## STRATEGIC ENVIRONMENTAL ASSESSMENT FOR THE WICKLOW TOWN AND ENVIRONS DEVELOPMENT PLAN 2013-2019

## SCOPING DOCUMENT

## INTRODUCTION

Wicklow County Council and Wicklow Town Council are in the process of preparing the 'Wicklow Town and Environs Development Plan 2013-2019'. The plan is being prepared under the provisions of the Planning and Development Act 2000 (as amended).

In accordance with Article 13B of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. 436 of 2004), a Strategic Environmental Assessment (SEA) is required to be carried out before the plan may be adopted. The SEA will play an integral part in the making of the plan.

This initial scoping document forms part of the statutory scoping process for the SEA under Article 13D of the Regulations and serves to inform stakeholders about the key environmental issues and elements of the plan.

## SCOPING

As per 13(D) of the SEA Regulations (2004), the planning authority is required to consult with specific 'environmental authorities' (statutory consultees) on the scope and level of detail of the information to be included in the Environmental Report. The main objective of scoping is to identify key issues of concern that should be addressed in the assessment of the plan and the appropriate level of detail to which they should be considered. The scoping exercise should answer the following questions:

- What are the relevant significant issues to be addressed by the SEA?
- Against what environmental objectives should the potential options be evaluated?

This scoping exercise includes a consideration of the following information that is required to be included in the SEA Environmental Report:

- An outline of the relationship of the Development Plan with other relevant plans;
- the relevant environmental characteristics of the plan area;
- any environmental problems which are relevant to the plan;
- development of draft SEA objectives;
- consideration of draft targets and indicators; and
- consideration of reasonable alternatives to be considered in the SEA.

The scope of the SEA will be reviewed following the evaluation of submissions, observations and comments received during the scoping process. An Environmental Report will then be issued for public consultation along with the Draft Plan. This will give the public the opportunity to comment on both the Draft Plan and the Environmental Report, prior to its adoption.

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## RELATIONSHIP OF DEVELOPMENT PLAN WITH OTHER RELEVANT PLANS AND POLICIES

As part of the SEA process, the context of the Wicklow Town and Environs Development Plan must be established with regard to other plans and policies that are in place at international, European, national, regional and local levels. In particular, the interaction of the environmental protection objectives and standards included within these plans and policies with the Development Plan requires consideration. A Draft Hierarchy of Plans and Policies in which the Wicklow Town and Environs Development Plan is placed in context is set out below.

## Draft Hierarchy of Plans and Policies

International/ EU Level
Water Framework Directive
Floods Directive
SEA Directive
Habitats Directive
Birds Directive
Freshwater Fish Directive
Drinking Water Directive
Bathing Water Directive
EIA Directive
Seveso Directive
Sewage Sludge in Agriculture Directive
Groundwater Directive
Urban Waste Water Treatment Directive
Shellfish Directive
Nitrates Directive
IPPC Directive
Plant Protection (Products) Directive
Waste Framework Directive
EU guidance documents, as appropriate
National Level
National Development Plan 2007-2013
National Spatial Strategy 2002-2020
National Climate Change Strategy 2007-2012
Government White Paper - Delivering a Sustainable Energy Future for Ireland
Guidelines for Planning Authorities, as appropriate
Sustainable Development - A Strategy for Ireland
Environmental Objectives (Surface Water Regulations) 2009
Planning and Development (Strategic Environmental Assessment) Regulations, 2004
European Communities Environmental Objectives (Groundwater) Regulations 2010
Waste Water Discharge (Authorisation) Regulations 2007
Water Services Act 2007
Bathing Water Quality Regulations 2008
Department of Transport 2020 Vision - Sustainable Travel and Transport (2009)
Water Quality in Ireland 2007-2008 - Key Indicators of the Aquatic Environment (EPA, 2009)
The Nature and Extent of Unauthorised Waste Activity in Ireland (EPA, 2005)
National Waste Report 2008 (EPA)
National Hazardous Waste management Plan 2008-2012 (EPA)
Ireland's Environment 2008 (EPA)
Implementation of the Regulations for Water Services Authorities for Public Water Supplies (EPA)
Guidelines on Information to be contained in Environmental Impact Statements (EPA 2002)

