufficient capacity to cope with the proposed population increase. The details of this assessment may give rise to a requirement to make further amendments to the draft plan.</p>
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River Blackwater Callows SPA 4094

<p>Qualifying Interests</p>	<p>Whooper Swan; Wigeon; Teal; Black-tailed Godwit; Wetlands and Waterbirds</p>
<p>Strategic Planning Area</p>	<p>Greater Cork Ring - target population increase of 13,464 to 2022 to be directed primarily to main settlements within the Greater Cork Ring</p>
<p>Main Settlements identified in draft CDP which occur within the catchment of the SPA</p>	<p>The town of Fermoy is located immediately upstream of this SPA. The plan provides for a population increase of 1,100 in the town to 2022. Waste water infrastructure is hydraulically overloaded and water quality in receiving waters has been assigned poor status.</p>
<p>Rural Housing Policy Area</p>	<p>This SPA lies within the area identified to be a Strong Rural Area and within the Fermoy Green Belt where the objective is to retain lands for agriculture, open space or recreational use. Policy permitting rural settlement in areas outside the Greenbelt is aimed at restricting development of one off rural housing only for people who can demonstrate that they have a rural generated housing need based on economic or social links to the area.</p>
<p>Renewable Energy Policy Area</p>	<p>This SPA is located within an area where it has been identified that large scale wind energy developments will normally be discouraged. All areas within 1km of the SPA are also within an area where wind energy developments will normally be discouraged.</p>
<p>Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SPA</p>	<p>None</p>

River Blackwater Callows SPA 4094

Other policies identified which could give rise to impacts on SPA

Chapters 4 and 8 tourism policies have the potential to increase pressure for development of walking or cycling routes within or adjacent to this SPA.

Other plans or programmes which could affect this SPA

Ferroy Town Plan, 2010. Ferroy Electoral Area Local Area Plan, 2011.

Screening Conclusion

It is clear from the above, that a relatively high level of growth is planned for the Blackwater catchment as a whole, and for the town of Ferroy which is located adjacent to this site, which could have the potential to affect water quality within this SPA.

It will be important that investment in the wastewater treatment infrastructure for Ferroy is prioritised in order to resolve outstanding issues with the plant, and that this is provided in advance of progressing further development in the town, in order to ensure that EPA license standards can be consistently met on an ongoing basis. Recommendations are included in this report that the plan would contain a commitment to prioritise the delivery of wastewater infrastructure for settlements where deficiencies have been identified within the Blackwater catchment. Priority needs to be given to resolving capacity or other issues with treatment plants, not just in the settlements described in the draft CDP, but in all other settlements within this catchment.

Tourism policies RCI 8-4 and TO 7-1 could have the potential to increase pressure for development of walking or cycling routes within or adjacent to this SPA. However it is an objective of the plan, to protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and these policies include caveats which recognise that such developments must be located in appropriate locations where they are compatible with environmental and heritage sensitivities, and avoid adverse impacts on Natura 2000 sites. In addition, a recommendation has been made to amend the wording of some of the text in the Tourism chapter, in order to discourage development of tourism initiatives in areas where they could have negative impacts on Natura 2000 sites generally. Having regard to the above, potential for tourism related policy to give rise to negative impacts on this SPA are screened out.

No issues have been identified relating to the wind energy policy in the vicinity of this SPA.

It is considered that the potential for the draft plan to give rise to negative impacts on this Natura 2000 site cannot be screened out. This site is brought forward for Appropriate Assessment, and a recommendation has been made to amend the plan, in order to ensure that there is no conflict between plan policy and the protection of this site. These recommendations relate to

River Blackwater Callows SPA 4094

prioritising the provision of wastewater infrastructure for settlements within the Blackwater catchment, and sensitive management of tourism related activities and developments within or close to this SPA.

Kilcolman Bog SPA 4095

Qualifying Interests

Whooper Swan; Teal; Shoveler; Wetlands and Waterbirds

Strategic Planning Area

North - Targeted population increase: 5,514

Main Settlements identified in draft CDP which occur within the catchment of the SPA

None

Rural Housing Policy Area

This SPA lies within the area identified to be a Strong Rural Area and within the Buttevant Green Belt. Policy permitting rural settlement in this area is aimed at restricting development of one off rural housing only for people who can demonstrate that they have a rural generated housing need based on economic or social links to the area.

