

Chapter 8 Environment and Natural Heritage

8.0 Introduction

Our environment comprising air, soil and water provides the basic building blocks for sustaining human life and the society and economy we occupy. A changing environment demands changing infrastructure and adapting policies and programmes to meet the challenges posed by the environment at a global, national and county scale. Key challenges in this regard include adaption to climate change and the related areas of Flood Risk Management and Coastal Zone Management. The Water Framework Directive and its associated River Basin District Management Plans and Programme of Measures set down significant challenges in attaining the required standard of water quality. The need to maintain water quality is key to conservation of biodiversity and water dependant habitats and species. Biodiversity loss is a serious threat as habitat degradation and species loss are often irreversible. The spread of invasive species is also threatening our native biodiversity areas. 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 are critical to ensure maintenance of a good quality environment.

At a policy and project level, the requirement to screen and carry out Strategic Environmental Assessment and Environmental Impact Assessment serve to identify any adverse environmental impacts at an early stage and plan mitigation measures to offset or reduce such adverse effects and achieve sustainable and environmentally benign development as far as possible. This Chapter details policies relating to the conservation and enhancement of the Town's environment and natural heritage.

Policy ENV 1

To comply with the requirements of Directive 2001/42/EC on the assessment of certain plans and programmes on the environment- The SEA Directive and associated Planning and Development (Strategic Environmental Assessment) Regulations 2004 and carry out screening of all land use and non land use plans as required under the regulations.

8.1 Landscape

The landscape of Dungarvan is a valuable resource in that it sustains harbour activity, Industry, tourism and is the location of homes and communities, while providing the routes and corridors for

vital infrastructure. Over time landscapes will change in response to society's evolving needs and uses.

The management of the Town's landscape involves:

- Sustaining and conserving the landscape;
- Protecting the landscape from inappropriate and unsustainable development;
- Providing for development that will enhance and benefit the receiving environment; and
- Ensuring adequate protection to sensitive and vulnerable landscapes through appropriate policies and objectives.

The European Landscape Convention (ELC) promotes the protection, management and planning of all landscapes. Article 5 of the ELC urges recognition in law that landscape is an essential component of people's surroundings, an expression of diversity of shared cultural and natural heritage, and a foundation of identity. The convention advocates the establishment and implementation of landscape policies aimed at landscape protection, management and planning, and urges the participation of the general public, and local and regional authorities in these policies.

The concept of landscape character assessment (LCA), and landscape capacity, provides a means for integrating spatial planning and landscape management. The Draft Planning Guidelines on Landscape and Landscape Assessment (issued by the Department of the Environment, Heritage and Local Government, June 2000), heighten awareness of the importance of landscape in all aspects of physical planning and identify a systematic approach to landscape appraisal.

Changes in the landscape brought about by development are inevitable. Landscapes are not meant to be fossilised; they must however be respected. Landscape Character Assessment allows for a much more proactive approach to landscape protection. It allows us to view landscape for its ability to accommodate developments, gives indicators as to which developments might be most suited, under what conditions and using what design criteria.

Under Section 204 of the Planning and Development Act 2000 (as amended), local authorities may designate Landscape Conservation Areas. A National Landscape Strategy is under preparation by the Department of Environment, Heritage and Local Government and will inform policy and management of landscapes in Ireland.

Policy ENV 2

To support provisions of the National Landscape Strategy and provide for the sustainable management of all of the Towns landscapes.

Dungarvan has a variety of landscapes and is characterised by the river Colligan, the harbour and its coastline. The landscape and natural heritage within the Town enables views and prospects of areas of natural beauty from many public roads. Accordingly a number of scenic landscapes and routes, and sensitive and visually vulnerable areas are designated as part of the Scenic Landscape Evaluation. This evaluation details landscape sensitivity based on the capacity of the environment to absorb new development and under the following classification:

- **Degraded** Areas characterised by breakdown of natural processes or pollution;
- **Robust** Areas of existing development and infrastructure;
- **Normal** A common character type with a potential to absorb a wide range of new developments;
- **Sensitive** Distinctive character with some capacity to absorb a limited range of new developments while sustaining its existing character; and
- **Vulnerable** Very distinct features with a very low capacity to absorb new development without significant alterations of existing character over an extended area.

Scenic routes indicate public roads from which views and prospects of areas of natural beauty and interest can be enjoyed. There is an onus on developers/applicants for planning permission to demonstrate that any proposed development shall not negatively impact on the character of a scenic route and that there shall be no obstruction or degradation of views towards visually vulnerable features or sensitive areas.

8.2 Water

Water bodies form a valuable amenity and recreation resource for Dungarvan. However, such resources are often under-utilised. The Council will continue to promote the protection and enhancement of the waterways within and adjoining the Town and the utilisation of same as a tourist attraction for water based sports, fishing and cruising.