Advice Notes on Current Practice in the preparation of Environmental Impact Statements (EPA, 2003)

The Provision and Quality of Drinking Water in Ireland - A Report for the Years 2007-2008 (EPA)
EPA Drinking Water Guidance Booklets and Advice Notes
Urban Waste Water Discharges in Ireland for Population Equivalents Greater than 500 Persons A Report for the Years 2006 and 2007 (EPA)
Code of Practice: Wastewater and Treatment and Disposal Systems Serving Single Houses (EPA)
The Quality of Bathing Water in Ireland - A Report for the Year 2009 (EPA)
Air Quality in Ireland 2008- Key Indicators of Ambient Air Quality (EPA)
Environmental Impact Assessment (EIA) Guidance for consent Authorities regarding sub threshold development (DoEHLG, 2003)
The Status of EU Protected Habitats and Species in Ireland (NPWS, DoEHLG, 2008)
Inland Fisheries Ireland guidelines
National Roads Authority guidelines

## Regional Level

Eastern River Basin Management Plan, 2009-2015
Regional Planning Guidelines for the Greater Dublin Area 2010-2022
Retail Strategy for the GDA 2008-2016
Transport 21
Greater Dublin Area Draft Transport Strategy (National Transport Authority)
Local Level
Wicklow County Development Plan 2010-2016
Wicklow County Water Services Investment Programme, 2010-2012
County Wicklow Biodiversity Action Plan 2010-2016
County Wicklow Heritage Plan 2009-2014
Wicklow Town River Analysis (WCC/ Barry and Partners, 2004)
Wicklow Town Public Realm Plan (WCC/Heritage Council, 2008)
Outlook 2002-2012 Wicklow County Development Board Strategic Plan
The Murrough Coastal Protection Study (WCC/RPS, 2007)
Wicklow Urban Habitat Mapping ( WCC/Heritage Council, 2008)
Wicklow Town Shop Front Study (2010)
County Wicklow Outdoor Recreation Strategy 2009-2013
Wicklow County Waste Management Plan 2006-2011
Wicklow and Environs Integrated Framework Plan for Land Use and Transportation (IFPLUT), 2003

Project Level
Environmental Impact Assessments
Urban Wastewater Treatment System Licences
Discharge Licences
IPPC Licences
Planning Permissions
Waste Licences or Waste Facility Permits

## Scoping Question No. 1

Are there any other relevant International, National or Regional Plans, Policies or Programmes that should be considered?

## ENVIRONMENTAL BASELINE

A brief description of the current state of the environment of the Wicklow Town and Environs study area is included in the following sections of this document. The Environmental Report will expand on the existing information and contain a full description of the environmental baseline data within the area. A number of baseline maps of the receiving environment have been prepared using Geographical Information Systems (GIS). These maps provide a visual interpretation of the information set out describing the principal environmental issues for the plan area.

## PRELIMINARY BASELINE

The SEA Regulations (2004) require that the Environmental Report includes an assessment of the likely significant effects on the environment, including on environmental sensitivities such as flora, fauna and biodiversity, population, human health, water, soil, noise, air, climatic factors, material assets, cultural heritage, landscape and the interrelationship between these. A summary of the relevant issues are set out below.

## Flora, Fauna and Biodiversity

## EU Designated Sites

The study area includes four EU Natura 2000 sites (i.e. Special Areas of Conservation (SAC) ${ }^{2}$ and Special Protection Areas (SPA) ${ }^{3}$ sites). These include the Murrough Wetlands cSAC (Site Code 00249), Wicklow Reef cSAC (Site Code 002274), the Wicklow Head SPA (Site Code 004127) and the Murrough SPA (Site Code 004186). These sites are shown on Figure 1.

## National Designated Sites

Three proposed Natural Heritage Areas (pNHAs) ${ }^{4}$ have been designated for protection in the study area - Wicklow Head pNHA (Site Code 000734), The Murrough pNHA (Site Code 000730) and Wicklow Town pNHA (Site Code 001929). The Wicklow Town pNHA comprises two sub-sites - the Leitrim River Sub-Site and the Blackcastle Sub-site, each of which contains rare plants protected under the Flora Protection Order 1987. These sites are shown on Figure 2.

