

VOLUME 2

STRATEGIC ENVIRONMENTAL ASSESSMENT

ENVIRONMENTAL REPORT

FOR

WATERFORD CITY DEVELOPMENT PLAN

2013-2019

February 2013



**Waterford City Council
Comhairle Cathrach Port Láirge**

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1. NON-TECHNICAL SUMMARY

1.1 Introduction

Strategic Environmental Assessment (SEA) is a formal process that was carried out in parallel with the preparation of the Development Plan for Waterford City 2013-2019. It is a valuable tool that informs decision making in the consideration of the Draft Plan, improving the environmental sustainability of the Draft Plan and raising awareness of the potential environmental consequences of its implementation so that these consequences may be mitigated or avoided altogether. It also gives the public and other interested parties an opportunity to comment and to be kept informed on decisions that may impact on the environment and how they were made.

In accordance with the legislation, a ‘scoping’ exercise was carried out to determine the range of environmental issues and level of detail to be contained in the Environmental Report. This involved consultation with the relevant Environmental Authorities:

- The Environmental Protection Agency
- The Department of the Environment, Community and Local Government
- The Department of Arts, Heritage and the Gaeltacht
- The Department of Communications, Energy and Natural Resources
- The Department of Agriculture, Fisheries and Food

A review was carried out of the Environmental Report prepared for the previous City Development Plan to inform the baseline and analyse trends in the environmental topics. Internal expertise was also used in carrying out the SEA process, which provided advice and expertise and assisted in the determination of significance of effects and mitigation and monitoring measures. Environmental Reports for the Waterford City Environs and Ferrybank/Belview Local Area Plans were reviewed to inform in-combination effects. The main output of SEA is the Environmental Report, which outlines the findings of the assessment process. This is the Environmental Report for the Waterford City Development Plan 2013-2019 that has been prepared in accordance with the Planning and Development (Strategic Environmental Assessment) Regulations 2004 and SEA (Amendment) Regulations 2011. This report should be read in conjunction with the Waterford City Development Plan 2013-2019 and the Appropriate Assessment Screening Report.

1.2 Contents and Main Objectives of the Waterford City Development Plan

The Waterford City Development Plan 2013-2019 provides a medium-term strategic planning framework for the development of the City. The plan is prepared under the requirements of Section 9 of the Planning and Development Act 2000 (as amended) and provides for the proper planning and sustainable development for Waterford City for the years 2013-2019. It contains a written statement of the vision for the City which feeds into the Strategic Goals for the Plan. These goals then form part of each of the chapters which go on to define specific policies and objectives for economic development, retail, the city centre, transportation, social, community and culture, housing, education, heritage, environmental management and development management. The Development Plan is required to include a Core Strategy showing that the development objectives in the plan are consistent, as far as practicable, with national and regional development objectives as set out in the National Spatial Strategy and the South East Regional Planning Guidelines 2010-2022.

1.3 Current State of the Environment

1.3.1 Flora, Fauna and Biodiversity

The landscape of Waterford City provides the setting for a range of wildlife habitats and species and the River Suir is designated a Special Area of Conservation. Natural Heritage Areas are designated for their conservation value at a national level. Kilbarry Bog and King's Channel are proposed as Natural Heritage Areas. Ballinakill Marsh (King's Channel pNHA) is the site of a Flora Protection Order species, Meadow Barley. Sites of local biodiversity interest in Waterford City include Bilberry Rock and Coady's Pond, Tramore Road walkway, The People's Park and St. John's River bank. The City Council in partnership with the Native Woodland Trust aims to recreate a native Irish woodland in 2012 at a site in Gracedieu of approximately 3 hectares (ha) which will add to the biodiversity resource of the City. Trees protected by Tree Preservation Order in the City include trees in the grounds of the Glanbia plant at Maypark Lane, at Ballindud House and Christendom in Ferrybank. A key challenge is the maintenance of favourable conservation status for all protected habitats and species, avoiding encroachment of development on designated sites and discouraging development on sites of local biodiversity value, maintenance of appropriate buffers around these areas and also enhancing green infrastructure and ecological corridors between key sites of nature conservation value. The issue of invasive species is one that also needs to be monitored to avoid degradation of habitats by alien plants. An AA screening was carried out on the Draft Plan and proposed amendments and the findings of that process were integrated into the Environmental Report. The AA screening concluded that incorporation of mitigation measures involving ecological assessment will mitigate for any potential adverse impacts from strategic infrastructure projects such as river crossings and linear parks affecting the SAC. AA screening identified overlap between residential land use zonings

and the SAC boundary but residential use had preceded SAC designation so there is no scope for zoning change.

1.3.2 Population and Human Health

The Census of 2011 shows the population of Waterford City grew by 2.2% from 45,748 in 2006 to 46,747 in 2011, an actual increase of 999 persons. Waterford is part of the South East Regional Authority and the City Development Plan must have regard to the SERA Regional Planning Guidelines 2010-2022. Waterford Gateway is not achieving the projected population growth aimed for in the RPGs (48,500 in 2010). The underperformance in population growth is a concern for Waterford City as critical mass is key for development of its Gateway status including development of environmental infrastructure.

There is an excess of 119ha of residential zoned land in the existing City Development Plan. This far exceeds the maximum permissible land requirements set out under the RPGs. The Draft Plan proposed phasing of lands at Carrickphierish, Gracedieu, Ballybeg/Kilbarry, Ballytruckle/Kilcohan and Dunmore Williamstown Road to address the over zoning.

Availability of spatial data on human health on a local basis is limited however human health issues in Waterford are generally concerned with quality of life which can be affected by factors such as commuting patterns and provisions for recreation and amenity in the City. Due to the geology of Waterford, radon gas may be an under-detected issue for human health in the area. Waterford has the second highest incidence of radon in homes in the country, with more than one in five homes measured in the county so far recording a high level. The RPII run campaigns to raise awareness of the dangers of radon and the need to measure levels in the home.

1.3.3 Water

According to the South East River Basin District Management Plan, in order to meet the requirements of the Water Framework Directive, water quality in Waterford Estuary needs to be restored and for groundwater, areas in the River Suir need to be restored. These requirements will be achieved with regard to Article 4.7 of the Water Framework Directive (section 4.4.8).

The St. John's River is seriously polluted and its ecological status needs to be restored. Waste water treatment and drinking water quality in the city are of a high standard and not of concern presently. However, along with other areas in the country water conservation is an ongoing issue to be addressed with regard to loss of water supply through leakage.

The Waterford Flood Alleviation Scheme has addressed flood areas through the construction of flood defences along the south quays of the River Suir from Grattan Quay to Adelphi Quay and to the northbank of the St. John's River as far as the Courthouse in 2010. In 2011 flood defence works were constructed on the banks of the St. John's River. A Strategic Flood Risk Assessment

was prepared as part of the Development Plan Review Process and recommendations were integrated into policies of the t Plan.

1.3.4 Air Quality and Climate

Air quality in Ireland is generally of a high standard across the country. Waterford lies in Zone C. EPA monitoring results for 2009 at Zone C demonstrate compliance with the Air Quality Standards limit values for all pollutants. Air monitors are stationed at Tycor and Bishop's Palace and maintained by the HSE for Waterford City Council. Climate change impacts may present challenges to future land use and location of development in the City. Predicted impacts from projected temperature rises include more concentrated periods of higher rainfall and more exposure to flood risk. A Climate Change Strategy has been prepared by Waterford City Council in partnership with the Waterford Energy Bureau and includes links to objectives in the City Heritage and Biodiversity Plans.

1.3.5 Geology and Soils

Due to the city's location along the River Suir much of the soil substrate consists of alluvium, a mixture of unconsolidated river deposits, generally silts, clays and sand and gravel. A Strategic Flood Risk Assessment was prepared as part of the Waterford City Development Plan. There are no Geological Heritage Sites listed for the City.

1.3.6 Cultural Heritage

Waterford City contains 111 Recorded Monuments protected under the National Monuments Act 1930-2004. A significant number of archaeological sites and monuments have been added to the Record of Monuments and Places as a result of excavations in the City in recent years. The development of three museums in the Viking Triangle area of the City in 2011 testifies to the importance of Waterford's cultural heritage.

Waterford City contains a fine stock of architectural heritage. There are 922 structures listed in the Record of Protected Structures. The sense of place within the historic core of Waterford is considered an asset and a reference point for future growth and development. There is a need to maintain the vibrancy of the historic core, avoid isolation of new development and physically link it to the existing historic core. A key challenge for the architectural heritage of the City is sustainable and sympathetic reuse, regeneration and development of the built environment whilst retaining and protecting the distinctive character of Protected Structures and Architectural Conservation Areas.

1.3.7 Landscape

Waterford's riverside setting makes it an attractive landscape for accommodating a range of competing land uses. The historic city centre offers a strong heritage resource while much of the quay area is designated an ACA. Future developments will continue to be required to be sympathetic to the riverscape in terms of design and building height. Further down river the corridor is lined by riparian woodland of local ecological value along with landscape value. Recognition and protection of this waterway corridor is desirable by at least maintaining if not increasing areas zoned as open space/agriculture along the corridor and ensuring integration of green infrastructure principles in development proposals along the waterway corridor.

1.3.8 Material Assets

Material assets are taken to include infrastructure and utilities including rail, road, water supply and wastewater treatment facilities. It also includes economic assets such as lands, coastal and water resources which support fisheries and tourism industry. National routes running through the City include the N25 (National Primary, E30 Euroroute) Waterford City Bypass linking the N25 to the N9 and N24 at Granagh, Kilkenny including a second bridge crossing to the north of Waterford City was completed in 2009. Waterford Regional Airport is located at Killowen, 12 km south of Waterford City. Waste water treatment works are located at Gorteen (Co. Kilkenny).

1.4 Existing Environmental Issues

Key environmental pressures in the City relate to:

Water including need for restoration of surface water quality in St. John's River and Waterford Estuary required to meet the targets set out in the SE River Basin District Management Plan. The need for ongoing works to maintain higher rates of water conservation is also recognised.

Biodiversity including maintenance of the favourable conservation status of sites designated for nature conservation (River Suir SAC, King's Channel pNHA, Kilbarry Bog pNHA), conservation of sites of local biodiversity interest, enhancement of ecological corridors and management of invasive species.

Cultural Heritage involving the need to maintain the vibrancy of the historic core and avoid isolation of new development instead linking it to the existing historic core. A key challenge for the architectural heritage of the City is sustainable and sympathetic reuse, regeneration and development of the built environment whilst retaining and protecting the distinctive character of Protected Structures and Architectural Conservation Areas.

Human Health- continued promotion of green routes and smarter travel options and access to recreation and amenity areas.

1.5 Consideration of Alternative Strategies

Alternative strategy options are explored in the main report along with the do-nothing scenario. Zoning options were reviewed in the context of the Strategic Flood Risk Assessment for Waterford City and proximity to sites of nature conservation value

Alternative Strategy Option 1- Continue with existing zoning in Waterford City Development Plan 2007-2013

A review of the Waterford City Development Plan 2007-2013 showed that under the existing area of residential zoned land in the City approximately 360ha remained undeveloped (70ha with extant permissions) indicating more than adequate availability of zoned land for the medium-long term.

Alternative Strategy Option 2- Review zoning as per Core Strategy to ensure compliance with Regional Planning Guidelines and apply phased zoning

Development will be permitted in principle on Phase 1 lands during the period of the new plan and this includes residential zoned lands with existing permissions. The proposed phasing is based on the principles of sustainable development including the likelihood of sites coming forward for development, a sequential approach to the city's expansion where practical and the core strategy criteria. Phase 2 lands may be considered for development providing that development proposals satisfy a core strategy justification and where applications satisfactorily demonstrate that where infrastructural deficiencies exist (e.g. sewers, roads) that these have been addressed to facilitate the development. Remaining lands will be held in Strategic Reserve.

1.6 Environmental Protection Objectives

The Environmental Protection Objectives provide a standard against which the goals, policies and objectives of the Waterford City Development Plan can be measured in order to highlight those with the potential for environmental impact. They are as follows:

1.6.1 Biodiversity, Flora and Fauna

B1: Protect, conserve and enhance habitats, species and areas of national and local importance, including aquatic habitats and species and promote the sustainable management of ecological networks.

1.6.2 Population and Human Health

P1: Facilitate a good standard of health for Waterford's population through ensuring high quality residential, recreational and working environments and minimising water pollution.

1.6.3 Water Resources

W1: Achieve and maintain required water quality standards in the South East River Basin Management Plan and reduce discharges of pollutants or contaminants to waters.

1.6.4 Soils and Geology

S1: Protect the quality of soils in the City in the interests of avoiding environmental degradation in water quality and biodiversity

1.6.5 Air and Climate

AC1: To improve travel choice and accessibility, reduce the need for travel by car and shorten the length and duration of journeys

1.6.6 Cultural Heritage

C1: Protect and conserve features of archaeological heritage.

C2: Protect and conserve and promote the sustainable reuse of architectural heritage.

1.6.7 Landscape

L1: Protect and conserve the quality, character and distinctiveness of the River Suir waterway corridor and minimise negative visual impacts.

1.6.8 Material Assets

MA1: Maintain sustainable access to assets such as open spaces, water resources and all other physical and social infrastructure.

1.7 Likely significant effects on the Environment of Implementing the Plan and mitigation measures

The full matrix and assessment of the Waterford City Development Plan policies and development objectives against environmental objectives is included in Appendix One of the Environmental Report. Appendix 1B details assessment of amendments proposed to the Draft Plan.

Assessment of the policies and development objectives in the Waterford City Development Plan and proposed amendments shows that, overall, these policies and development objectives will not pose a significant adverse impact on the environment. Many of the policies and objectives are considered positive, setting out to manage and protect aspects of the environment such as water quality, landscape, heritage resources and management of flood risk. Due to the strategic nature of the plan some of the broad range objectives cannot be accurately appraised to infer a definite positive or negative impact and so have been assessed as “uncertain” as a lower level tier assessment will be more appropriate to determine the precise nature of the impacts involved. This may relate to strategic objectives concerning specific projects or other framework plans that may also require SEA at their inception.

The finding of “uncertain” impacts in the SEA matrix will be determined at a lower level of environmental assessment largely through EIA at the project level. These assessments will involve application of Habitats Directive Assessment, landscape appraisal, archaeological and

architectural heritage appraisal and flood risk assessment to accurately determine the impacts under the range of environmental headings detailed above.

The findings of the Appropriate Assessment screening process are carried through the Environmental Report and have been addressed through the incorporation of amendments to Plan policies as recommended in Appendix 1 and 2 of the AA Screening Report.

1.8 Monitoring Proposals

Under the previous City Development Plan (2007-2013) the statutory Manager’s Report, prepared two years after the adoption of the Plan, reported on monitoring of environmental indicators. The Report states “the review indicates that the implementation of the plan is not having significant adverse effects on the environment.”

Measures are proposed as part of this SEA process to monitor the effects on the environment of implementing the t Waterford City Development Plan 2013-2019 and these are presented in the Environmental Report in terms of the achievement of the environmental protection objectives and the impact on the environmental factors that the SEA legislation requires to be considered. Measurable indicators are included and targets are set. Monitoring for SEA will be carried out as part of the overall monitoring of implementation of the Waterford City Development Plan and using existing assessment frameworks such as the SE River Basin District Management Plan and Article 17 Habitats Directive Assessment. Sources of data will include Waterford City Council Planning and Environment Section data, NPWS Conservation Status reporting and monitoring data from the EPA and WFD Ireland.

Environmental Objectives	Targets
<p>B1: Protect, conserve and enhance the diversity of habitats, species and areas of national and local importance, including aquatic habitats and species and promote the sustainable management of habitat networks.</p>	<p>Maintenance of favourable conservation status¹ for all habitats and species protected under national and international legislation.</p> <p>Preparation of a City Habitat Map, Audit of Trees of Special Amenity Value and identification of sites of Local Biodiversity and ecological corridors</p> <p>Delivery of constructed wetlands within lifetime of Plan</p>
<p>P1: Facilitate a good standard of health for Waterford’s population through ensuring high quality residential, recreational and working</p>	<p>Increase in employment opportunities, services and public amenity within the City and increase in population.</p>

environments and minimising water pollution.	<p>No Shellfish Areas to be graded as Class C.</p> <p>Implementation of Pollution Reduction Programmes for Waterford Harbour</p> <p>Increase in length of cycle lanes and provision of riverside walkways</p>
W1: Achieve and maintain required water quality standards in the South East Management Plan and associated Programme of Measures and reduce discharges of pollutants or contamination to waters.	<p>Protect and Restore areas identified in the River Basin District Management Plan required to achieve “good” status, i.e. 4+ for water quality by 2021 in line with the Water Framework Directive objectives.</p> <p>No deterioration in levels of compliance with drinking water quality standards and maintenance of above national average compliance rate.</p>
S1: Protect the quality of soils in the interesting if avoiding environmental degradation of water quality and biodiversity.	<p>Full compliance with conditions of waste licence (Kilbarry Landfill) and dredging licences.</p>
AC1: To improve travel choice and accessibility, reduce the need for travel by car and shorten the length and duration of journey	<p>To reduce road traffic in line with DoEHLG policy <i>Smarter Travel A Sustainable Transport Future</i></p> <p>Increase in length of cycle paths and foot paths in the City</p>
C1 Protect and conserve features of archaeological heritage.	<p>To maintain and increase the number of archaeological features recorded and protected.</p> <p>No damage occurring to structures or monuments due to development</p> <p>To increase visitor numbers to Waterford’s museums</p>
C2 Protect and conserve features of architectural heritage.	<p>To increase the number and maintain the conservation status of Protected Structures</p> <p>To maintain the quality of ACAs in the City .</p>
L1: Protect and conserve the quality, character and distinctiveness of the River Suir waterway corridor and minimise negative visual impacts.	<p>Increase in or at least no loss in area zoned as open space along the River Suir</p> <p>No loss and identification and protection of riparian woodland along the River Suir</p> <p>Appropriate Heritage Appraisal and Landscape Capacity Assessment to inform any future development along the waterway corridor</p>
MA1: Maintain sustainable access to assets such as open spaces, water resources and all other physical and social infrastructure.	<p>Increased usage of Waterway Corridors as a public amenity.</p> <p>Increased visitor numbers to cultural heritage sites.</p>

2. INTRODUCTION

2.1 Background

The objective of the Waterford City Development Plan is to provide for the proper planning and sustainable development for Waterford City for the years 2013-2019.

The purpose of this environmental report is to identify and evaluate the likely significant impacts on the environment of implementing the Waterford City Development Plan 2013-2019.

2.2 Strategic Environmental Assessment

Strategic Environmental Assessment (SEA) is defined as ‘the formal, systematic and comprehensive process of evaluating the effects of a proposed policy, plan or programme or its alternatives, including the written report on the findings of that evaluation, and using the findings in publicly accountable decision making’.

SEA is a process for evaluating at the earliest appropriate stage, the environmental quality, and potential consequences, of policies, plans or programmes and to ensure that any potential consequences are assessed during their preparation and the findings taken into account before they are adopted. Its overall purpose is to contribute to sustainable development. SEA is intended to provide a framework for influencing decision-making at an early stage; to improve the environmental sustainability of the Draft Plan and to raise awareness of the potential environmental consequences of its implementation so that these consequences may be mitigated or avoided altogether. It also gives the public and other interested parties an opportunity to comment and to be kept informed on decisions that may impact on the environment and how they were made.

The SEA process includes the following outputs:

- Scoping Report – stating how the scoping responses of the environmental authorities were taken into account in preparing the Environmental Report;
- An Environmental Report (a report containing the findings of the SEA) on the likely significant effects of implementing the Waterford City Development Plan 2013-2019.
- A SEA Statement (identifying how environmental considerations and consultation have been integrated into the final adopted City Development Plan).

This is the Environmental Report for the Waterford City Development Plan 2013-2019 and has been carried out in accordance with Schedule 2B of S.I. 436 of 2004 and SI 201 of 2011, which sets out the information that is required to be included in SEA and Environmental Reports. This

report should be read in conjunction with the Waterford City Development Plan 2013-2019 and Appropriate Assessment Screening Report.

2.3 The Contents and Main Objectives of the Waterford City Development Plan 2013-2019

The Waterford City Development Plan 2007-2013 was adopted on 8th July 2007. Under Section 11 (1) of the Planning and Development Act 2000 this Plan is subject to review and sets the context for the Development Plan for the period 2013-2019.

The Waterford City Development Plan 2013-2019 has been prepared in accordance with the requirements of Section 10(2) of the Planning and Development Act 2000 and provides for the proper planning and sustainable development for Waterford City for the years 2013-2019. It contains a Strategic Goal and strategic aims for the Plan. These strategic aims then form part of each of the chapters which go on to define specific policies and objectives.

The overarching goal is for Waterford City to fulfil its role as a Gateway City and, as the economic driver of the South East Region, facilitate the provision of key investment priorities whilst ensuring the City develops in a balanced, sustainable, transport friendly and attractive way with good quality of life and opportunities for all its citizens. The image and attractiveness of the City and the quality of life it offers are fundamental and shall be protected and enhanced through policies and objectives of the Development Plan.

This goal will be delivered through the following policies:

- To promote and facilitate the sustainable level of economic development and population growth necessary to create “critical mass” in the City and its zone of influence.
- To facilitate the delivery of key infrastructure.
- To realise the potential of the City Centre as a national and regional attraction, which is vibrant and lived in, has a strong retail and cultural offering and a high quality public realm.
- To protect, restore and improve, where appropriate, areas of natural heritage value. To protect and promote the integrity of all Natura 2000 sites within the City and subsequently the awareness of the City’s rich biodiversity.
- To protect the retail primacy of the City Centre.
- To facilitate provision of a good quality public transport system and a choice of transport modes within the City in accordance with the existing Green Routes Strategy and Smarter Travel National Guidance. To provide good connectivity to and within the City and to ensure ease of mobility/access from neighbourhoods to the City Centre.
- To support the provision of sustainable education facilities at pre-school, primary and secondary levels and the delivery of a University for the South East Region with its headquarters in Waterford City.
- To develop a Tourism product of national and international standing.

- To develop sustainable neighbourhoods with facilities and services to meet local needs, that give a sense of identity and belonging to residents.
- To promote social inclusion and to facilitate equality of access to employment, education, transport, housing and social and cultural facilities.
- To minimize any adverse impacts on the environment through the implementation of policies on water quality, waste management, control of emissions and the promotion of energy efficiency and implementation of a climate change strategy for Waterford City.
- To develop the City generally in accordance with the integrated land use and transportation framework set out in the Waterford Planning, Land Use and Transportation Strategy (PLUTS) as and when reviewed.
- To have an Arts & Culture product which is of National and International standing and is an economic driver for the Gateway.

2.4 RELATIONSHIP OF THE DRAFT CITY DEVELOPMENT PLAN WITH OTHER RELEVANT PLANS

2.4.1 Introduction - Hierarchy of Strategic Actions

The City Development Plan is situated within a hierarchy of strategic actions, policy and guidance; higher-level strategic actions direct the City Development Plan while the City Development Plan in turn, will direct lower strategic actions. In accordance with the SEA legislation in this regard, the Environmental Report shall include the information that may reasonably be required taking into account a number of factors, one of which is “the extent to which certain matters are more appropriately assessed at different levels in the decision-making process in order to avoid duplication of environmental assessment”.

In accordance with this provision, potential environmental impacts that arise from the implementation of policies and objectives where dictated by higher-level policy, will not be assessed in this SEA. Furthermore, certain objectives will be more site-specific than strategic. Where such situations arise, they will undergo assessment for their impacts through a more appropriate appraisal, such as EIA. As required in the legislation, the City Development Plan (and accompanying Environmental Report) shall, so far as is practical, be consistent with national and regional plans, policies and strategies, and any guidelines issued by the Minister of the Environment Community and Local Government, which relate to the proper planning and sustainable development of the area covered by the City Development Plan 2013-2019.

2.4.2 National and Regional Policy and Guidance

Ireland has ratified a range of national and international agreements in relation to our environment; such agreements place legal obligations on the State in relation to the maintenance of prescribed standards of environmental quality and the conservation and management of

designated heritage sites and species. Relevant policy and guidance from regional, national and international levels are outlined in the following sections.

National Spatial Strategy, 2002

The NSS was published in 2002 and is a 20-year planning framework designed to deliver more balanced social, economic and physical development between regions. In 2009, the Department of the Environment, Heritage and Local Government undertook an NSS Update and Outlook comprising of a detailed analysis of NSS implementation to date and ongoing challenges, effectiveness of planning and delivery mechanisms at central, regional and local levels and identification of critical investments necessary to grow the gateways' and regions' economic performance and competitiveness.

In view of the current challenges facing Ireland and planning for the medium to long term, the Update and Outlook focused on how the NSS can contribute to economic renewal and competitiveness, through:

- enhanced prioritisation of infrastructure investment;
- strengthening governance arrangements in gateways; and
- improved integration of environmental considerations within the planning process.

The Planning & Development (Amendment) Act, 2010 further supports NSS objectives by greater oversight, integration and consistency between spatial plans at national, regional and local levels, together with ensuring that environmental and social sustainability are fully integrated into planning policy. A new National Spatial Strategy will be prepared in 2013.

The Planning and Development (SEA) (Amendment) Regulations 2011 require consultation with any adjoining planning authority whose area is contiguous to the area which prepares a draft plan.

National Development Plan 2007-2013

The National Development Plan 2007-2013 focused on a number of key themes including sustainable development and linking future growth to the NSS. The concept of sustainability underpins the plan. The NDP includes the following objectives:

1. Decisively tackle structural infrastructure deficits.
2. Greatly enhance enterprise development, science and technology and innovation, working age training and skills provision.
3. Integrate regional development within the National Spatial Strategy framework.
4. Invest in long-term environmental sustainability.

Regional Planning Guidelines for the South East Region 2010-2022

The objective of the Regional Planning Guidelines is to provide a long-term strategic planning framework for the development of the South-East region (South Tipperary, Waterford, Carlow, Kilkenny and Wexford). The guidelines are intended to be a framework for local authority development plans by enhancing the strategic dimension of planning at regional and local levels and building upon the approach taken by the National Spatial Strategy.

The Regional Planning Guidelines, developed by the South East Regional Authority, represent a planning framework for the period 2010-2022 designed to achieve a better spatial balance of social, economic and physical development throughout the region. The Guidelines provide a strategic framework for local authority development plans and address issues such as settlement, transportation, industrial development, community facilities and environmental protection.

The Regional Planning Guidelines promote the City as the Regional Gateway of the South East of Ireland. The Gateway is defined as comprising the City itself and its environs in the counties of Waterford and Kilkenny. Gateways roles are defined as *‘Strategically placed, national scale urban areas, which individually and in combination will be key elements for delivering a more spatially balanced Ireland and driving development in their own regions’*.

Waterford Planning Land Use and Transportation Study (PLUTS) 2004

The development strategy for Waterford City has been guided by the PLUTS since 2004. The PLUTS was initiated to provide a strong planning framework for the development of the City and Environs over the period up to 2020. It provides a coherent long term spatial context, within which more detailed statutory City and County Development Plans are developed. It outlines a sustainable form of spatial development for Waterford City and Environs.

As part of the preparation of the Waterford City Development Plan an in-house review of progress achieved to date in implementing the PLUTS was carried out. It concluded that while the basic fundamental principles of PLUTS Framework are still sound, the growth estimates initially envisaged will now take longer to achieve:-

- While significant progress has been achieved in securing critically enabling infrastructures, key infrastructures such as completion of the Orbital Route remains outstanding and is not likely to be realised by 2020 given prevailing economic conditions.
- Population growth in the PLUTS study area is lagging behind that originally envisaged. For example, PLUTS had projected population growths of between 20% and 30% by 2011 compared with actual population growth of 11.1% in Waterford City & Environs between 2002 and 2011.

- PLUTS employment projections for the City for the year 2020 are unlikely to be realised given the recent regional employment trends² based on the ILO³ data reflecting 18.2% for 2011 compared with 5.3% in 2006 which illustrates the scale of employment deterioration within the region.
- Based on recent traffic trends at the halfway point in the PLUTS Framework period, the original travel demands foreseen by PLUTS are unlikely to arise by 2020. Latest figures from City Councils traffic counters, when compared with figures from 2005 / 2006, indicate a trend of reduced demand with a reduction of between 8.5% and 14.5% in traffic on key access routes to and around the City Centre over the six year period to 2011.

Implementation of PLUTS will be carried out in accordance with policies and objectives of the Plan promoting compliance with environmental legislation and sustainable development.

2.4.3 International Conventions and Agreements

Ireland has ratified a range of International Agreements in relation to our environment. Such agreements place legal obligations on the State in relation to the conservation and management of our environment and heritage. Table 2.1 below details the range of EU environmental legislation and policies and how they are transposed into Irish law.

Table 2.1 Legislation and Policy directing environmental standards and policy in Ireland

Topic	Policy, Plan or Programme	Objectives
Biodiversity	UN Convention of Biological Diversity (1992)	Maintain and enhance biodiversity.
	The Ramsar Convention The Convention on Wetlands of International Importance (1971 and amendments)	Objectives include protection and conservation of wetlands, particularly those of importance to waterfowl as Waterfowl Habitat
	European Union Directive (92/432/EEC) on the conservation of natural habitats and of wild flora and fauna	Lists certain habitats and species that must be given protection.
	European Communities (Natural Habitats) Regulations, SI 94/1997, as amended SI 233/1998 and SI 378/2005 SI 584/2011	These Regulations give effect to Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (Habitats Directive) and the Minister to designate special areas of conservation (endangered species and habitats of endangered species) as a contribution to an EU Community network to be known as NATURA

² Q2 Quarterly National Household Survey for the South East Region (NUTS 3) 2006 & 2011

³ Eurostat the statistical office of the European Union, defines unemployed as those persons age 15 to 74 who are not working, have looked for work in the last four weeks, and ready to start work within two weeks, which conform to ILO standards.