8.3 Ground Water Protection

The Geological Survey of Ireland (GSI) compiled the Groundwater Protection Scheme for County Waterford which identified the main sources for groundwater within the County and the vulnerability of such resources to environmental pollution.

The European Communities Environmental Objectives Groundwater Regulations 2010, S.I. No. 9 of 2010 have been issued by the Minister for the Environment and have been developed for the purpose of responding further to the requirements of the Water Framework Directive and the Groundwater Directive (2006/118/EC). The regulations provide for clear environmental objectives and groundwater quality standards to strengthen the regime for the protection of groundwater.

Policy ENV 3

It is a policy of the Council to preserve and protect groundwater and surface water quality.

8.4 Water Quality

European and Irish legislation continue to place a strong emphasis on achieving a high standard of water quality. The Water Framework Directive, which was adopted in 2000, required that “*good status*” is achieved in all water bodies by 2015. The eutrophication of rivers, lakes and tidal waters is one of the main threats to surface waters with agricultural runoff and municipal discharges being the key contributors.

The Waste Water Discharge (Authorisation) Regulations 2007 came into effect in 2007 and has placed increased obligations on Water Services Authorities relating to the licensing of discharges from waste water treatment plants, facilitating greater implementation of the Water Framework Directive and other relevant EU Directives. The new licensing system which will be policed by the Environmental Protection Agency (EPA) will set strict limits on discharges allowed from these plants into our surface waters such as rivers, canals and lakes, and coastal waters and our groundwater.

Under the Water Framework Directive a management plan must be prepared for all River Basin Districts (RBDs). The South Eastern RBD encompasses the Dungarvan area. The final plans were adopted in May 2010 and outline the current status of our waters, environmental objectives for our waters, and the programme of measures which may be necessary in order to achieve these objectives.

The EU Nitrates Directive (91/676/ECC) requires member states to take specific measures to protect surface water and groundwater from nitrate contamination from agricultural activities. A Farm Waste Management Scheme introduced in 2006 provided grants to farmers to meet their slurry storage requirements and it is now the responsibility of individual farmers to ensure that they are compliant with the *Good Agricultural Practice Regulations*.

Nitrates Regulations have been signed into law by the Minister for the Environment, Heritage and Local Government in 2009. The European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2010 revise and replace the previous Regulations made in 2006 and 2007. They provide for strengthened enforcement provisions and for better farmyard management.

Policy ENV 4

It is a policy of the Council to comply with the objectives, policies and Programme of Measures of the Water Framework Directive and the South Eastern River Basin District Management Plans.

8.5 Wastewater

The 2001 Urban Wastewater Treatment Regulations deal with the collection, treatment and discharge of urban wastewater and wastewater from certain industrial sectors. Environmental Objectives (Surface Water Regulations) came into effect in July 2009 and provide a basis for deciding on the appropriate treatment required in order to meet objectives in line with the Water Framework Directive Objectives. The regulations provide for legally binding quality objectives for all surface waters and the drawing up of pollution reduction plans by Local Authorities.

Policy ENV 5

It is a policy of the Council to comply with the 2009 Surface Water Regulations, Waste Water Discharge Regulations (2007) and Urban Waste Water Treatment Regulations (2004).

8.6 Renewable Energy

Renewable energy is any naturally occurring, theoretically inexhaustible source of energy such as sunlight, wind, rain, tides, waves, wood fuels, bio fuels, anaerobic digestion, landfill gas and geothermal heat which is not derived from fossil or nuclear fuel.

The Government White Paper “Delivering a Sustainable Energy Future for Ireland” sets out the energy policy framework 2007-2020 to deliver a sustainable energy future for Ireland. Issues contained within the White Paper include:

- National security of energy supply;
- Development & implementation of a National Energy Efficiency Action Plan;
- Implementation & operation of an All-Ireland energy market;
- Targets of 15% electrical consumption by 2010 & 33% of electrical generation by 2020 to come from renewable energy technologies;
- Limiting Ireland’s relative dependency on Natural Gas for power generation to approximately 50% by 2020;
- Extension to the Gas & Electrical distribution Network; and
- Develop & implement a Bio Energy Action Plan for Ireland.

Policy ENV 6

To facilitate and encourage sustainable development proposals for alternative energy sources and energy efficient technologies.

8.7 Waterford Energy Bureau

The Waterford Energy Bureau established in 2003 provides a range of energy management, energy conservation and renewable energy services to the general public, businesses and to both Waterford County (including Dungarvan) and City Council. The Bureau which is based in the Tramore Civic Offices seeks to:

- Undertake programmes of specific actions and implement plans in energy related issues;
- Assist in the development of an integrated approach to energy development;
- Promote the efficient and rational use of energy (electricity, oil, solid fuel etc);
- Provide an impartial energy information and assessment service to the councils and the general public;
- Source funding where applicable for energy related projects; and
- Advise local authorities of Waterford on energy procurement, efficiency and renewable energy technology issues.