## Wicklow Urban Habitat Mapping

The 'Wicklow Urban Habitat Mapping' project was undertaken in 2008 for the urban area of Wicklow town. The project identifies locally important biodiversity areas, including public parks, areas of railway embankments, and numerous agricultural fields with associated hedgerow systems and small areas of woodland along roadsides and streams. These sites are of medium to high conservation value and provide important corridors to link green spaces, further contributing to the enhancement of biodiversity within the town. Sites identified as urban habitats under the Wicklow Urban Habitat Mapping project are shown on Figure 3.

## Tree Protection

The Wicklow County Development Plan (CDP) 2010-2016 includes objectives relating to the protection of trees that have Tree Protection Orders (TPOs) and trees/ groups of trees that are

[^1]considered for preservation. In addition, the Wicklow Town Development Plan, 2007 includes an objective for the preservation of trees at Church Hill and the River Leitrim River bank, and Action Area 6 LAP, 2006 includes an objective for the protection of trees at Marlton Valley. Trees that are designated for protection are indicated on Figure 4.

## CORINE Land Mapping

CORINE land cover mapping for the study area is shown on Figure 5. This mapping classifies land cover under various land cover types.

Invasive Species
The National Invasive Species Database has been developed through the National Biodiversity Data Centre as a resource to assist recording, monitoring and surveillance programmes, and provides the infrastructure for development of an early warning system for invasive species. The database includes distribution information for a number of invasive species in the Wicklow Town and Environs area that pose a threat to local biodiversity and may have negative impacts on the economy and on human health and lifestyle. Relevant invasive plants include (but are not limited to); Japanese knotweed (Fallopia japonica), Giant rhubarb (Gunnera tinctoria), Travellers joy (Clematis vitalba), Sea buckthorn (Hippophae rhamnoides), and Hottentot fig (Carpbotus edulis).

## Population and Human Health

## Population

The census for 2006 showed that the population of the Wicklow area was 11,919 (comprising 6,930 in Wicklow Urban area, 3,140 in Wicklow Environs and 1,849 in Rathnew). The Wicklow County Settlement Hierarchy includes targets for the future growth of the area. The Hierarchy indicates that the Wicklow/Rathnew settlement is to grow to 19,000 by 2016 and 24,000 by 2022.

The Wicklow Town and Environs Plan will ensure that infrastructure and services are provided for the needs of projected growth arising from both within and outside the study boundary. Regard will be paid to needs of populations that reside outside the study area but which depend on services provided within the study area, including community, recreational, education, retail, employment and public transportation facilities. In addition, the plan will provide for tourists and their infrastructure and service needs.

## Human Health

With regard to human health, impacts relevant to the SEA are those which arise as a result of interactions with environmental vectors (i.e. environmental components such as air, water or soil through which contaminants or pollutants, which have the potential to cause harm, can be transported so that they come into contact with human beings).

## Water

## Drinking Water

The 'Wicklow Water Supply Scheme’ supplies drinking water to the area of Ashford, Rathnew and Wicklow Town and its environs. Water to the area is supplied from the Cronroe Water Treatment Plant and Reservoir in Ashford, where water, abstracted from the Vartry River at Annagolan, is treated and mixed with treated water from the Dublin Regional Supply at Vartry Reservoir in Roundwood. Water from Cronroe is distributed throughout the plan area via a number of intermediary storage reservoirs, including Broomhall, Seacrest, Ballynerrin and Greenhills.

Pending the completion of a new pipeline from the Vartry supply to the Cronroe Reservoir by 2013, the town will have sufficient water supply to meet the needs of projected population growth. Notwithstanding the available supply of water, the ability to supply all lands within the environs boundary is restricted, mainly due to the lack of a high level reservoir, and also to requirements regarding the upgrade and rationalisation of existing systems.

## Wastewater

The Wicklow Sewerage Scheme came into operation in 2010, serving the settlements of Ashford, Rathnew and Wicklow. The Wastewater Treatment Plant has a capacity of 34,000 PE (population equivalent) and is located at Knockrobin Murrough. The operation of the scheme involves the collection of wastewater from the area at the Murrough Pumping Station, near the harbour, where the wastewater undergoes preliminary treatment. The screened wastewater is then pumped to the Knockrobin Wastewater Treatment Plant, where secondary treatment is undertaken along with the removal and treatment of sludge. Treated effluent is returned to the Murrough Pumping Station where it is discharged to the sea through a long sea outfall pipe.