Renewable Energy Policy Area

This SPA is located within an area where it has been identified that large scale wind energy developments will normally be discouraged. All areas within 1km of the SPA are also within an area where wind energy developments will normally be discouraged.

Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SPA

None

Other policies identified which could give rise to impacts on SPA

None identified.

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Other plans or programmes which could affect this SPA	None identified.
Screening Conclusion	No policies of the draft CDP direct specific development into this site. Having regard to this and to HE 2-1 (protection of sites designated for nature conservation), it is considered that the potential for this plan to give rise to negative impacts on this site can be screened out.

The Gearagh SPA 4109

Qualifying Interests	Teal; Wigeon; Mallard; Coot; Wetland and Waterbirds
Strategic Planning Area	Greater Cork Ring - target population increase of 13,464 to 2022 to be directed primarily to main settlements within the Greater Cork Ring
Main Settlements identified in draft CDP which occur within the catchment of the SPA	None
Rural Housing Policy Area	This SPA is located within the Macroom Green Belt and within the area identified to be Rural Area Under Strong Urban Influence. Settlement policy within this Rural Housing Policy Area is more restrictive than other areas closer to Cork City, but less so than areas of the County further away from Cork City. Greenbelt policy for Macroom seeks to prevent town sprawl and ensure a distinction in character between the town and the open countryside.
Renewable Energy Policy Area	Part of this SPA is located within an area where it has been identified that large scale wind energy developments will normally be discouraged. However the SPA is located within 400m of areas where wind energy development is open to consideration.
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SPA	None

The Gearagh SPA 4109

Other policies identified which could give rise to impacts on SPA

None identified.

Other plans or programmes which could affect this SPA

Macroon Electoral Area Local Area Plan, 2011.

Screening Conclusion

One settlement into which growth is targeted is located within the catchment of this SPA. However, the wastewater discharge point for Macroon is located downstream of the SPA, and therefore poses no threat to the species for which the SPA is designated, or to the habitats upon which they are dependant. Having regard to the above, and to environmental protection policies contained in the plan including policy HE 2-1 relating to the protection of sites designated for nature conservation, policy WS 3-1 relating to wastewater disposal, and policy WS 6-1, restricting development in flood risk areas, it is concluded that the Core Strategy or Settlement Policies contained in the draft plan are unlikely to give rise to pressures for development of housing within the SPA, or to compromise the protection of water quality in the catchment of this SAC.

Parts of this SPA are located within 400m of an area where large scale wind energy developments are Open to Consideration, and a number of species for which this SPA is important display evidence of avoidance of habitat around turbines at distances of up to 800m. Having regard to such evidence, it is recommended in chapter 4 of this report that the boundary of the 'Open to Consideration' area be amended to ensure that all parts of the SPA are >800m from this zone.

It is considered that the potential for the draft plan to give rise to negative impacts on this Natura 2000 site cannot be screened out. This site is brought forward for Appropriate Assessment, and a recommendation has been made to amend the plan, in order to ensure that there is no conflict between plan policy and the protection of this site. This recommendation relates to amendment of the Wind Energy Map.

Sovereign Islands SPA 4124

Qualifying Interests Strategic Planning Area	Cormorant West - target population increase of 8,460 to 2022 to be directed primarily to main settlements within the Western Strategic Policy Area.
Main Settlements identified in draft CDP which occur within the catchment of the SPA	None.
Rural Housing Policy Area	Uninhabited island.
Renewable Energy Policy Area	This SPA is located within an area where it has been identified that large scale wind energy developments will normally be discouraged. All areas within 1km of the SPA are also within an area where wind energy developments will normally be discouraged.
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SPA	None
Other policies identified which could give rise to impacts on SPA	None identified.
Other plans or programmes which could affect this SPA	None identified.
Screening Conclusion	No policies of the draft CDP direct specific development into this site. Having regard to this and to HE 2-1 (protection of sites designated for nature conservation), it is considered that the potential for this plan to give rise to negative impacts on this site can be screened out.