Objective ENV 1

It is an objective of the Development Plan:

- a) To encourage, where appropriate and sustainable, proposals for renewable energy developments and ancillary facilities;
- b) To support and encourage the appropriate and sustainable development of the bio-energy sector and facilitate its development for energy production, heat storage and distribution.

8.8 Wind Energy

The exploitation of renewable energy although still in its infancy, is very much at the forefront when considering means of satisfying our energy requirements over the life time of this Plan and beyond. The implementation of both National and EU renewable energy policies will result in the generation of renewable energy as per National and EU targets. Waterford County Council adopted a Wind Strategy as a variation to the 2005-2011 County Development Plan and it provides the basis for a planned approach to wind energy development in Waterford. The Wind Strategy categorises the County (including the Town) into areas based on their suitability to harness wind energy while taking into account the sensitivity of the landscape.

The wind map is categorised into four areas of suitability for wind farm development:

1. **Strategic Areas:** Areas which are primarily suitable for wind energy and should be reserved for this purpose.
2. **Preferred Areas:** Areas which are suitable and should generally be considered for permission unless local circumstances dictate otherwise.
3. **Open to Consideration:** Proposals for wind farms will be assessed on their merits with the responsibility on the developer to demonstrate suitability of the site.
4. **No-Go Areas:** Areas which are unsuitable for wind farm development.

Prior to making an application for a wind farm development, prospective applicants are advised to consult with the Department of the Environment, Heritage and Local Government's Publication on Wind Energy and with the Waterford County Wind Strategy to ascertain the suitability of the proposal.

Policy ENV 7

To promote and facilitate the sustainable development and use of wind energy in and adjoining the Town where appropriate.

8.9 Micro-Renewables.

The Planning and Development Regulations 2001 were amended in 2007 to provide planning exemptions subject to limitations for the construction and provision of micro-renewables such as domestic wind turbines, solar water heating, biomass boilers etc. Further amendments were made to the Regulations in 2008 which allowed for planning exemptions for micro-renewable forms of energy in industrial buildings and on agricultural holdings.

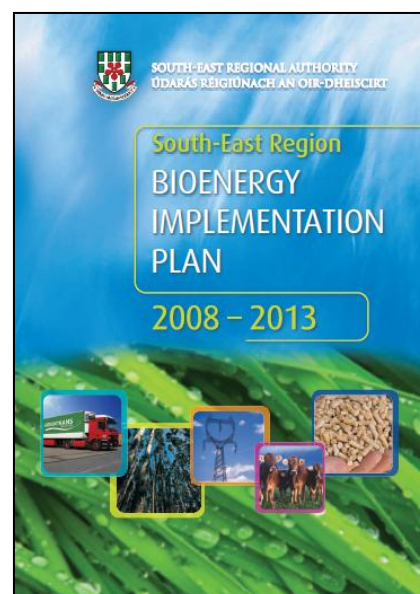
Policy ENV 8

The Council will facilitate and promote the use of micro-renewable technologies in the generation of electricity where they will not have an adverse impact on residential amenities, biodiversity, water quality and landscape sensitivities. Screening for Appropriate Assessment will be carried out where required to ensure that there is no negative impact on the integrity (defined by the structure and function and conservation objectives) of any Natura 2000 site located at or adjacent to proposed site for micro renewable development and that the requirements of Articles 6 (3) and (4) of the EU Habitats Directive 92/43/EEC are fully satisfied.

8.10 Bio-Energy

The South East Region, which includes County Waterford, is primarily a rural region with significant bioenergy potential in the form of agricultural land, forestry and waste residual (from municipal, agricultural and industrial sources) which can generate energy through the production of heat and electricity.

The South-East Regional Authority (SERA) in partnership with Sustainable Energy Ireland and a wide range of stakeholders in the Region have prepared a Bio Energy Implementation Plan for the South-East Region. This Plan outlines the bio-fuel policies and legislation that are driving development in the sector and the schemes that are supporting the supply side and stimulating the demand side of the market. The Plan sets out the targets for bio-energy



consumption within the Region for 2010-2020 aiming to increase its contribution towards meeting the future total energy requirements of the Region. With a target of 5% of total energy supply from biomass by 2010, increasing to 17% by 2020, it is envisaged that the South East will become more self sufficient in its energy supply and will create opportunities to support employment creation and regional development.

Policy ENV 9

The Council will support and facilitate, where possible and at appropriate and sustainable locations, the policies and objectives of the South East Region Bio-energy Implementation Plan 2008-2013.

8.11 Climate Change

Scientific evidence is growing that man-made greenhouse gas emissions are having significant effects on the earth's climate. Climate change scientists predict that temperatures in Ireland will increase by 1.25 -1.50°C by 2040. Rainfall is expected to increase in winter by about 15% and summer projections range from no change to a 20% decrease.