		2000.
	EU Directive (EU/79/409) on the conservation of wild birds	Designation of Special Protection Areas for birds.
	Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities (2009)	Guidance on carrying out AA on plans and Projects as required under Article 6 of the Habitats Directive
	National Biodiversity Plan 2011	To secure the conservation, including where possible the enhancement and sustainable use, of biological diversity in Ireland
	European Communities Environmental Objectives (Freshwater Pearl Mussel) 2009	Measures to protect the conservation status of Freshwater Pearl Mussel
	Irish National Forest Standards (2000)	Aims to ensure sustainable forest management
	Ospar Convention (1992) The Convention for the Protection of the Marine Environment of the North East Atlantic	Protection of the Marine Environment
	EU Marine Strategy Framework Directive 2008 (Yet to be adopted in Ireland)	Aims to achieve good environmental status of the EU's marine waters by 2021 and to protect the resource base upon which marine-related economic and social activities depend.
	EU Freshwater Fish Directive (78/659/EEC)	Objectives seek to protect those freshwater bodies identified by Member States as waters suitable for sustaining fish populations. For those waters it sets physical and chemical water quality objectives for salmonid waters and cyprinid waters.
Water	EU Water Framework Directive (2000/60/EC) 2000	Establishes a framework for community action in the field of water policy. Aims to prevent any deterioration in the status of any waters and to achieve at least “good status” in all waters by 2021.
	The Groundwater Directive (1980/68/EC) 1980	Seeks to maintain and enhance the quality of all ground waters in the EU.
	EU Urban Waste Water treatment directive (91/271/EEC) 1991	Sets targets dates for the provision of specified waste water treatment infrastructure and services.
	EU Floods Directive (2007/60/EC)	The Floods Directive applies to river basins and coastal areas at risk of flooding and provides for the prevention and management of flood risk and preparation of Flood Risk Management Plans
	DoEHLG Guidelines on Flood Risk Management and the Planning System (2009)	Seeks to prevent development that is sensitive to the effects of flooding in flood prone or marginal areas. Must not reduce the flood plain or restrict flow across floodplains.
	The Nitrates Directive	This Directive has the objective of

	(91/676/EEC)	reducing water pollution caused or induced by nitrates from agricultural sources and preventing further such pollution.
	Drinking Water Directive (80/778/EEC) as amended by Directive 98/83/EC	The primary objective is to protect the health of the consumers in the European Union and to make sure drinking water is wholesome and clean.
	The Local Government (Water Pollution) Act, 1977 (Water Quality Standards for Phosphorous) Regulations, 1998	Rivers of good quality to be retained as such, rivers of poor quality to be improved
	European Communities Environmental Objectives (Surface Waters) Regulations, 2009	Transposes into Irish law the measures needed to give effect to Article 4 of the Water Framework Directive relating to the protection of surface waters including the requirements of Directive 2008/105/EC on environmental quality standards.
	Managing Ireland's Rivers and Lakes: Catchment based Strategy Against Pollution (1997)	This document details a strategy to protect water quality against pollution by phosphorus from all sources.
	River Basin Management Plans for River Basin Districts (RBDs)	Seeks to establish an integrated monitoring and management system for all waters within an RBD, to develop a dynamic programme of management measures and to produce a River Basin Management Plan, which will be continually updated.
	Bathing Water Directive EC Directive 2006/7 EC Repeals existing Directive (71/160/EEC) with effect from 31 December 2014	Sets out standards for bathing water quality to protect health and the environment
Human Health	WHO Air Quality Guidelines (1999) and Guidelines for Europe (1987) Non Statutory	Seeks to eliminate or minimise certain airborne pollutants for the protection of human health.
	The Stockholm Convention (2001)	Objectives seek to protect human health and the environment from persistent organic pollutants (POPs).
	The EU CAFÉ Programme Commission communication of 4 May 2001 "The Clean Air for Europe (CAFE) Programme: Towards a Thematic Strategy for Air Quality".	Seeks to prevent and reduce air pollution and impacts on human health from air pollution.
	EU Shellfish Directive (79/923/EEC)	Objectives seek to maintain those coastal and brackish waters, which

		need protection or improvement, in order to allow shellfish to develop and to contribute to the high quality of shellfish products intended for human consumption.
	Pollution Reduction Programme for, Waterford Harbour,	To ensure compliance with standards and objectives of the 2006 Quality of Shellfish Waters Regulations
	The EU Environment and Health Strategy 2004-2010	Seeks to prevent and reduce the impacts pollution on human health.
	Environmental Noise Directive (2002/49/EC) Environmental Noise Regulations 2006	Establishes a framework for environmental noise planning including environmental noise maps for designated areas and appropriate noise action plans.
Climate / Air	Kyoto Protocol (1997)	Aim of the UN Protocol is to combat climate change. Industrialised countries will have to reduce their combined greenhouse gas emissions by a minimum of 8% by 2012.
	Second European Climate Change Programme (ECCP II) 2005	Seeks to develop the necessary elements of a strategy to implement the Kyoto protocol.
	White Paper on 'European transport policy for 2010', COM (2001) 370	Seeks to develop a modern sustainable transport system.
	"The IPPC Directive" Directive 96/61/EC concerning integrated pollution, prevention and control	Seeks to minimise pollution and maximize resource efficiency in industry through licensing and guidance.
	Ozone in Ambient Air Regulations 2004 (S.I. No. 53 of 2004).	Objectives include the reduction of certain airborne pollutants for the protection of human health and the environment.
	"Air Framework Directive" Directive on Air Quality Assessment and Management (Framework Directive) (1996/62/EC)	Seeks the prevention and/or reduction of airborne pollutants for the protection of human health and environment.
	Directive on national emission ceilings for certain atmospheric pollutants (2001/81/EC)	Seeks to limit the national emissions of certain airborne pollutants for the protection of human health and the environment.
	EC Directive 2008/50/EC on ambient air quality and cleaner air for Europe	Replaces the air framework directive and the first three daughter directives. Sets standards and target dates for reducing concentrations of fine particles, which are among the most dangerous pollutants for human health.
	Adopting to climate change in Europe – options to EU action {SEC(2007) 849}	Seeks to initiate a Europe-wide public debated and consultation on developing responses to climate change at EU level
	National Climate Change	Established measures by which

	Strategy 2007-2012	Ireland can meet its 2008-2012 targets in respect to green house gas emissions
	Delivering A Sustainable Energy Future for Ireland	Government Energy Policy Framework 2007-2020 to deliver a sustainable energy future for Ireland.
Cultural Heritage (Landscape Architecture Archaeology)	European Landscape Convention 2000	Encourages public authorities to adopt policies at local, national and international level to protect and manage landscapes.
	Policy Paper on Ireland's Landscape and the National Heritage, The Heritage Council, (2002)	Policy paper sets out a vision for the Irish landscape to allow people to harness the landscape for economic benefit whilst acknowledging that in the long run such benefits can only be sustained through an appreciation and awareness of the contribution of that landscape to our quality of life.
	Landscape and landscape and Assessment, Guidelines for Planning Authorities -2000	Sets out how a landscape character assessment should be conducted.
	Granada Convention for protection of the Architectural Heritage of Europe 1985	Established common principles and strategy, informed Part IV of the 2000 Planning and Development Act 2000-2004
	European Convention on protection of the Archaeological Heritage 1992	Requires that appropriate consideration be given to archaeological issues at all stages of the planning and development process
	Architectural Heritage Protection- Guidelines for Planning Authorities 2004	The protection of structures, or parts of structures, which are of special architectural, historical, archaeological, artistic, cultural, scientific, social, or technical interest, and; the preservation of the character of architectural conservation areas.
	National Heritage Plan 2002	Plan forms the basis of a strategic approach to the protection and management of heritage up to 2007
	National Inventory of Architectural Heritage	To establish inventory of buildings of value
	Framework and Principles for the Protection of the Archaeological Heritage (1999)	This document sets out the archaeological policies and principles which should be applied by all public bodies when undertaking or authorising development.
Soil	2006 Proposal for an EC Directive establishing a framework for the protection of soil	Still under discussion. Proposes to establish a common strategy in Europe for the protection and sustainable use of soil.

	Sewage Sludge Directive (86/278/EEC)	To encourage the use of sewage sludge in agriculture and to regulate its use in such a way as to prevent harmful effects on soil, vegetation, animals and man
	Directive 2004/35/EC on Environmental Liability with regard to the prevention and remedying environmental damage	Prevention and remediation of environmental damage
Sustainable Development	Agenda 21 (1992). Action for Sustainable Development	Aims to promote sustainable development at a local and regional level by taking into account environmental protection in the development process.
	“The Gothenburg Strategy” Communication from the Commission on Sustainable Europe for a Better World” 2001	Seeks to make the future development of the EU more sustainable.
	The Sixth Environmental Action Programme (EAP) of the European Community 2002-2012 Statutory	Seeks to make the future development of the EU more sustainable.
	The SEA Directive (2001/42/EC)	Objective is to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development, by ensuring that, in accordance with this Directive, an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment.
	Guidelines for Planning Authorities on Sustainable Rural Housing 2005	To address the issue of sustainable rural housing
	Sustainable Residential Development in Urban Areas 2008	Addressing sustainable design and services in urban areas
	Wind Energy Guidelines 2004	To ensure a consistency of approach in the identification of suitable locations for wind farm development and the treatment of planning applications for wind farm developments
	Draft Framework for Sustainable Development for Ireland 2012	The Framework will form a central element of Ireland’s contribution to the UN Conference on Sustainable Development (Rio+20) which takes place in Rio de Janeiro, Brazil in June 2012

	Transport 21 (2005)	Seeks to develop an integrated transport system across Ireland
	Traffic Management Guidelines (2003)	Provides guidance on a number of traffic management issues including public transport
	Smarter Travel- A Sustainable Transport Future, A New Transport Policy for Ireland 2009-2020	Promotion of sustainable transport
	Delivering A Sustainable Energy Future For Ireland – The Energy Policy Framework 2007 – 2020	Seeks to reduce energy demand and energy related emissions
	Directive 2004/35/EC on Environmental Liability with regard to the prevention and remedying environmental damage	Seeks to establish a common framework for the prevention and remediation of environmental damage
Waste	The Waste Framework Directive” Council Directive 75/442/EEC of 15 July 1975 on waste “the Waste Framework Directive” and amending acts.	Seeks to minimise the quantities of waste production in the EU, reduce the environmental impacts from the management of these wastes and defines what constitutes a waste or hazardous waste.
	“The Landfill Directive” Council Directive 99/31/EC of 26 April 1999 on the landfill of waste	Seeks to reduce the environmental impact from the landfilling of waste & divert certain quantities and types of waste from European landfills.
	“The WEE Directive” Directive 2002/96/EC of 27 January 2003 on waste electrical and electronic equipment	Seek more environmentally sensitive management of waste electric and electronic equipment.
	National Waste Prevention Programme	Seeks to decouple waste generation from economic activity in Ireland
Major Accidents	EU Major Accident (Seveso) Directive (96/82/EC) 1996	Seeks to avoid and minimize the effects of major accidents

3. SEA METHODOLOGY

3.1 Steps in the SEA Process

The Environmental Report is an important element of the SEA process. The report is generated from a series of distinct steps taken in the assessment of the likely potential impacts of the Plan being implemented.

The steps taken in the execution of this SEA process follow the layout of this document, and are as follows:

1. Introduction to and familiarisation with the SEA process.
2. Setting out the Background to the Waterford City Development Plan 2013-2019.
3. Consultation with the Environmental Authorities, the public and officials with a range of expertise within the Local Authority.

Scoping was carried out with the environmental authorities prescribed in the legislation:- the Environmental Protection Agency (EPA), Department of the Environment, Community and Local Government, Department of Arts, Heritage and the Gaeltacht, Department of Agriculture, Fisheries and Food and the Department for Communications, Energy and Natural Resources and adjoining local authorities. These were all consulted in order to determine the scope and the level of detail to be included in the environmental report. A scoping document was submitted to the authorities to facilitate this consultation. A scoping report has been prepared to show how the responses received from these authorities were taken account of when preparing the Draft City Development Plan and Environmental Report and this is contained in Appendix 2.

Internal expertise within the local authority was used to input into the SEA process. This included staff from planning, infrastructure, and GIS sections. They were consulted at the various stages in the process and inputted to the identification of significant environmental issues.

4. Establishment of Environmental Baseline and Trends for the City:

Baseline data were collected based on the information included in the scoping report as well as having regard to the requirements of the SEA Directive. The various factors used to describe the current state of the environment include bio-diversity, population and human health, water, air quality, landscape, soils and geology, archaeology and built heritage and the inter-relationships between these factors. Much of the data were extracted from existing data sources.

5. Identifying significant Existing Environmental Issues in Waterford City.

This was facilitated by the various forms of consultation that took place as part of the SEA process along with a review of the Environmental Report for the City Development Plan 2007-2013 and SEA of the Waterford City Environs LAP (Waterford County Council) and the Ferrybank/Belview LAP (Kilkenny County Council).

6. Drafting of Environmental Protection Objectives from regional, national and international environmental policy, consideration of the significant environmental issues facing Waterford specifically.
7. The Likely Significant Effects of implementation of the Draft City Development Plan 2013-2019 were established through the identification of conflicts between the Draft City Development Plan policies and objectives and environmental objectives (assessed in matrix format).
8. Where conflicts are identified, opportunities to prevent, reduce, or offset the adverse environmental effects can be explored and policies altered or augmented where necessary to address / mitigate the effects.
9. Where conflicts and consequent adverse impacts cannot be prevented, reduced or offset, mitigation measures can be proposed.
10. Reasonable and realistic alternative strategies were considered regarding options for future land use zoning in the City in terms of amount of zoning and location.
11. Monitoring measures were identified in order to quantitatively assess the consequences of the identified impacts.
12. Consultation. The Environmental Report and the Draft City Development Plan 2013-2019 were made available for public consultation as per the statutory process provided for under the Planning and Development Acts 2000 (as amended). Along with prescribed bodies the documents were made available to neighbouring local authorities. Consultation was also carried out with the NPWS to review the Appropriate Assessment Screening of the plan due to the location of Waterford City on the River Suir SAC.

3.2 Difficulties Encountered in Compiling the Required Information

The SEA Guidelines produced by the DoEHLG in 2004 state that the SEA process “does not require major new research”. As such, the Environmental Report was prepared and informed by many already available data sources including Environmental Reports from SEAs of the previous City Development Plan, Waterford City Environs LAP (Waterford County Council) and the Ferrybank/Belview LAP (Kilkenny County Council).

Data sources that were used include; research that was carried out within the local authority, by the Central Statistics Office, by the Environmental Protection Agency and WFD River Basin District Management Plans and also the Heritage Data that has been collated by the DoECLG.

Difficulties encountered in compiling data include the availability of spatial data for human health. Table 3.1 details data sources used relating to the Environmental Protection Objectives.

Table 3.1 Environmental Protection Objectives and Data Gaps

Biodiversity, Flora and Fauna	Data Status and Gaps
B1: Protect, conserve and enhance the diversity of habitats, species and areas of national and local importance, including aquatic habitats and species and promote	Good data available NPWS Woodland Survey 2008 NPWS Grasslands Survey NPWS Saltmarsh monitoring project

the sustainable management of habitat networks.	Draft Waterford Nature Park Management Plan 2012-2019 www.npws.ie Data gap re status of Twaite Shad and Allis Shad in River Suir
Population and Human Health	
P1: Facilitate a good standard of health for the City's population through ensuring high quality residential, recreational and working environments and minimising water pollution.	Spatial data on human health in the City
Water Resources	
W2: Achieve and maintain required water quality standards in the South East River Basin Management Plan and reduce discharges of pollutants or contamination to waters.	Good data available
Soils and Geology	
S1: Protect the quality of soils in the interesting if avoiding environmental degradation of water quality and biodiversity	Data available- GSI, EPA Kilbarry Landfill Environmental Report
Air and Climatic Factors	
AC1: To improve travel choice and accessibility, reduce the need for travel by car and shorten the length and duration of journeys.	Good Data – Waterford City Public Transport Feasibility Study 2010
Cultural Heritage	
C1: Protect and conserve features of architectural and archaeological heritage.	Good Data available through Record of Monuments and Places
C2: Protect and conserve and promote the sustainable re-use of architectural heritage	Good Data available through Record of Protected Structures
Landscape	
L1: Protect and conserve the quality, character and distinctiveness of the River Suir waterway corridor	Spatial data on open space zoning and riparian woodland
Material Assets	
MA1: Maintain the quality of, and access to, assets such as open spaces, water resources and all other physical and social infrastructure	Details on public amenity areas available

4. CURRENT STATE OF THE ENVIRONMENT

4.1 Introduction

Ireland's Environment 2008, the Environmental Protection Agency's fourth state of the environment report provides an overall assessment of Ireland's environment. The overall conclusion of the report is that the quality of Ireland's environment is relatively good but there are some key environmental challenges facing Ireland and these include;

1. Limiting and adapting to Climate Change
2. Reversing Environmental Degradation
 - preventing eutrophication and other water pollution
 - protecting natural habitats and species populations
 - remediation of contaminated land
3. Complying with Environmental Legislation and Agreements.
4. Mainstreaming Environmental Considerations

The Assessment reports that there are two primary areas where unsatisfactory conditions are extensive - eutrophication and other water pollution and the unsatisfactory conservation status of natural habitats and species. Remediation of contaminated land is also an important issue. Ireland faces a difficult challenge in meeting many of its environmental protection obligations under both European legislation and other internationally binding legal agreements. Financial penalties are a potential consequence of failing to meet our environmental protection commitments.⁴

Remediation of unsatisfactory quality in groundwater, rivers, lakes and estuaries is one of the main environmental challenges. The Water Framework Directive marked a new approach for the protection and improvement of water resources. Commenced in 2009, a six year cycle of river basin management plans is being implemented for the purpose of protecting and enhancing all waters- groundwater, rivers, lakes, transitional waters (estuaries) and coastal waters including protection for related terrestrial ecosystems and wetlands. Waterford City is covered by the South East River Basin District Management Plan (Section 4.4.10).

Biodiversity loss is a serious threat to the quality of Ireland's environment as habitat degradation and species loss are often irreversible. Many of Ireland's most important habitats afforded protection under the EU Habitats Directive were assessed in 2008 as having bad conservation status⁵. Certain species particularly those of wetland and aquatic environments such as the Sea Lamprey and Otter are considered to be of poor conservation status while the conservation status of Twaite Shad and Atlantic Salmon is rated as bad (Section 4.2.4).

⁴ Ireland's Environment 2008, EPA

⁵ The Status of EU Protected Habitats and Species in Ireland, 2008, NPWS

The provision and maintenance of sufficient infrastructure in the areas of wastewater treatment, water supply, flood prevention and control, renewable energy, sustainable transport and waste management is critical to ensure maintenance of a good quality environment. The following baseline details the current status of the environment in Waterford City in relation to these issues.

BASELINE AND RELEVANT ENVIRONMENTAL PROBLEMS

4.2. Flora, Fauna and Biodiversity

The need to conserve biodiversity is underlined in the National Biodiversity Plan and Convention on Biological Diversity which Ireland signed and ratified in 1996. Conservation of biodiversity in Ireland is directed by the EU Birds Directive, EU Habitats Directive (transposed into Irish law by the Natural Habitat Regulations amended by SI 233/1998, SI 378/2005, SI 477 Birds and Habitats Regulations 2011 and the 1976 and 2000 (Amendment) Wildlife Acts. A Local Biodiversity Plan was published for Waterford City in 2010 with the aim of maintaining and enhancing biodiversity in the City through raising awareness, addressing information gaps and developing best practice through policy and work practices.

4.2.1 Designated Sites

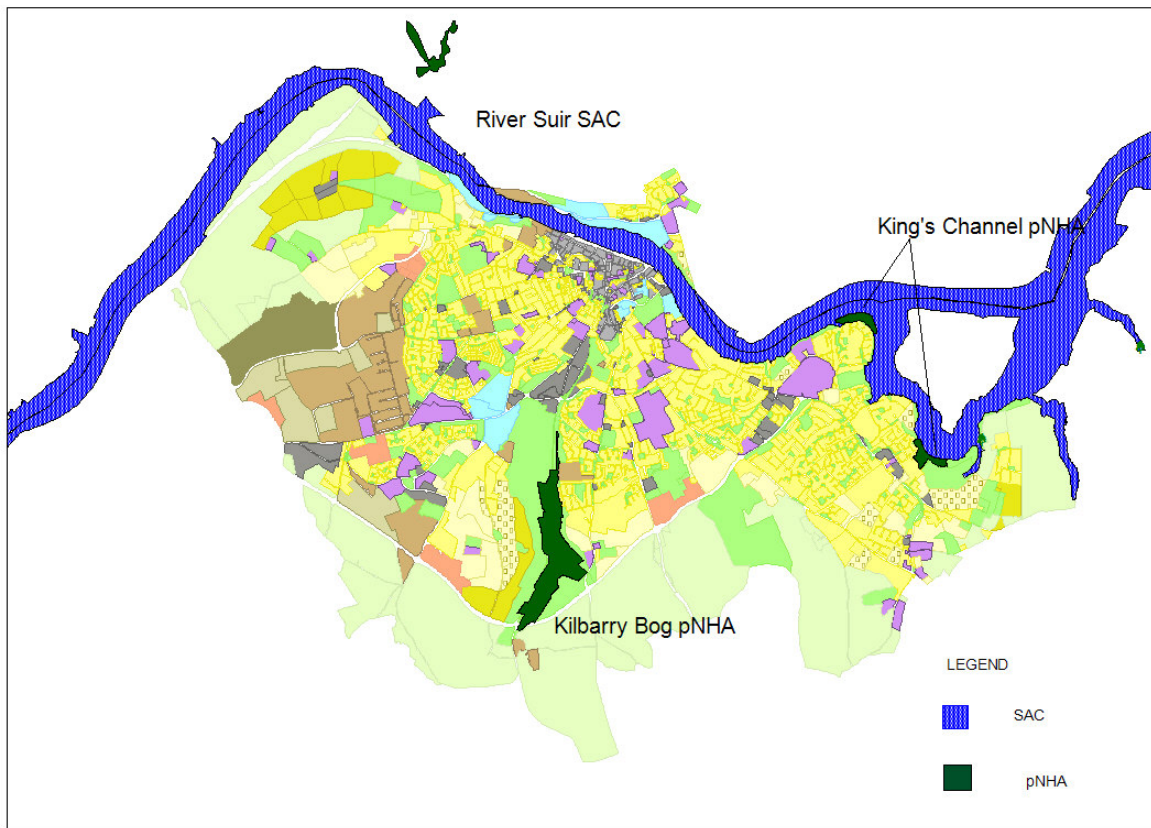
The landscape of Waterford City provides the setting for a range of wildlife habitats and species and the River Suir is designated a Special Area of Conservation. This designation is in place to protect the favourable conservation status of habitats and species identified in the Habitats Directive (e.g. Atlantic Salt Meadows, Eutrophic Tall Herbs, Sea Lamprey, Brook Lamprey, River Lamprey, Crayfish, Twaite Shad, Atlantic Salmon and Otter).

Natural Heritage Areas are designated for their conservation value at a national level. Kilbarry Bog and King's Channel are proposed as Natural Heritage Areas. Ballinakill Marsh (King's Channel pNHA) is the site of a Flora Protection Order species, Meadow Barley. Other interesting species include Saltmarsh Grass, Saltmarsh Rush, Sea Spurrey, Sea Milkwort, Sea Rush, Parsley Water Dropwort, Scurvy Grass and Wild Celery, Reed, Sea Clubrush and Tasselweed

Kilbarry Bog is not a bog in the true sense but an area of reedswamp and freshwater marsh. The designated area includes two reed beds, mainly species poor and dominated by Common Reed with large amounts of the two Pond Sedges (*Carex riparia* and *C. acutiformis*). Willow bushes are scattered. Other reedswamp species include Meadowsweet, Marsh Valerian, and Tufted Hair-grass.

Around the swamp margins the vegetation grades into marsh and then to wet grassland with Bottle Sedge, Brown Sedge, Creeping Bent and Soft Rush, and widespread Yellow Flag and Tall Fescue. The Royal Fern and Summer Snowflake also add interest to the site. Some of the

species that can be considered typical of neutral wetlands, such as Bottle Sedge, are not recorded elsewhere in Waterford City.



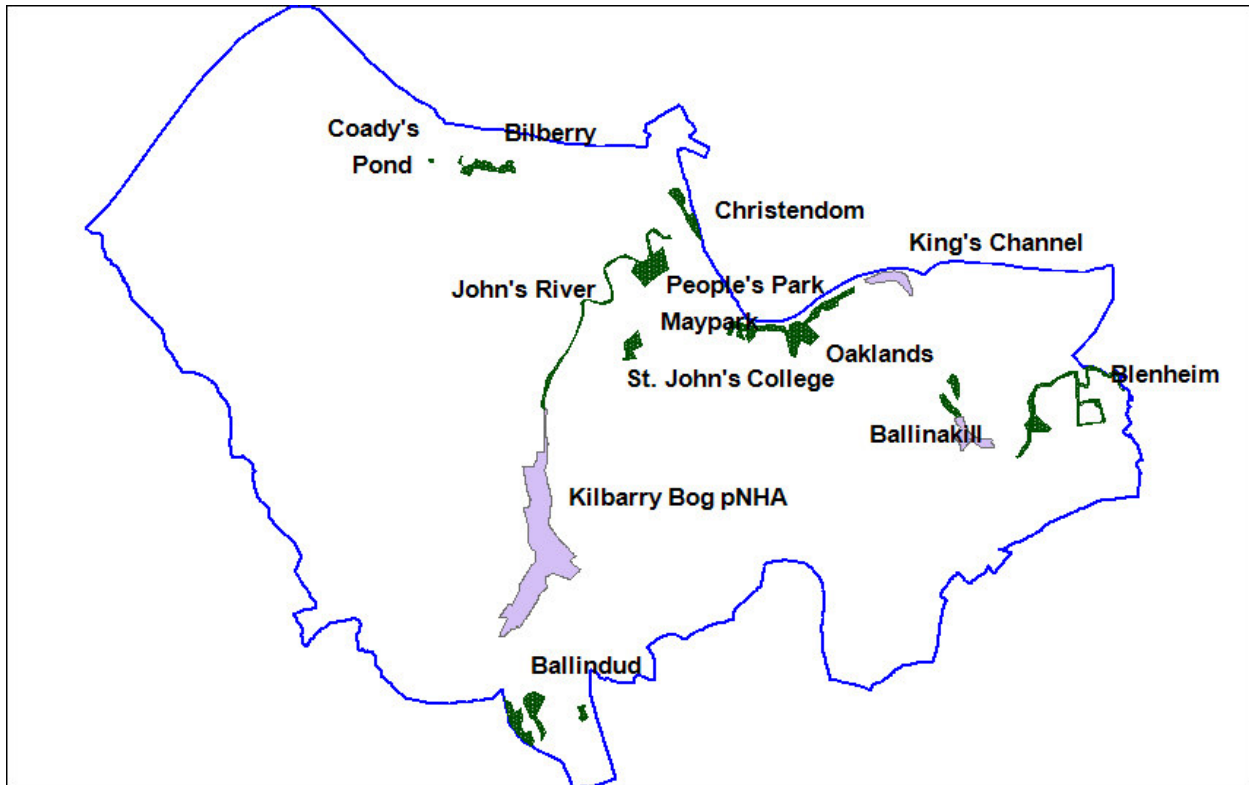
Map 1. Sites of Nature Conservation value in Waterford City

4.2.2 Sites of local biodiversity interest

Most of Waterford's land cover lies outside the areas designated for nature conservation but linear features such as hedgerows, woodlands and streams provide a resource in linking local biodiversity features throughout the landscape. These are "ecological corridors" along which species can move and disperse and are important in linking sites of higher nature conservation value. Sites of local biodiversity interest in Waterford City include Bilberry Rock and Coady's Pond, Tramore Road walkway, The People's Park and St. John's River bank. A survey of Irish Semi-Natural grasslands carried out by the NPWS in 2008 identified an area of grassland of conservation interest in Gracedieu. The site of 3.8ha is dominated by Creeping Bent grass with Creeping Buttercup. The area is zoned as Open Space in the City Development Plan.

It is an objective of the Plan to prepare a Habitat Map of the City that can inform policy and highlight opportunities to conserve and enhance wildlife corridors. Map 2 details sites of local biodiversity interest in Waterford City that have value as ecological corridors.

Other mammals of interest in Waterford City include the Feral Goat population on Bilberry Rock. The urban fabric, woods and riverscape of the city also provides suitable habitat for a range of bat species and at least 4 species of bat have been recorded from the City.



Map 2. Sites of local biodiversity interest and pNHAs in Waterford City

4.2.3 Wetlands

Wetland sites are areas of marsh, fen, peatland or water whether natural or artificial, permanent or temporary with water that is static or flowing, brackish or salt. Wetlands are significant habitats as they provide habitats for unusual communities of species that can survive in aquatic and semi-aquatic conditions. The amount of drainage and water present at these sites are their most important feature as increased drainage or flooding can cause drastic changes and loss of species. Wetlands of significance in Waterford include Kilbarry Bog, Ballinakill Marsh and The River Suir.

Kilbarry Bog is a remnant of a once much larger wetland which included Kilbarry landfill. Remediation works have been carried out on the landfill involving capping and re-vegetation and the surrounding lands are being developed as a public amenity. Approximately 3.5ha adjoining the pNHA to the south east were purchased by Waterford City Council for the purpose of creating Waterford Nature Park and completed in 2012. The Park consists of approximately 69 ha and includes the creation of constructed wetlands as a compensatory measure for loss of

wetland habitat resulting from the development of the landfill in the 1970s. Establishment of a wildflower meadow and the planting of approximately 20,000 trees will enhance the overall biodiversity of the area.

A Draft Management Plan for Kilbarry Bog and adjacent Nature Park was prepared for Waterford City Council in 2012. The impetus for the plan commenced in 2008 with plans for flood alleviation on the R675 whilst protecting Kilbarry Bog. The plan was then expanded to include consideration of habitat compensation under ECJ case 494/01 and related works in the wider Kilbarry area encompassing the landfill and nature park. The plan period parallels that of the City Development Plan and will be subject to ongoing review. Objectives of the plan include habitat survey and hydrology study of Kilbarry Bog, habitat creation and promotion of biodiversity awareness of the site. In compensation for encroachment on Kilbarry Bog from the St. John's River walk to the Outer Ring Road a pond was constructed at the southern end of Kilbarry bog in 2011 with the aim of attracting aquatic invertebrates, common frog and smooth newt to the site.

Waterford City Council recently purchased an area of land at Ballinakill on the banks of the River Suir close to the King's Channel pNHA and Little Island for the purpose of habitat creation as Compensation under ECJ Case C/494. It is proposed to recreate semi-natural wetlands in what is existing reclaimed agricultural land by constructing a mosaic of freshwater and brackish wetlands through altering the site's hydrology. Compensatory habitat project plans have involved baseline habitat surveys, habitat creation options and environmental assessment of the options under the management of ecological consultants.

4.2.4 Other Water Dependant Species

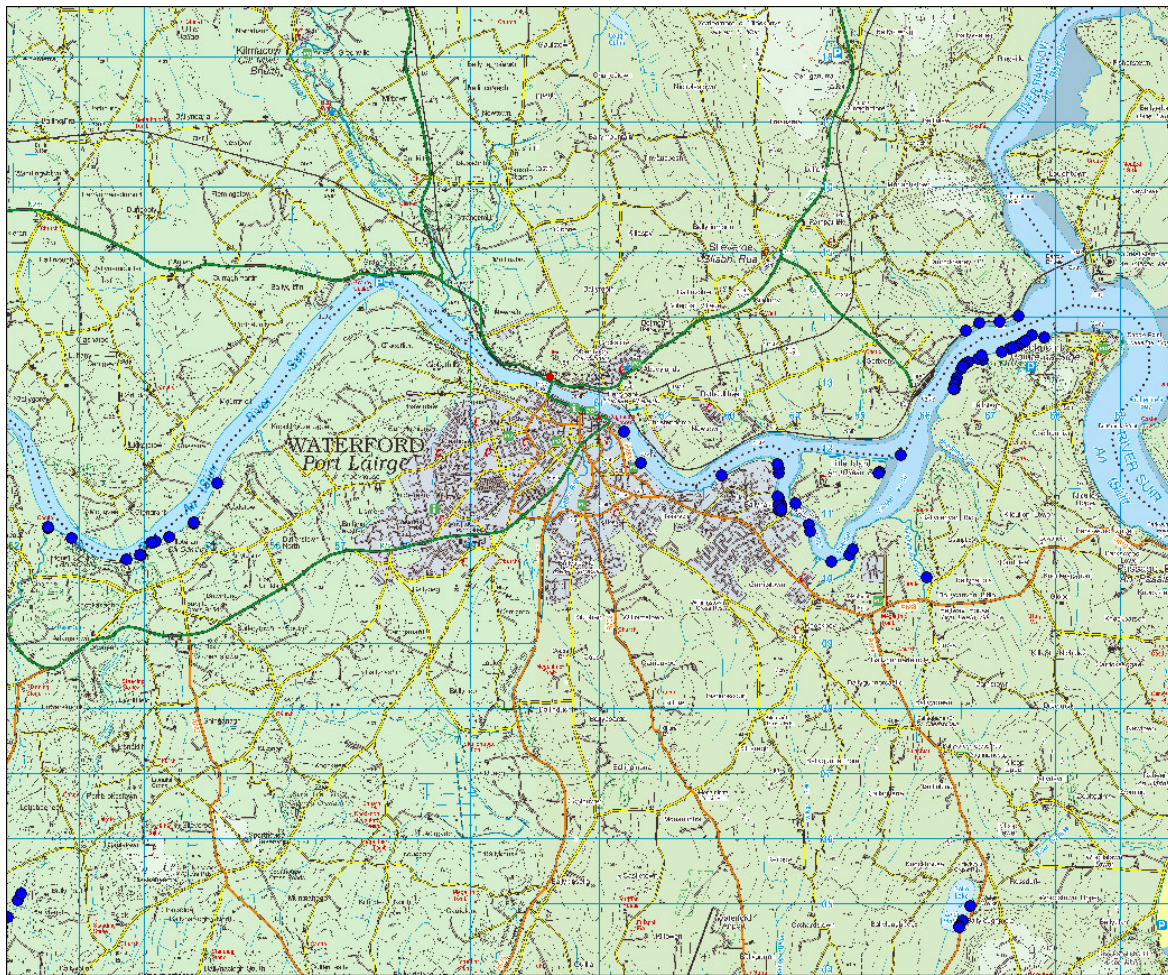
Twaite Shad are known to occur in the Lower River Suir and migrate in May to spawning areas upstream of Carrick-on-Suir. This species is considered to be in serious decline on a national level. Without intervention, the future prospects of the Twaite Shad are considered poor and overall the conservation status of the species is bad. Allis Shad are known from the South East including the Lower Suir and Waterford Estuary but their overall conservation status is unknown.

Three lamprey species, Sea Lamprey, River Lamprey and Brook Lamprey are known from the Lower Suir SAC. In a survey of Lamprey in the River Suir catchment by the NPWS⁶ in 2006, Lamprey were recorded in the St. John's River at a population density of 4.71 per m². Whilst holding a Q value of Q2 (i.e. bad ecological status) the survey noted the stretch of river surveyed had optimal physical lamprey habitat and lamprey "seem to favour slightly elevated levels of organic material and filamentous algae in the water". The survey reported that river/brook

⁶ National Parks and Wildlife Service

lampreys are presently at a favourable status in the Suir catchment. The status of sea lampreys in the catchment is unfavourable however. One commercial fish species, the Atlantic Salmon is also an Annex II species under the Habitats Directive.