Beara Peninsula SPA 4155

Qualifying Interests	Fulmar; Chough
Strategic Planning Area	West - target population increase of 8,460 to 2022 to be directed primarily to main settlements within the Western Strategic Policy Area.
Main Settlements identified in draft CDP which occur within the catchment of the SPA	Castletownbere – Target population to increase from 912 to 1,439 (+527) to 2022.
Rural Housing Policy Area	This SPA is within the area identified as a Tourism and Rural Diversification Area in chapter 5 of the draft CDP. Policy permitting settlement in this area is aimed at reducing the number of permissions granted for one off holiday homes in the countryside, and restricting permissions for the development of rural housing to applicants who have demonstrated a genuine need for rural housing based on their social and /or economic links to the area.
Renewable Energy Policy Area	This SPA is located within an area where it has been identified that large scale wind energy developments will normally be discouraged. All areas within 1km of the SPA are also within an area where wind energy developments will normally be discouraged.
Roads Infrastructure Projects Which Could Affect the SPA	None identified.
Other policies identified which could give rise to impacts on SPA	Chapters 4 and 8 tourism policies have the potential to increase pressure for development of walking or cycling paths within or adjacent to this SPA.
Other plans or programmes which could affect this SPA	None identified.

Screening Conclusion	<p>Tourism policies RCI 8-4 and TO 7-1), could have the potential to increase pressure for development of recreational walks along this SPA. However it is an objective of the plan, to protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and both RCI 8-4 and TO 7-1 include caveats which recognise that such developments must be located in appropriate locations where they are compatible with environmental and heritage sensitivities, and avoid adverse impacts on Natura 2000 sites. In addition, a recommendation has been made to amend the wording of some of the text in the tourism chapter, in order discourage development of tourism initiatives in areas where it could have negative impacts on Natura 2000 sites generally.</p> <p>No other policies have been identified which direct development into this SPA or have otherwise been identified as having the potential to give rise to impacts on this SPA. Accordingly, it is considered that the potential for the draft CDP to give rise to negative impacts on this SPA can be screened out.</p>
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Sheep's Head to Toe Head SPA 4156

Qualifying Interests	<p>Peregrine Falcon; Chough</p>
Strategic Planning Area	<p>West - target population increase of 8,460 to 2022 to be directed primarily to main settlements within the Western Strategic Policy Area.</p>
Main Settlements identified in draft CDP which occur within the catchment of the SPA	<p>None</p>
Rural Housing Policy Area	<p>This SPA is within the area identified as a Tourism and Rural Diversification Area in chapter 5 of the draft CDP. Policy permitting settlement in this area is aimed at reducing the number of permissions granted for one off holiday homes in the countryside, and restricting permissions for the development of rural housing to applicants who have demonstrated a genuine need for rural housing based on their social and /or economic links to the area.</p>
Renewable Energy Policy Area	<p>This SPA is located within an area where it has been identified that large scale wind energy developments will normally be discouraged. All areas within 1 km of the SPA are also within an area where wind energy developments will normally be discouraged.</p>

Sheep’s Head to Toe Head SPA 4156

<p>Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SPA</p>	<p>None</p>
<p>Other policies identified which could give rise to impacts on SPA</p> <p>Other plans or programmes which could affect this SPA</p>	<p>Chapters 4 and 8 tourism policies have the potential to increase pressure for development of walking or cycling paths within or adjacent to this SPA.</p> <p>None identified.</p>
<p>Screening Conclusion</p>	<p>Tourism policies RCI 8-4 and TO 7-1 could have the potential to increase pressure for development of recreational walks along this SPA. However it is an objective of the plan, to protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and both RCI 8-4 and TO 7-1 include caveats which recognise that such developments must be located in appropriate locations where they are compatible with environmental and heritage sensitivities, and avoid adverse impacts on Natura 2000 sites. In addition, a commendation has been made to amend the wording of some of the text in the tourism chapter, in order to discourage development of tourism initiatives in areas where it could have negative impacts on Natura 2000 sites generally.</p> <p>No other policies have been identified which direct development into this SPA or have otherwise been identified as having the potential to give rise to impacts on this SPA. Accordingly, it is considered that the potential for the draft CDP to give rise to negative impacts on this SPA can be screened out.</p>

Stack’s to Mullaghareirks, West Limerick Hills and Mount Eagle Bog SPA 4161

<p>Qualifying Interests</p>	<p>Hen Harrier</p>
<p>Strategic Planning Area</p>	<p>North - Targeted population increase: 5,514</p>