Reducing greenhouse gas emission is a global priority and requires committed national and local action. The *National Climate Change Strategy 2007-2012* builds on the commitment to sustainable development as set out in *Towards 2016* and the National Development Plan 2007-

2013. Ireland, as a member of the European Union, is committed to a concerned response to limit the growth of green house gas emissions to 13% above 1990 levels in the 2008 – 2012 period. Further targets of reduced CO₂ emissions will be set for 2020.

A Climate Change Forum was established by Waterford County Council (including the Town) in May 2007 to progress the initiation of energy efficient measures and sustainable energy projects to reduce CO₂ emissions. This is an internal Council forum, which meets periodically to develop policies and actions that can realistically and coherently make the maximum contribution to the National effort to address climate change.

As part of this, Waterford County Council Climate Change Forum has developed a Climate Change Strategy to implement policies and practices that will have significant influence over green house gas emissions in Waterford. It is a strategic goal for the Council to become carbon neutral by 2020.



Policy ENV 10

To support and implement the policies of the Waterford County Climate Change Strategy when assessing proposals for new development.

Policy ENV 11

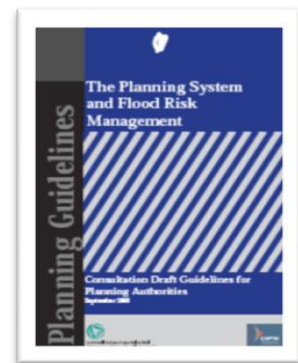
To continue to work effectively with the Waterford Energy Bureau (WEB) to reduce green house gas emissions and to support the objectives of the National Climate Change Strategy.

Objective ENV 2

To ensure that buildings are designed and constructed so as to maximise energy efficiency in line with Local Agenda 21 principles.

8.12 Flooding

Flooding is a natural process that can happen at any time in a wide variety of locations and plays a role in shaping the natural environment. Flooding from the sea and from rivers is probably best known but prolonged and intense rainfall can also cause sewer flooding, overland flow and flooding from groundwater. Where it impacts on human activities, it can threaten people, their property and the environment. Of increasing concern are the consequences of climate change which are impacting on sea levels, the nature and pattern of rainfall events and general weather patterns. While the exact impacts of change are not known, it is widely agreed that climate change will result in higher risk of flooding of both inland and coastal locations. It is important therefore that this issue is considered within the Town Development Plan as decisions on the direction of future growth within the Town can impact on flood risk.



The Department of Environment, Heritage and Local Government and the Office of Public Works (OPW) published Planning Guidelines *The Planning System and Flood Risk Management*, in 2009. These Guidelines recommend a clear and transparent assessment of flood risk at all stages in the planning process and set out that strategic flood risk assessment and management policy recommendations are necessary to set a policy framework for Development and Local Area Plans at the local level. The guidelines advocate that planning authorities avoid development in areas that are

at risk from flooding in particular in floodplains unless in exceptional circumstances, where the flood risk can be managed and the development is sustainable in the wider context. A sequential approach to flood risk management is advocated based on avoidance, reduction and management/mitigation in assessing the location of new development in the development plan process. The Guidelines also require the incorporation of flood risk assessment into the assessment of planning applications.

The EU Floods Directive was transposed into Irish law in 2010 by the European Communities (Assessment and Management of Flood Risks) Regulations 2010. The Directive sets out a best-practice framework for the assessment and management of flood risk, requiring the preparation by the State of flood maps by 2013 and flood risk management plans by 2015 aimed at managing flood risk in areas where the risk is potentially significant. Such areas will be identified through a preliminary flood risk assessment by 2011. The Floods Directive requires that these programmes are undertaken in a co-ordinated manner with the implementation of the Water Framework Directive to promote integrated river basin management.

The OPW has developed a Catchment Flood Risk Assessment and Management (CFRAM) Programme which lies at the core of the assessment of flood risk and the long term planning of the flood risk management measures throughout the Country. This programme is being delivered through the CFRAM studies which are catchment-based studies focused on Areas of Potentially Significant Risk with detailed flood maps and flood risk management measures collated in Flood Risk Management Plans. Catchment Flood Risk and Assessment Management Studies will be prepared for the River Suir Catchments and the South East and South West River Basin Districts.

Policy ENV 12

It is the policy of the Council that flood risk be managed pro-actively at all stages in the planning process, by avoiding development in flood risk areas where possible and sustainable, and by reducing the causes of flooding to and from existing and future development.

Policy ENV 13

The Council will have regard to the policies and guidelines of the DoEHLG and OPW in floodplains and areas sensitive to flooding.

Objective ENV 3

It is an objective to identify and consider flood hazard and potential risk of flooding in development applications at the earliest stages in the planning process and require the preparation of a Flood Risk Assessment where necessary.

Objective ENV 4

It is an objective to continue to support the preparation of all CFRAM Studies applicable to the Town and incorporate measures to manage flood risk identified in these studies.