In the NPWS 2004/2005 Otter Survey of Ireland the Suir is included in the list of the most important SACs for Otter. The Draft Waterford Nature Park Management Plan 2012-2019 reports evidence of Otter resident in the Kilbarry Bog area while holts have been recorded along the River Suir. An INTERREG Project being delivered by the WIT Mammal Ecology Unit and Waterford County Council is carrying out research on a number of mammals including Otter and a Waterford City Otter survey commenced in 2011.



Map 3. Records of Otter activity along the Lower River Suir 2011/2012 (Andrew Harrington MISE Project)

Recent Otter Survey (under the MISE project) of the Lower River Suir and Waterford Estuary in 2011/2012 indicates quite a healthy presence of Otter along this waterway corridor which is a positive finding. Map 3 details where Otter Spraints have been found. The absence of records

between Ferrybank and Gorteens does not infer an absence of Otter but is due to the absence of survey along this section to date.

As Waterford is located on an estuary cetacean species, such as harbour porpoises and grey seals, are occasionally sighted in the waters.

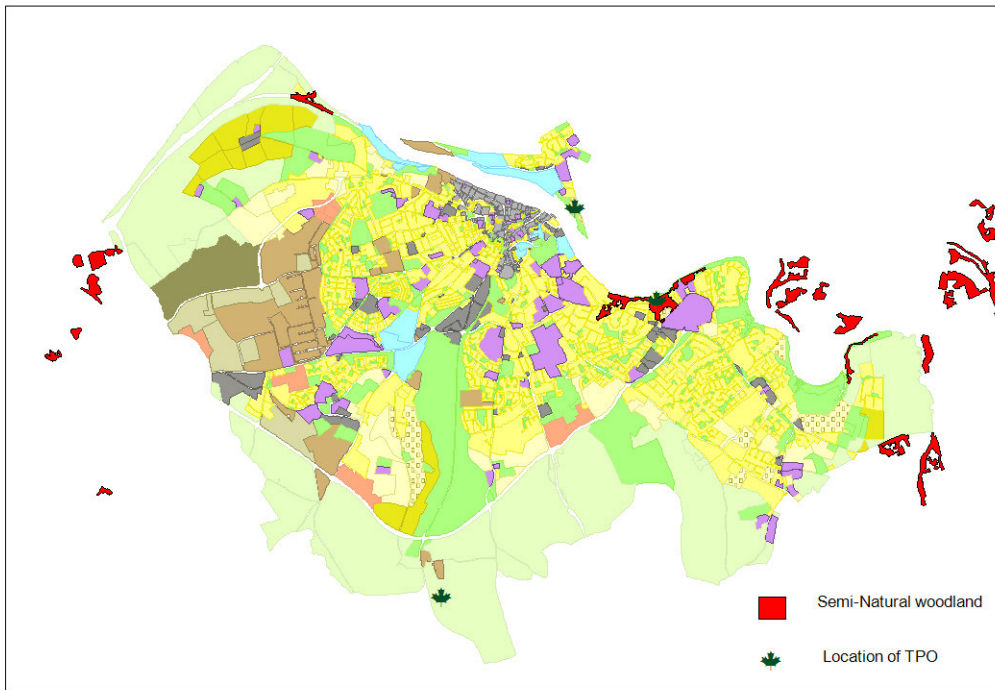
4.2.5 Trees, Woodlands and Hedgerows

Trees provide great amenity value in the landscape and are also an important wildlife habitat. A national survey of native woodland was carried out by the National Parks and Wildlife Service in 2008. Semi-natural woodland in Waterford City occurs at Gracedieu, Glenville, Little Island and Blenheim (Map 3). The City Development Plan recognises these groups of trees as being of Special Amenity Value with an objective to carry out an audit of all trees of special amenity value, as listed in Schedule 3, with a view to updating same.

The City Council plants trees on an annual basis. During the period of 2008-2011 approximately 10,000 trees and shrubs were planted in the City's streets, parks and open spaces, this figure is in addition to the 20,000 trees planted at the Kilbarry Park.

The City Council in partnership with the Native Woodland Trust aims to recreate a native Irish woodland in 2012 at a site in Gracedieu of approximately 7.5 acres which will add to the Biodiversity resource of the City.

A number of trees are protected by Tree Preservation Order in the City. Development Plan including trees in the grounds of the Glanbia plant at Maypark Lane, at Ballindud House and Christendom in Ferrybank whose value is generally based on their contribution to the broader landscape and their ecological and cultural significance.



Map 4. Semi-natural woodland in Waterford City as per the 2008 NPWS Woodland Survey and location of TPOs.

4.2.6 Invasive Species

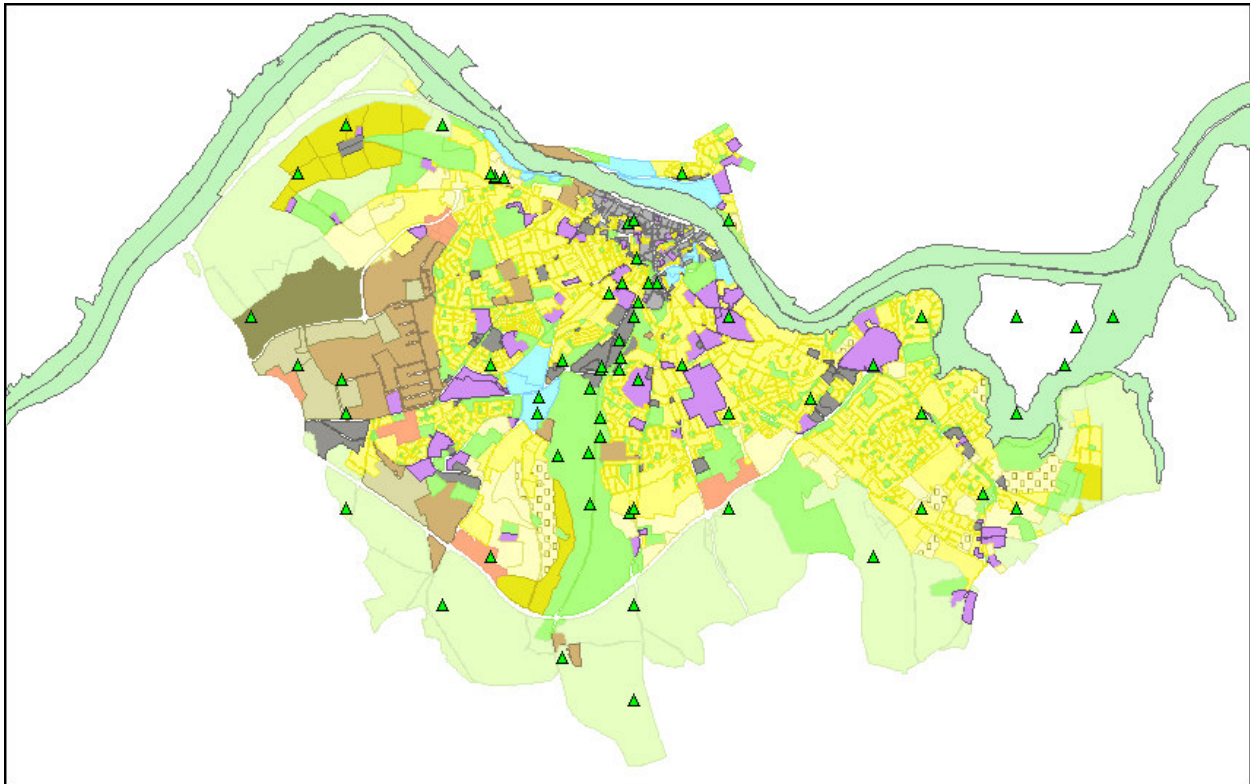
Invasive species represent a very significant threat to biodiversity, second only to that caused by direct habitat destruction. They do this by competitively excluding or out-competing our less robust native species, by preying on native species or by altering the natural aquatic or riparian habitat in which they reside. Invasive Species of concern in Waterford include, Japanese Knotweed (Kilbarry Bog and along Tramore Road) , Giant Knotweed (Kilcohan, Ballytruckle, St. John's River), Himalayan Balsam (Little Island, Banks of River Suir) and Common Cord Grass (King's Channel, Ballynakill, Little Island, Ballycanvan Big).

Under the 2011 Birds and Habitats Regulations it is an offence to aid the spread of invasive species.

The Chinese Mitten Crab, a potentially invasive species was first recorded from Ireland in Waterford Estuary in 2006. This is the only location in Ireland that this crab has so far been recorded. The first record was in 2006 and then not recorded again until 16 individuals were found in 2009. The Crab causes erosion of river banks through its burrowing activity.

Grey squirrel were first recorded in Count Waterford as recently as December 2006 having crossed the River Suir and 3 have been sighted in the Maypark Lane area in the City in 2011.

Grey Squirrel competes for food and habitat of the native Red Squirrel and are a threat to its continued existence. The control of and promotion of awareness on Invasive Species is being prioritised by a number of agencies and organisations including the National Biodiversity Data Centre, Waterford Institute of Technology and Waterford County Council through the INTERREG MISE project (Mammals in a Sustainable Environment). The NBDC published a report on the Dirty Dozen non-native invasive species in Co. Waterford and issued to Both City and Councils in 2010. It is an objective of the Waterford City Biodiversity Plan to raise awareness and promote the management of invasive species in the City.



Map 5. Location of Invasive Species records from Waterford City (Δ) . Appendix 3 details range of species recorded at these locations.

4.2.7 Existing Environmental Pressures/problems; Biodiversity, Flora and Fauna

Atlantic Salt Meadows and Mediterranean Salt Meadows are the Annex 1 habitats listed as qualifying interests for the Lower River Suir SAC in Waterford City. Areas of saltmarsh near Little Island (Ballynakill, King's Channel and Belmont) were surveyed in the NPWS Saltmarsh monitoring project 2007-2008. The overall conservation status of the survey site is rated as unfavourable-bad due to the negative impact of adjacent development and infilling of saltmarsh habitat. According to the Site report (NPWS 2009) the main impacts and activities adjacent to the areas of Saltmarsh opposite Little Island include continuous urbanisation and use of the Suir

River Channel for navigation and access to Waterford Port. Impacts and activities around the site were found to impact more adversely on Upper Saltmarsh with a noted absence of Sea Rush and decline in occurrence of Meadow Barley. The assessment of unfavourable-bad is related to adjacent development, infilling of saltmarsh habitat and disturbance from previous pipeline construction. However, the Atlantic Salt Meadows habitat was found to be generally in good condition. “There are several saltmarsh communities present and zonation is moderately well-developed. The best example of ASM saltmarsh (along the River Suir SAC) is present at Ballynakill”.⁷

Availability of data on some Annex II species such as Twaite Shad and Allis Shad is poor but recent surveys on Otter and Lamprey indicate that they hold favourable conservation status in Waterford.

A key challenge is the maintenance of favourable conservation status for all protected habitats and species avoiding encroachment of development on designated sites and sites of local biodiversity value, maintaining appropriate buffers around these areas and also enhancing green infrastructure and ecological corridors between key sites of nature conservation value.

The issue of invasive species is one that also needs to be monitored to avoid degradation of habitats by alien plants. Waterford’s location in a harbour area makes it susceptible as a vector site for introduction of new species.

On a national and local level, wetlands have been subject to a number of damaging activities that undermine their important functions. This includes arterial drainage, infilling, dumping and land development as occurred in Kilbarry. Development of the Kilbarry Nature Park and compensatory wetland area seeks to redress damage incurred to this wetland in past decades. Drainage of wetlands above 0.1 ha is no longer exempted development following amendments to the Planning Regulations in 2011.

4.3 Population and Human Health

The Census of 2011 shows the population of Ireland increased by 8.1% from in 2006 to in 2011 an actual increase of 341,421 persons. Over this time, the population of Waterford City grew by 2.2% from 45,748 to 46,747.

⁷ Saltmarsh Monitoring Project 2007-2008 Volume 5 (NPWS, 2009)

Table 4.1. Census 2002-2011: Population of Waterford City 2002-2011.

Population			Change 2002-2006		Change 2006-2011	
2002	2006	2011	Actual	%	Actual	%
44,594	45,748	46,747	1,154	2.6%	999	2.2

Waterford is part of the South East Regional Authority and the City Development Plan must have regard to the SERA Regional Planning Guidelines 2010-2022. The main aim of the RPGs is to develop the designated gateway in the region (Waterford City) in support of the aims of the National Spatial Strategy. A review of population figures in the 2006 census reveals that the growth of the South East Region and the Waterford Gateway is not achieving the projected population growth aimed for in the RPGs (48,500 in 2010). In Waterford the greatest level of population growth was in Tramore reflecting the trend of commuter belt living at distance from places of employment and key services. The promotion of a balanced regional development is a priority for the Regional Planning Guidelines and a population projection of 55,000 is advocated for Waterford by 2022. The underperformance in population growth is a concern for Waterford City as critical mass is key for development of its Gateway status including development of environmental infrastructure.

4.3.1 Human Health

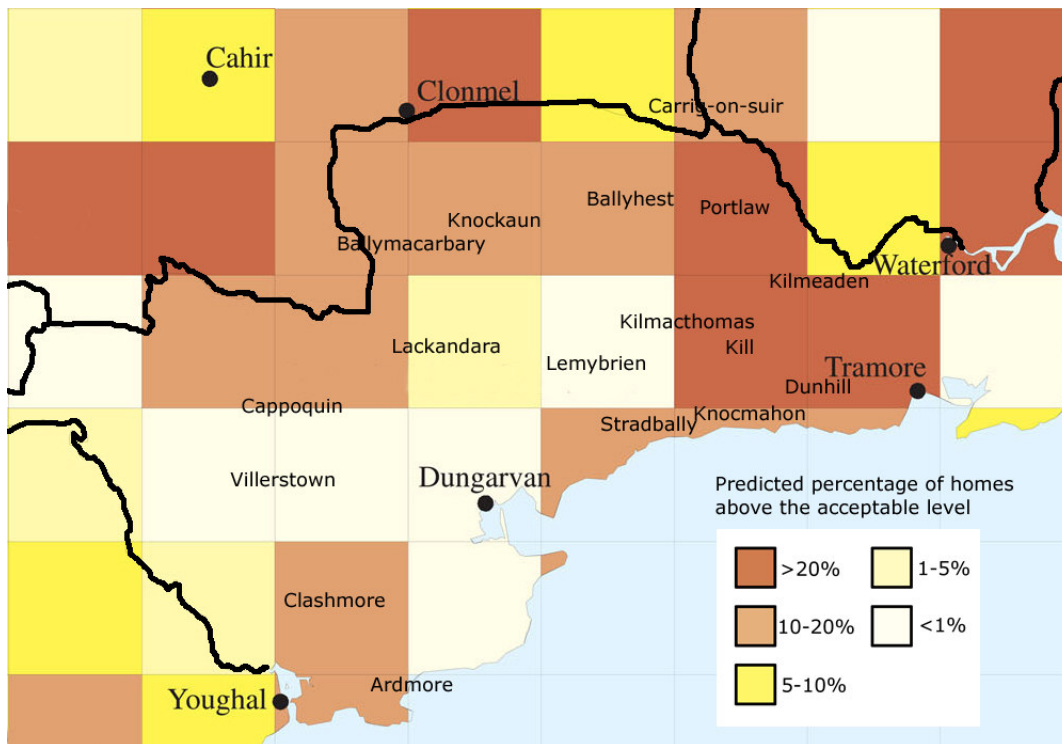
Waterford City became a member of the WHO European Network of Healthy Cities in December 2010. This initiative is part of a World Health Organization (WHO) involving over 80 other European cities. The aim of the initiative is to enhance the health of the city, its environment and people through all groups and agencies working together. As a member of the WHO European Network of Healthy Cities, Waterford will endeavour to respond to the following healthy city criteria: age friendly city, migrants and social inclusion, active citizenship, reducing risk factors for chronic diseases, promoting physical activity, reducing isolation and promoting mental health, healthy urban design, creativity and liveability, healthy transport, safety and security.

Availability of spatial data on human health on a local basis is limited. However, human health issues in Waterford are generally concerned with quality of life which can be affected by factors such as commuting patterns and provisions for recreation and amenity in the City. Due to the geology of Waterford radon gas may be an under-detected issue for human health in the area.

Radon, a naturally occurring radioactive gas comes from the radioactive decay of uranium in rocks and soils and rises up through the ground to disperse in the air. It only becomes a health hazard when it is trapped in buildings. Recently, the Radiological Protection Institute of Ireland

(RPII) has measured homes in Waterford and found that over 1 in 5 homes are above the acceptable level. The RPII has identified the area south of the River Suir and bounded by and including Waterford City to the north-east as being at particularly high risk from radon. It believes there are many homes in Waterford with high radon levels and urges local people to test for radon and reduce their risk of lung cancer. Nationally, radon is linked to 200 lung cancer deaths per year.

A 'High Radon Area' is one in which more than 10% of homes are predicted to have radon levels in excess of the reference level of 200 Bq/m³. Much of Co. Waterford is predicted to have more than 10% of the homes above the reference level.



Map 6. Radon levels in Waterford City and County Waterford (www.rpii.ie)

Increase in population and economic activity is linked to growth in road traffic and noise. The economic downturn and opening of the Waterford City Bypass in 2009 have decreased the volume of traffic passing through Waterford City Centre. In fulfilment of the Environmental Noise Regulations 2006 Waterford City Council are preparing a road noise action plan for the City.

4.3.2 Existing Environmental Pressures/problems; Population and Human Health

Key issues with population and human health in Waterford City are access to recreation and amenity areas and exposure to radon gas. An increase in sedentary lifestyles and availability of

processed foods has seen a worrying trend of obesity in Ireland. Access to cycleways, walkways and promotion of smarter travel can help people's quality of life by offering alternatives to using the private car. Provision of a wide range of housing choice in the City can also attract more people to live in the Gateway thus building up critical mass for provision of services.

Due to the flood alleviation measures carried out along the River Suir it is considered that flood risk does not represent a significant risk to human health in Waterford City. A Strategic Flood Risk Assessment was carried out as part of the review of the City Development Plan.

The issue of radon exposure needs to be monitored by continual testing.

4.4 Water

An overview of water quality in Ireland is provided in the 2009 EPA report "Water Quality in Ireland 2007-2008". Quality in 89 water bodies from 32 estuarine and coastal areas in 2006-2008 showed that 35 (39%) were unpolluted, 40 (45%) intermediate, 7 (8%) potentially eutrophic and 7 (8%) eutrophic. This represents an improvement in water quality status, compared with the most recent previous period, with 6 fewer water bodies being classed as eutrophic. A total of 11 water bodies, however, showed a decline in status including the middle Suir which is now classed as eutrophic.

The main findings of the report were that there was an overall improvement in the quality of water in the state since the previous assessment period and that nutrient enrichment causing eutrophication is the main threat to these systems.

4.4.1 Surface Waters

From the 2009 EPA "Water Quality in Ireland" report. water quality in rivers and streams on a national level assessed in 2006-2008 showed slight deterioration, compared to the 2004–2006 period, with 70 per cent unpolluted, 19 per cent slightly polluted, 10.6 per cent moderately polluted and 0.5 per cent seriously polluted. While the extent of serious pollution was the same, both moderate and slight pollution had increased

Surface Waters in Waterford City include the River Suir and St. John's River which are monitored by the EPA under Hydrometric Area 16. The most recent assessment of water quality in the St. John's River concludes that water quality is "continuing unsatisfactory with bad ecological quality" with some stretches seriously polluted.

The River Suir is only sampled downstream as far as Carrick on Suir as the Lower Suir is an estuarine water body (see Section 4.4.6). Data extracted from the EPA state "overall 2006 to 2008 were bad years for water quality in the upper reaches of the River Suir while the lower reaches near Carrick on Suir are now rated as Eutrophic".

Table 4.2 details summary of river water quality in St. John's River extracted from EPA Hydrometric Data.

<i>Biological Quality Ratings (Q Values)</i>						
Station	1980	1984	1988	1992	2009	2011
Bleach Bridge	1/0	1/0	1/0	1-2	2	2
Wyse's Bridge (Bath Street)	1	1/0	1-2/0	2	2-3	-

Table 4.2 River Water Quality in St. John's River, Waterford

Assessment: Continuing unsatisfactory with bad ecological quality

4.4.2 Groundwater

Waterford lies on a regionally important aquifer and is rated as being of high vulnerability. Groundwater protection schemes have been prepared by the GSI in conjunction with local authorities aiming to preserve the quality of groundwater, particularly for drinking water purposes. A Groundwater Protection Schemes was prepared for Waterford in the 1990s.

4.4.3 Drinking Water Quality

The European Communities (Drinking Water) Regulations (No. 2) 2007 came into force in March 2007. In accordance with these regulations, the local authority must notify the EPA where there has been a failure to meet a quality standard.

Waterford City's drinking water supply is served by the East Waterford Regional public water supply operated by Waterford City Council serving a population of 46,747. Microbiological compliance in the Waterford City PWS was 100% in both 2009 and 2010 whilst chemical compliance levels increased from 98.0% in 2009 to 99.1% in 2010. No boil water notices or water restriction notices were issued to consumers during 2010 and none remained in place from previous years.

The Remedial Action List (RAL) is a list of Public Water Schemes (PWSs) where remedial action is required to ensure compliance with the requirements of the Drinking Water Regulations. In 2010, the Waterford City Council PWS was removed from the RAL due to the completion of the necessary remedial works by Waterford City Council at the Adamstown drinking water treatment plant. The installation of chlorine monitors and alarms is required to

ensure that the supply is adequately disinfected at all times. A chlorine monitor and alarm is in place on Waterford City Council's PWS. The EPA did not carry out any audits of drinking water treatment plants in Waterford City during 2010.⁸

4.4.4 Water Conservation

Control of leakage rates is an ongoing challenge for local authorities and may increase with predicted dry winters and below average rainfall due to climate change. Waterford City Council has undertaken mapping and identification of leakage control zones and carried out mains rehabilitation and replacement in an effort to maximise water conservation. Work is ongoing as part of the 2010-2012 Water Services Investment Programme under Water Conservation Works Stage 3. A review of SEA Environmental Monitoring Indicators for the existing Development Plan (2009) reported unaccounted for potable water to be approximately 44%.

4.4.5 Waste Water

The most recent report on *Urban Waste Water Discharges in Ireland Population Equivalents Greater than 500 persons - A Report for the Years 2006 and 2007* was published by the EPA in 2009. This is the first report on urban waste water since the Waste Water Discharge Regulations were introduced in 2007 to tighten controls over local authority operated waste water treatment plants. The report provides a baseline prior to the implementation of the new EPA licensing system for local authority waste water treatment plants.

Waterford City has sufficient capacity for current and future growth due to the installation of wastewater treatment facilities at Gorteens (Co. Kilkenny) fully operational since 2010. The plant has a design Population Equivalent of 190,600 which caters for the existing (47,000) and a future (68,600) City population. Secondary treatment is carried out on waste water with a discharge to Waterford Estuary (NE of Little Island) as licenced by the EPA in 2010 and subject to annual environmental report. Previously wastewater was discharged to the River Suir either untreated or following preliminary treatment.

The local authority prepared an Assessment of Needs for Water Services submitted to the DoEHLG under the Department's Water Services Investment Programme in November 2009. These needs were prioritised under four themes:

1. Water Conservation Proposals which meet environmental and economic goals
2. Works required to respond to ECJ judgements
3. Environment/Public Health Objectives
4. Works to support sustainable development of hubs and gateways under the NSS

⁸ The provision and quality of Drinking Water in Ireland, A report for the year 2010 (EPA 2011)

Current works include rehabilitation of water mains and water conservation.

The City Council controls 12 licences to discharge water to a sewer under Sections 16 of the Local Government (Water Pollution) Act, 1977 and one licence to discharge to a river under Section 4 of the Act.

4.4.6 Estuarine and Coastal Waters

The water quality of estuarine and coastal waters is assessed using the EPA’s Trophic Status Assessment Scheme (TSAS). The scheme, which was designed to detect the occurrence of eutrophication in estuarine and nearshore waters, is based on relevant measures of water quality. The trophic status of 89 water bodies from 32 estuarine and coastal areas around Ireland was assessed for the period 2006-2008. The assessment of these waters shows that seven (8%) were classed as eutrophic, seven (8%) as potentially eutrophic, 40 (45%) as intermediate and 35 (39%) were unpolluted. The results of this assessment indicate an improvement in overall water quality with six fewer water bodies being classed as eutrophic when compared to the previous assessment.

Monitoring of the Suir Estuary however shows a decline in estuarine water quality with the Middle Suir Estuary now classed as Eutrophic and the unpolluted status of the Barrow/Nore/Suir Estuary now rated as intermediate. The installation of the secondary treatment WWTP in Gorteen should have a positive bearing on future monitoring data in Waterford Estuary.

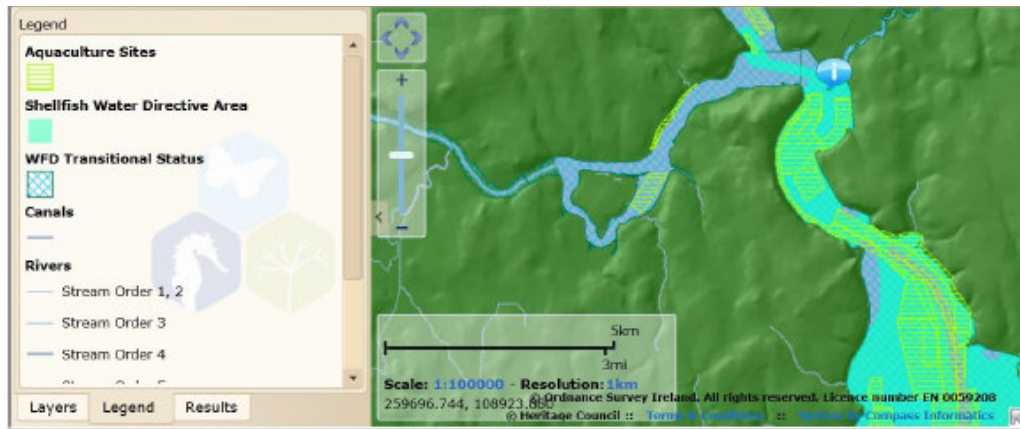
Table 4.3. Estuarine and Coastal water Quality (Trophic Status) in Water Quality in Ireland

Site	Trophic Status 2001-2005	Trophic Status 2007-2009
Middle Suir Estuary	Potentially Eutrophic	Eutrophic
Lower Suir Estuary	Intermediate	Intermediate
Barrow Nore Suir Estuary	Unpolluted	Intermediate
Waterford Harbour	Unpolluted	Unpolluted

4.4.7 Shellfish Growing Areas

Waterford Harbour is a shellfish growing area delineated by the Sea-Fisheries Protection Authority. The Sea Fisheries Protection Authority is responsible for classifying shellfish production areas as required under Directive 991/492/EEC) and by the 1996 Regulations (SI No 147 of 1996). Waterford Harbour is classified as Class B – requiring purification for 48 hours before shellfish can be placed on the market. The DoEHLG published a Pollution Reduction Programme for Waterford Harbour in 2009 to ensure compliance with the standards and objectives established by the Quality of Shellfish Waters Regulations 2006 (S.I. No. 268) of 2001 as amended for the designated Shellfish growing waters. The designated Shellfish Waters

Area occurs approximately 3 km from the boundary of Waterford City. The Characterisation Report for these designated shellfish waters identified that key pressures are urban wastewater systems, onsite waste water treatment systems and agriculture. The installation of a secondary WWTP at Gorteen will significantly improve water quality in Waterford Harbour and reduce the cumulative impact from urban wastewater treatment systems on the Shellfish Growing Area.



Map 7. Location of Shellfish Growing area and aquaculture sites

4.4.8 Water Framework Directive

Article 6 of the Water Framework Directive requires each Member State to establish a Register of Protected Areas. These areas are considered to need greater protection because they contain sensitive habitats or wildlife species or the need to protect human health including drinking water sources, shellfish growing areas and bathing areas. Protected areas must achieve standards relevant to their designation which may be stricter than good or high status as defined under the Directive.

Table 4.4. Protected Areas under Water Framework Directive in Waterford

Protected Area	Total Designated Areas
Drinking Waters	N/A
Economically Significant Aquatic Species	N/A
Recreation and Bathing Waters	N/A
Nutrient Sensitive Waters	River Suir
Water Dependant SACs	River Suir
Water Dependant SPAs	N/A

Under Article 4.7 of the Water Framework Directive, Member States will not be in breach of this Directive when failure to achieve good groundwater status, good ecological status or, where

relevant, good ecological potential or to prevent deterioration in the status of a body of surface water or groundwater is the result of new modifications to the physical characteristics of a surface water body or alterations to the level of bodies of groundwater, or failure to prevent deterioration from high status to good status of a body of surface water is the result of new sustainable human development activities and all the following conditions are met:

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

4.4.9 Flooding

The main watercourses in Waterford City are the River Suir, St. John's River and the Lisduggan Stream along with a number of smaller tributaries and drains. Areas in the City that have historically been subject to flooding are Park Road/Newtown Road, The Quay, Poleberry and the Tramore Road. The main source of flooding in the City was a result of the River Suir, St. John's River and Lisduggan Stream overtopping their banks. Flooding from the River Suir and lower reaches of the St. John's River is mostly tidal in nature. Flooding in the upper reaches of the St. John's River (Kilbarry Bog) and Lisduggan Stream is mostly as a result of fluvial flow. The Waterford Flood Alleviation Scheme has addressed flood areas through the construction of flood defences along the south quays of the River Suir from Grattan Quay to Adelphi Quay and to the northbank of the St. John's River as far as the Courthouse in 2010. In 2011 flood defence works were constructed on the banks of the St. John's River in two low-lying areas of the city that were regularly inundated by floodwaters- Scotch and George's Quay and Waterside. Raising of sections of the Tramore Road was also carried out in 2010. Construction of the remaining phases of the Flood Alleviation Scheme is due to be completed by 2014 involving floodwalls and flood embankments on south bank of the River Suir downstream of its confluence with the St. John's River and the Lisduggan Stream as far as the Regional Sports Centre and the Tramore Road Area. Flood defences include for a minimum of 0.5m freeboard i.e. the finished height of the flood defences is at a minimum half a metre above the calculated design flood level. A Strategic Flood Risk Assessment was prepared as part of the Development Plan Review Process and recommendations were integrated into policies of the Plan. Map 8 presents the Flood Zone

Mapping for Waterford City. Indicative Coastal Flood mapping by the OPW was reviewed to check risk of flooding to critical infrastructure serving the City. The WWTP at Gorteen is located just above the flood risk zone while the Water Treatment at Adamstown in the county is not within a flood risk area. The 110 KV Sub-Station is also located on higher ground at Gracedieu and not in a flood risk zone.

The OPW are currently involved in preparing catchment-based flood risk management plans through the CFRAMs (Catchment Flood Risk Assessment and Management Studies) programme with the relevant local authorities, the Environmental Protection Agency (EPA) and other key agencies, providing an integrated and pro-active approach to flood risk and the mechanism through which predictive flood maps and Catchment Flood Risk Management Plans (CFRMPs) are being developed. These CFRAM studies will establish a prioritised set of flood risk management measures for their relevant areas, including the use of physical and management responses. The South Eastern Catchment Flood Risk Assessment and Management (CFRAM) study commenced in the South Eastern district in August 2011 and will run until the end of 2015. A pilot CFRAM study for the River Suir has been underway since 2007. The outputs of that study will be co-ordinated with the South Eastern CFRAM Study. A preliminary flood risk assessment was completed in 2011 to identify areas that need further assessment to determine their risk of flooding. The River Suir CFRAMS identified Waterford as an area of potential risk and it is indicated as a probable area for future assessment on the pfra maps (www.cfram.ie). For these risk areas, flood risk maps and flood hazard maps will be drawn up by 2013. Flood Risk Management Plans (FRMPs) will be developed by 2015



Map 8. Stratfidec Flood Risk Assessment Map of Waterford City

4.4.10 Existing Environmental Pressures and Water

According to the South East River Basin District Management Plan in order to meet the requirements of the Water Framework Directive, water quality in Waterford Estuary needs to be restored by 2021 and for groundwater, areas in the River Suir need to be restored, by 2027. The St. John’s River is seriously polluted and its ecological status needs to be restored. Waste Water Treatment and Drinking Water quality in the city are of a high standard and not of concern presently. However along with other areas in the country water conservation is an ongoing issue to be addressed with regard to loss of water supply through leakage.