Stack's to Mullaghareirks, West Limerick Hills and Mount Eagle Bog SPA 4161

<p>Main Settlements identified in draft CDP which occur within the catchment of the SPA</p>	<p>None</p>
<p>Rural Housing Policy Area</p>	<p>Transitional Rural Area – Rural parts of western County that are more distant from the major urban areas, which have been identified to have some environmental sensitivities. Rural settlement policy in this area supports the provision of rural housing for people from the local community based on their social and/or economic links to a particular local rural area, but is more relaxed in terms of persons eligible to apply for planning permission for rural housing than other areas of the county.</p>
<p>Renewable Energy Policy Area</p>	<p>This SPA is located within an area where it has been identified that large scale wind energy developments will normally be discouraged. However, it is located within 300m of an area where large scale wind energy developments are open to consideration. There is evidence that the species for which this SPA has been designated, avoids hunting and other activities on suitable habitats where these are within 500m of wind turbines.</p>
<p>Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SPA</p>	<p>None</p>
<p>Other policies identified which could give rise to impacts on SPA</p>	<p>None identified.</p>
<p>Other plans or programmes which could affect this SPA</p>	<p>None identified.</p>
<p>Screening Conclusion</p>	<p>This SPA is located within 300m areas which have been zoned as Open to Consideration on Figure 9-2 of the wind energy map. It is recommended in chapter 4 of this report that the boundary of the 'Open to Consideration' area be amended to ensure that all parts of the SPA are >500m from this zone. No other policies have been identified which could have the potential to cause negative impacts on this SPA. It is considered that the potential for the draft plan to give rise to negative impacts on this Natura 2000 site cannot be screened out. This site is brought forward for Appropriate Assessment, and a recommendation has been</p>

Stack's to Mullaghareirks, West Limerick Hills and Mount Eagle Bog SPA 4161

made to amend the plan, in order to ensure that there is no conflict between plan policy and the protection of this site. This recommendation relates to amendment of the Wind Energy Map.

Mullaghanish to Musheramore SPA 4162

Qualifying Interests	Hen Harrier
Strategic Planning Area	West - target population increase of 8,460 to 2022 to be directed primarily to main settlements within the Western Strategic Policy Area.
Main Settlements identified in draft CDP which occur within the catchment of the SPA	None.
Rural Housing Policy Area	Transitional Rural Area – Rural parts of western County that are more distant from the major urban areas, which have been identified to have some environmental sensitivities. Rural settlement policy in this area supports the provision of rural housing for people from the local community based on their social and/or economic links to a particular local rural area, but is more relaxed in terms of persons eligible to apply for planning permission for rural housing than other areas of the county.
Renewable Energy Policy Area	This SPA is located within an area where it has been identified that large scale wind energy developments will normally be discouraged. However, it is located within 300m of an area where large scale wind energy developments are open to consideration. There is evidence that the species for which this SPA has been designated, avoids hunting and other activities on suitable habitats where these are within 500m of wind turbines.
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SPA	TM 5-1 Seek the support of the NRA to upgrade the N25 Ballincollig-Macroon-Ballyvourney. It is approximately 800m from the SPA near Ballyvourney. Having regard to the distance of the road from the SPA, and the nature of the SPA, it is considered unlikely that the road upgrade would give rise to negative impacts on the SPA.

Mullaghanish to Musheramore SPA 4162

<p>Other policies identified which could give rise to impacts on SPA</p>	<p>None identified.</p>
<p>Other plans or programmes which could affect this SPA</p>	<p>None identified.</p>
<p>Screening Conclusion</p>	<p>This SPA is located within 300m areas which have been zoned as Open to Consideration on Figure 9-2 of the wind energy map. It is recommended in chapter 4 of this report that the boundary of the 'Open to Consideration' area be amended to ensure that all parts of the SPA are >500m from this zone. No other policies have been identified which could have the potential to give rise to negative impacts on this SPA. It is considered that the potential for the draft plan to give rise to negative impacts on this Natura 2000 site cannot be screened out. This site is brought forward for Appropriate Assessment, and a recommendation has been made to amend the plan, in order to ensure that there is no conflict between plan policy and the protection of this site. This recommendation relates to amendment of the Wind Energy Map.</p>