Objective ENV 5

It is an objective to include a Strategic Flood risk Assessment for the Development Plan.

Objective ENV 6

It is an objective to apply the sequential approach set out in the DoEHLG Guidance on Flood Risk to all future zoning of land for development.

Objective ENV 7

It is an objective to promote the use of SUDS in mitigating the effects of flood risk in both urban and rural areas subject to flood risk.

8.13 Coastal Zone Management

Dungarvan's coastline is a valuable natural resource providing a buffer for extreme weathers, an important wildlife area for a range of protected habitats and species, and a scenic landscape asset of tourism value. The coastal zone is generally taken as the area between Mean High Water Mark (MHWM) and the nearest continuous road. A growing body of evidence illustrates that rising sea levels, increasing storm frequency and wave energy will increase the rate of erosion, loss of habitats and incidence of flood-related events in vulnerable areas of the town's coast. The impacts of climate change may have wide reaching implications for the heritage and tourism value of the coastline. It is necessary that future management and development of coastal areas is carried out in a manner that protects coastal functions and values including natural coastal defence, habitat value and landscape/seascape character.

Integrated Coastal Zone Management seeks to achieve a more effective and sustainable use of coastal resources by involving all coastal users in planning for appropriate management of the coast. Baseline work has been carried out on the principle of Integrated Coastal Zone Management (ICZM) in the east

of the County and it is sought to apply the process to the Towns coastal zone with the support of all the relevant agencies and organisations.

Objectives for Coastal Protection

Objective CP 1

To explore the process of ICZM in the future management and sustainable development of the Town's Coastline.

Objective CP 2

To recognise the value of the Town's natural coastal defences and ensure their protection by sustainable means and with professional advice.

Objective CP 3

To protect the scenic value of the Coastal Zone through the town including landward and seaward views and continuous views along the Town's coastline and manage development so it will not materially detract from the visual amenity of the coast.

Objective CP 4

To facilitate appropriate public access to the coast and the sustainable development of coastal walkways including recognition of public rights of way.

Objective CP 5

To protect the designated shellfish waters in Dungarvan Bay.

8.14 Noise and Lighting Management

In today's modern world, particularly with the pace of development, the nuisance factors associated with both noise and light have increased. In part these can be minimised through appropriate design and by ensuring that developments are not making use of unnecessary lighting. In terms of development proposals the Planning Authority will require a lighting plan for developments indicating that while sufficient light is being incorporated for safety purposes, that it is properly directed. In addition developments that seek to make the best possible use of natural light are inherently more cost effective than those that are designed in such a fashion so as to require lighting during normal daylight hours. Impacts resulting from lighting and noise from sites should be minimised. A detailed study may be required prior to the commencement of development in sensitive

locations (e.g. adjacent dwelling houses, nursing home etc.) to outline probable impacts and mitigation measures.

Traffic using transport infrastructure can pollute clean air and surface drainage can pollute water bodies. Noise levels and exhaust fumes can intrude on the peace and quiet that residents and users of amenities should reasonably expect to enjoy. To address the noise impact of transport infrastructure, nominated authorities where relevant, are obliged to comply, and to secure compliance with Environmental Noise Regulations 2006 (SI 140), which transposes EU Directive 2002/49/EC. The Environmental Protection Agency (EPA) is the National supervisory body charged with advising on the implementation of the Directive and with ensuring National compliance. Noise nuisance caused by commercial or industrial or other sources will be addressed under noise nuisance legislation.

Objective ENV 8

It is the objective of the Council to prevent public noise and light nuisance through the regulation of industrial, construction and commercial activities.

8.15 The Natural Environment and Amenity**8.15.1 Introduction**

The conservation and management of heritage is directed by national legislation which supports a range of international conventions that have been ratified by the Government. The principal national legislation in relation to natural heritage is the Wildlife Act 1976, the Wildlife (Amendment) Act 2000 and Part XAB of the Planning and Development Acts 2000-2010. The European Communities (Natural Heritage) Regulations 1997 give effect to the requirements of the Birds and Habitats Directives including the requirement to designate Special Areas of Conservation and Special Protection Areas and the need for assessment of impacts on these sites from plans or projects by way of an appropriate assessment or Habitats Directive Assessment.

At a county level, the County Waterford Heritage Plan (2004-2010) has guided the conservation, research, enhancement and access to the archaeological, architectural, natural and cultural heritage of the county and much survey work commissioned under this plan has been used to inform heritage policy. The plan was prepared in fulfilment of the requirements of the National Heritage Plan which calls for the preparation of Local Heritage Plans at a county level.

A Local Biodiversity Action Plan (2008-2013) was published for County Waterford in 2008 and sets out the objectives for conservation of Biodiversity in the County in fulfilment of the requirements of the National Biodiversity Plan (2002). The aim of the Biodiversity Plan is to address information gaps in biodiversity and maintain and enhance biodiversity through a series of projects and through local authority policy and work programmes. Projects carried out under the plan such as habitat mapping will continue to inform the Dungarvan Development Plan.