4.5 Soils and Geology

Waterford City stands on a bedrock of rhyolitic volcanic rock slaty mudstone formed about 450 million years ago during the Ordovician period and reddish sandstone and conglomerate from the Devonian Old Red Sandstone period about 350 million years ago. Geology shapes the landscape and determines the overlying soil types and vegetation.

Quarry Road in Gracedieu is so named from the small quarries nearby and is also known as the Red Road from the red sandstone of the area and used in the stone walls there.

The principal soils to be found in Waterford City are mainly acid brown earths derived from sandstone or rhyolite till with some limestone glacial till and associated soils including gleys, podzols and grey brown and brown podzolics. Soil depths vary from one to three metres and the soils are usually well drained except the gleys, which have a high clay and silt content. Gley soils are found mainly around the flood plain of the St. John's River at Kilbarry. There are few rock outcrops, apart from the Black Rock at Kilbarry and small projections on the Dunmore Road.

The River Suir and St. John's River continue to carry a sediment load that is being continuously deposited along the banks of the Suir, which limits access to and limits recreational usage of the Suir along most of its tidal length. The small saltmarsh area along the Suir within city limits hold deep loads of fluvial mud (depths of at least 4 metres have been reached near the Island ferry) of ecological value for feeding waders.

4.5.1 Existing Environmental Pressures and Soils and Geology

The Waterford City Quays and marina berths are subject to maintenance dredging by plough dredging to maintain the navigation channels. Disposal of dredge material is regulated by the Dumping at Sea Acts 1996 and 2004 and permitted by the Department of Agriculture, Food and the Marine.

The landfill at Kilbarry involved infilling of waste of a 20ha area of former wetland over 40 years. The landfill has now been remediated involving capping and landscaping, installation of a gas abstraction system and surface water management system. Constructed wetlands will treat any surface run off from the site before discharging to the perimeter drain. The bedrock beneath the landfill site forms part of a regionally important aquifer with fissure flow. Due to the low permeability of the bedrock beneath the landfill, migration of leachate is more likely along southern and western sides where depth to bedrock is shallower. The landfill is subject to ongoing monitoring under an EPA waste licence as detailed in Kilbarry Landfill Site Annual Environmental Reports.

4.6 Air and Climate

Air quality in Ireland is generally of a high standard across the country. Waterford lies in Zone C. EPA monitoring results for 2009 at Zone C demonstrate compliance with the Air Quality Standards limit values for all pollutants. There are air monitoring stations at Tycor and at the Bishop's Palace which measures smoke levels in the City Centre. Air monitors on the Mall measure Benzene NO₂ and SO₂ and are maintained and read by the HSE on behalf of Waterford City Council.

The Port Company continues to monitor, on a regular basis, noise levels and air quality emanating from operations at the Belview Terminal.

Global climate change is now recognized as the primary environmental challenge of this century. The European Union is taking the lead in this regard with the adoption of climate change strategies, including the Kyoto Protocol, aimed at reducing the level of greenhouse gas (GHG) emissions. Under the Kyoto Protocol, the EU has agreed to reduce its GHG emissions by an overall 8%. Ireland's target in the EU "burden sharing" agreement is to limit increases to 13% above 1990 levels by 2008-2012. For the period beyond 2012, the EU Council of Ministers has committed to achieving at least a 20% reduction of greenhouse gas emissions by 2020 compared to 1990 levels.

To ensure Ireland reaches its target under the Kyoto Protocol, the Government published a reviewed National Climate Change Strategy 2007-2012. Policy statements such as the White Paper, *Delivering a Sustainable Energy Future for Ireland*, sets out the Government's Energy Policy Framework 2007-2020 to deliver a sustainable energy future for Ireland. Local Authorities are working in collaboration with their local energy agencies to implement Climate Change Strategies at local level and a Climate Change Strategy has been prepared by Waterford City Council in partnership with the Waterford Energy Bureau. Actions in the Strategy include the following:-

- All new LA Housing Projects to have a minimum "A2" Energy labelling after 2012.
- Waterford City Council will endeavour to improve the energy efficiency of its existing housing stock and put measures in place to reduce the risk of fuel poverty occurring.
- Waterford City Council will continue to put mechanisms in place to improve the energy efficiency of existing municipal buildings.
- All new local authority non-domestic building projects to be carbon neutral after 2014.

4.6.1 Existing environmental pressures air and climate

Currently there are no significant concerns with regard to air quality in Waterford. Awareness of Radon gas and need for monitoring in areas containing geology with high uranium content should be promoted. Radon rises up through the ground to disperse in the air and only becomes a health hazard when it is trapped in buildings.

However, climate change impacts may present challenges to future land use and location of development in the City. Predicted impacts from projected temperature rises include more concentrated periods of higher rainfall and more exposure to flood risk.

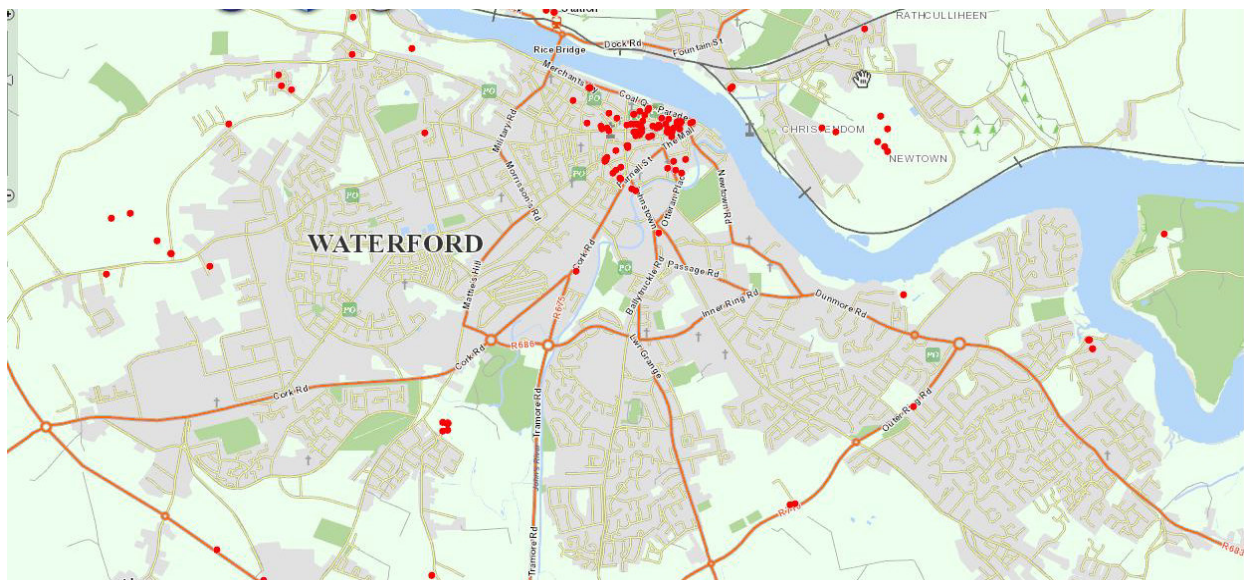
4.7 Cultural Heritage

4.7.1 Archaeological Heritage

Waterford City contains 111 Recorded Monuments protected under the National Monuments Act 1930-2004. A significant number of archaeological sites and monuments have been added to the

Record of Monuments and Places as a result of excavations in the City in recent years. The City Archaeological Inventory for Waterford was published by the National Monuments Service of the DoEHLG in 1999. There are nine historic graveyards in the City. Details of archaeological sites are available on www.archaeology.ie

Sites of significant cultural heritage value include Reginald's Tower, the City Walls and the Medieval Blackfriars and Greyfriars Churches. The heritage tourism value of these sites is recognised in the Fáilte Ireland South East Tourism Plan. The development of three museums in the Viking Triangle area of the City in 2011 testifies to the importance of Waterford's cultural heritage. The riverside aspect of the City provides interest in underwater archaeology along with archaeological potential in intertidal areas.



Map 9. Archaeological sites and monuments in Waterford City (extract from www.archaeology.ie)

4.7.2 Architectural Heritage

Waterford City contains a fine stock of architectural heritage including City Hall, ecclesiastical sites (Christ Church, St. Olaf's, St. Patrick's and Cathedral of the Holy Trinity) and other sites of industrial and vernacular heritage. There are 922 structures listed in the Record of Protected Structures. Parts of Waterford contain groups of buildings that make an important contribution to the streetscape. These significant areas of the built environment are recognised through their designation as Architectural Conservation Areas (ACAs) comprising a general conservation area encompassing the Viking and Norman City and the 18th Century additions, i.e. The Mall, Parnell Street and O'Connell Street. In addition to the General Conservation Area there are two specific areas designated as Architectural Conservation Areas;

- The precinct of the Cathedral of the Holy Trinity known as the ‘Trinity Within’ Architectural Conservation Area.
- The South Quays and environs known as the South Quays Architectural Conservation Area.

Waterford has been surveyed under the National Inventory of Architectural Heritage and an inventory of architectural heritage was published by the DoEHLG in 2004.

4.7.3 Existing environmental pressures/ Cultural Heritage

The maintenance and conservation of the City’s Cultural Heritage is key in order to maintain an irreplaceable resource, sense of identity for the City and as a source of visitor interest and tourism revenue. The sense of place within the historic core of Waterford is considered an asset and a reference point for future growth and development. There is a need to maintain the vibrancy of the historic core and avoid isolation of new development but rather physically link it to the existing historic core. A key challenge for the architectural heritage of the City is sustainable and sympathetic reuse, regeneration and development of the built environment whilst retaining and protecting the distinctive character of Protected Structures and Architectural Conservation Areas. Where appropriate, high quality contemporary designs that respect the character of the ACA can enhance the special aesthetic qualities of the area.

4.8 Landscape

Waterford City is defined by the Waterway Corridor of the River Suir and Waterford Estuary from Knockhouse Upper to Ballycanvan. Gibbethill provides the entrance to Waterford Harbour while the riparian woodland along the River Suir between Waterpark and Kings Channel provides for a very attractive water corridor. The City’s riverside setting is important to Waterford’s developing tourism industry. Historic gardens are located at Sion Hill House and at Abbey Road - the latter is included in the Waterford Garden Trail which promotes the Garden heritage of both Waterford City and County. Development of infrastructure including energy networks, and tourism developments all have the potential to impact on the waterway corridor and Little Island. A Landscape Character Assessment has not been prepared for either Waterford City and County. Waterford’s City landscape character types include urban, peri-urban and rural.

4.8.1 Existing environmental pressures/ Landscape

Waterford’s riverside setting makes it an attractive landscape for accommodating a range of competing land uses. The historic city centre offers a strong heritage resource while much of the quay area is designated an ACA. Future developments will continue to be required to be sympathetic to the riverscape in terms of design and building height. Further down river the corridor is lined by riparian woodland of some ecological value along with landscape value.

Recognition and protection of this waterway corridor is desirable by at least maintaining if not increasing areas zoned as open space/agriculture along the corridor and ensuring integration of green infrastructure principles in development proposals along the Waterway corridor.

4.9 Material Assets

Material assets is taken to include infrastructure and utilities including rail, road, water supply electric grid, gas network and wastewater treatment facilities. It also includes economic assets such as lands, coastal and water resources which support fisheries and tourism industry.

Two 110kv lines run through the north of Waterford City and a number of 38kv substations are located around the city. A 220kv line runs across South Kilkenny connecting Great Island on Waterford Estuary to Cork. Eirgrid launched the public consultation phase for the Grid Link project in April 2012 which proposes the construction of a 400kv AC overhead line linking Cork and Kildare via Wexford. The study area includes Waterford and following preparation of a constraints map a preferred corridor and indicative line route will be selected and subject to EIA and submitted to An Bord Pleanála for approval.

A gas line runs from Clonmel to Waterford City and to Tramore. Plunkett Train Station in Waterford City serves Kilkenny, Dublin, Clonmel and Limerick. A railway way freight lines runs from Waterford to Belview Port and New Ross. The rail passenger service to New Ross closed in 2010. National routes running through the City include the N25 (National Primary, E30 Euroroute). Waterford City Bypass linking the N25 to the N9 and N24 at Granagh, Kilkenny including a second bridge crossing to the north of Waterford City completed in 2009. The South-East Regional Airport is located at Killowen, 12 km south of Waterford City. Water treatment works are located at Gorteens (Co. Kilkenny). There are four licensed waste facilities within the City which includes Kilbarry landfill now closed. Remediation works are being carried out to address leachate and gas emissions.

4.9.1 Existing environmental pressures/ Material Assets

The development of the national road network has facilitated more efficient access but loss of the rail service to New Ross has reduced choice of transport options. Increased travel by private car has implications for air quality and Ireland's obligations in terms of meeting agreements under the Kyoto Protocol. The Waterford Climate Change Strategy sets out an action plan to offset carbon emissions including transport. Remediation of the landfill site at Kilbarry is complete and subject to ongoing monitoring of leachate and emissions.

4.10 Interrelationships between the above environmental factors

The interrelationships between the range of environmental topics is an important consideration in the environmental assessment. Table 4.10 below indicates the interrelationships identified between the environmental topics in this assessment. Green Infrastructure is now recognised as

an important concept in land use planning and environmental protection. It relates to the network of open spaces, parks, gardens, green corridors, woodlands, waterways and urban tree lines. Green space and biodiversity provide environmental, social, economic and physical benefits and give added value for quality of life and flood attenuation where integrated in the development process.

Table 4.5 Inter-Relationships between Environmental Topics

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

4.11 Evolution of the Environment in the absence of the Plan (“DO-NOTHING” SCENARIO)

Under Section 11 (1) of the Planning and Development Act 2000 this Plan is subject to review and thus the absence of a review of the current City Development Plan would not be in compliance with statutory obligations under the Planning Acts and the “do-nothing” scenario is not an option.

4.12 Conclusion – Significant Environmental Issues

A review of the environmental baseline in the SEA of the existing City Development Plan was carried out to assess trends in the range of environmental topics. This review (detailed in table below) combined with collation of more recent environmental data informs the conclusion of significant environmental issues.

Table 4.6. Summary of baseline changes in SEA 2006 and 2012

Baseline Topic	Status in 2006	Status in 2012
Population	44,594 in 2002 with an estimate of 47,415 for 2008 and projected to grow by approximately 5000 over the period 2008-2014	45,748 in 2006 and 46,747 in 2011 an actual change of 999 with an estimated population of 47,997 for 2013
Land Use areas	Administrative area: 4,157 ha of which 288ha. is water 1137ha zoned for residential development 494 ha zoned for open space in 2007 plan 166.3 ha zoned for community facilities	No change in administrative area (to date April 6 th 2012) 1129 ha zoned for residential - 776 ha existing developed lands, 240 ha undeveloped and 112.5 residential strategic reserve. 491.7 ha zoned for open space in Draft Plan. Note change does not represent a loss /reduction in actual open space but is as a more accurate measure of the land area. 170 ha zoned for community facilities in the Draft- new City Graveyard at Ballybeg

		1008.7 ha of land zoned for agricultural use in Draft Plan
Biodiversity	Designated sites include River Suir and 2 pNHAs – King’s Channel and Kilbarry Bog Reference to “Greening of Waterford City Study” 2003 that involved surveying, identification and mapping of habitats, categorization of land use types and identification of locally important sites and green corridors	No change in number of designated sites. AA process has reviewed land use and SAC boundary issues. National surveys e.g. NPWS woodlands and grasslands surveys have informed biodiversity baseline and recommendation to prepare a Waterford City Habitat Map
Built Heritage	2 ACAs 893 structures on the RPS Conservation project on City Walls and Tower underway	No Change 922 structures on RPS Conservation of City Walls and Tower completed Development of 3 Museums within Viking Triangle- Bishop’s Palace, Reginald’s Tower and Chorister’s Hall
Soils and Geology	Description of underlying bedrock and soil substrate.	No Change Identification of under-detection of radon gas as an inter-relationship with human health
Surface Water	Water quality rated as doubtful and moderately polluted due to poor waste water infrastructure. St. John’s River seriously polluted due to landfill leachate and industrial discharges. Leachate control systems being put in place.	Trophic status of Lower Suir estuary is Intermediate Wastewater Treatment Plant operating since 2010 for a p.e. of 190,600 with secondary treatment Water quality in St. John’s River is continuing unsatisfactory with bad ecological quality and with some stretches seriously polluted but with recent monitoring results indicating improvement
Water supply	Average daily demand in 2004 was 26900m ³ Overall compliance with quality standards was 98.8% Active water conservation programme is	Microbiological compliance was 100% in 2009 and 2010. Chemical compliance levels increased from 98% to 99.1% in 2010.

	being implemented, volume of water used in 2004 held at same level as 2003.	Water Conservation works Stage 3 in progress under the 2010-2012 WSIP.
Air Quality	Waterford lies within Zone C No limit values exceeded Air quality in outer areas likely to be more typical of Zone D.	No Change

In summary, key environmental pressures in the City relate to:

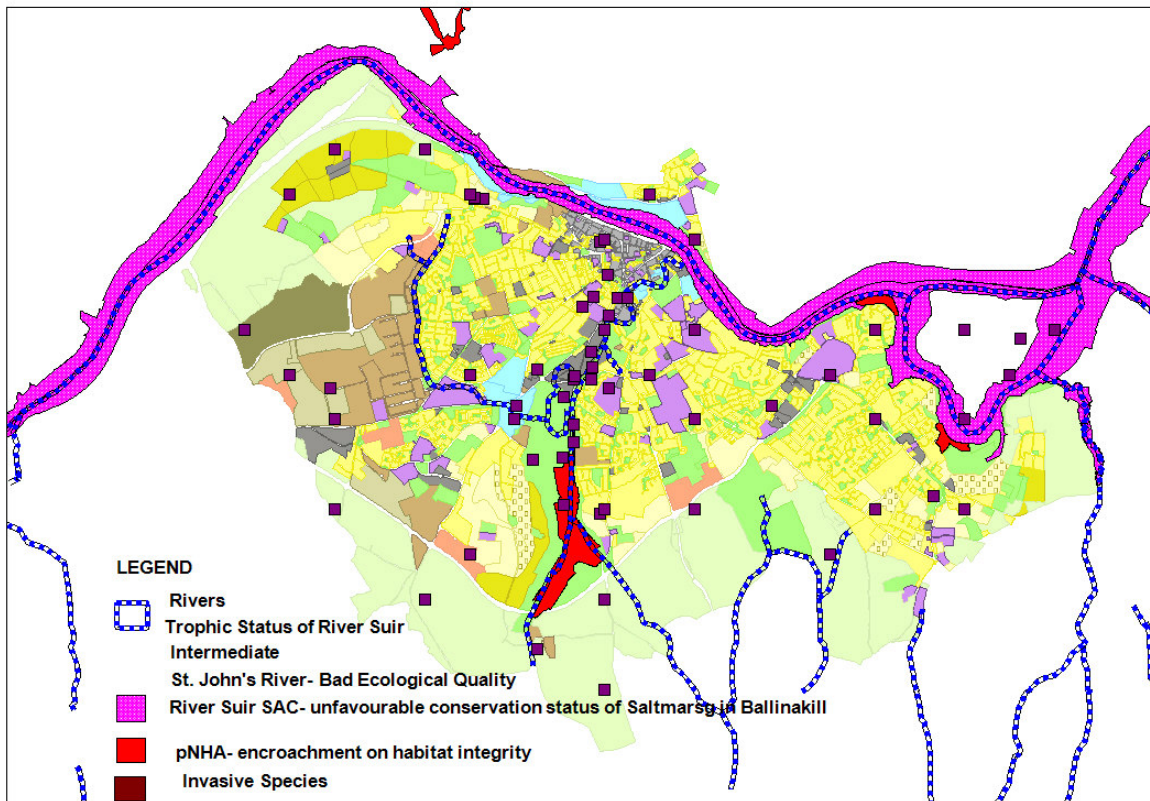
Water - including restoration of surface water quality in St. John's River and Waterford Estuary required to meet the targets set out in the SE River Basin District Management Plan and ongoing measures to address water conservation.

Soils - remediation and monitoring of landfill.

Biodiversity - including maintenance of the favourable conservation status of sites designated for nature conservation, conservation of sites of local biodiversity interest, enhancement of ecological corridors and management of invasive species.

Cultural Heritage - involving the need to maintain the vibrancy of the historic core and avoid isolation of new development instead linking it to the existing historic core. A key challenge for the architectural heritage of the City is sustainable and sympathetic reuse, regeneration and development of the built environment whilst retaining and protecting the distinctive character of Protected Structures and Architectural Conservation Areas.

Human Health - continued promotion of green routes and smarter travel options and access to recreation and amenity areas.



Map 10. Combined environmental vulnerability

4.13 Consideration of alternative directions

It is required in the legislation that the Environmental Report must consider “reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme” and the significant environmental effects of the alternatives selected.

Alternative strategies that were considered are outlined below.

Alternative Strategy Option 1- Continue with existing zoning in Current City Development Plan

A review of the City Development Plan 2007-2013 showed that under the existing area of residential zoned land in the City approximately 360 ha. remains undeveloped (70ha with extant permissions) indicating more than adequate availability of zoned land for the medium-long term.

Alternative Strategy Option 2- Adopt Core Strategy and apply phased zoning to ensure compliance with Regional Planning Guidelines

Section 7 of the Planning and Development (Amendment) Act 2010 requires Development Plans to contain a Core Strategy demonstrating how the objectives of the Development Plan are consistent with the National Spatial Strategy and Regional Planning Guidelines.

The land zoned for residential development in the existing plan far exceeds the maximum permissible land requirements under the RPGs. Based on the RPG population projections and 2011 Census figures a population of 5,003 is the projected growth figure for the Plan period. Based on a density of 20 units/ha and a household density of 2.6 persons and applying a 150 % overzoning as per the RPGs the required area of residential zoned land is 240 ha. Thus there is an excess of 113 ha of residential zoned land in the City Development Plan. In order to deal with this excess it is proposed to apply a phasing to the development of lands at Carrickphierish, Gracedieu, Ballybeg/Kilbarry, Ballytruckle/Kilcohan and Dunmore/Williamstown Roads.

Preferred Option- Option 2

The Core Strategy of the Draft City Development Plan provides an evidence based rationale for the amount of land zoned for housing in the Plan. The underlying principle is based on achieving sustainable social, economic and physical critical mass in a compact city form through the integration of planning, land use and transportation, supported by the consolidation of existing and the establishment of new neighbourhoods focused around neighbourhood centres.

Development will be permitted in principle on Phase 1 lands during the period of the new plan and this includes residential zoned lands with existing permissions. The proposed phasing is based on the principles of sustainable development including the likelihood of sites coming forward for development, a sequential approach to the city's expansion where practical and the core strategy criteria. Phase 2 lands may be considered for development providing that development proposals satisfy a core strategy justification and where applicable satisfactorily demonstrate that where infrastructural deficiencies exist (e.g. sewers, roads) that these have been addressed to facilitate the development. Phase 3 lands amounting to 112.4 ha are classified as strategic reserve providing for longer term expansion of the City beyond the plan period. Residential development will not be permitted on Phase 3 lands during the lifetime of the plan.

Table 4.6 cross -checks the proposed phased zonings against the Flood Risk Assessment Map and areas of biodiversity value. Small areas of land at Knockboy and Kilbarry occur within the edge of the Floodrisk area and future development on these sites will be subject to a site specific flood risk assessment. None of the strategic reserve land (Phase 3) areas occur within the Flood Risk Zone or within areas of biodiversity value. Kilbarry site is adjacent to Kilbarry Bog and Gracedieu contains Trees of Special Amenity Value. All three areas under strategic reserve have infrastructural constraints and are in outer areas of the City.

Table 4.7 Proposed amount of residential zoned land in Waterford City by geographic area, phase , flood risk and biodiversity value

Area	Phase 1 Existing residential	Phase 2 Undeveloped Residential	Within a Flood Risk Area/Area of biodiversity value	Phase 3 Strategic Residential Reserve	Within a Flood Risk Area/Area of biodiversity value	Total
Carrickphierish	39.3ha	11.9ha		-		51.2ha
Gracedieu	-	-		74.4ha	Not within a Flood Risk area Some land contains trees of special amenity value	74.4ha
Ballybeg/Kilbarry	43.6ha	33.1ha	Small area south of Beech Drive within Flood Risk Area and adjacent to Killbarry Bog pNHA	28.5ha	Adjacent to but not within Flood Risk area Adjacent to Kilbarry Bog pNHA	105.2ha
Ballytruckle/Kilcohan	14ha	9.4ha	Not within a Flood Risk area or area of biodiversity value	-		23.4ha
Dunmore/Williamstown Roads	50.6ha	36.8ha	Land at Knockboy partly within and at the edge of the Flood Risk Zone. Area contains trees of special amenity value	9.5ha	Not within a Flood Risk area or area of biodiversity value	96.9ha
Ferrybank	1.9ha					1.9ha
Total	149.4ha	91.2ha		112.4ha		353ha

5. ENVIRONMENTAL PROTECTION OBJECTIVES RELEVANT TO THE DRAFT CITY DEVELOPMENT PLAN 2013-2019

5.1 Introduction

The use of environmental protection objectives fulfils obligations set out in Section F, Schedule 2B of the Planning and Development (Strategic Environmental Assessment) Regulations 2004. The environmental protection objectives are distinct from the Draft City Development Plan objectives and provide a standard against which the policies and objectives of the Draft City Development Plan can be measured in order to highlight those with the potential for environmental impact. They are used as a tool to cross check the policies of the Draft City Development Plan in order to maximise the environmental sustainability of the Draft City Development Plan. The cross checking process will help identify policies that will be likely to result in significant adverse impacts, so that alternatives may be considered or mitigation measures may be put in place.

The environmental protection objectives for the Waterford City Development Plan have been generated from European, National and Regional Policy and Guidance. Sample objectives are given in Table 4B of the SEA Guidelines produced by the DoEHLG in 2004 and these were amended to reflect the specific issues that are considered relevant to the Plan and the range of issues that are significant within the City. The scoping process informed the generation of appropriate objectives. The objectives are set out below, under a range of headings, which were taken from the SEA Regulations and the DoEHLG guidelines.

5.2 Environmental Protection Objectives

Biodiversity, Flora and Fauna

B1: Protect, conserve and enhance habitats, species and areas of national and local importance, including aquatic habitats and species and promote the sustainable management of habitat networks.

Population and Human Health

P1: Facilitate a good standard of health for Waterford's population through ensuring high quality residential, recreational and working environments and minimising water pollution.

5.2.3 Water Resources

W1: Achieve and maintain required water quality standards in the South East River Basin Management Plan and reduce discharges of pollutants or contaminants to waters.

5.2.4 Soils

S1: Protect the quality of soils in the City in the interests of avoiding environmental degradation in water quality and biodiversity.

5.2.5 Air and Climate

AC1: To improve travel choice and accessibility, reduce the need for travel by car and shorten the length and duration of journey.

5.2.6 Cultural Heritage

C1: Protect and conserve features of archaeological heritage.

C2: Protect and conserve and promote the sustainable re-use of architectural heritage.

5.2.7 Landscapes

L1: Protect and conserve the quality, character and distinctiveness of the River Suir waterway corridor and minimise negative visual impacts.

5.2.8 Material Assets

MA1: Maintain sustainable access to assets such as open spaces, water resources and all other physical and social infrastructure.

5.2 Use of Environmental Protection Objectives

The above Environmental Protection Objectives have been used to carry out the SEA in accordance with the legislation. They provide a standard against which the policies of the City Development Plan were measured for their environmental sustainability. A crosschecking process has been used whereby the City Development Plan policies and development objectives were proofed against the Environmental Protection Objectives so that any policies/development objectives with the potential for significant adverse environmental impacts were highlighted in addition to significant positive impacts. Alternative strategic options will be considered and mitigation measures proposed to counteract any adverse environmental effects identified, thereby maximising the environmental sustainability of the Waterford City Development Plan 2013-2019.

6. STRATEGIC ENVIRONMENTAL ASSESSMENT OF WATERFORD CITY DEVELOPMENT PLAN 2013-2019

6.1 Methodology for assessment and Determination of Significance of Effects

Matrices are the mechanism by which conflicts or potential conflicts between the policies of the City Development Plan and the strategic environmental objectives have been identified. These matrices are provided in Appendix One to this Environmental Report. The likely significant effects that the policies contained in the City Development Plan could have on the environment were identified in this process.

Each strategic policy and objective proposed in the Draft City Development Plan and subsequent proposed amendments were assessed against the agreed SEA objectives.

The Plan produced was then formally assessed using the matrix (see Appendix One). The assessment of each was assigned a symbol;

- + Significant beneficial impact
- ? Uncertain impact
- X Significant Adverse impact
- O No relationship, or insignificant impact

Evaluation of significance requires consideration of various questions, which will establish the importance, or “significance”, of the predicted impact:

1. Will the policies and objectives in the City Development Plan and proposed amendments lead to a risk of environmental standards being breached?
2. Could it lead to failure to achieve environmental policies or targets?
3. Will it affect environmental resources, which are protected by laws or policies, e.g. Natura 2000 habitats, species, landscapes, water resources, agricultural resources and cultural heritage sites, etc.?
4. Could it lead to impacts on environmental resources, which, although not legally protected, are important or valuable?

As a follow on from the preparation and evaluation of the previous sections of the report, i.e. baseline data and trends, existing significant issues, environmental vulnerabilities, the above questions were considered in determining significance of environmental effects identified. Suggested alternatives, mitigation, and offsetting, to any potential adverse significant effects were identified and amendments recommended to the Draft City Development Plan 2013-2019 where required.

6.2 Summary of Likely Significant Effects of Implementing the Waterford City Development Plan 2013-2019 on the Environment and Measures Proposed to Prevent, Reduce or Offset

6.2.1 Introduction

The full matrix and assessment of policies against environmental objectives is included in Appendix One of this report. Appendix 1B details assessment of amendments proposed to the Draft Plan. A summary of the outcome of this assessment is provided in this section.

In accordance with the legislation, the likely significant effects on the environment of implementing the City Development Plan 2013-2019 and proposed amendments are summarised under headings that include all of the issues required to be covered.

The previous City Development Plan (2007-2013) was subject to SEA in 2006 and thus in the natural evolution of the process it is expected that SEA of the 2013-2019 Plan would find a higher level of policy convergence between Environmental Protection Objectives and Development Plan objectives and an absence of or at least much reduced risk of potential significant adverse impact from the Development Plan objectives. Along with having gone through the SEA process previously, preparation of the City Development Plan 2013-2019 is required to be executed within a much stronger environmental policy and legislative context than the previous plan e.g. the WFD River Basin District Management Plans, the requirement for Flood Risk Assessment and Appropriate Assessment, Water Quality Regulations, the National Climate Change Strategy and the Regional Planning Guidelines. Thus, it is to be expected in accordance with best practice that the policies and objectives of the Draft Plan would comply with environmental standards and incorporate environmental considerations at the earliest stage. This is in contrast to plans that were subject to SEA the first time round where significant amendments were identified as being required to ensure environmental compliance in land use zonings policies and objectives at the Draft Plan Stage.

SEA of the review of the 2013-2019 plan has involved best practice in an iterative process with key environmental issues being identified at SEA Scoping and Pre-Draft public consultation and policies, objectives and zonings drafted or amended to address these issues. The SEA Scoping Report details changes made to Pre-Draft Plan policies following identification of issues arising through the Environmental Report. Examples include objectives for invasive species, protection of fisheries habitat and sustainable transport.

Under the previous City Development Plan, water quality including waste water treatment and flood risk and needs of a projected growing population (as per PLUTS) were the key issues to be addressed. The availability of a WWT with a P.E of 190,000, the delivery of the Waterford Flood Alleviation scheme and requirement to prepare a Core Strategy (in compliance with the RPGs) and subsequent proposals for phased zoning mean that water quality, flood risk and population are no longer such significant issues for the future development of Waterford City and for the SEA of this plan.

In fact, assessment of the policies and development objectives in the Waterford t City Development Plan 2013-2019 and amendments shows that most of the policies and objectives are considered positive or at least insignificant/neutral, setting out to manage and protect aspects of the environment such as water quality, landscape, heritage resources and management of flood risk; these policies and objectives will not pose a significant adverse impact on the environment.

The finding of mainly positive or at least insignificant/neutral impacts from the plan policies and objectives demonstrates integration of environmental considerations into the plan at an early stage and thus is in the spirit of and meets the intention of the SEA Directive.

Where the level of significance of key strategic environmental issues (water quality, flood risk, conservation of Natura 2000 Sites) has decreased since preparation of the previous Development Plan there is now scope to focus more at other issues such as local biodiversity sites, enhancement of ecological corridors, invasive species, landscape, cultural heritage along with continuing attention to requirements for climate change impacts.