Galley Head to Duneen Point SPA 4190

<p>Qualifying Interests</p>	<p>Chough</p>
<p>Strategic Planning Area</p>	<p>West - target population increase of 8,460 to 2022 to be directed primarily to main settlements within the Western Strategic Policy Area.</p>
<p>Main Settlements identified in draft CDP which occur within the catchment of the SPA</p>	<p>None.</p>
<p>Rural Housing Policy Area</p>	<p>This SPA is within the area identified as a Tourism and Rural Diversification Area in chapter 5 of the draft CDP. Policy permitting settlement in this area is aimed at reducing the number of permissions granted for one off holiday homes in the countryside, and restricting permissions for the development of rural housing to applicants who have demonstrated a genuine need for rural housing based on their social and /or economic links to the area.</p>

Galley Head to Duneen Point SPA 4190

<p>Renewable Energy Policy Area</p>	<p>This SPA is located within an area where it has been identified that large scale wind energy developments will normally be discouraged. All areas within 1 km of the SPA are also within an area where wind energy developments will normally be discouraged.</p>
<p>Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SPA</p>	<p>None</p>
<p>Other policies identified which could give rise to impacts on SPA</p>	<p>Chapters 4 and 8 tourism policies have the potential to increase pressure for development of walking or cycling paths within or adjacent to this SPA.</p>
<p>Other plans or programmes which could affect this SPA</p>	<p>None identified.</p>
<p>Screening Conclusion</p>	<p>Tourism policies RCI 8-4 and TO 7-1, could have the potential to increase pressure for development of recreational walks along this SPA. However it is an objective of the plan, to protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and both RCI 8-4 and TO 7-1 include caveats which recognise that such developments must be located in appropriate locations where they are compatible with environmental and heritage sensitivities, and avoid adverse impacts on Natura 2000 sites. No other policies have been identified which direct development into this SPA or have otherwise been identified as having the potential to give rise to impacts on this SPA. In addition, a recommendation has been made to amend the wording of some of the text in the Tourism chapter, in order discourage development of tourism initiatives in areas where it could have negative impacts on Natura 2000 sites generally.</p> <p>Accordingly, it is considered that the potential for the draft CDP to give rise to negative impacts on this SPA can be screened out.</p>

Seven Heads SPA 4191

Qualifying Interests	Chough
Strategic Planning Area	West - target population increase of 8,460 to 2022 to be directed primarily to main settlements within the Western Strategic Policy Area.
Main Settlements identified in draft CDP which occur within the catchment of the SPA	None.
Rural Housing Policy Area	This SPA is within the area identified as a Tourism and Rural Diversification Area in chapter 5 of the draft CDP. Policy permitting settlement in this area is aimed at reducing the number of permissions granted for one off holiday homes in the countryside, and restricting permissions for the development of rural housing to applicants who have demonstrated a genuine need for rural housing based on their social and /or economic links to the area.
Renewable Energy Policy Area	This SPA is located within an area where it has been identified that large scale wind energy developments will normally be discouraged. All areas within 1km of the SPA are also within an area where wind energy developments will normally be discouraged.
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SPA	None
Other policies identified which could give rise to impacts on SPA	Chapters 4 and 8 tourism policies have the potential to increase pressure for development of walking or cycling paths within or adjacent to this SPA.
Other plans or programmes which could affect this SPA	None identified.

Seven Heads SPA 4191

Screening Conclusion

Tourism policies RCI 8-4 and TO 7-1 could have the potential to increase pressure for development of recreational walks along this SPA. However it is an objective of the plan, to protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and both RCI 8-4 and TO 7-1 include caveats which recognise that such developments must be located in appropriate locations where they are compatible with environmental and heritage sensitivities, and avoid adverse impacts on Natura 2000 sites. In addition, a recommendation has been made to amend the wording of some of the text in the Tourism chapter, in order discourage development of tourism initiatives in areas where it could have negative impacts on Natura 2000 sites generally.

No other policies have been identified which direct development into this SPA or have otherwise been identified as having the potential to give rise to impacts on this SPA. Accordingly, it is considered that the potential for the draft CDP to give rise to negative impacts on this SPA can be screened out.