Policy NH1

To support the implementation and review of the County Waterford Heritage Plan and Local Biodiversity Action Plan in partnership with all relevant stakeholders and subject to available resources.

Policy NH2

To conserve, manage and enhance the natural heritage, biodiversity, landscape and environment of Dungarvan in recognition of its importance as a non-renewable resource, unique identifier and character of the town and as a natural asset.

Policy NH3

To ensure as far as possible that development does not impact adversely on wildlife habitats and species, in the interests of sustainability, biodiversity should be conserved for the benefit of future generations.

8.16 Natura 2000 sites

Due to its location, Dungarvan supports a wide range of coastal habitats including, mudflats, sandflats, and salt marsh along with small areas of woodland and hedgerows. The value of these habitats is recognised in the designation of Dungarvan Harbour and part of the River Colligan as a Special Protection Area (SPA), proposed Natural Heritage Area (pNHA) and Ramsar Site.

The 1992 Habitats Directive places an obligation on member states of the EU to establish an EU wide network of special conservation sites including Special Protection Areas and Special Areas of Conservation. This network is known as Natura 2000. SPAs and candidate SACs are designated by the National Parks and Wildlife Service of the DoEHLG. Dungarvan Harbour is designated a Special Protection Area for its importance for the large number of many species of waterfowl that use it. The site regularly holds over 20,000 wintering waterfowl including light-bellied Brent Goose, Black-tailed

Godwit and Bar-tailed Godwit in numbers of international importance. The SPA designation is below the High Water Mark and includes the Cunnigar and the River Colligan upstream as far as Ballyneety Bridge.



Figure 1. Dungarvan Bay SPA



Figure 2. Natura 2000 network in Co. Waterford

8.17 Habitats Directive Assessment

Plans and projects proposed within or proximate to Special Areas of Conservation and Special Protection Areas are required to be assessed by a Habitats Directive Assessment or *Appropriate Assessment* to determine if the proposed development is environmentally sustainable and will not affect the integrity of the area or its habitats or the objectives of species conservation.

Where such plans or projects would affect the integrity of the site they will only be permitted where there is no alternative solution and there are imperative reasons of overriding public interest for the development or land-use change. Where the site concerned hosts a priority natural habitat type and/or a priority species, development or land use change will not be permitted unless it is necessary for imperative reasons of human health or public safety or for benefits of primary importance for the environment.

Annex IV of the Habitats Directive also provides for the protection of certain species wherever they occur within or without a Natura 2000 site. This includes all bat species, Otter and Killarney Fern.

Policy NH4

To conserve the favourable conservation status of species and habitats of conservation value within Dungarvan Harbour Special Protection Area.

Policy NH5

To undertake a Habitats Directive Assessment for plans and projects not directly connected with or necessary to the management of Dungarvan Harbour SPA and which are likely to have significant effects on the site individually or cumulatively.

Policy NH6

To protect species of conservation value and habitats of species of conservation value that require strict protection under the Habitats Regulations (S.I. no. 94 of 1997, 233 of 1998 and 378 of 2005) and species of conservation value and their habitats protected under the Wildlife Acts 1976-2000.

Policy NH7

To comply with Article 6 of the Habitats Directive at each level of the development planning process from Town Plan to project level to ensure that there is no significant adverse impact on the integrity of Natura 2000 sites and that the requirements of Articles 6(3) and 6(4) of the Habitats Directive are fully satisfied.

8.18 Natural Heritage Areas (NHAs)

Natural Heritage Areas are designated by the NPWS of the DoEHLG under the provisions of the Wildlife (Amendment) Act 2000 in recognition of nationally important habitats, species and sites of geological interest. Dungarvan Harbour is proposed as a Natural Heritage Area.

Policy NH8

To protect the conservation status of habitats and species within Dungarvan Harbour proposed NHA.

8.19 Local Sites of Biodiversity Value

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 provide environmental, social, economic and physical benefits and gives added value where integrated in the development process.

Many habitats that do not meet the criteria for designations as an NHA are still important on a local or county basis e.g. saltmarsh along the Railway walk, bridges that may provide for bat roosts. In order to inform this process Dungarvan Town Council supports ongoing surveys of key habitats and the development of a habitat map for Dungarvan.



Figure 3. Saltmarsh habitat along Railway Walk



Figure 4. Bridges can provide suitable roosts for bats

Article 10 of the EU Habitats Directive states that Member States shall endeavour in their land use planning and development policies to encourage the management of features of the landscape which are of major importance for wild flora and fauna. Such features are those which by virtue of their linear and continuous structures such as rivers and riverbanks or hedgerows or by virtue of their functions as stepping-stones such as ponds or small woods are essential for the migration, dispersal and genetic exchange of wild species.