Due to the strategic nature of the plan some of the broad range objectives cannot be accurately appraised to infer a definite positive or negative impact and so have been assessed as “uncertain” as a lower level tier assessment will be more appropriate to determine the precise nature of the impacts involved. This may relate to strategic policies/objectives concerning specific projects or other framework plans that may also require SEA/EIA at their inception.

To qualify “uncertain” impacts the range of issues for consideration under the various environmental topics is detailed below.

6.2.2 Biodiversity, Flora, Fauna

SEA of the previous City Development Plan (2007-2013) identified biodiversity as a key environmental issue citing the conflict between the landscape and development along with historical waste management policies that had brought pressure to bear on elements of biodiversity with the City’s wetlands in particular an area of concern. The development of Kilbarry Nature Park includes the creation of constructed wetland as a compensatory measure for loss of wetland habitat resulting from the development of the landfill. It is an objective of the Plan in Section 10.4.2 to create additional wetlands in the City as is proposed for Kilbarry and in Ballinakill.

In fulfilment of the requirements of Article 6 (3) of the Habitats Directive an Appropriate Assessment Screening was carried out to assess the impacts of the Draft Plan on the River Suir SAC and other sites within 15km of Waterford City. A review of the current status of qualifying interests of the River Suir SAC shows Salt Marsh habitat has been subject to adverse impacts in the past. Due to its low percentage habitat cover in the City, wider county and within the entire River Suir SAC it is imperative that policies and objectives in the current plan avoid any future

adverse impact on this habitat type. This includes potential river crossings in the King's Channel area.

Section 10.4.2 of the Plan provides for compliance with Article 6 of the Habitats Directive by ensuring that all projects that may affect the River Suir SAC will be subject to AA Screening. Preparation of a City Habitat Map is a positive objective and will inform AA screenings of future development proposals. It is an objective of the Plan in Section 10.4.2 to create additional wetlands in the City including an area of saltmarsh habitat at Ballinakill.

Maintenance of water quality standards under the SE River Basin Management Plan (Policy 11.2.1) will help protect habitat for riparian species such as Lamprey, Otter and Twaite Shad. Proposed amendments to objectives for riverside walkways in sections 5.5.4, 6.2.6 and 7.3.7 also strengthen the provision for conservation of these species as does the proposed addition of objective 10.4.7.

The AA screening (Vol 3) reviewed the SAC boundary in relation to land use zonings in the plan and screened strategic infrastructure proposals such as river crossings and linear parks. The SAC boundary overlaps with residential land use zoning in three areas in the Plan area- King's Channel, Ballynakill House and Riverside (Ballinakill Downs). As each of the areas were zoned for residential use prior to designation of the SAC and are now built on there is no scope to change the zoning and the SAC boundary should be amended to reflect the situation on the ground.

With regard to strategic infrastructure proposals such as port/energy and communications networks/road developments including river crossings and linear parks it is considered that while there may be potential for impacts these will be mitigated by policies in section 10.4.2 of the Plan relating to natural heritage and requirement for AA at the project level.

Potential impacts from other strategic plans such as the SE Waste Management Plan involve environmental/appropriate assessment screening under its own review process and not through the City Development Plan assessment.

Positive impacts on biodiversity are identified through the Plan objective to prepare a City Habitat Map and to carry out an audit of the Trees of Special Amenity Value as these will recognise sites of Local Biodiversity Interest. This is particularly important in areas where ecological corridors and sites of semi-natural woodland as identified in the NPWS woodland survey occur in areas zoned as residential. A positive objective includes seeking to acquire and develop the lands adjacent to the Snowcream plant at Maypark Lane as a Woodland Park (section 7.13.2 of the Plan). Policies are also included on invasive species and an objective to create a number of strategic "green wedges" to separate development areas and provide opportunities for recreation and nature conservation.

Management of invasive species was a key issue identified earlier in the report and section 10.4.2 includes objectives for raising awareness and addressing management of invasive species in development management.

6.2.2.1 Amendments to Draft Plan

Following public consultation on the draft and review of submissions, amendments were proposed to policies to strengthen the conservation of protected species and habitats in the River Suir e.g. Policy 10.3.1, Policy 10.4, Policy 11.2.1, Policy 11.5.5 and Development Management Standards 4.2, 4.3 and Section 7.3.4. Where uncertainties for Biodiversity were identified in the SEA matrix from potential river crossings and riverside linear parks, policies have been qualified with the addition of “*subject to compliance with the requirements of the Habitats Directive for the protection of otters*” e.g. 5.5.4, 7.3.7, 10.3.1. Objectives for river crossing in Section 6.2.6 of the plan have been qualified with “*subject to further feasibility and environmental assessment*”. Such river crossings have been constructed over cSAC rivers in other Irish cities without adverse effects on the cSAC where appropriate mitigation measures were used. The effects of constructing any in-stream support structures will be fully assessed.

Positive amendments for biodiversity included the proposed rezoning 1.9 ha from low density residential zoning to Open Space in Rocklands. An area of low density residential land in Knockboy is proposed for re-zoning as open space as it was found to occur in an area of flood risk.

6.2.3 Population and Human Health

Generally, impacts on population and human health from the Plan are considered positive as the City Development Plan seeks to provide for growth in the gateway which can provide benefits and services while promoting enhanced travel choice, protection of heritage and environment, and access to amenity and recreation. The Settlement Strategy has been drawn up in recognition of the existing and future proposed capacities in infrastructure and is designed to promote population growth in the interests of avoidance of environmental degradation and damage to human health.

A Strategic Flood Risk Assessment was prepared as part of the Development Plan Review Process. Availability of detailed Flood Risk Zone mapping and the Waterford Flood Alleviation works along the Quay and St. John’s River, significantly reduce the risk of adverse impacts from flooding on Waterford’s population.

6.2.3.1 Amendments to Draft Plan

Assessment of proposed amendments to policies, objectives and zonings in the Draft City Development Plan 2013-2019 showed that impacts are mainly positive or neutral with no potential for significant adverse impacts.

6.2.4 Water

SEA of the previous Plan (2007-2013) cited Water Quality as a key environmental issue prevalent in the main drainage artery for the City- St. John's River and to a lesser extent in the Suir Estuary. Review of river quality data for this SEA indicate that the status of St. John's River continues to be unsatisfactory with bad ecological quality. Chapter 11 (11.2) sets out a policy to promote the achievement of good ecological status, good ecological potential and good chemical status for all waterbodies in the City by 2021 in accordance with the Water Framework Directive. Article 4.7 of the Directive sets out circumstances in which failure to achieve certain of the WFD objectives are permitted. It is also an objective to remediate and enforce against unauthorised discharges to the surface water drainage system (11.5.9).

6.2.4.1

Assessment of proposed amendments to policies, objectives and zonings in the City Development Plan 2013-2019 shows that impacts are mainly positive or neutral with no potential for significant adverse impacts. Policy 11.2.1 was strengthened in relation to achieving targets for water quality under the SERBDMP by 2021 and 2027 with the addition of “*and if possible within the lifetime of the plan*”. Policy 11.5.5 was amended to include protection of the Waterford Harbour Shellfish growing area.

6.2.5 Air & Climate

Air quality in Waterford is considered to be of a very high standard and there are no issues arising from the Plan that would adversely impact on air quality. As the projections of PLUTS will not be realised in the expected timeframe there will not be a risk of increased emissions from traffic from the projected population targets as the PLUTS review and preparation of the Core Strategy have detailed. A revised section on renewable energy and climate change is included in the proposed amendments.

6.2.5.1 Amendments

Assessment of proposed amendments to policies, objectives and zonings in the Draft City Development Plan 2013-2019 showed that impacts are mainly positive or neutral with no potential for significant adverse impacts.

6.2.6 Cultural Heritage

SEA of the previous Plan 2007-2013 cited cultural heritage as a key environmental issue particularly archaeological heritage where it comes under pressure from the necessity to develop and maintain a vibrant City Centre in the same location as its historic core. Development of the

Viking Triangle recognises that the archaeological heritage is a resource on which to promote City Centre development as reflected by policies and objectives in Section 10.4.1.

Policies in section 10.4.1 seek to promote the sustainable reuse of protected structures. Policies provide for zoning restrictions to be relaxed and development contributions reduced or exempted where the protected structure will be rehabilitated to the highest standard, where the special interest, character and setting of the building is protected and where the proposed use and development is consistent with conservation policies and the proper planning and sustainable development of the area. Other positive objectives include to protect the special heritage values, unique characteristics and distinctive features of the Architectural Conservation Areas from inappropriate development which would detract from the special character of the ACA and to assess the need to establish additional areas for designation as ACAs and/or to extend the boundaries of the existing ACAs.

6.2.6.1 Amendments

Assessment of proposed amendments to policies, objectives and zonings in the Draft City Development Plan 2013-2019 showed that impacts were mainly positive or neutral with no potential for significant adverse impacts. Additional policies on the protection of archaeology and consultation on development proposals affecting archaeology were proposed for inclusion in Chapter 10.

6.2.7 Landscape

Impacts on landscapes may arise from a range of developments including communications networks, energy networks, recreational pressure and tourism developments. The nature and extent of impacts can be determined at project level by landscape impact assessment and landscape capacity studies. The development of a National Landscape Strategy and National Landscape Character Assessment will assist in informing such appraisal. Major infrastructure projects that may arise through plan projects or other strategic infrastructure projects (e.g. Eirgrid) will be subject to EIA involving assessment of impacts on landscape.

6.2.7.1 Amendments

Assessment of proposed amendments to policies, objectives and zonings in the Draft City Development Plan 2013-2019 showed that impacts were mainly positive or neutral with no potential for significant adverse impacts. Objective 10.4.11 recognises the importance of green infrastructure aiming *“To support the green infrastructure concept in development proposals where feasible”*. Positive amendments for landscape also included the proposed rezoning of 1.9 ha from low density residential zoning to Open Space in Rocklands. An area of low density residential land in Knockboy is proposed for re-zoning as open space as it was found to occur in an area of flood risk.

6.2.8 Material Assets

Objectives relating to strategic infrastructure projects such as port/energy and communications networks/road developments including river crossings will be more appropriately assessed at the project level by EIA and Appropriate Assessment. Potential impacts from other strategic plans such as the SE Waste Management Plan and Grid Link will involve environmental/appropriate assessment screening under its own review process and not through the City Development Plan assessment.

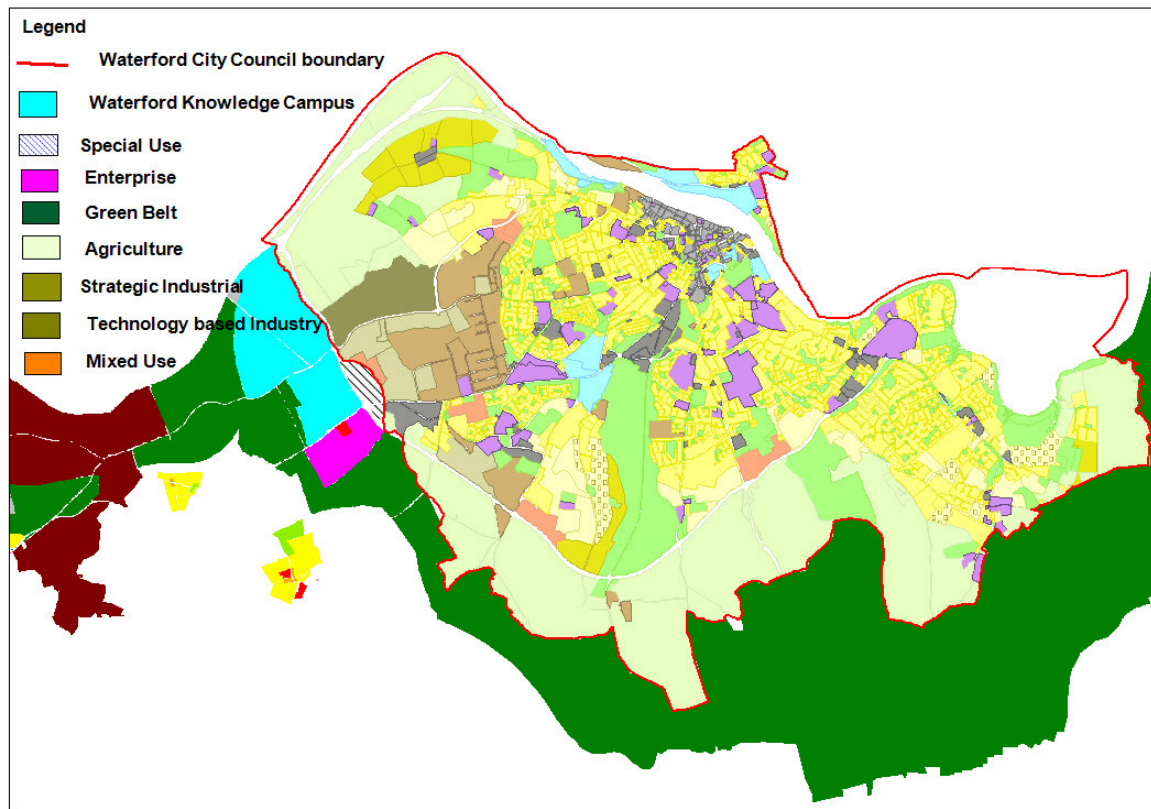
6.2.8.1 Amendments

Assessment of proposed amendments to policies, objectives and zonings in the Draft City Development Plan 2013-2019 showed that impacts are mainly positive or neutral with no potential for significant adverse impacts.

6.3 In-combination Effects

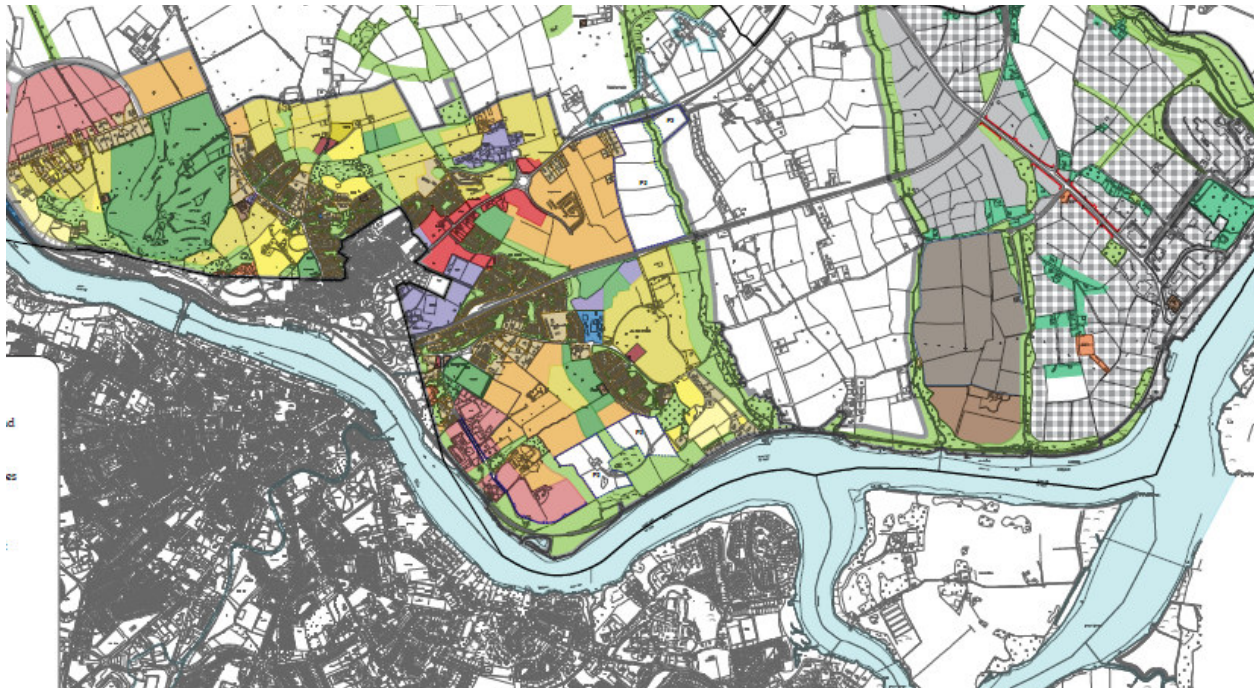
Due to its location on the River Suir and adjoining land use areas with Kilkenny County Council and Waterford County Council it is necessary to consider the City Plan in combination with provisions of the Waterford County Development Plan (Waterford City Environs) (Map 11) and Ferrybank/Belview Local Area Plan (Map 12).

A review of land use zonings along the administrative areas of Waterford City and the Waterford City Environs (Waterford County Council) shows compatibility between uses with agricultural green belt forming the southern boundary of the City. The area around Butlerstown is zoned for special use in the City Environs and forms the Butlerstown Retail Park while adjacent uses within the City boundary are for technology based industry, strategic industrial and mixed use. A large area in the City Environs is zoned for the Waterford Knowledge Campus. The combined land use zonings do not encroach on any of the environmental vulnerabilities identified in Section 4.12 and Map 10 of this SEA. Environmental issues highlighted in the SEA of the Waterford City Environs Plan (2008) included potential for impacts on water quality whereby a WWTP with capacity for 20,000 p.e. would be required to service projected population figures and loadings from zoned land in the LAP.



Map 11. Composite Map of Waterford City Environs (Waterford County Council) and Waterford City Land Use Zonings.

A review of land use zonings in the Ferrybank/Belview LAP shows that the northern bank of the River Suir from Newtown to Gorteens is zoned as passive open space which provides a buffer to the waterway corridor and SAC. Land use zoning in both the Waterford City and Kilkenny areas of Ferrybank serve the urban village function involving community facilities and residential zonings. Opportunity sites and industrial zoning in Ferrybank run alongside areas of Open Space on the Kilkenny Side. The area around Gorteens and Belview is zoned for Pharmaceutical, Industry and Technology and Development of Port facilities.



Map 12. Extract of Zoning Map Ferrybank/Belview Local Area Plan (Kilkenny County Council)

The Belview Strategic Water Supply Scheme launched in February 2012 provides 3,300 cubic metres of water per day and will service 240 ha. of industrial land around Belview Industrial Park near Belview Deepwater Port, and has the capacity to provide for 10,000 additional houses in South Kilkenny and Waterford between now and 2031. When all phases are completed, 15,000 cubic metres (3.3 million gallons) of water a day will be available, of which 9,000m³ or 2 million gallons will be available for industrial use to attract and retain large scale utility intensive manufacturing operations in the pharmaceuticals, bio pharmaceuticals, life sciences and food sectors.

In terms of environmental in-combination effects, the potential for the Belview Strategic Water Supply scheme to provide for 10,000 additional houses in South Kilkenny and Waterford and as an attraction for pharmaceutical and bio pharmaceutical industries may give rise to impacts on biodiversity, shellfish waters and air quality in the future. Impacts will be assessed at the project level through EIA and AA.

Due to the economic downturn the realisation of land use zonings in the Waterford City Environs Plan and potential for substantial additional housing in South Kilkenny and Waterford are now likely to be in the long term and thus potential for in-combination effects from landuse zonings will more likely be an issue for review of the next City Development Plan in 2017. All plans are now subject to the requirements of Core Strategies and targets set out in the RPGS which will incur modifications to original zoning and housing targets in those plans.

Review of the Ferrybank/Belview LAP SEA and AA highlight that the development of Belview Port and surrounds may involve the removal of wetland habitat directly adjacent to the SAC. An extension to the Port facilities was approved by An Bord Pleanála in 2002 and subject to EIA. Mitigation and monitoring measures contained therein will monitor the environmental impact of the Port development.

A review of the AA of the Ferrybank/Belview LAP (2008) highlighted that loss of semi-natural habitats could result in a deterioration of water quality in the SAC, reduction in Otter population and reduced connectivity between the SAC and riparian woodland. Mitigation proposed for this loss recommended Ecological Impact Assessment of future building projects in the area.

Other issues highlighted in the Ferrybank/Belview LAP AA were the infilling of wetlands in the Grannyferry area and loss of connectivity between the River Suir SAC and Grannyferry NHA. Thus, within the wider region of Waterford City and environs, reduction in wetland habitat and preservation of ecological corridors is a key in-combination effect and requires to be addressed by compensatory wetland and habitat enhancement as proposed by Waterford City Council in Kilbarry and Ballinakill along with support for and implementation of the Green Infrastructure Concept.

The Port of Waterford is a member of EcoPorts Foundation, which is a forum where an exchange of experiences occurs between ports regarding environmental problems and remedies are shared. The Port Company have an Oil Spill Pollution Plan in place approved by the Irish Coastguard.

Dredging activity in the Port area can cause high levels of noise. A noise survey of dredging activity in 2010 was carried out following concerns from residents in Cheekpoint and results issued to Waterford County Council. Noise in excess of 45dBA was recorded on 3 occasions. Review of submissions to the Draft Plan and AA Screening report raised the issue of impacts from dredging on protected species such as Twaité Shad and Allis Shad. In recognition of the potential for impacts from dredging on Shad (and other Fish species) the following amendments were proposed:-

Policy 3.7.8 to be amended re -continuing to support the “*sustainable*” development” of Cruise Line Tourism and proposed additional policy to include fish species of conservation concern as follows:-

“To ensure that development proposals will have sufficient mitigation measures to avoid damage or destruction of the breeding sites of strictly protected species (otter, bats, *Shad and Lamprey species*) or, where necessary, have appropriate derogation licences in accordance with the EU Habitats Directive prior to the granting of permission for the development”. Environmental impacts from dredging will be monitored and regulated in accordance with attaining targets set out for water quality under the SERBDMP.

6.4 Conclusion

SEA assessment of the Waterford City Development Plan policies, objectives and zonings and proposed amendments has determined that no significant adverse impacts are predicted from the Plan while positive impacts will be realised through proposed policies for biodiversity, population, water, and cultural heritage.

The findings of “uncertain” impacts in the SEA matrix will be determined at a lower level of environmental assessment largely through EIA and AA at the project level. These assessments will involve application of Appropriate Assessment, landscape appraisal, archaeological and architectural heritage appraisal and flood risk assessment to accurately determine the impacts under the range of environmental headings detailed above.

Compilation of the SEA Scoping Report, review of the SEA of the existing City Development Plan, Waterford City Environs and AA of the Ferybank/Belview LAP and Pre- Draft Plan public consultation process have all informed the Environmental Report to address key environmental issues in the City as highlighted in section 4.12 of the report. Table 6.1 below details the relevant policy and section in the Draft Plan that addresses the key Environmental Topics as identified in the scoping process.

Table 6.1

Key Environmental Issue		Relevant Co. Dev Plan policy
Water Quality	Protection of Water Quality- Water Framework Directive, surface and ground water protection, drinking water, wastewater treatment, water conservation	Chapter 11 Environmental Management Section 11.2
	Integration of flood risk assessment into the Plan to ensure appropriateness of land use and inclusion of SUDS technology	Chapter 11 Environmental Management Section 11.6
	Protection of designated Shellfish Waters (Waterford Harbour)	Chapter 11 Environmental Management Section 11.5
Biodiversity	Designated sites	Chapter 10 Section 10.4.2
	Local Biodiversity	Chapter 10 Section 10.4.2
	Invasive Species	Chapter 10 Section 10.4.2
	River Management Policies	Chapter 10 Section 10.4.2

	Aquatic Habitat Protection-incorporation and management of riparian buffer zones along waterways	Chapter 10 Section 10.4.2
	Maintenance and preservation of urban watercourses and associated riparian habitats as natural corridors for fish and wildlife movement and amenity.	Chapter 10 Section 10.4.2
	Promotion of integration and improvement of natural watercourses in urban renewal and development proposals	Chapter 10 Section 10.4.2
Air and Climate	Consideration of potential impacts of climate change	Chapter 11 Environmental Management Section 11.8
	Promotion of renewable energy ⁹ and energy conservation	Chapter 11 Environmental Management Section 11.8
	Sustainable transport	Chapter 6 Transportation Section 6.2.3

⁹ Renewable energy largely relates to micro-renewables in the City

7 MONITORING

7.1 Introduction

As part of the Strategic Environmental Assessment process, measures envisaged for monitoring the likely significant effects of implementing the Draft City Development Plan must be included in the Environmental Report. The review of the City Development Plan 2013-2019 will include monitoring of any significant environmental effects.

Monitoring is often based on indicators, which measure changes in the environment, especially changes which are critical in terms of environmental quality. The Department of Environment Heritage and Local Government SEA Guidelines state that indicators that can be easily and realistically measured should be used. “Environmental indicators are key statistics, which describe an environmental issue. Their purpose is to communicate information on environmental issues in a simplified manner and over time to create a benchmark against which future progress towards sustainable development can be measured. To be effective they should be representative of the issue and be based on scientifically valid information. In this manner they can support policy development and reflect the interrelationship between society, the economy and the environment.”

Several kinds of indicators may be used to fulfil particular functions and measure the quality/quantity of environmental resources:

1. State of the environment indicators reflect environmental quality, or quantity of physical and biological or chemical phenomenon;
2. Stress indicators reflect development effects;
3. Performance indicators may be used to evaluate long-term achievements in environmental management and protection;
4. Sustainable development indicators introduce a new dimension to the provision of information, in that they seek to describe and measure key relationships between economic, social and environmental factors.

In all cases, indicators should both quantify and simplify information, thereby making it more accessible to policy-makers and the public.

Where new or improved monitoring measures come to light during the course of the Guidelines review they will inform monitoring for SEA, to ensure that monitoring of effects during the course of implementing the guidelines can be meaningful and effective.

Under the existing City Development Plan (2007-2013) the statutory Manager’s Report prepared two years after the adoption of the Plan was the mechanism for reporting on monitoring of environmental indicators. The report (2009) states “the review indicates that the implementation of the plan is not having significant adverse effects on the environment.”

Table 7.1 below details the indicators used in the SEA of the existing City Development Plan and their status.

SEA Indicators City Development Plan (2007-2013)		Status/ Comment
Biodiversity	Completion of Heritage and Biodiversity Plans	Heritage and Biodiversity plans have been prepared and finalised for Waterford City but implementation is at an early stage with majority of actions to be delivered.
	Development of significant indicators as part of Biodiversity Plan	Draft Management Plan for Kilbarry Bog Nature Park Island View compensatory habitat site in progress
Population	CSO statistics	Completed at a national level 2011. Census results available reporting a growth of 2.2% in Waterford
	New Housing Completions	Available from the DECLG and detailed in Section 8.2 of Draft Plan showing marked decrease since 2006
	New recreation and community facilities in place	Children's playgrounds completed in Manor St and Hennessy's road bringing number of playgrounds under City Council to 9. Upgrading works to People's Park. City Parks area amount to 30 acres
	Traffic Growth	Available from Waterford City Council through PLUTS review- tend of reduced demand with a reduction of between 8.5% and 14.5% in traffic on key access routes to and around the City Centre over the six year period to 2011.
	Employment Growth	Available from Live Register, slight distortion of data due to Electoral District basis rather than City administrative boundary basis. Unemployment rate approximately 15-17%
Human Health	Traffic growth/modal shift	Available from Waterford City Council through PLUTS review Waterford City Climate Change Strategy
	Improvements in water supply	Phase 2 of mains rehabilitation commenced in

		<p>2008 replacing 21.5km of old water mains. 6.2km were replaced in 2000 saving water leaks in the region of 2,000m³ per day.</p> <p>Construction of water tower and reservoir at Gracedieu West improving water supply and pressure in this area.</p>
	Improvements in Wastewater Treatment	<p>Available from EPA</p> <p>WWTP opened in Gorteens 2010 with a P.E. of 190,600 and designed to comply with UWWT Regulations (2001).</p>
	No. Of energy efficient developments	Available through Waterford City Climate Change Strategy
	Air Quality Monitoring	<p>Available from EPA</p> <p>Air monitors on the Mall monitor Benzene, NO₂ and SO₂. Smoke monitor at the Bishop's Palace. Monitors maintained and read by HSE on behalf of Waterford City Council.</p>
	Drinking Water quality	<p>Available from EPA</p> <p>Chlorine monitors and alarms installed in City's reservoirs. Mains replacement has removed old and corroded cast iron mains.</p>
Soil	% of identified brownfield opportunity sites under design and development	Available from Waterford City Council Planning Section
	% diversion of waste from Landfill	Objective in City Climate Change Strategy to increase the level of recycling from 55% to 70%
	Density of development achieved	<p>Average residential density of 20 residential units/ha</p> <p>Guided by Core Strategy in Draft Development Plan</p>
Water	Progress on development and implementation plan for	Draft Waterford Nature Park Management Plan published 2012

	wetlands	<p>Constructed wetlands established on Kilbarry landfill</p> <p>Construction of pond in Kilbarry Bog 2011</p> <p>Proposal for wetland habitat creation in Ballinakill close to River Suir</p> <p>Action in City Heritage Plan to prepare a Management Plan for the City's wetlands</p>
	% of unaccounted for potable water	<p>Available from Water Services Waterford City Council</p> <p>Approximately 44% (SEA monitoring report 2009)</p>
	Water quality of rivers as assessed by EPA, IFI and Marine Institute	Ongoing monitoring available from these agencies
	No. Of flooding incidents	Available from Waterford City Council Water Services Section and OPW. Flood Relief works have significantly reduced level of flood risk in the City.
Air/Climate	Air quality Monitoring	Ongoing by EPA
	Traffic growth statistics	Available from Waterford City Council through PLUTS review
	No. and standards of new industrial/commercial processes emitting to atmosphere	Ongoing by EPA
	No. of developments with energy conservation as a design priority	Data needs to be collated from WEB and Waterford City Council Planning Section
Material Assets	% of Brownfield opportunity sites in design or under development	Available from Waterford City Council Planning Section
	Density of development achieved	Available from Waterford City Council Planning Section

Cultural Heritage	No. of contacts/advisory services/declarations in relation to protected structures	Available from Waterford City Council Planning Section
	Conservation Grants awarded	Available from Waterford City Council Planning Section
	No. of archaeological investigations completed under licence	Available from DAHG
	% of City Walls restored	Over 60% of upstanding remains of City Walls have been conserved including 6 towers. Over €2.5 million was spent on capital works to the city walls.
Landscape	Density of new housing achieved	Available from Waterford City Council Planning Section
	No. of ACAs in place	Three ACAs are designated in Waterford City

Review of the indicators and monitoring mechanism set out under the SEA of the existing City Development Plan (2007-2013) shows availability of data for the environmental variables is readily accessible through national monitoring for population (CSO, housing stats, Live Register) Water, Air & Climate (EPA) and Flooding (OPW). Locally generated data includes community facilities, traffic growth, energy efficiency developments, soils, wetlands, flooding, cultural heritage, landscape and material assets accessible through various departments in Waterford City Council.

Review of targets and indicators in the SEA of the existing City Development Plan has been useful for the current SEA process and some targets and indicators will be carried through while others will be amended and added to benefitting from more recent monitoring mechanisms e.g. Article 17 reporting under the Habitats Directive, WFD Programme of Measures, Shellfish Pollution Reduction Programmes and spatial mapping of land use zonings.

The following measures are proposed as part of this SEA process, to monitor the effects on the environment of implementing the Draft City Development Plan 2013-2019, presented in terms of the achievement of the environmental protection objectives and the impact on the environmental factors that the SEA legislation requires to be considered. Measures include targets and thresholds that determine where remedial action may be required (“intervention”) in order to achieve that target and fulfil the environmental protection objective.