Helvick Head to Ballyquin SPA 4192

Qualifying Interests	Cormorant; Peregrine Falcon; Herring Gull; Kittiwake; Chough
Strategic Planning Area	Not in County
Main Settlements identified in draft CDP which occur within the catchment of the SPA	N/A
Rural Housing Policy Area	N/A
Renewable Energy Policy Area	SPA is >9km from Co. Cork.
Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SPA	N/A
Policies potentially directing development within SPA	N/A
Other policies identified which could give rise to impacts on SPA	N/A

Helvick Head to Ballyquin SPA 4192

<p>Other plans or programmes which could affect this SPA</p>	<p>N/A</p>
<p>Screening Conclusion</p>	<p>This SPA is >9km from the Co. Cork border. No potential for impacts has been identified.</p>

Courtmacsherry Estuary SPA 4219

<p>Qualifying Interests</p>	<p>Great Northern Diver; Shelduck; Wigeon; Red-breasted Merganser; Golden Plover; Lapwing; Dublin; Black-tailed Godwit; Car-tailed Godwit; Curlew; Black-headed Gull; Common Gull; Wetlands and Waterbirds</p>
<p>Strategic Planning Area</p>	<p>Greater Cork Ring - target population increase of 13,464 to 2022 to be directed primarily to main settlements within the Greater Cork Ring and Coastal Rural Diversification Area</p>
<p>Main Settlements identified in draft CDP which occur within the catchment of the SPA</p>	<p>None. The Argideen Estuary is eutrophic (EPA Envision Maps, November 2013).</p>
<p>Rural Housing Policy Area</p>	<p>This SPA falls into two rural housing policy areas. The western portion of the SPA and most of its catchment is within the Tourism and Rural Diversification Area, which the eastern portion of the SPA and its catchment falls into the Rural Area Under Strong Urban Influence.</p>
<p>Renewable Energy Policy Area</p>	<p>This SPA is located within an area where it has been identified that large scale wind energy developments will normally be discouraged. However the Argideen Estuary which forms part of the SPA is located within 100m of areas where large scale wind energy developments will be open to consideration.</p>
<p>Roads Infrastructure Projects Proposed within the Potential Impact Zone of the SPA</p>	<p>TM 5-1 Seek the support of the NRA in the implementation of an upgrade to the N71 (Cork-Clonakilty-Skibberen-Bantry) regional route. This route is located within the catchment of this SAC, however it is over 5km from the SPA.</p>

Courtmacsherry Estuary SPA 4219

Other policies identified which could give rise to impacts on SPA

Chapters 4 and 8 tourism policies have the potential to increase pressure for development of marine leisure fishing facilities within this SAC. Intensification of these activities within the SPA increases the risk of deterioration of coastal habitat quality or of disturbance to birds.

Other plans or programmes which could affect this SPA

Skibbereen Electoral Area Local Area Plan 2011.

Screening Conclusion

None of the settlements to which growth is targeted are located within the catchment of this SPA. Additionally, the policy for this rural housing area has a relatively high level of restrictions comparable to other parts of the county. Having regard to the above, and to environmental protection policies contained in the plan including policy HE 2-1 relating to the protection of sites designated for nature conservation, policy WS 3-1 relating to wastewater disposal, and policy WS 6-1, restricting development in flood risk areas, it is concluded that, while the estuary has been identified to be eutrophic, the Core Strategy or Settlement Policies contained in the draft plan are unlikely to give rise to pressures for development of housing within the SPA, or to compromise the protection of water quality in the catchment of this SPA.

Parts of this SPA are located within 100m of an area where large scale wind energy developments are Open to Consideration, and a number of species for which this SPA is important display evidence of avoidance of habitat within 800m of wind turbines. Having regard to such evidence, it is recommended in chapter 4 of this report that the boundary of the 'Open to Consideration' area be amended to ensure that all parts of the SPA are >800m from this zone.

Tourism policies RCI 8-4 and TO 4-1 (developing the marine leisure sector), could have the potential to increase pressure for development of marine leisure facilities and marine recreational use within this SPA. However it is an objective of the plan, to protect the natural heritage resources upon which the tourism industry is built (TO 2-1), and both RCI 8-4 and TO 4-1 include caveats which recognise that such developments must be located in appropriate locations where they are compatible with environmental and heritage sensitivities, and avoid adverse impacts on Natura 2000 sites. In addition, a recommendation has been made to amend the wording of some of the text in the Tourism chapter, in order discourage development of tourism initiatives in areas where it could have negative impacts on Natura 2000 sites generally.

Having regard to the environmental and heritage protection policies that are contained in the plan, and subject to the inclusion of recommendations for amendments contained in Chapter 4 of this document into the next iteration of the plan, it is considered that the potential for the plan to give rise to impacts on this SPA can be screened out.

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