Policy NH9

To encourage the retention and creation of sites of local biodiversity value, ecological corridors and networks that connect areas of high conservation value such as woodlands, hedgerows, earthbanks and wetlands.

Policy NH10

To encourage the retention and creation of green corridors within and between built up urban areas.

Policy NH11

To apply the precautionary principle in relation to development proposals in areas identified as being of nature conservation value by requiring an ecological assessment to ensure that development will not impact adversely on the integrity and habitat value of the site.

8.20 Wetlands

Wetlands are areas of marsh, fen, peatland or water whether natural or artificial, permanent or temporary, with water that is static or flowing. Wetlands provide habitats for communities of species that can survive in aquatic and semi-aquatic conditions. The Water Framework Directive and Ramsar Convention provide for the protection and wise use of Wetlands. Dungarvan Harbour is recognised as a wetland of international importance under the Ramsar Convention of 1971.

Dungarvan Harbour is a significant wetland in County Waterford as it attracts large populations of wintering waterfowl and is considered the 15th most important wetland site in Ireland and the second most important wetland in the South-East after Wexford Harbour. The site supports two species of internationally important numbers of Light Bellied Brent Goose and Black-tailed Godwit. The average number of Bar-tailed Godwits is close to the international threshold.

Policy NH12

To ensure that the habitats of Dungarvan harbour are maintained for their biodiversity and flood protection values.

Policy NH13

To protect wetland sites from infilling and other developments that may affect the biodiversity value of these sites.

Policy NH14

To consult with Inland Fisheries Ireland and NPWS on any development proposal concerning riparian areas and watercourses of conservation value and to take account of the requirements for the protection of fisheries habitat during construction and development works at river sites.

Policy NH15

To maintain good ecological status of wetlands and watercourses in support of the provisions of the Water Framework Directive and Ramsar Convention.

Policy NH16

To apply Programme of Measures assigned for local authorities under the South Eastern River Basin District Management Plan.

8.21 Hedgerows

Hedgerows are an important feature of our landscape providing wildlife habitats, attractive scenery and shelter in exposed areas. Hedgerows act as ecological corridors connecting habitats such as woodland and forest plantations. Hedgerows function as carbon sinks, pollution filters and sound barriers between busy roads and housing. It is the policy of Dungarvan Town Council to retain the natural roadside hedgerows as far as possible for the purposes of maintaining natural habitat, landscape character, and screening of new developments.

Policy NH17

To protect hedgerows in all new developments, particularly species rich roadside and townland boundary hedgerows.

Policy NH18

To adhere to the provisions of the Wildlife (Amendment) Act 2000 in prohibiting hedge cutting during the bird nesting season from March 1st to August 31st.

Policy NH19

To protect and preserve existing hedgerows and seek their replacement with new hedgerows with native species of local provenance where their removal is necessary during the course of road works or other works. There will be a presumption against the removal of hedgerows where there is a realistic alternative.

8.22 Trees

Trees are a valuable feature of the urban landscape for their amenity and wildlife value. Urban planting proposals will be supported where planting of deciduous trees will contribute to the biodiversity and amenity of the area. There is one existing urban woodland area in Dungarvan at Fr. Twomey's Road established under the Neighbourwood Scheme of the Forest Service. The Council will protect and preserve mature and semi-mature trees and will require new developments to be so designed as to integrate existing trees into new schemes. Sites with large mature trees need special care. Tree Surveys should be carried out by a professional qualified arborist and in accordance with BS 5837:2005. The Council will make Tree Preservation Orders as deemed necessary.

Objective NH1

To encourage the replanting and extension of tree cover within Dungarvan in order to ensure the preservation and enhancement of the arboreal landscape in the town.

Objective NH2

To protect and continue to develop the green area at Fr. Twomey's Road as a woodland amenity area.

Objective NH3

To identify suitable locations for developing as urban woodland amenity areas.

Objective NH4

To protect mature and semi-mature trees in new residential developments.

8.23 Invasive Species

Many species of flora and fauna have been introduced to Ireland and pose a serious threat to native vegetation, wildlife and their ecosystems. Problematic species in Waterford include Grey Squirrel and invasive plants such as Japanese Knotweed and Himalayan Balsam. Dungarvan Town Council will promote awareness of invasive species and their management, and work with other agencies to address the issue. A useful guidance document relating to the management of invasive species is the NRA publication *The Management of Noxious Weeds and Non-Native Invasive Plant Species on National Roads*.

Policy NH20

Where development is approved for sites containing known invasive species the planning authority will consider where appropriate the use of conditions for control and eradication of invasive species.

8.24 Coastal Zone Management

The coastal zone is generally taken as the area between Mean High Water Mark (MHW) and the nearest continuous road. A growing body of evidence illustrates that rising sea levels, increasing storm frequency and wave energy will increase the rate of erosion loss of habitats and incidence of flood related events in vulnerable areas of the Dungarvan. Coastal erosion is evident in the vicinity of Pinewood and along the stretch of coast between the Abbey and Lands End.