7.1.1 Monitoring Proposals and Environmental Indicators

Environmental Objectives, Indicators and Targets

Biodiversity, Flora, Fauna					
Environmental Objectives	Indicators	Responsible Authority	Frequency of Monitoring	Targets	Intervention
B1: Protect, conserve and enhance the diversity of habitats, species and areas of national and local importance, including aquatic habitats and species and promote the sustainable management of habitat networks.	Conservation status of habitats and species as assessed under Article 17 of the Habitats Directive.	NPWS of DAHG	Every 6 years. Next report due in 2014	Maintenance of favourable conservation status ¹⁰ for all habitats and species protected under national and international legislation.	Loss of favourable conservation status of protected habitats and species
	Preparation of a City Habitat Map	Waterford City Council	Development Plan Mid-Term Review in 2015	Identification of sites of Local Biodiversity and ecological corridors	Absence of City Habitat Map and Audit of Special Amenity value in 2015
	Audit of Trees of Special Amenity Value	Waterford City Council	Completion of Audit within lifetime of Plan	Delivery of constructed wetlands within lifetime of Plan	Non-delivery of constructed wetlands
	Delivery of constructed wetlands	Waterford City Council			
Population and Human Health					
Environmental Objectives	Indicators	Responsible Authority	Frequency of Monitoring	Targets	Intervention
P1: Facilitate a good standard of health for Waterford's population through ensuring	Increase in Waterford City's population	Waterford City Council Central	CSO- next Census 2016	Increase in employment opportunities, services and public amenity within the City	Decline in Waterford City's population

high quality residential, recreational and working environments and minimising water pollution.	Quality of Shellfish Growing Areas in and implementation of Pollution Reduction Programmes for Waterford Harbour Provision of walking routes and cycling lanes	Government, IDA Ireland, Enterprise Ireland City Enterprise Board Marine Institute Water Quality Section, DoCLG Waterford City Council	PRP reviewed every 3 years Development Plan Mid-Term Review in 2015	and increase in population. No Shellfish Areas to be graded as Class C. Implementation of Pollution Reduction Programmes for Waterford Harbour Increase in length of cycle lanes and provision of riverside walkways	Class C shellfish areas grading in Waterford Harbour
Water					
Environmental Objectives	Indicators	Responsible Authority	Frequency	Targets	Intervention
W1: Achieve and maintain required water quality standards in the South East Management Plan and associated Programme of Measures and reduce discharges of pollutants or contamination to waters.	Water quality monitoring results by the EPA for: Surface Water Ecological and Chemical Status. Trophic Status of Estuarine and Coastal Waters. Groundwater Quality. Drinking Water Quality. EPA data under <i>Urban Waste Water Discharges in Ireland</i>	EPA Waterford City Council	Annual	Protect and Restore areas identified in the River Basin District Management Plan required to achieve “good” status, i.e. 4+ for water quality by 2021 in line with the Water Framework Directive objectives. No deterioration in levels of compliance with drinking water quality standards and	Deterioration in Water Quality Standards Non attainment of WFD standards in River Basin Management Plan by 2021 for surface water and 2027 for groundwater

	<p><i>Population Equivalents Greater than 500 persons - Reports for the Years 2008 and 2009 and 2010-2011. Agglomerations over 500 without Secondary Treatment.</i></p> <p>Performance of WWTP in relation to conditions of licence.</p>			<p>maintenance of above national average compliance rate.</p>	
Soils					
Environmental Objectives	Indicators	Responsible Authority	Frequency	Targets	Intervention
S1: Protect the quality of soils in the interesting if avoiding environmental degradation of water quality and biodiversity	<p>Monitoring results from Kilbarry Landfill annual reports.</p> <p>Dredging licences</p>	<p>Waterford City Council</p> <p>EPA</p> <p>DAFF</p>	Annual	Full compliance with conditions of waste licence	Failure to meet conditions of waste licence

Air and Climate					
Environmental Objectives	Indicators	Responsible Body	Frequency	Targets	Intervention
AC1: To improve travel choice and accessibility, reduce the need for travel by car and shorten the length and duration of journey	<p>Average daily motor vehicle flow within the City.</p> <p>Proportion of travel by mode</p> <p>Monetary investment in bus and rail, walking and cycling</p>	<p>Waterford City Council</p> <p>Dept. of Transport</p> <p>National Transport Authority</p>	Ongoing	<p>To reduce road traffic in line with DoEHLG policy <i>Smarter Travel A Sustainable Transport Future</i></p> <p>Increase in length of cycle paths and foot paths in the City</p>	<p>Non-attainment of targets set out in <i>Smarter Travel A Sustainable Transport Future</i></p> <p>No modal change in transport used by end of plan</p>
Cultural Heritage					
C1 Protect and conserve features of archaeological heritage.	<p>Number of Monuments in the RMP and areas of archaeological potential which have been recorded or subject to exploration as a result of development.</p> <p>Number of archaeological monuments damaged due to development.</p>	<p>Waterford City Council</p> <p>DAHG</p> <p>National Monuments Service</p>	Ongoing	<p>To maintain and increase the number of archaeological features recorded and protected.</p> <p>No damage occurring to archaeological monuments due to development</p> <p>To increase visitor numbers to Waterford's museums</p>	Damage to or loss of recorded monuments
C2 Protect and conserve features of architectural heritage.	<p>Number and conservation status of structures in RPS</p> <p>Extent of ACAs designated in the City.</p> <p>Number of protected structures damaged</p>	<p>Waterford City Council</p> <p>DAHG</p> <p>NIAH</p>	<p>Ongoing</p> <p>Ongoing</p>	<p>To increase the number and maintain the conservation status of Protected Structures</p> <p>To maintain the quality of ACAs in the City .</p>	<p>Damage to or loss of Protected Structures</p> <p>Decline in quality of ACAs</p>

	due to development.		Ongoing		
Landscape					
Environmental Objectives	Indicators	Responsible Body	Frequency	Targets	Intervention
L1: Protect and conserve the quality, character and distinctiveness of the River Suir waterway corridor and minimise negative visual impacts.	<p>Area of land zoned as open space along the waterway corridor</p> <p>Area of riparian woodland along the River Suir Waterway</p> <p>Building height and design along the Quay</p>	<p>Waterford City Council</p> <p>Kilkenny County Council</p>	Ongoing	<p>Increase in or at least no loss in area zoned as open space along the River Suir</p> <p>No loss and identification and protection of riparian woodland along the River Suir</p> <p>Appropriate Heritage Appraisal and Landscape Capacity Assessment to inform any future development along the waterway corridor</p>	<p>Reduction or loss in area zoned as open space along the River Suir</p> <p>Loss of riparian woodland along the River Suir Waterway</p>
Material Assets					
MA1: Maintain sustainable access to assets such as open spaces, water resources and all other physical and social infrastructure.	Access to public amenities and visitor numbers.	<p>Waterford City Council</p> <p>Fáilte Ireland</p>	Ongoing	<p>Increased usage of Waterway Corridors as a public amenity.</p> <p>Increased visitor numbers to cultural heritage sites.</p>	Damage to or loss of sites of amenity value

APPENDIX 1

SEA Matrix

SEA Matrix

Policy No.	CHAPTER 1	B1	P1	W1	S1	AC1	C1	C2	L1	MA1	AA
	STRATEGIC CONTEXT										
1.1.1	To promote and facilitate the sustainable level of economic development and population growth necessary to create “critical mass” in the city and its zone of influence.	?	+	0	0	0	0	0	0	0	Will be subject to project AA as per policy in Heritage Chapter 10
1.1.2	To facilitate the delivery of key infrastructure	?	+	0	?	0	0	0	0	0	Will be subject to project AA as per policy in Heritage Chapter 10
1.1.3	To realise the potential of the City Centre as a national and regional attraction, which is vibrant and lived in, has a strong retail and cultural offering and a high quality public realm	0	+	0	0	0	+	+	0	0	0
1.1.4.1	To protect, restore and improve where appropriate, areas of natural heritage value.	+	+	0	+	0	0	0	0	0	+
1.1.4.2	To protect and promote the integrity of all Natura 2000 sites within the City and subsequently the awareness of the City’s rich biodiversity	+	+	0	+	0	0	0	0	0	+
1.1.5	To protect the retail primacy of the City Centre	0	+	0	0	0	0	0	0	0	0
1.1.6	To facilitate provision of a good quality public transport system and a choice of transport modes within the City in accordance with the existing Green Routes Strategy and Smarter Travel National Guidance.	0	+	0	0	+	0	0	0	0	0
1.1.6	To provide good connectivity to and within the City and to ensure ease of mobility/access from neighbourhoods to the City Centre	0	+	0	0	0	0	0	0	0	0
1.1.7	To support the provision of sustainable education facilities at pre-school, primary and secondary levels and the delivery of a University for the South East Region with its headquarters in Waterford City	0	+	0	0	0	0	0	0	0	0
1.1.8	To develop a tourism product of national and international standing	0	+	0	0	0	0	0	0	0	0
1.1.9	To develop sustainable neighbourhoods with facilities and services to meet local needs, that give a sense of identity and belonging to residents.	0	+	0	0	0	0	0	0	0	0
1.1.10	To promote social inclusion and to facilitate equality of access to employment, education, transport, housing and social and cultural facilities	0	+	0	0	0	0	0	0	0	0
1.1.11	To minimise any adverse impacts on the environment through the implementation of policies on	0	+	+	+	+	0	0	0	0	0

	water quality, waste management, control of emissions and the promotion of energy efficiency and implementation of a climate change strategy for Waterford City										
1.1.12	To develop the City generally in accordance with the integrated land use and transportation framework set out in the Waterford Planning, Land Use and Transportation Strategy (PLUTS) as and when reviewed.	?	+	0	?	0	0	0	?	+	Will be subject to project AA as per policy in Heritage Chapter 10
1.1.13	To have an Arts and Culture product which is of national and international standing and is an economic driver for the Gateway.	0	+	0	0	+	+	0	0	0	0
1.1.14	Retain Healthy City Status	0	+	0	0	0	0	0	0	0	0

PLUTS Strategy	B1	P1	W1	S1	AC1	C1	C2	L1	MA1	AA
Provision for a population increase of almost 30,000 people (or 57% population growth) in Waterford City and Environs by 2020	?	? ¹¹	0	0	0	0	0	0	0	?
Investment needed for almost 12,800 new jobs or 46% growth by 2020	0	+	0	0	0	0	0	0	0	0
Requirement for approximately 11,500 new dwellings located both north and south of the River Suir	?	? ¹²	0	?	0	0	0	0	0	?
Significant retail expansion in the City Centre	0	+	0	0	0	0	0	0	0	0
A downstream river crossing to facilitate the extension of the Outer Ring Road northwards to the N25	?	+	0	?	0	0	0	?	0	?
A new city centre bridge for pedestrians and cyclists which will link the redeveloped North Quays with the existing City Centre	?	+	0	0	0	0	0	?	0	?
Provision of a rail-passenger platform on the North Quays as part of a new Public Transport Interchange	0	+	0	0	0	0	0	0	0	0
Development of a high-quality bus-based public transport system in the City supported by Park and Ride facilities located north and south of the River	0	+	0	0	0	0	0	0	0	0
Expansion and improvement of the South-East Regional Airport with an extended runway, more operators and improved transport linkages.	?	+	0	0	0	0	0	0	+	Subject to AA screening under County Plan

As the current economic circumstances are very different from those which existed when the PLUTS was adopted in 2004, it is considered that many of its growth expectations will not be realised by the strategic frameworks end horizon of 2020. As part of the preparation of the draft City Development Plan an in house review of progress achieved to date in implementing the PLUTS was carried out. In short it concluded that the basic fundamentals of PLUTS were still sound, but that the delivery dates for many aspects of it have been pushed out. A number of the PLUTS elements, such as sustainable transport measures have further evolved since under the policy directions of Transport 21, Smarter Travel –A Sustainable Transport Future and the recent findings of the Waterford City Transport Feasibility Study 2010 which in turn have informed the draft plan's preparation.

¹¹ Review of PLUTS for Draft Dev Plan Review indicated projections are way out of existing scenario and will not be realised within expected timeframe

¹² Review of PLUTS for Draft Dev Plan Review indicated projections are way out of existing scenario and will not be realised within expected timeframe

	CHAPTER 2	B1	P1	W1	S1	AC1	C1	C2	L1	MA1	AA
Policy No.	CORE STRATEGY										
Obj 2.1.1	To require, where appropriate, all plans and projects within Waterford City Council Boundary to comply with the requirements of the Strategic Environmental Assessment Directive, the Habitats Directive, Water Framework Directive and Floods Directive	+	+	+	+	+	+	+	+	+	+
Obj 2.1.2	To ensure Draft Waterford City Development Plan Policies and Objectives demonstrate consistency with the National Spatial Strategy and the Regional Planning Guidelines for the South East 2010-2022.	0	+	0	0	0	0	0	0	0	0
Obj 2.1.3	To implement a phased approach to the development of new residential land.	0	+	0	0	0	0	0	0	0	0
Obj 2.1.4	To require new housing proposals to demonstrate compliance with the core strategy.	0	+	0	0	0	0	0	0	0	0
Obj 2.1.5	To provide for a variety of housing types, tenures and densities reflective of the diverse needs of the people of Waterford, mitigating current residential leakage and unsustainable travel patterns.	0	+	0	0	0	0	0	0	0	0
Obj 2.1.6	To protect and strengthen the retail primacy of Waterford City within the South East Region.	0	+	0	0	0	0	0	0	0	0
Obj 2.1.7	To protect and enhance the vibrancy and vitality of Waterford City Centre.	0	+	0	0	0	0	0	0	0	0
Obj 2.1.8	To support and implement the preparation of a meaningful Joint Retail Strategy for the Gateway	0	+	0	0	0	0	0	0	0	0
Obj 2.1.9	To protect existing employment and promote new employment areas	0	+	0	0	0	0	0	0	0	0
Obj 2.1.10	To require new development to account for known and anticipated local climate change impacts including flood risk	0	+	+	+	+	0	0	+	0	0
Obj 2.1.11	To facilitate improved access to the City through more sustainable transport modes	0	+	0	0	+	0	0	0	0	0
Obj 2.1.12	Protect the integrity of all Natura 2000 sites within the City.	+	+	0	+	0	0	0	+	0	0
Obj 2.1.13	Apply appropriate development management measures to ensure that growth is appropriate and compatible with the Regional Planning Guidelines for the South East Region 2010.	0	+	0	0	0	0	0	0	0	0
Obj 2.1.14	Continue to encourage and promote the development of a range of quality tourism facilities, attractions and accommodation within the City.	0	+	0	0	0	0	0	0	0	0
Obj 2.1.15	Implement the Waterford City Climate Strategy Programme of Measures	0	+	0	+	+	0	0	0	0	0
Obj 2.1.16	Ensure that sufficient land is zoned for the educational requirements of 1 st , 2 nd and 3 rd level educational establishments.	0	+	0	0	0	0	0	0	0	0
Obj 2.1.17	To provide for a socially inclusive society	0	+	0	0	0	0	0	0	0	0
Obj 2.1.18	Retain a Healthy City status over the lifespan of the draft Development Plan	0	+	0	0	0	0	0	0	0	0

	CHAPTER 3	B1	P1	W1	S1	AC1	C1	C2	L1	MA1	AA
Policy No	Economic Development										
3.0.1	To facilitate and promote the balanced and sustainable economic development of the City as a national gateway	0	+	0	0	0	0	0	0	+	0
3.0.2	To maximise employment opportunities by developing a business environment that is attractive to indigenous enterprise and places Waterford at the forefront of destinations for inward investment within the state	0	+	0	0	0	0	0	0	0	0
3.0.3	To create a City with a vital and vibrant commercial core facilitating the juxtaposition of an appropriate range of commercial, heritage, riverside and residential uses	0	+	0	0	0	0	0	0	0	0
Obj 3.0.1	To promote and prioritise economic development as a means of growing the gateway economy	0	+	0	0	0	0	0	0	0	0
Obj 3.0.2	To achieve a critical population and highly skilled labour force mass for the City	0	+	0	0	0	0	0	0	0	0
Obj 3.0.3	To promote and foster an internationally oriented and highly competitive location	0	+	0	0	0	0	0	0	0	0
Obj 3.0.4	To provide for a wide range of development opportunities so as to foster a balanced economic structure	0	+	0	0	0	0	0	0	0	0
Obj 3.0.5	To develop the City as a centre for higher education excellence with the WIT its driving force within the regional economy	0	+	0	0	0	0	0	0	0	0
Obj 3.0.6	To support the objective of attaining Technological University Status for WIT	0	+	0	0	0	0	0	0	0	0
Obj 3.0.7	To promote and develop the national role of the Port of Waterford and Belview Industrial Zone	? ¹³	+	?	?	0	0	0	0	0	Subject to AA in its own right including Belview LAP
Obj 3.0.8	To promote and develop the regional role of Waterford Airport, Waterford Airport Business Park and the adjoining Pilot Training College	?	+	0	0	0	0	0	0	0	Any future development will be Subject to AA in its own right
Obj 3.0.9	To further develop the tourism product of the City including the provision of new attractions and facilities including the development of the city as a centre of artistic and cultural excellence	0	+	0	0	0	0	0	0	0	0
Obj 3.0.10	To protect and strengthen the retail primacy of the city within the region	0	0	0	0	0	0	0	0	0	0
3.4.1	To ensure that an adequate quantity and range of serviced land is available for enterprise development and that appropriate supporting infrastructure is provided	0	0	0	0	0	0	0	0	+	0
3.4.2	To work with the economic	0	+	0	0	0	0	0	0	0	0

¹³ Development at Waterford Port and Belview Industrial Zone may be subject to EIA and AA at the project level to determine environmental impacts

	development initiatives of other agencies and to promote the development of sustainable employment										
3.4.3	To be proactive and to support IDA Ireland in the attraction of world class industrial enterprises	0	+	0	0	0	0	0	0	0	0
3.4.4	To work with Enterprise Ireland, the City Enterprise Board and other agencies in the promotion of indigenous enterprises	0	+	0	0	0	0	0	0	0	0
3.4.5	To promote and facilitate the continued extension of advanced communication networks and associated services as required with a view to contributing to national competitiveness and attracting inward investment	0	+	0	0	0	0	0	0	0	0
3.4.6	To promote and facilitate the provision of continued appropriate telecommunications infrastructure within the City and to encourage the provision of telecommunications based services at appropriate locations within the City, subject to environmental considerations	0	+	0	0	0	0	0	0	0	0
3.4.7	In considering proposals for new telecommunications facilities the City Council will have regard to the "Telecommunications Antennae and Support Structures - Guidelines for Planning Authorities" issued by the Department of the Environment Heritage and Local Government and to any subsequent amendments as may be issued	0	0	0	0	0	0	0	0	0	0
3.4.8	To ensure security of energy supply in order to support economic and social development	0	+	0	0	0	0	0	0	0	0
Obj 3.4.1	Co-operate with IDA Ireland, Enterprise Ireland, Waterford and Kilkenny County Councils, Waterford CDB, WIT, WCVEC, FAS and other agencies in meeting the needs of industry, training and innovation, where appropriate	0	+	0	0	0	0	0	0	0	0
Obj 3.4.2	Co-operate with adjoining local authorities in the servicing of strategic employment opportunities at designated business and technology parks on lands outside the city boundary in particular with regard to provision strategic and sustainable transportation services	0	+	0	0	0	0	0	0	0	0
Obj 3.4.3	Provide for a strategic development site to attract and facilitate foreign direct investment (F.D.I).	0	+	0	0	0	0	0	0	0	0
Obj 3.4.4	Develop and facilitate the continued creation of business incubation/start up space throughout the city where feasible and as resources permit.	0	+	0	0	0	0	0	0	0	0
Obj 3.4.5	Provide for childcare facilities in appropriate locations and in consultation with the Waterford City Childcare Committee thereby promoting labour market participation among parents and supporting parents in accessing employment, training and education	0	+	0	0	0	0	0	0	0	0

Obj 3.4.6	Continue to improve access to major areas of employment through sustainable transport modes	0	+	0	0	0	0	0	0	0	0
Obj 3.4.7	Maintain an adequate supply of land for general industry comprising light and mixed industrial uses in order to ensure a diverse range of employment opportunities in the city and to allow for start-up indigenous enterprises of this nature	0	+	0	0	0	0	0	0	0	0
Obj 3.4.8	Facilitate innovative work practices such as 'live-work' or 'live above the shop' units where it can be demonstrated that they do not negatively impact upon contiguous residential amenity	0	+	0	0	0	0	+	0	0	0
3.7.1	To fully support and progress the policy actions of the <i>Destination Waterford Tourism City</i> Committee	0	+	0	0	0	+	+	0	+	0
3.7.2	Promote the Viking Triangle as Waterford's cultural and heritage quarter	0	+	0	0	0	+	+	0	+	0
3.7.3	To co-operate with the tourism agencies in the promotion of the city as a tourism destination	0	+	0	0	0	+	+	0	+	0
3.7.4	Facilitate and encourage sustainable tourism development, which is based on and reflects the city's distinctive history, culture and environment	0	+	0	0	0	+	+	0	+	0
3.7.5	Strengthen the city's position as a tourism destination by promoting and facilitating the city's position as a tourism destination by promoting and facilitating the further development of a sustainable tourism infrastructure and attractions	0	+	0	0	0	+	+	0	+	0
3.7.6	To continue to expand the profile of arts in the City through appropriate branding and hosting of associated events	0	+	0	0	0	0	0	0	0	0
3.7.7	To encourage the development of the conference market in the city	0	+	0	0	0	0	0	0	0	0
3.7.8	Continue to support the development of cruise line tourism	0	+	0	0	0	0	0	0	0	0
3.8.1	To ensure that an adequate quantity and range of serviced land is available for the expansion of the City's educational facilities and that the appropriate infrastructure is provided	0	+	0	0	0	0	0	0	0	0
3.8.2	To support the development of WIT as the technological university of the South East	0	+	0	0	0	0	0	0	0	0
3.9.1	To facilitate the expansion and development of healthcare facilities in order to expand the range of services provided	0	+	0	0	0	0	0	0	0	0
	CHAPTER 4	B1	P1	W1	S1	AC1	C1	C2	L1	MA1	AA
	RETAIL										
4.3.1	To acknowledge the City Centre as the primary retail centre for high and middle order retail goods for the region, and to protect and reinforce this role.	0	0	0	0	0	0	0	0	0	0
4.3.2	To facilitate the expansion of, and improvement in the quality of the retail offer	0	+	0	0	0	0	0	0	0	0
4.3.3	To protect the retail function of the core shopping area	0	0	0	0	0	0	0	0	0	0
4.3.4	To apply the sequential approach to	0	0	0	0	0	0	0	0	0	0

	retail development proposals										
4.3.5	Promote the development of specific opportunity City Centre sites and other identified edge of centre sites for appropriate City Centre retail development	0	0	0	0	0	0	0	0	0	0
4.3.6	To acknowledge the role of the District centres in meeting local needs primarily for convenience shopping with a limited range of comparison shopping to service local need	0	0	0	0	0	0	0	0	0	0
4.4.2	To confine the development of large scale retail developments to the city centre and the District Centres	0	+	0	0	0	0	0	0	0	0
4.4.3	To strictly control and monitor the level of comparison floorspace development in District centres	0	0	0	0	0	0	0	0	0	0
4.4.4	Discourage the development of higher order comparison floorspace in District Centres to protect the retail primacy of the City Centre	0	0	0	0	0	0	0	0	0	0
4.5.1	To provide for an adequate and appropriate scale of retail and other services within the existing and proposed neighbourhood centres	0	+	0	0	0	0	0	0	0	0
4.6.1	To facilitate the development of local shopping facilities in areas not adequately served by permitting developments of up to 100m2 net sales area.	0	+	0	0	0	0	0	0	0	0
4.6.2	To facilitate reasonably sized extensions of existing local shops where necessary to accommodate contemporary retail formats and to ensure sustainability.	0	+	0	0	0	0	0	0	0	0
4.6.3	To facilitate forecourt shops at service stations up to 100m2 net sales space, subject to the provision of safe pedestrian access	0	+	0	0	0	0	0	0	0	0
4.7.1	<p>It is the policy of the Planning Authority to strictly control retail warehousing in the city. Retail warehouses will only be permitted where they fulfil the following criteria:-</p> <p>Only retailing of non-convenience products not associated with the city centre such as bulky household goods, including carpets, furniture, automotive products, white electrical goods, DIY and gardening products; office and industrial plant and equipment, and building materials will be permitted. The sale of goods such as food, clothing, footwear, books/stationary, toys, and sports wear will not be permitted.</p> <p>It can be demonstrated that the development meets a practical need and that the proposal, taken in isolation, or in combination with other such developments will not have an unacceptable impact on existing or proposed retail facilities. Applications for retail warehouses or retail parks will be required to be accompanied by a retail impact statement.</p>	0	0	0	0	0	0	0	0	0	0

	<p>The minimum floor area of any warehouse shall not be less than 700m² gross floor area, and the maximum floor area shall not exceed 6000m² gross floor area, including any ancillary garden centre.</p> <p>The floorspace shall be provided in a grouped format in planned retail parks, and individual, freestanding, retail warehouses will not normally be permitted.</p> <p>The development shall be strategically located in relation to the road and public transport network, and sufficient car parking shall be provided on site to service the development.</p> <p>Retail parks shall achieve a high standard of design, have a coherent layout and shall meet with the policies and development management standards set down in this Development Plan.</p> <p>Proposals for retail parks that are part of a mixed use development shall be considered on their merits having regard to the Retail Strategy.</p>											
4.8.1	The core shopping area will form the main focus and preferred location for new retail development	0	0	0	0	0	0	0	0	0	+	0
4.8.2	Where it is not possible to provide for the form and scale of development that is required on a site within the core shopping area then consideration can be given to edge of centre sites	0	0	0	0	0	0	0	0	0	+	0

	CHAPTER 5	B1	P1	W1	S1	AC1	C1	C2	L1	MA1	AA
Policy/Obj No	CITY CENTRE										
5.3.1	To develop in partnership with all stakeholders a city centre management strategy	0	+	0	0	0	0	0	0	0	0
5.4.1	To control the spread of uses that could lead to a reduction in the attractiveness of, and the retailing function of, the principal shopping streets.	0	0	0	0	0	0	+	0	0	0
5.4.2	To control the extent of retail and office developments, of a type and scale which are appropriate to the city centre, outside the central area.	0	0	0	0	0	0	+	0	0	0
5.4.3	To promote and develop commercial synergy between City Centre Opportunity site areas	0	0	0	0	0	0	+	0	0	0
5.4.4	To protect established residential areas in the centre from encroachment by commercial development and associated activities.	0	+	0	0	0	0	0	0	0	0
5.4.5	To ensure that refurbishment and redevelopment proposals contribute to the environmental quality, and are	0	0	0	0	0	+	+	0	0	0

	in keeping with the character, of the central area										
5.4.6	To facilitate the development of an accessible city centre, with particular reference to persons with disabilities, pedestrians and cyclists and to improve the availability of public transport, and short term parking, within easy reach of the central area.	0	+	0	0	+	0	0	0	0	0
5.4.7	To provide for and regulate appropriate street furniture, signage and other devices in the public realm.	0	0	0	0	0	0	+	0	+	0
5.4.8	To retain and enhance the existing street pattern, to encourage the retention and refurbishment of existing buildings of character, and to upgrade the physical environment of the city centre's streets and urban spaces.	0	0	0	0	0	0	+	0	0	0
5.4.9	To encourage and facilitate the development of the centres role in the areas of arts and culture and to encourage and facilitate the expansion of existing and the development of new festivals	0	+	0	0	0	0	0	0	0	0
5.4.10	To promote more City Centre residency	0	+	0	0	+	0	0	0	0	0
5.4.11	To promote the provision of additional educational facilities within the City Centre	0	+	0	0	0	0	0	0	0	0
5.4.12	To promote and expand sustainable tourism development in the City Centre	0	+	0	0	0	0	0	0	0	
5.4.13	To monitor footfall levels in the City Centre on an ongoing basis	0	0	0	0	0	0	0	0	0	0
5.4.14	To provide better co-ordination and management of disparate activities and services through the establishment of City Centre Forum	0	0	0	0	0	0	0	0	0	0
5.4.15	To provide for better connectivity between John Roberts Square and Railway Square	0	+	0	0	0	0	+	0	+	0
5.4.16	To promote and enhance the evening economy in the City Centre	0	+	0	0	0	0	0	0	0	0
5.4.17	To adhere to the principle of the primacy of the City Centre as enunciated in Retail Planning Guidelines for Planning Authorities.	0	0	0	0	0	0	0	0	0	0
5.4.18	To give consideration to appropriate "meanwhile uses" and temporary commercial uses for vacant or under utilised properties in as much as legislation and regulation allow	0	0	0	0	0	?	?	0	0	0

Note: The Waterford City Centre Report was reviewed as part of the AA. Fig. 7.6 of this report and Strategic Objective 9.1.2 promote the upgrade of public realm along the quay commencing at the clock tower. This work will be subject to AA screening as per policy in the heritage Chapter and as required under Section XAB of the Planning and Development Amendment Act 2010.

	CHAPTER 6	B1	P1	W1	S1	AC1	C1	C2	L1	MA1	AA
Policy/Obj No	TRANSPORTATION										
6.1	It is an objective to examine the potential opportunities which the development of the airport may present to develop an economic corridor or enterprise zone at the Airport Road/Outer Ring Road	0	+	0	0	0	0	0	0	0	Dev of Airport will be subject to AA screening under County Plan

6.2	It is the policy of City Council to continue to provide adequate ranks at various locations throughout the city in consultation with the taxi operators. Ranks will be of varying sizes and will be time restricted as appropriate. All ranks shall be designed so as to provide for accessibility for people with disabilities.	0	+	0	0	0	0	0	0	0	0
6.3	It is an objective of the strategy to complete the implementation of all remaining Green Routes phases during the lifetime of the new plan	0	+	0	0	+	0	0	0	0	See AA of Transport Study
6.4	It is an objective of the strategy to have 'Realtime Passenger Information' ¹⁴ signs operational at key bus stops within the City. Expected arrival time information will be sourced from automatic vehicle location devices.	0	+	0	0	0	0	0	0	0	0
6.5	Small scale sustainable hybrid Park & Ride service to be located adjacent to the Outer Ring Road in the general Farronshoneen / Williamstown Road area. It is an objective that this proposal will be developed through to implementation during the lifetime of this plan and subject to the availability of resources.	0	+	0	0	+	0	0	0	0	0
6.6	an objective to provide a citywide cycle network to link all areas of the city to each other via main routes	0	+	0	0	+	0	0	0	0	0
6.7	It is an objective to expand the network to connect the city centre to any proposed North Quay development with a foot/cycle bridge.	?	+	0	0	+	0	0	0	0	Subject to AA at project level mitigated by policy in Heritage Chapter
6.8	It is an objective to provide cycle and walking networks between neighbourhood areas, further negating the need for car based journeys	0	+	0	0	+	0	0	0	0	0
6.9	It shall be an objective that all transportation proposals shall make provision for accessibility for all persons, with particular regard for measures to enhance access for persons with mobility and visual impairment	0	+	0	0	0	0	0	0	0	0
6.10	It is an objective to implement all aforementioned parking strategy measures during the forthcoming new plan period	0	+	0	0	+	0	0	0	0	0
6.11	It is an objective of this plan to continue to work towards the full implementation of the PLUTS strategic route improvements in conjunction with other route improvements as outlined hereunder .	?	+	0	0	+	0	0	0	0	Subject to AA at project level mitigated by policy in Heritage Chapter
6.12	Realignment/improvement of Bilberry/Quarry Road, providing for improved safety and facilities for buses, pedestrians and cyclists, with new vehicular access provision to Bilberry Opportunity site.	?	+	0	0	0	0	0	0	0	0

¹⁴ MottMacDonald 'Waterford City Public Transport Feasibility Study' 2010

6.13	Extension of the Outer Ring Road with a downstream crossing to complete the orbital road network and provide a distributor route around the city. It would also link development areas to the north of the Suir to those on the south. It would provide traffic relief for the city centre and provide a further alternative crossing point of the river. PLUTS identified the optimal location for the river crossing in the Maypark area.	? ¹⁵	+	0	?	0	0	0	?	+	Subject to AA at project level mitigated by policy in Heritage Chapter
6.14	The provision of a new pedestrian river crossing located in the vicinity of the Clock Tower to provide accessibility to the North Quays and facilitate future development.	? ¹⁶	+	0	?	0	0	0	?	+	Subject to AA at project level mitigated by policy in Heritage Chapter
6.15	Investigate the feasibility of provision of an open span bridge facilitating a light public transport system in the vicinity of Reginald's Tower linking up with future development on the north quays.	? ¹⁷	+	0	?	0	0	0	?	+	Subject to AA at project level mitigated by policy in Heritage Chapter
6.16	It is an objective of this strategy to reduce speeds within residential areas, especially housing estates, to 30 km/h (20mph).	0	+	0	0	0	0	0	0	0	0
6.17	To conserve the carrying capacity of the N25 Waterford City By-Pass by strictly controlling access to the route and development in the vicinity of the route	0	+	0	0	0	0	0	0	0	0
6.18	To identify and provide for, in cooperation with Waterford County Council, a new or improved route between the Airport Road and the Dunmore East Road	? ¹⁸	+	0	?	0	0	0	0	0	0
6.19	To provide for the realignment and improvement of the following city routes - Completion of Williamstown Road - Old Kilmeaden Road (Improvements from Carrickphierish Road to Tirconnell Avenue) - Bilberry Road - Quarry Road.	0	+	0	0	0	0	0	0	0	0
6.20	To provide for the necessary roads infrastructure to facilitate development of the neighbourhood structure and neighbourhood centres as demand requires.	0	+	0	0	0	0	0	0	0	0
6.21	To facilitate and promote the continued enhancement of the public transport bus service, through the further expansion of: the green routes, realtime passenger information, provision of high quality bus shelters, traffic management measures, and by ensuring that the design and layout of the neighbourhoods facilitate the	0	+	0	0	+	0	0	0	0	0

¹⁵ Impacts on biodiversity will be assessed through the AA process at a project level in relation to impacts on the Lower River Suir SAC.