The Council recognises the need for a strategic approach to coastal protection. It is considered that management of the coastal resource in the form of coastal zone management policies and strategies is necessary to ensure that future development does not adversely impact on the coastal area.

Policy NH21

Restrict development in areas zoned as Coastal Amenity to provide for and improve coastal and riverside amenity including the conservation of areas of nature conservation value.

Policy NH22

Assess on an ongoing basis, the need for additional coastal protection works within the Dungarvan area.

Policy NH23

Seek funding to implement the recommendations of the Coastal Erosion Study undertaken at Lands End.

Policy NH24

Liaise with Waterford County Council in the preparation of a point Coastal Zone Management Strategy.

8.25 Public Open Space and Amenity

Adequate and accessible provision of open space for passive and active recreational activities is an important consideration in assessing the quality of life in a town or area. Over the lifetime of the previous plan there has been significant investment in the upgrading of the amenity areas. A children's playground has been provided at Fairlane and the amenity area at Walton Park has been completed.

8.26 Pedestrian links

It is the aim of the Council that any future areas of open space and amenity be based upon an interlinked linear corridor and system of open and green spaces integrating the coast and river areas with large areas of recreational open space wherever possible. It is considered there is potential to develop further the amenity area between Abbeyside Church and Abbeyside Football Pitch as an integrated open space leisure and amenity facility. This could be in association with the regeneration of the Beach and bathing area at Abbeyside. Opening up and developing this underutilised open-space would contribute significantly to the range and quality of open space and amenity facilities in the area and would encourage more frequent use of the local beach.

The Open Space and Amenity (OS) zoning indicating interlinked linear open space corridor at Monang, Parkatluggera, Clonanagh, Burgery, Abbeyside and Tournore is an indicative zoning only and may be altered to allow greater flexibility in achieving linear open space. Any proposal to alter the aforementioned OS will require the approval of the Planning Authority and shall comply with the following;

- a) Provide the same extent of open space
- b) The OS space provided shall link into adjoining areas of OS as designated in the plan

It is important to ensure that amenity areas and facilities are accessible to residential areas. This will include the provision of footpaths and pedestrian linkages through new residential areas to riverside and coastal walks. Integral to the open space system and corridors will be the facilitation and promotion of existing and new pedestrian linkages and walks e.g. the Dungarvan-Waterford Railway walk and the Ringasillogue.

8.27 Open Space in Residential Developments

The provision of open space in major new residential developments should facilitate both active and passive recreation. It should incorporate both hard and soft landscaping that can be used as safe play areas for smaller children, an area for active sporting activities for older children and a sheltered/landscaped area for passive recreation. It should also provide a landscape setting for the development that will enhance the network of open space provision in the town.

8.27.1 Active Recreational Areas

Provision for active sport and recreational facilities should form an integral part of any major development proposal. This may include the provision of tennis courts, basketball courts or hard surfaced play areas. In this regard the Council will encourage the adaptation of the Playground Marking Scheme for use in residential areas. Developers will be able to provide suitable areas with markings and the residents will be encouraged to liaise with Waterford Sports Partnership to receive advice and adequate training. This may also be possible in existing estates where a suitable area for the marking scheme can be provided within the development.

The Council shall apply the standards in relation to the provision of appropriate open space as set out in the Development Standards for this development plan. Such provision may include for the direct provision on or off site, or may provide (in limited circumstances) for a financial contribution in lieu of on site provision.

8.27.2 Playgrounds

Playgrounds are located in Walton Park, Strandside North and the Linear Park, Shandon.

Objective OP1

To preserve and enhance the unique natural setting of the town and structure future major general public open space provision on a hierarchical basis.

Objective OP2

To improve public access to coastal and riverside areas. Access development to and near Special Protection Areas will be subject to Habitats Directive assessment.

Objective OP3

To ensure that existing and proposed residential developments and amenity areas link effectively with each other through the provision of safe pedestrian links, footpaths and lighting.

Objective OP4

To require the provision of a hierarchy of open space both for active and passive recreational use in new residential developments.

Objective OP5

To encourage and facilitate private and public initiatives for improving the quality and capacity of sporting, amenity and recreational facilities, including the development of playground marking schemes in residential areas.

8.28 Geology

Geology is now recognised as an intrinsic component of natural heritage and it is appropriate that due regard is given to conservation of geological heritage features.

The Geological Survey of Ireland established the Irish Geological Heritage (IGH) programme in 1998 with the objective of identifying and selecting sites that best represent the geological heritage of Ireland for designation as Natural Heritage Areas. The IGH have identified Shandon Railway Cutting Cave as a County Geological Site of Interest in Dungarvan.

Policy NH 25

To protect sites recognised by the GSI for their Geological Heritage.