¹⁶ Impacts on biodiversity will be assessed through the AA process at a project level in relation to impacts on the Lower River Suir SAC

¹⁷ Impacts on biodiversity will be assessed through the AA process at a project level in relation to impacts on the Lower River Suir SAC

¹⁸ Route to be identified and environmental assessment carried out at the project level

	expansion of the bus service										
6.22	To further develop the existing network of cycleways on the existing road network, within and between the neighbourhoods, and within selected amenity areas	0	+	0	0	+	0	0	0	0	0
6.23	Continue to develop and implement a parking strategy for the City Centre and its fringe areas	0	+	0	0	0	0	0	0	0	0
6.24	Continue to implement a HGV Management Strategy	0	+	0	0	0	0	0	0	0	0
6.25	Provide public lighting on all public roads as required where appropriate.	? ¹⁹	+	0	0	0	0	0	0	0	0
6.26	To facilitate the development of a sustainable river-based transport system on the River Suir, including the development of ferry and waterbus services	? ²⁰	+	0	0	0	0	0	0	0	

	CHAPTER 7	B1	P1	W1	S1	AC1	C1	C2	L1	MA1	AA
Policy/Obj No	SOCIAL, COMMUNITY AND CULTURE										
Objective contained in main text	It is an objective to plan and provide for additional community services, public amenities and facilities where there are existing deficiencies.	0	+	0	0	0	0	0	0	0	0
7.2.1	To ensure that the growth of the city takes place in an orderly manner that is sustainable in terms of integrated land use, transportation and provision of infrastructure.	0	+	+	0	+	0	0	0	+	0
7.2.2	To implement the Neighbourhood Strategy in order to provide for the development of sustainable neighbourhoods, focused on neighbourhood/district centres with a mix of uses, densities, community facilities and neighbourhood centre uses.	0	+	0	0	0	0	0	0	0	0
7.2.3	To retain, protect and improve the environmental qualities of the existing suburban areas; to reinforce their neighbourhood/district centres and to provide for additional community youth and public services, amenities and facilities as identified in this plan.	0	+	0	0	0	0	0	0	0	0
Objective contained in main text	It is an objective of the zoning and development management strategies to ensure that development proposals for lands adjoining the green wedge address the buffer zone and pNHA and include proposals for the protection of the pNHA.	+	0	0	+	0	0	0	0	+	0
Objective contained in main text	To facilitate provision for a children's play facility within the neighbourhood on a site owned by Waterford City Council	0	+	0	0	0	0	0	0	0	0
Objective contained in main text	To provide for additional facilities, including a club house and driving range at Williamstown Golf Course	0	+	0	0	0	0	0	0	0	0
Objective contained	To connect the cycleways between Maypark Lane Roundabout and Island	0	+	0	0	+	0	0	0	0	0

¹⁹ Impacts of lighting on bats along known foraging treelines and hedgerows should be considered

²⁰Waterbus proposal should be considered for environmental impacts under AA screening

in main text	Lane, and to develop a cycleway between the Farronshoneen Roundabout and the Waterford Regional Hospital Roundabout.										
Objective contained in main text	To promote and provide for public access to the riverbanks and to reserve lands free from development to facilitate such access and to provide for a sustainable riverside walk along the southern bank of the River Suir from Canada Street to Blenheim.	? ²¹	+	0	0	0	0	0	0	0	Subject to AA screening as per policy in Chapter 10
Objective contained in main text	To ensure that the design and layout of new development provides for ease of movement and facilitates pedestrian and cycle access, and the use of public transport.	0	+	0	0	+	0	0	0	0	0
Objective contained in main text	To facilitate, in partnership with the local community and community organisations, the provision of a multi-use community centre within the neighbourhood and to support the local community and community organisations in providing additional and improved community facilities and public services in the area.	0	+	0	0	0	0	0	0	0	0
Objective contained in main text	To facilitate the provision of additional sporting and recreational facilities at Ballygunner G.A.A. Club and by community organisations in the area.	0	+	0	0	0	0	0	0	0	0
Objective contained in main text	To facilitate the creation of a village green, incorporating a public open space within the neighbourhood on a site zoned for open space adjacent to the Gaelscoil and to protect the view of the River Suir from the Knockboy Road from obstruction and inappropriate intrusion by new development.	0	+	0	0	0	0	0	+	0	0
Policy contained in main text	It is the policy of the City Council to encourage the further development of these facilities for the benefit of the neighbourhood and the city.	0	+	0	0	0	0	0	0	0	0
Objective contained in main text	To extend the scheme of green routes to the Ferrybank Dual Carriageway and to re-align and widen Abbey Road.	0	0	0	0	+	0	0	0	0	0
Objective contained in main text	To provide for a sustainable riverside walk along the northern bank of the Suir, as part of the redevelopment of the North Quays, from Rice Bridge to the City boundary, which would run through this area of open space.	?	+	0	0	0	0	0	+	0	?
7.4.1	To protect the integrity, special character and landscape of the rural parts of the City, by ensuring that the growth of the City takes place in an orderly fashion, which is economic and sustainable in relation to land use and the provision of public infrastructure.	0	+	0	+	0	0	0	+	0	0
7.4.2	To maintain a clear demarcation between the rural and built up areas and to prevent urban sprawl	0	0	0	+	0	0	0	+	0	0
7.4.3	To promote the use of the rural areas of the City for sustainable agriculture.	0	+	0	+	0	0	0	0	0	0

²¹ Impacts on biodiversity assessed through the AA process at the project level

7.4.4	To preserve, and promote the use of existing public rights of way in the rural area of the City.	0	+	0	0	0	0	0	0	+	0
7.4.5	To discourage the construction of new buildings and structures in the area of the City zoned for agricultural uses other than for the purposes of: - -Agriculture and forestry -Facilities for outdoor sport and recreation -Alteration and extension of existing buildings -Housing for the immediate family members of long standing residents, farmers and farm workers -Essential public service installations.	0	+	0	0	0	0	0	0	+	0
7.5.1	To provide and encourage the provision and further development of sustainable community facilities, which are flexible in their design and promote optimum usage, throughout the City.	0	+	0	0	0	0	0	0	0	0
7.5.2	To co-operate with all service providers in the provision of new health, social and community facilities through the re-use of existing institutional buildings and community facilities or where new buildings are required that they would be suitable for multi-use.	0	+	0	0	0	0	0	0	0	0
7.5.3	To continue to liaise with other statutory, voluntary and community groups in the provision of community services and facilities.	0	+	0	0	0	0	0	0	0	0
Obj 7.5.1	To ensure that major new development is accompanied by the provision of appropriate community and social and cultural facilities.	0	+	0	0	0	0	0	0	0	0
Obj 7.5.2	To ensure the efficient use of new and existing community facilities.	0	+	0	0	0	0	0	0	0	0
Obj 7.5.3	To rectify, where possible existing deficiencies in community facilities to ensure, during the lifetime of the plan, that each neighbourhood designated in the plan will, as a minimum, have the following facilities: - A purpose-built community childcare facility - A purpose-built youth facility - A neighbourhood park including a playground, an active recreation area for teenagers, a kick-about area - Playing pitches aligned to sporting codes	0	+	0	0	0	0	0	0	0	0
7.5.4	To encourage, facilitate and plan for the provision of high quality childcare facilities for all children in appropriate locations, including residential areas, City Centre, district and neighbourhood centres, in areas of employment and educational establishments, in consultation with the Waterford City Childcare Committee. Such facilities will normally provide open space play areas, good accessibility and off-street parking and will be subject to proper	0	+	0	0	0	0	0	0	0	0

	planning and sustainable development considerations.										
Obj 7.5.4	To require the provision of appropriate and sustainable purpose built childcare facilities in association with proposals for new residential development of more than 75 dwelling units. Where appropriate the Council will operate this requirement in a flexible manner and will encourage and facilitate cooperation between developers to jointly provide facilities, having regard to the Waterford City Childcare Strategy.	0	+	0	0	0	0	0	0	0	0
Obj 7.5.5	To encourage the provision of drop-in childcare facilities within large scale new retail, leisure or tourism developments, in particular shopping centres.	0	+	0	0	0	0	0	0	0	0
7.5.5	To facilitate the provision of healthcare facilities which will develop the system of healthcare and to facilitate the provision of appropriate community based care facilities, subject to proper planning and sustainable development considerations.	0	+	0	0	0	0	0	0	0	0
7.5.6	To provide for the integration of community based care facilities in both existing and new communities and to ensure that they are accessible to those with special needs such as the elderly and the disabled.	0	+	0	0	0	0	0	0	0	0
7.6.1	To support the further development of Waterford City as a nationally recognised centre for culture and arts and to encourage and facilitate the provision of additional and improved arts and cultural facilities in the City.	0	+	0	0	0	0	0	0	0	0
7.6.2	To support and develop existing festivals and encourage the establishment of new festivals and events, in particular those of national and international distinction.	0	+	0	0	0	0	0	0	0	0
7.6.3	To require Developers of large-scale developments throughout the City to provide at their own expense a piece of civic artwork at a cost of 1% of the total cost of the proposed development subject to a ceiling of €44,000.	0	+	0	0	0	0	0	0	0	0
7.6.4	To ensure that all construction projects undertaken by the Council which are supported by Government funding are considered for the 'Per cent for Art' Scheme.	0	+	0	0	0	0	0	0	0	0
7.6.5	To promote access to and appreciation of the arts.	0	+	0	0	0	0	0	0	0	0
Obj 7.6.1	To investigate the feasibility of using vacant properties in the ownership of the City Council for artistic use.	0	+	0	0	0	0	+	0	0	0
Obj 7.6.2	To encourage and foster the development of art programmes in local communities.	0	+	0	0	0	0	0	0	0	0
Obj 7.6.3	To promote the participation of students in schools and colleges to observe, learn and participate in the arts.	0	+	0	0	0	0	0	0	0	0
Obj 7.6.4	To provide for additional library	0	+	0	0	0	0	0	0	0	0

	services, including new branch libraries where appropriate, in the new neighbourhoods.											
Objective contained in main text	To create a network of natural heritage areas and recreational open spaces and amenity areas and promote linkage and accessibility between these areas and the wider City area by using walkways and cycleways to connect them where appropriate.	0	+	0	0	+	0	0	+	0	0	
Objective contained in main text	The land use zoning strategy includes the zoning of lands for recreational open space and natural heritage protection in association with new development areas. It shall be an objective that such areas are made available to the public in conjunction with the development of the associated development lands.	0	+	0	+	0	0	0	0	0	0	
Objective contained in main text	There is an opportunity to provide for linear park along the riverside particularly in the undeveloped areas in the north west section of the city, it is an objective to investigate the feasibility of developing same.	?? ²²	+	0	?	0	0	0	+	0		Subject to AA screening as per Chapter 10 policy on AA
Policy contained in main text	It is the policy of the City Council that where practical, additional open space be provided at a minimum rate of 2.83ha (Acres) per 1000 population.	0	+	0	+	0	0	0	+	0	0	
Policy contained in main text	It is also the policy of the City Council to provide for an adequate network of public open spaces and amenities areas throughout the City.	0	+	0	+	0	0	0	+	0	0	
Objective contained in main text	The Council has as an objective the creation of a "child friendly" city by creating an environment that includes diverse opportunities for play, is characterised by safe and accessible recreational areas and facilities.	0	+	0	0	0	0	0	0	0	0	
7.7.1	To manage and protect public open spaces, to meet the social, recreational, conservation and ecological needs of the city and where appropriate to consider the development of appropriate complimentary facilities.	0	+	0	+	0	0	0	+	0	0	
7.7.2	To protect existing public and private recreational open space, and the loss of such facilities will normally be resisted unless alternative recreational facilities are provided in a suitable location, or it can be demonstrated that there is no longer sufficient demand to sustain the facility.	0	+	0	0	0	0	0	+	0	0	
7.7.3	To promote the implementation of the open space and recreational objectives outlined in the Neighbourhood Strategy.	0	+	0	0	0	0	0	0	0	0	
7.7.4	In considering applications for new development, to require the provision of appropriately located and designed open space, recreational and amenity areas	0	+	0	0	0	0	0	0	0	0	
7.7.5	To facilitate the development of private lands for recreational purposes, having regard to the amenities of residents in vicinity, and to the environmental impact of the	0	+	0	0	0	0	0	0	0	0	

²² Impacts on biodiversity will be assessed through the AA process at a project level in relation to impacts on the Lower River Suir SAC

	development											
7.7.6	To promote Waterford City as a child friendly city	0	+	0	0	0	0	0	0	0	0	0
7.7.7	To support the objectives of the Waterford Sports Partnership	0	+	0	0	0	0	0	0	0	0	0
Obj 7.7.1	To identify, designate and provide, sites for new urban parks, playing fields and childrens play areas within the neighbourhood structure.	0	+	0	0	0	0	0	0	0	0	0
Obj 7.7.2	To protect the Green Wedges from inappropriate development, to provide for public access for recreational purposes, and to facilitate nature conservation.	+	+	0	+	0	0	0	+	0	0	0
Obj 7.7.3	To seek to acquire and develop the lands adjacent to the Snowcream plant at Maypark Lane as a Woodland Park	+	+	0	0	0	0	0	+	0	0	0
Obj 7.7.4	To seek to acquire and develop the garden to the rear of De La Salle primary school as a pocket park and thereby present and make accessible the conserved city wall and tower	+	+	0	0	0	+	0	0	0	0	0
Obj 7.7.5	To develop additional facilities, including a Clubhouse, at Williamstown Golf Course	0	+	0	0	0	0	0	0	0	0	0
Obj 7.7.6	To develop sustainable riverside walks as opportunities arise, along the banks of the River Suir and St John' River.	? ²³	+	0	?	0	0	0	0	+	0	0
Obj 7.7.7	To investigate the feasibility of providing a riverside linear park in the Gracedieu area and at Blenheim	?	+	0	?	0	0	0	0	+	0	Subject to AA screening as per Chapter 10 policy on AA
Obj 7.7.8	To promote the development of a sustainable public walkway in association with the restoration of the railway line at Bilberry	? ²⁴	+	0	0	0	0	0	0	+	0	Subject to AA screening as per Chapter 10 policy on AA

	CHAPTER 8	B1	P1	W1	S1	AC1	C1	C2	L1	MA1	AA
Policy/Obj No	HOUSING										
	Part V objective of this Development Plan, as required by Section 95 of the Planning and Development, Act, 2000, that 20% of the land zoned in the plan for residential use, or for a mixture of residential and other uses shall be reserved for the provision of housing for the purposes of either or both housing for persons referred to in Section 9(2) of the Housing Act, 1988 (Social Housing) and section 19 Housing (miscellaneous provisions) Act 2009 and Affordable housing, as defined in Section 93 of the Planning & Development Act, 2000, shall be retained until such time as there is a legislative change altering the provisions of Part V.	0	+	0	0	0	0	0	0	0	0
Obj 8.1	It is an objective of the Draft	0	+	0	0	0	0	0	0	0	0

²³ Impacts on biodiversity will be assessed through the AA process at a project level in relation to impacts on the Lower River Suir SAC

²⁴ Impacts on biodiversity will be assessed through the AA process at a project level in relation to impacts on the Lower River Suir SAC

	Development Plan to ensure that a mixture of types and sizes is developed to reasonably match the requirements of different categories of households within the city, including the special requirements of older persons and people with disabilities and other special needs.											
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	CHAPTER 9 EDUCATION	B1	P1	W1	S1	AC1	C1	C2	L1	MA1	AA
Obj 9.1	To have primary schools at the heart of our neighbourhoods. In order to achieve this we will need to: Achieve the development of the Carrickapherish Gaelscoil/Educate Together Campus Zone lands in the Noth-West Suburbs to allow in anticipation of the re-location of a City Centre School	0	+	0	0	0	0	0	0	0	0
Obj 9.2	To have a sustainable network of post-primary schools. In order to achieve this we will need to: Work pro-actively with post-primary schools which are suffering reduced pupil intake in order to develop mechanisms to counteract the trend Facilitate the re-location of Gaelcholáiste Phortláirge to an appropriate permanent site Assess the need for, and potential location of, an Educate Together post-primary school	0	+	0	0	0	0	0	0	0	0
Obj 9.3	To support the providers of continuing education to further develop appropriate facilities and services				0						
Obj 9.4	To support WIT to develop its infrastructure so that it can be a top attractor to local, national and international students. In order to achieve this, we will need to: Liaise with the College and with Waterford County Council in order to ensure that the College's development needs are fully understood and appropriate responses initiated To zone appropriate lands to facilitate further required college expansion. Liaise with the college to determine the best possible solutions to issues of student accommodation, car-parking requirements, public transport services, recreational services, community relations and other such areas	0	+	0	0	0	0	0	0	0	0
Obj 9.5	To support the development of WIT as the Technological University of the South East in amalgamation with Carlow IT	0	+	0	0	0	0	0	0	0	0
Obj 9.6	To promote and prioritise greater educational attainment within the City				0						
Obj 9.7											
Obj 9.8											

	CHAPTER 10	B1	P1	W1	S1	AC1	C1	C2	L1	MA1	AA
Policy/Obj No	HERITAGE										
10.0.1	To protect and conserve all relevant aspects of the national heritage and	+	+	+	+	+	+	+	+	+	+

	their settings where appropriate											
10.0.2	Protect, conserve and where relevant restore and enhance the environmental quality, character and distinctiveness of monuments, archaeological and heritage objects, architectural heritage, flora and fauna, wildlife habitats, parks and gardens, townscapes and riverscapes of national, regional and local importance.	+	+	+	+	+	+	+	+	+	+	+
10.0.3	Provide for the enhancement of opportunities for access to and enjoyment of the heritage.	0	+	0	0	0	+	0	0	0	0	0
10.0.4	Implement the Waterford City Heritage plan in partnership with all relevant stakeholders.	+	+	+	0	+	+	+	+	+	+	+
10.0.5	To implement the Waterford City Biodiversity Action Plan 2010 in partnership with all relevant stakeholders.	+	+	+	+	0	0	0	0	0	0	+
10.0.6	Promote environmental awareness campaigns, designed to enhance understanding and awareness of environmental and heritage issues.	0	+	0	0	0	0	0	0	0	0	0
10.1.1	To protect and enhance archaeological monuments and their settings including city walls, embankments and ditches, gates, bastions or ancillary fortifications church sites and associated graveyards and other monuments	0	0	0	0	0	+	0	0	0	0	0
10.1.2	To protect and preserve the archaeological value of underwater archaeology. In considering development proposals the City Council will take account of rivers, inter-tidal and sub-tidal environment and the potential to impact on previously unrecorded shipwreck, that may be over 100-years old and thus protected under the National Monuments (Amendment) Act 1987	0	0	0	+	0	+	0	0	0	0	0
10.1.3	To protect the archaeological heritage of the City as a source and instrument for historical and scientific study.	0	0	0	0	0	+	0	0	0	0	0
10.1.4	To facilitate appropriate guidance in relation to the protection of the archaeological heritage of the City	0	0	0	0	0	+	0	0	0	0	0
10.1.5	To promote pre-planning consultations in relation to the archaeological heritage with the Planning Authority and with the National Monuments Service, Department of Arts, Heritage & the Gaeltacht.	0	0	0	0	0	+	0	0	0	0	0
10.1.6	To promote best practice in archaeological excavation and endeavour to ensure the dissemination of the results of archaeological excavation in a timely and appropriate	0	0	0	0	0	+	0	0	0	0	0

	manner										
10.1.7	To promote the use of the archaeological heritage of the City as an educational, cultural and tourism resource and to promote public -access and awareness of this rich archaeological heritage	0	+	0	0	0	+	0	0	0	0
Obj 10.1.1	To secure the preservation (in-situ or by record) of all sites and features of historical and archaeological interest	0	0	0	0	0	+	0	0	0	0
Obj 10.1.2	To preserve the integrity of existing archaeological monuments in their settings including the integrity of city defences and to ensure that development in the vicinity of a site of archaeological interest does not unduly affect the character of the archaeological site or its setting by reason of its location, scale, bulk or detailing.	0	0	0	+	0	+	0	0	0	0
Obj 10.1.3	To seek to retain the existing street layout, including laneways, historic building lines and traditional plot widths where these derive from medieval or earlier origins	0	0	0	0	0	+	+	0	0	0
Obj 10.1.4	In securing such preservation to have regard to the advice and recommendations of the Department of Arts, Heritage & the Gaeltacht both in respect of whether or not to grant planning permission and in respect of the conditions to which permission, if granted, should be subject	0	0	0	0	0	+	0	0	0	0
Obj 10.1.5	In considering development in the vicinity of all upstanding monuments, including city defences, or development that may have implications for archaeological heritage, the Planning Authority will require the preparation and submission of an archaeological assessment report detailing the potential impact of the development on the archaeological heritage including upstanding, buried structures and deposits. The report will also include a visual impact - assessment to ensure adequate consideration of any potential visual impact the proposed development may have on any upstanding remains.	0	0	0	+	0	+	+	0	0	0
Obj 10.1.6	To promote the incorporation of or reference to significant archaeological finds in a development, where appropriate, through layout, displays, signage, plaques, information panels or use of historic place names.	0	0	0	0	0	+	+	0	0	0
Obj 10.1.7	To provide guidance for developers, based on the experience of the archaeological environment in Waterford, and guidelines on development issued by The Heritage and Planning Division of the Department of Arts, Heritage & the Gaeltacht and the Department of the Environment, Community and Local Government, in order to ensure that	0	0	0	0	0	+	+	0	0	0

	the degree of commitment to a development in terms of finance and programme, may be planned in relation to the degree of uncertainty concerning the archaeology and the stages in its clarification and resolution.											
Obj 10.1.8	To prepare guidance notes/brochures for Developers for key sites in the City Centre in relation to the treatment of archaeology within such sites and possible mitigation measures	0	0	0	0	0	+	+	0	0	0	
10.1.8	To protect, preserve, conserve and restore, where appropriate, the upstanding remnants of the city walls and towers.	0	0	0	0	0	+	+	0	0	0	
10.1.9	To protect the essential character and setting of the City Walls and Towers through the control of the design, location and layout of new development in their vicinity and through the control of changes of use of lands so as to ensure that there are no adverse impacts; by the protection of adjoining streetscapes and site features where appropriate and by protecting views to and from the walls and towers from obstruction and/or inappropriate intrusion by new buildings structures, plant and equipment, signs and other devices; and where opportunities arise to create additional views of the walls and towers.											
10.1.10	To utilise the City Walls and Towers as an ordering device within the urban form, by protecting and preserving and maintaining the upstanding elements and by delineating the line of the defensive system where opportunities arise.	0	0	0	0	0	+	+	0	0	0	
10.1.11	To utilise the City Walls and Towers as an educational and tourism resource and to facilitate the publication and dissemination of interpretative material to the general public, and to facilitate public access to the walls and towers.	0	0	0	0	0	+	+	0	0	0	
10.1.9	To preserve the integrity of the City Walls and Towers in their settings.	0	0	0	0	0	+	+	0	0	0	
Obj 10.1.10	To secure the preservation (in situ) of city walls, embankments, town gates, bastions or ancillary fortifications or portions thereof.	0	0	0	0	0	+	+	0	0	0	
Obj 10.1.11	When considering development in the vicinity of city defences, to aim to achieve a satisfactory buffer area between the development and the city defences in order to ensure the preservation and enhancement of the amenity associated with the presence of city defences within the historic urban pattern	0	0	0	0	0	+	+	0	0	0	
Obj 10.1.12	To have regard to the preservation and enhancement of the line of the city defences when considering development proposed in their vicinity. Disturbance, removal and	0	0	0	0	0	+	+	0	0	0	

	alteration of the line of city defences shall not be considered appropriate within the historic core of Waterford City.											
10.2.1	To promote the protection of the architectural heritage of the City through the identification of structures of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest, by the inclusion of such structures on the RPS and by taking such steps as are necessary to ensure the protection of those structures.	0	0	0	0	0	0	+	+	0	0	0
10.2.2	To promote the sustainable reuse of protected structures for any such purpose compatible with the character of the structure. The Planning Authority may, where considered appropriate, relax use zoning and other site development restrictions and may grant exemption from or reduce the amounts of development contributions payable in order to secure the protection and conservation of protected structures. These restrictions may be relaxed and development contributions reduced or exempted where the protected structure will be rehabilitated to the highest standard, where the special interest, character and setting of the building is protected and where the proposed use and development is consistent with conservation policies and the proper planning and sustainable development of the area. In such cases the proposed development shall be open for consideration notwithstanding the current zoning objective for the site and therefore shall be considered as not materially contravening the Development Plan.	0	0	0	0	0	0	0	+	0	0	0
10.2.3	To protect the structures included on the Record of Protected Structures their curtilage and setting from any works that would result in the loss or damage to their special character.	0	0	0	0	0	0	0	+	0	0	0
Obj 10.2.1	To review the Record of Protected Structures during the lifetime of the development plan to ensure all records are consistent with the criteria for inclusion on the RPS, by being of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest	0	0	0	0	0	0	0	+	0	0	0
Obj 10.2.2	To include all of the structures within the city which are, in the opinion of the planning authority, of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest, in the Record of Protected Structures (RPS) and to ensure the protection of all structures included in the RPS.	0	0	0	0	0	0	0	+	0	0	0
Obj 10.2.3	To carry out an audit of all protected structures in the ownership of the City Council with a view to securing uses that are compatible with the character	0	0	0	0	0	0	0	+	0	0	0

	of the individual protected structure and to identify any protected structures on the Derelict Sites Register suitable for reuse.											
Obj 10.2.4	To achieve the protection of the architectural heritage within the city by giving advice to owners of protected structures on appropriate measures or actions to take in regard to their property; by promoting best practice in the use of materials in repair and adaptation work, including referral to appropriate documents such as the 'Architectural Heritage Protection, Guidelines for Planning Authorities, 2004' issued by the Department of the Environment, Heritage and Local Government; and the use of skilled specialist practitioners in the conservation of protected structures	0	0	0	0	0	0	+	0	0	0	0
Obj 10.2.5	In considering development which may have a significant impact on the architectural heritage to require the preparation and submission of an architectural heritage impact assessment detailing the potential impact of the development on the architectural heritage. The report shall be compiled generally in accordance with the details set out in Appendix B of the Architectural Heritage Protection Guidelines for Planning Authorities, Department of the Environment, Heritage & Local Government, 2004.	0	0	0	0	0	0	+	0	0	0	0
Obj 10.2.6	To issue declarations on request to owners or occupiers of protected structures detailing the type of works that it is considered would or would not materially affect the character of the structure or of any element of the structure which contributes to its special interest	0	0	0	0	0	0	+	0	0	0	0
Obj 10.2.7	To promote public awareness of the value of the protected structures within the city and the positive contribution protected structures make to the built environment, the distinctiveness and authenticity of the city and the tourism potential of the city and to develop specific measures to achieve such awareness.	0	0	0	0	0	0	+	0	0	0	0
Obj 10.2.8	To identify and implement measures for promoting the character and distinctiveness of the historic city and improving its physical condition and presentation.	0	0	0	0	0	0	+	0	0	0	0
Obj 10.2.9	To seek the retention and repair of shop and pub fronts of architectural interest	0	0	0	0	0	0	+	0	0	0	0
10.2.4	To achieve the preservation of the special character of places, areas, groups of structures or townscape within the city by setting out Architectural Conservation Areas of appropriate extent within the city.	0	0	0	0	0	0	+	0	0	0	0
10.2.5	To protect the special heritage values, unique characteristics and distinctive	0	0	0	0	0	0	+	0	0	0	0

	features of the Architectural Conservation Areas from inappropriate development which would detract from the special character of the ACA.											
Obj 10.2.10	To assess the need to establish additional areas for designation as ACAs and/or to extend the boundaries of the existing ACAs having regard to their special architectural, historic, archaeological, artistic, cultural, scientific, social or technical interest or value or contribution to the appreciation of protected structures.	0	0	0	0	0	0	0	+	0	0	0
Obj 10.2.11	To consider the feasibility of protecting structures by designating additional ACAs in the City with the specific aim of removing such structures from the Record of Protected Structures, only buildings of local, rather than national or regional importance will be selected for deletion from the RPS. Any such ACA will protect primarily the front facades and streetscape character and will serve to remove the protected structure status from such buildings.	0	0	0	0	0	0	0	+	0	0	0
Obj 10.2.12	To consider preparing and adopting special planning control schemes to preserve, protect and enhance the civic, architectural and historic character of the designated Architectural Conservation Areas where considered appropriate.	0	0	0	0	0	0	0	+	0	0	0
Obj 10.2.13	To promote local initiatives which promote the preservation of the special character of Architectural Conservation Areas. In considering development applications within the designated ACA's the Planning Authority shall have particular regard to the impact the proposed development will have on the streetscape and urban layout in relation to compatibility of design, materials and use and the impact of the proposed development on existing amenities having regard to traffic and parking and the amenity and utility value of public and private spaces including open spaces.	0	0	0	0	0	0	0	+	0	0	0
10.3.1	To protect and preserve, free from obstruction, views of the rural environs of the City considered to be of special amenity value.	0	0	0	0	0	0	0	0	+	0	0
10.3.2	To protect the essential character and setting of the river corridors through the control of the location, layout and design of new development, including the material change of use of land, so as to ensure that there are no undue effects on the character and amenities of the corridors	+	0	0	0	0	0	0	0	+	0	0
10.3.3	To protect views to and from the River Suir deemed to be of special amenity value from obstruction and or inappropriate intrusion by new buildings, structures, plant and equipment, signs and other devices, or	0	0	0	0	0	0	0	0	+	0	0

	inappropriate changes of use.											
10.3.4	To provide for sustainable ²⁵ public access to the riverbanks and to reserve lands free from development to facilitate such access	?	+	0	0	0	0	0	0	+	+	0
Obj 10.3.1	To provide for a sustainable riverside walk along the southern bank of the Suir from Canada Street to Blenheim	? ²⁶	+	0	0	0	0	0	0	0	+	
Obj 10.3.2	To provide for a sustainable riverside walk along the northern bank of the Suir, as part of the redevelopment of the North Quays, from Rice Bridge to the City boundary	? ²⁷	+	0	0	0	0	0	0	0	+	0
Obj 10.3.3	To provide for a sustainable riverside walk along St. Johns River for its full length within the City	?	+	0	0	0	0	0	0	0	+	0
10.4.1	To conserve, manage and where possible enhance the City's natural heritage	+	+	0	+	0	0	0	0	0	+	0
10.4.2	To provide for the protection, conservation and enhancement of wildlife habitats within designated and proposed designated sites, at the Suir estuary, at Kings Channel, Ballinakill Downs and at Kilbarry/Ballynakill Marsh and to maintain the conservation value of these designated and proposed designated sites.	+	0	0	+	0	0	0	0	0	0	0
10.4.3	To ensure that plans and projects with the potential to have a significant impact, directly or through indirect or cumulative impact, on Natura 2000 sites (River Suir SAC) are subject to Habitats Directive Assessment (Appropriate Assessment) under Article 6 of the Habitats Directive (92/43EEC) and associated legislation and guidelines informing decision making.	+	0	0	+	0	0	0	0	0	0	0
10.4.4	To improve sustainable social and physical access to the natural heritage and the recreational facilities of the City	+	0	0	0	0	0	0	0	0	0	0
10.4.5	To promote increased understanding and awareness of the City's natural heritage and local biodiversity	+	0	0	0	0	0	0	0	0	0	0
10.4.6	To promote increased understanding and awareness of invasive species and their management and work with other agencies to address the issue.	+	0	0	0	0	0	0	0	0	0	+
10.4.7	To provide for the protection and conservation of wildlife habitats				+							
Obj 10.4.1	To bring the Kilbarry/Ballynakill Marsh pNHA into public ownership.	+	+	0	0	0	0	0	0	0	+	0
Obj 10.4.2	To provide connectivity between the Kilbarry Park and the Outer Ring Road and the general wider City area through the development of a range of sustainable walkways and cycleways.	0	0	0	0	+	0	0	0	0	0	0
Obj 10.4.3	To promote the integration and improvement of natural watercourses in urban renewal and development proposals.	+	0	0	+	0	0	0	0	0	0	0
Obj 10.4.4	To consult with the Fisheries Board	+	0	0	+	0	0	0	0	0	0	0

²⁵ Sustainable development implies compliance with all EU environmental directives including the Habitats Directive

²⁶ Impacts on biodiversity will be assessed through the AA process at a project level in relation to impacts on the Lower River Suir SAC

²⁷ Impacts on biodiversity will be assessed through the AA process at a project level in relation to impacts on the Lower River Suir SAC

	and NPWS on all development proposals concerning riparian areas and watercourses and to take account of the requirements for the protection of fisheries habitat during construction and development works at river sites.											
Obj 10.4.5	To construct additional wetland areas and where appropriate bring into public ownership.	+	0	0	0	0	0	0	0	0	0	0
Obj 10.4.6	To assess all proposed developments in order to determine if they are likely to impact, directly or through indirect or cumulative impact, on designated natural heritage sites and protected species in accordance with the relevant legislation	+	0	0	0	0	0	0	0	0	0	0
Obj 10.4.7	On approving development proposals for sites containing known invasive species the Planning Authority will consider, as appropriate, the use of conditions for the control and eradication of invasive species	+	0	0	+	0	0	0	+	0	0	0
Obj 10.4.8	To prepare and implement a management plan for the Waterford Nature Park including the Kilbarry pNHA and the surrounding buffer area.	+	0	0	+	0	0	0	0	0	0	0
Obj 10.4.9	To prepare a City Habitat Map	+	0	0	+	0	0	0	0	0	0	+
Obj 10.4.10	In assessing development proposals to take cognisance of the green infrastructure concept	+	0	0	+	0	0	0	0	0	0	+To promote and implement the green infrastructure concept in assessment of dev. proposals
10.5.1	To provide for the effective management and sustainability of the City's tree stock	+	0	0	0	0	0	0	0	0	0	0
10.5.2	To provide continuity of tree cover throughout the City, promoting the use of native species where possible, with varied species and age distribution.	+	0	0	0	0	0	0	0	0	0	0
10.5.3	To promote the enhancement of the public realm and general amenity of the City through the continued maintenance and provision of trees in the urban environment.	+	0	0	0	0	0	0	0	0	0	0
10.5.4	To protect, preserve and ensure the effective management of, trees and groups of trees, considered to be of special amenity value included in schedule 3.	+	0	0	0	0	0	0	0	0	0	0
10.5.5	To ensure when planning to undertake development or when considering the approval or authorisation of development that the protection, preservation and management of existing trees of amenity value, and the implementation of a planned planting and management scheme, are provided for.	+	0	0	0	0	0	0	0	0	0	0

Obj 10.5.1	To implement the Waterford City Tree Management Policy, 2010 and review as appropriate.	+	0	0	0	0	0	0	0	0	0
Obj 10.5.2	To carry out an audit of all existing trees within the city with a view to developing and implementing an annual arboricultural programme of planting, pruning and removal as appropriate.	+	0	0	0	0	0	0	0	0	0
Obj 10.5.3	To carry out an audit of all trees of special amenity value, as listed in Schedule 3, with a view to updating same	+	0	0	0	0	0	0	0	0	0
Obj 10.5.4	To ensure when planning to undertake development or when considering development proposals that adequate information to assess the impact of the proposed development on existing trees, including tree surveys and planting and management schemes, is provided.	+	0	0	0	0	0	0	0	0	0
Obj 10.5.5	To ensure when undertaking development or when permitting development that the loss of or damage to existing trees is minimised.	+	0	0	0	0	0	0	0	0	0
Obj 10.5.6	To promote public awareness and appreciation of the significant aesthetic, ecological, cultural and historic value of trees in the urban environment.	+	0	0	0	0	0	0	0	0	0

	CHAPTER 11	B1	P1	W1	S1	AC1	C1	C2	L1	M A1	AA
	ENVIRONMENT										
11.2.1	It is the policy of Waterford City Council: to promote the achievement of good ecological status, good ecological potential and good chemical status for all river water by 2021 and groundwater by 2027 and if possible within the lifetime of the plan..	+	+	+	+	0	0	0	0	0	+
Obj 11.2.1	It is an objective of Waterford City Council: To implement the European Union Water Framework Directive through the implementation of the relevant parts of the South East River Basin Management Plan and programme of measures specific to Waterford City	+	+	+	+	0	0	0	0	0	+
Obj 11.2.2	To take into consideration the South East River Basin Management Plan when considering new development proposals	+	+	+	+	0	0	0	0	0	+
Obj 11.2.3	To implement the South East River Basin Management Plan and its programme of measures through the provision good environmental management as reflected in the policies and actions herein	+	+	+	+	0	0	0	0	0	+
11.5.1	To continue the development of the water supply system so as to ensure that an adequate supply of piped water of suitable quality for domestic, commercial, industrial, fire safety and other uses, is available for the	0	+	+	0	0	0	0	0	0	0

	sustainable development of the city										
11.5.2	To maintain and improve the information and control system for the water supply network	0	+	+	0	0	0	0	0	0	0
11.5.3	To maintain and expand the water conservation programme, and the watermain rehabilitation programme, in order to conserve valuable resources, business and industry	0	+	+	0	0	0	0	0	0	0
11.5.4	To design and construct water supply improvement schemes to remedy infrastructural deficiencies	0	+	+	0	0	0	0	0	0	0
11.5.5	To promote the improvement of water quality in the rivers and watercourses in accordance with the provisions of the Water Framework Directive and to ensure the protection of Waterford Harbour Shellfish growing area	+	+	+	+	0	0	0	0	0	+
11.5.6	To provide for the control of surface and storm waters arising from developments within the City	+	+	+	0	0	0	0	0	0	0
11.5.7	To ensure that all developments have and are provided with satisfactory drainage systems in the interests of public health and of the avoidance of pollution of ground waters	0	+	+	0	0	0	0	0	0	0
11.5.8	To provide for continued water quality monitoring of the City's Surface Water Drainage system	0	+	+	0	0	0	0	0	0	0
11.5.9	To remediate and enforce against unauthorised discharges to the surface water drainage system	0	+	+	0	0	0	0	0	0	0
11.5.10	To seek to alleviate flood risk in areas currently liable to flooding	0	+	+	+	0	0	0	0	0	0
11.5.11	Developments located outside areas readily serviced by the main drainage system (Phase 1 lands) shall be considered on their merits. These would generally constitute phase 2 lands. Proposals for extensions to the main drainage system shall be required to satisfy a Core Strategy justification and demonstrate avoidance of sewage pumping arrangements where feasible .	0	+	+	0	0	0	0	0	0	0
11.5.12	There shall be a presumption against developments involving communal treatment or septic tanks	0	+	+	0	0	0	0	0	0	0
11.5.13	Individual septic tanks will not be permitted where main drainage is available or is likely to be provided within a reasonable period	0	0	+	0	0	0	0	0	0	0
11.5.14	Development proposals in the rural part of the city will be considered in accordance with the policies set down in Chapter 10 and individual septic tanks will only be permitted for otherwise acceptable proposals where compliance with the EPA Guidelines can be demonstrated	0	0	+	0	0	0	0	0	0	0
11.5.15	The City Council will consider the provision by developers of interim/permanent infrastructural services, including water supply, main drainage and waste water treatment systems, where such provision is in accordance with the core strategy and the zoning objectives for the area, is designed and constructed in	0	0	+	0	0	0	0	0	0	0

	accordance with agreed specifications, makes due provision, if required, for the servicing of other zoned lands in the vicinity, and is compatible with the longer term infrastructural services planned for the area										
11.5.16	Where water or waste water pumping is required, it may be a later requirement that such services or facilities, for example, waste water plants or pump houses, be decommissioned and removed following the provision of longer term infrastructure at a future date	0	0	+	0	0	0	0	0	0	0
11.5.17	In order to ensure that the resources and energy devoted to the main drainage system are conserved, it shall be a requirement in all new developments that separate foul and surface water drainage systems be provided and where feasible in new redevelopment schemes	0	0	+	0	0	0	0	0	0	0
11.5.18	In the newly developing neighbourhoods all surface and storm water discharges shall be attenuated and sustainable urban drainage systems utilised. Attenuation schemes may be combined with the provision of public amenity areas through the provision of water features, wildlife refuges and other desirable elements	+	0	+	0	0	0	0	0	0	0
11.7.1	Applications for development on lands identified on the SFRA maps, shall be subject to a site specific Flood Risk Assessment appropriate to the type and scale of the development being proposed, in accordance with the Planning Guidelines requirements and those of the Waterford City SFRA.	0	+	+	+	0	0	0	0	+	0
11.7.2	Development that is vulnerable to flooding will not be permitted in an area identified as being at high (Flood Zone A) or moderate (Flood Zone B) flood risk (as set out in the Guidelines), unless the criteria as set out in the Justification Test are satisfied.	0	+	+	+	0	0	0	0	+	0
11.7.3	All applicants shall primarily be responsible in the first instance when making a planning application for assessing whether there is a flood risk issue and how it will be addressed in the development they propose.	0	+	+	+	0	0	0	0	+	0
11.7.4	Relevant portions of zoned development land which failed the SFRA Justification test shall be restricted to 'water compatible' use only	0	+	+	+	0	0	0	0	+	0
Obj 11.7.1	To facilitate the full implementation of the flood relief scheme within the plan period	0	+	0	+	0	0	0	0	0	0
Obj 11.7.2	To update and review flood zone maps for the City as information becomes available	0	+	0	+	0	0	0	0	0	0
11.8.1	Waterford City Council recognizes that Waterford can be Irelands lead	0	0	0	0	+	0	0	0	0	0

	City in Sustainable Energy Technologies. Waterford City Council will utilize where feasible indigenous energy supplies such as biomass, wind, biogas, bio-fuels, solar energy and new innovative energy solutions.										
11.8.2	The City Council will support and facilitate the provision of improved energy supply / infrastructure to the city and environs in order to support economic growth and social development.	0	+	0	0	+	0	0	0	0	0
POL 11.8.3	The City Council will promote a culture of adopting energy efficiency / renewable energy technologies and energy conservation within its own activities and in the provision of services.	0	+	0	0	+	0	0	0	0	0
11.8.4	The City Council will strive to improve the energy efficiency of its own 3000 social housing units and source a variety of national and EU funding to achieve this.	0	+	0	0	+	0	0	0	0	0
POL11.8.	The implementation of Climate Change Reduction measures in Energy Consumption, Procurement activities, raising awareness, building projects, planning policies, transport activities, waste reduction actions and within the other statutory functions of Waterford City Council will contribute directly to reducing direct emissions by WCC and indirectly through implementing policies and practices that will result in a reduction in emissions by others.	0	0	0	0	+	0	0	0	0	0
11.10.1	It is the policy of the City Council to implement the Joint Regional Waste Management Plan policies and objectives for the region.	? ²⁸	?	0	?	?	0	0	0	0	Plan is subject to review in 2012 and AA
11.10.2	It is the policy of the City Council to fully participate in the preparation, adoption and implementation of the review Joint Waste Management Plans in the region	?	?	0	?	?	0	0	0	0	Plan is subject to review in 2012 and AA
11.10.3	It is the policy of the City Council to enforce waste and litter legislation in the city and to impose fines and prosecute those who do not comply with the law in this regard	0	+	0	+	0	0	0	0	0	0
11.10.4	The City Council regulates all waste operators in its area of jurisdiction through a system of Permitting and Certification	0	+	0	0	0	0	0	0	0	0

²⁸ Impacts on biodiversity will be assessed through the AA process of the Waste Plan review

Obj 11.10.1	To continue and expand environmental awareness initiatives designed to create increased public awareness of waste prevention, minimisation and reuse	0	+	0	0	0	0	0	0	0	0
Obj 11.10.2	To identify and promote further waste prevention and recovery/recycling initiatives	0	+	0	0	0	0	0	0	0	0
Obj 11.10.3	To provide for additional recycling, including composting facilities both on a city-wide basis and within the neighbourhoods and to promote the recovery/recycling of all food waste	0	+	0	0	0	0	0	0	0	0
Obj 11.10.4	To consider, when undertaking development or when authorising or permitting development, the provision of a waste minimisation, prevention and reuse programmes and facilities including: - the provision of recycling facilities within developments. the imposition of conditions requiring the implementation of waste management programmes, including schemes for the management of construction and demolition waste, on development sites	0	+	0	0	0	0	0	0	0	0
11.11.1	To continue the programme for development of the Fire Service, including provision of training and equipment procurement	0	+	0	0	0	0	0	0	0	0
11.11.2	To co-operate with the adjoining Local Authorities in the development of the Fire Service	0	+	0	0	0	0	0	0	0	0
11.11.3	To implement effective fire prevention programmes under the Fire Services Act 1981 and the Building Control Act 1990	0	+	0	0	0	0	0	0	0	0
11.11.4	To implement the Fire Services Change Programme	0	+	0	0	0	0	0	0	0	0
11.11.5	To implement the National Framework for Major Emergency Management	0	+	0	0	0	0	0	0	0	0
11.11.6	To provide for the relocation of the Waterford City Fire Station	0	0	0	0	0	0	0	0	0	0

CHAPTER 12 ZONING OBJECTIVES	B1	P1	W1	S1	AC1	C1	C2	L1	MA1	AA
To protect and improve existing residential areas and their amenities and provide for appropriate residential infill opportunities where feasible.	0	+	0	0	0	0	0	0	0	0
To provide for new residential areas and their amenities. To provide for new low density residential areas and their amenities	0	+	0	0	0	0	0	0	0	0
To protect, provide and improve City Centre Commercial uses.	0	+	0	0	0	0	0	0	0	0
To provide and improve General Business uses.	0	+	0	0	0	0	0	0	0	0
To provide for strategic industrial development.	0	?	?	0	?	0	0	0	0	0
To provide for industrial, employment and related uses.	0	+	0	0	0	0	0	0	0	0
To provide for science and	0	+	0	0	0	0	0	0	0	0

technology based enterprise.										
To protect, provide and improve community facilities.	0	+	0	0	0	0	0	0	0	0
To preserve and provide for recreational uses, open space and amenity facilities	0	+	0	+	0	0	0	+/	0	0
To protect and conserve rural character and preserve agricultural uses.	+	+	0	+	0	0	0	+	0	0
To promote the development of mixed use sites.	0	+	0	0	0	0	0	0	0	0
To promote the development of opportunity sites	0	+	0	0	0	0	0	0	0	0
To preserve lands as a strategic reserve for the duration of the Development Plan period.	0	+	0	0	0	0	0	0	0	0

CHAPTER 13	B1	P1	W1	AC1	C1	C2	L1	MA1	AA
DEVELOPMENT MANAGEMENT STANDARDS									
It is the objective of Waterford City Council to prevent an excessive concentration of uses as Take-Aways, Amusements Centres, Night Clubs/Licensed Premises, Off-Licences, Open Air Concerts and to ensure that the intensity of any proposed use is in keeping with both the scale of the building and the pattern of development in the area.	0	+	0	0	0	+	0	0	0
To enhance the provision of family residences particularly in the city centre.	0	+	0	0	?	?	0	0	0

Appendix 1 B. SEA Screening of Amendments proposed to Draft Waterford City Development Plan

Policy No.	CHAPTER 1 INTRODUCTION	B1	P1	W1	S1	AC1	C1	C2	L1	MA1	AA
Section 1.3 SEA	It is an objective that all Plans and Projects shall comply with the requirements of the SEA Directive and associated Planning and Development (SEA) Regulations, 2004 and 2011 and to carry out SEA screening of all land use and non land use plans as required under the regulations.	+	0	+	0	0	0	0	0	0	+
	CHAPTER 5 CITY CENTRE										
Section 5.5.4	Waterpark to Blenheim. Previous City Development Plans contained an objective to provide for a riverside walkway in this area along the River Suir. It remains an objective that any development adjoining the riverbank should facilitate the future provision of such a walkway <i>subject to compliance with the requirements of the Habitats Directive for the protection of otter and bat species...</i>	?	+	0	0	0	0	0	0	0	?
	CHAPTER 6 TRANSPORTATION										
Section 6.2.6	Extension of the Outer Ring Road with <i>an appropriately designed and constructed</i> downstream river crossing to complete the orbital road network and provide a distributor route around the city. It would also link development areas to the north of the Suir to those on the south. It would provide traffic relief for the city centre and provide a further alternative crossing point of the river. PLUTS identified the optimal location for the river crossing in the Maypark area <i>but this will be subject to further feasibility and environmental assessment.</i>	?	+	0	0	0	0	0	0	0	?
Section 6.2.6	The provision of <i>an appropriately designed and constructed</i> new pedestrian river crossing located in the vicinity of the Clock Tower to provide accessibility to the North Quays and facilitate future development	?	+	0	0	0	0	0	?	0	? ²⁹
Section 6.2.9 Obj 14	<i>Surface water runoff from all new hard-surfaced infrastructure draining directly into the River Suir and John's River shall be subject to appropriate hydrocarbon interception where the risk of hydrocarbon pollution is deemed significant, and the feasibility of retrofitting such interception to existing infrastructure, where such a significant risk is identified, will be examined.</i>	+	0	+	0	0	0	0	0	0	+
	CHAPTER 7 SOCIAL, COMMUNITY AND CULTURE										
Section 7.3.7	To provide for a sustainable riverside walk along the northern bank of the Suir, as part of the redevelopment of the North Quays, from Rice Bridge to the City boundary, which would run	+	+	0	0	0	0	0	0	0	+

²⁹ Such urban crossings have been constructed over cSAC rivers in other Irish cities without adverse effects on the cSAC where appropriate mitigation measures were used. The effects of constructing any in-stream support structures will be fully assessed.



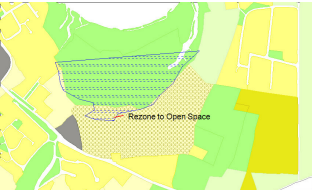
	through this area of open space <u>subject to compliance with the requirements of the Habitats Directive for the protection of otters and bat species.</u>										
Obj 7.7.3	To seek to acquire and develop the lands adjacent to the Snowcream/Glanbia plant at Maypark Lane as a Woodland Park. <i>It will be a requirement of permissions for development of the Glanbia site that the layout provide for the designation of the woodland area at the northern/north western section of the site, identified as open space in the draft plan, as a publicly accessible open space and include details of appropriate management and maintenance mechanisms.</i>	+	+	0	0	0	0	0	+	0	0
	CHAPTER 10 HERITAGE										
Policy 10.1.1	To protect and enhance archaeological monuments and their settings including city walls, embankments and ditches, gates, bastions or ancillary fortifications, <u>church sites and associated graveyards and other monuments</u>	0	0	0	0	0	+	+	+	0	0
Policy 10.1.5	To promote pre-planning consultations in relation to the archaeological heritage with the Planning Authority and <u>with the National Monuments Service, Department of Arts, Heritage & the Gaeltacht</u>	0	0	0	0	0	+	+	0	0	0
Section 10.1.2	To protect and preserve the archaeological value of underwater archaeology. In considering development proposals the City Council will take account of rivers, inter-tidal and sub-tidal environments, <u>and the potential to impact on previously unrecorded shipwreck, that may be over 100-years old and thus protected under the National Monuments (Amendment) Act 1987.</u>	0	0	0	0	0	+	+	0	0	0
Section 10.1.5	<u>When considering development in the vicinity of upstanding archaeological/historical monuments, to aim to achieve a satisfactory buffer area between the development and the monument in order to ensure the preservation and enhancement of the amenity associated with the presence of upstanding monuments within the historic urban pattern.</u>	0	0	0	0	0	+	+	0	0	0
Section 10.3.1	To provide for a sustainable riverside walk along the southern bank of the Suir from Canada Street to King's Channel Insert footnote in plan to "sustainable" <u>Compliance with EU environmental directives including the Habitats Directive.</u>	?	+	0	0	0	0	0	0	0	?
Obj 10.4.11	<u>To support the green infrastructure concept in development proposals where feasible</u>	+	+	+	+	0	0	0	+	+	+
Obj 10.4.7	<u>To ensure that development proposals will have sufficient mitigation measures to avoid damage or</u>	+	0	0	0	0	0	0	0	0	+

	<i>destruction of the breeding sites of strictly protected species (otter, bat, Shad and Lamprey species) or, where necessary, have appropriate derogation licences in accordance with the EU Habitats Directive prior to the granting of permission for the development</i>										
	CHAPTER 11 ENVIRONMENT										
Policy 11.2.1	It is the policy of Waterford City Council: to promote the achievement of good ecological status, good ecological potential and good chemical status for all waterbodies in the City by 2021 and groundwaters by 2027 <i>and if possible within the lifetime of the plan</i>	+	+	+	+	0	0	0	0	0	+
Policy 11.5.5	To promote the improvement of water quality in the rivers and watercourses in accordance with the provisions of the Water Framework Directive <i>and to ensure the protection of Waterford Harbour Shellfish growing area.</i>	+	+	+	+	0	0	0	0	0	+
Policy 11.7.1	Applications for lands identified on the SFRA maps shall be subject to a site specific Flood Risk Assessment appropriate to the type and scale of the development being proposed <i>and pass the Development Management Justification Test as detailed in the Flood Risk Management Guidelines</i> in accordance with the Planning Guidelines requirements and those of the Waterford City SFRA	0	+	+	+	0	0	0	0	0	0
Obj 11.7.2	To update the <i>Strategic Flood Risk Assessment</i> and review flood zone maps for the City <i>as new flood risk information becomes available</i>	0	+	+	+	0	0	0	0	0	0
Section 11.8	<i>Waterford City Council recognises that Waterford can be Ireland's lead City in Sustainable Energy Technologies. Waterford City Council will utilise where feasible indigenous energy supplies such as biomass, wind, biogas, bio-fuels, solar energy and new innovative energy solutions.</i>	0	+	0	0	+	0	0	0	0	0
Section 11.8	<i>The City Council will support and facilitate the provision of improved energy supply/infrastructure to the city and environs in order to support economic growth and social development.</i>	0	+	0	0	+	0	0	0	0	0
Section 11.8	<i>The City Council will promote a culture of adopting energy efficiency/renewable energy technologies and energy conservation within its own activities and in the provision of services.</i>	0	+	0	0	+	0	0	0	0	0
Section 11.8	<i>The City Council will strive to improve the energy efficiency of its own 3000 social housing units and source a variety of national and EU funding to achieve this.</i>	0	+	0	0	+	0	0	0	0	0
Section 11.8	<i>The implementation of Climate Change reduction measures in energy consumption, procurement activities, raising awareness, building projects, planning policies, transport activities, waste reduction actions and within the other statutory functions of Waterford</i>	0	+	0	0	+	0	0	0	0	0

	<i>City Council will contribute directly to reducing direct emissions by WCC and indirectly through implementing policies and practices that will result in a reduction in emissions by others.</i>										
	CHAPTER 12 DEVELOPMENT ZONING OBJECTIVES										
	<i>Where a planning application is made in respect of a development or class of development referred to in Schedule 5 of the Planning and Development Regulations 2001 (as amended) that application shall be accompanied by an EIS. Information to be contained in an EIS is outlined in Schedule 6 of the Regulations (as amended). Appropriate scoping should be undertaken as early in the process as possible. In this regard applicants are advised to contact the Council and the EPA in the early stages of the Assessment.</i>	+	+	+	+	+	+	+	+	+	+
Quantitative Standards 4.2 institutional Lands	<i>An exception to this may occur in redeveloped sites adjacent to the River Suir, where an open space buffer of 30m will be retained as open space and managed accordingly.</i>	+	+	+	0	0	0	0	+	0	+
Quantitative Standards 4.3 institutional Lands	<i>In the case of these lands or hotel lands, all broadleaf trees within at least 30m of the River Suir will be retained and, where individual trees need to be removed for safety reasons, trees will be replanted in the same riverside location.</i>	+	+	+	0	0	0	0	+	0	+
Gracedieu Phase 3 Strategic Residential Reserve	<i>Development in this area will be subject to appropriate assessment screening and the use of Sustainable urban drainage systems or similar runoff treatment/attenuation and groundwater protection measures.</i>	+	+	+	0	0	0	0	0	0	+
Ballinakill Phase 2 Section 7.3.4	<i>A 20m buffer of open space will be provided between development and the cSAC boundary.</i>	+	+	+	0	0	0	0	0	0	+
Kilbarry Phase 3 Strategic Residential Reserve Section 7.3.2	<i>This area will only be developed using SUDS or similar runoff treatment/attenuation and groundwater protection measures and subject to ecological assessment.</i>	+	+	+	0	0	0	0	0	0	+
Schedule 4	<i>Addition of Trees on the riverbank of the Suir at Christendom</i>	+	+	+	0	0	0	0	0	0	+
	ZONING AMENDMENTS										
The Hermitage Granstown	Rezoning .089 ha from open space to residential	0 ³⁰	0	0	0	0	0	0	0	0	0
St. Otterans, St. John's Hill	Rezone lands from community facilities, open space and residential to community facilities, residential use, open space and general business 	? ³¹	+	0	0	0	0	0	0	0	0

³⁰ Small area of land involved in an existing residential area.

³¹ Isolated ecological corridors and no loss or reduction in amended area of open space. Low habitat value on site in terms of habitat structure and diversity.

											
Rocklands (Abbeylands) Ferybank	<p>Rezone 1.9 ha from low density residential zoning to Open Space (lands in pink shading to revert to open space)</p> 	+	+	0	0	0	0	0	+		+
Glanbia, Maypark Lane	<p>Rezone open space to residential, alter low density residential to residential and rezone two existing residential zoned areas to open space.</p>	? ³²	0	0	0	0	0	0	?	0	0
Knockboy	<p>Re-zone area of low-density residential that occurs in area of flood risk as Open Space</p> 	+	+	+	0	0	0	0	0	0	0

³² Zoning amendment has been informed by a Tree Survey and residential development subject to policy 10.5.4 To protect, preserve and ensure the effective management of, trees and groups of trees, considered to be of special amenity value included in Schedule 3. Amended Draft Plan to include statement that it will be a requirement of permissions for development of the Glanbia site that the layout provide for the designation of the woodland area at the northern/north western section of the site, identified as open space in the draft plan, as a publicly accessible open space and include details of appropriate management and maintenance mechanisms.

APPENDIX 2

SEA Scoping Report

SEA Scoping Report

Strategic Environmental Assessment (SEA) is a formal process that is carried out in parallel with preparation of the City Development Plan 2013-2019 in accordance with the Planning and Development (Strategic Environmental Assessment) Regulations 2004. The SEA process is a valuable tool for improving the environmental sustainability of the Development Plan and raising awareness of the potential environmental consequences of its implementation so that these consequences may be mitigated or avoided altogether. The main output of the SEA process is the Environmental Report. In preparation for compilation of the Environmental Report a scoping exercise was carried out by issuing a scoping document to the prescribed environmental authorities that scoped the range of topics to be addressed in the environmental report. The Planning Authority received 4 responses to the SEA Scoping document for the City Development Plan. These were from the EPA, Inland Fisheries Ireland, Department of Arts Heritage and Gaeltacht and Department of Communications, Energy and Natural Resources. The EPA's regional SEA consultation clinic was attended in July in Kilkenny 2011.

EPA

Key issues recommended to be addressed	Draft Plan Policy / Recommendation for inclusion
Protection of Water Quality- Water Framework Directive, surface and ground water protection, drinking water, wastewater treatment, water conservation	Addressed in policies and objectives in Chapter 11 Environmental Management
Protection of Biodiversity- Natura 2000 sites, pNHAS, non-designated habitats, Habitat mapping	Addressed in policies and objectives in Chapter 10 Heritage
Invasive Species	A recommendation was made to insert policies on Invasive Species in Chapter 10 and this was incorporated by the planning team in the Draft.
Inland waters, rivers streams and wetlands	Addressed in policies and objectives in Chapter 10 Heritage
Protection of designated Shellfish Waters (Waterford Harbour)	A recommendation was made to insert reference to the Waterford Harbour Pollution Reduction Programme in list of guidance in 11.2 and also the Quality of Shellfish Waters Regulations 2006. This was incorporated by the planning team in the Draft Plan.
Integration of flood risk assessment into the Plan to ensure appropriateness of land use and inclusion of SUDS technology	Addressed in policies and objectives in Chapter 11 Environmental Management
Consideration of potential impacts of climate change	Addressed in policies and objectives in Chapter 11 Environmental Management

Promotion of renewable energy and energy conservation	Addressed in policies and objectives in Chapter 11 Environmental Management
Sustainable transport	A recommendation was made to insert a stated policy/objective to promote smarter travel and sustainable transport. This was incorporated by the planning team in the Draft Plan

The EPA SEA pack and scoping checklist formed part of the EPA submission. Attention was drawn to the amending SEA Regulations of 2011 whereby the Minister for Agriculture, Marine and Food and the Minister for Arts, Heritage and the Gaeltacht are additional prescribed environmental authorities under the regulations.

Inland Fisheries Ireland

IFI urge that rivers and watercourses are assets which provide a basis for development of visual and amenity features of the areas through which they flow.

Key issues recommended to be addressed	Draft Plan Policy
River Management Policies	Addressed in policies and objectives in Chapter 10 Heritage
Aquatic Habitat Protection- incorporation and management of riparian buffer zones along waterways	A recommendation was made to insert a policy/objective on the management of watercourses and consultation with IFI. This was incorporated by the planning team in the Draft Plan.
Maintenance and preservation of urban watercourses and associated riparian habitats as natural corridors for fish and wildlife movement and amenity.	Addressed in policies and objectives in Chapter 10 Heritage relating to protection of riverscape and AA on River Suir development proposals.
Promotion of integration and improvement of natural watercourses in urban renewal and development proposals.	A recommendation was made to insert a policy/objective on the integration of natural watercourses in urban renewal and development proposals. This was incorporated by the planning team in the Draft Plan.

Department of Arts, Heritage and the Gaeltacht

The DAHG recommended liaison with National Monuments Section on the drafting of the archaeological content of the plan. The plan should address in detail the potential archaeological impacts of any proposed development. Reference sources were cited relating to policy, legislation and information sources for archaeology that the SEA assessment of impacts should have regard to.

Department of Communications, Energy and Natural Resources

The Department had no comment to make at this time.

APPENDIX 3

Invasive Species recorded in Waterford City

Invasive Species recorded in Waterford City

(Problematic species are highlighted in bold)

Species	Location
<i>Acer pseudoplatanus</i> Sycamore	Ballyhoo Lacken Bishopscourt Kilbarry Bog Knockboy Grantstown King's Channel Ballynaneashagn Waterford City Ballynakill Little Island Brown's Lane, Waterford Gracedieu West Logloss / Gracedieu Gracedieu East
<i>Clematis vitalba</i>	Couse Bishopscourt Williamstown Knockboy Grantstown King's Channel Waterford City Ballynakill Little Island Barker Street, Waterford Logloss / Gracedieu
<i>Cotoneaster horizontalis</i>	Bishopscourt Waterford Waterford City Logloss / Gracedieu
<i>Crocsmia pottsii x aurea = C. x crocosmiiflora</i> Montbretia	Ballindud Bishopscourt Ballybeg (S. of) Kilbarry Bog Knockboy Grantstown

	Ballynaneashagn Waterford City Ballynakill Little Island Logloss / Gracedieu Gracedieu East
<i>Cyperus eragrostis</i>	Knockboy
<i>Elodea Canadensis</i> Pondweed	Kilbarry Bog Waterford City
<i>Fallopia japonica</i> Japanese Knotweed	Lacken Kilcohan Kilbarry Bog R675 going out of Waterford City. Waterford Kilbarry Landfill, Co. Waterford Public walkway opposite Superquinn. Kilbarry bog. Along walkway of old railway line, heading onto R6 Along riverbank, Waterford City. Tramore Road, Kilbarry, Co. Waterford S61A Ballynakill Tramore road just off N25. Ballynakill Along Hennessy's Road Mount Sion (school) Gracedieu West Logloss / Gracedieu Gracedieu East
<i>Fallopia japonica x sachalinensis = F. x bohemica</i>	Kilcohan Waterford (S5910 - H6) Ballytruckle (S6010 - H6) S61A St. John's River Waterford City
<i>Fallopia sachalinensis</i>	Kilcohan Ballytruckle S61A

	Waterford City St. John's River
<i>Hippophae rhamnoides</i>	Waterford
<i>Hyacinthoides hispanica</i> Spanish Bluebell	Gracedieu West
<i>Hyacinthoides non-scripta x hispanica</i> = <i>H. x massartiana</i>	Knockboy Ballynakill Logloss / Gracedieu
<i>Impatiens glandulifera</i> Himalyan Balsam	Waterford City Little Island River Suir, bank of
<i>Lemna minuta</i>	Little Island Duck's Pond
<i>Persicaria wallichii</i>	Waterford City
<i>Prunus laurocerasus</i>	Waterford City Ballynakill Ballynakill Little Island Ballynakill Little Island Gracedieu West Logloss / Gracedieu
<i>Rattus norvegicus</i>	Quarry Road, Gracedieu, Waterford City Ardkeen
<i>Rhododendron ponticum</i>	Little Island
<i>Sasa palmata</i>	On R686 Ash Road, Waterford City
<i>Sedum album</i>	King's Channel
<i>Sciurus carolinensis</i> Grey Squirrel	Glenville
<i>Spartina anglica</i> Cord Grass	King's Channel Ballynakill Little Island Ballycanvan Big
<i>Symphoricarpos albus</i>	Couse Waterford City Ballynakill Gracedieu West

	Logloss / Gracedieu
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