## Water Quality

The plan area falls within the catchment of the Eastern River Basin District (ERBD) and as such, much information regarding environmental baseline considerations, particularly water issues, can be taken from the Eastern River Basin Management Plan (RBMP) ${ }^{5}$ as well as its accompanying SEA. The Eastern RBMP takes into account lakes, rivers, groundwater, transitional and coastal waters. Information on the status and pressures on water bodies can be derived from the ERBD data base. It should be noted that a substantial amount of the plan area is classified as being an area that floods directly into the sea, and as such is not part of the Water Management Unit.

The following water bodies are of relevance to the plan area:

- The Potters Water Management Unit (WMU) includes the Three Mile Water river water body, which is of 'good' ecological status. The RBMP includes an objective for the Potters WMU to achieve a 'good' ecological status by 2021.
- Rathnew WMU includes the following water bodies:
- Rathnew Lower water body, which is of 'moderate' ecological status.
- Rathnew Upper water body, which is of 'moderate' ecological status.
- Ballinalea water body, which is of 'moderate' ecological status.

The RBMP includes an objective for the Rathnew WMU to achieve a 'good' status by 2027.

- Vartry WMU includes the Vartry Lower water body, which is of 'moderate' ecological status. The RBMP includes an objective for the Vartry WMU to achieve a 'good' ecological status by 2021.
- The 'Southwestern Irish Sea-Killiney Bay (HA10)' coastal water body - this water body is of 'high' ecological status, and the objective is for it to maintain its status.
- The 'Broad Lough' transitional water body ${ }^{6}$ - this water body is of 'moderate' ecological status, and the objective, as set out in the RBMP, is for it to achieve a 'good' status by 2021.

[^2]- the 'Wicklow East' groundwater body - this water body is of 'good' ecological status, and the objective is for it to maintain its status.

Information on the water quality of the area is indicated in Figures 6, 7 and 8.

## Flooding

To comply with the EU Floods Directive introduced in November 2007, and in line with the Guidelines for Planning Authorities 'The Planning System and Flood Risk Management', an assessment of flood risk will be undertaken as part of the preparation of the new Development Plan. In accordance with the guidelines, the preparation the plan is to incorporate an approach that aims to avoid development in areas at risk of flooding, and where development on floodplains cannot be avoided, to take a sequential approach to flood risk management based on avoidance, reduction and mitigation of risk.

Review of the Office of Public Works (OPW) National Flood Hazard mapping and flood risk policies will aid in establishing the impacts and management concerns for the Development Plan. OPW flood maps indicate three records of flooding in the study area, at Marlton Stream, Burkeen Stream and Rathnew. These flood risk points are indicated on Figure 9.

In addition, the plan preparation process will have regard to the 'Wicklow Town River Analysis' that was undertaken by Barry and Partners in 2004. The study involved calculating the capacity of three streams, the Rathnew, Burkeen and Marlton Streams, to determine the impact of existing and future levels of urban development and to provide an analysis of the potential for flooding in their lower reaches. Mathematical modeling was used to determine what works are required to provide adequate capacity in the streams to cater for the 100-year design flow for the scheme.

## Soil

Figure 10 indicates the spatial distribution of soils in the study area. The distribution and type of soils influences the diversity, flora and fauna of the area, as well as the type and extent of agricultural land uses.

## Noise

Noise can have a significant effect on the environment and on the quality of life enjoyed by individuals and communities. There is a need to minimize the adverse impact of noise without placing unreasonable restrictions on development.

## Air

At present, there is a localised effect upon air quality in the town centre area due to traffic emissions. In general, potential concerns in terms of air quality, either from traffic or industrial activities, are greatly reduced by Wicklow Town's coastal location. The attendant sea winds and air movements generally result in the dispersal of emissions in the town.

EPA air quality data indicates that the Wicklow area is located in Air Quality Zone D (Rural Ireland) and has no restrictions on the sale of coal.

Air quality in the general study area is not considered to be a significant issue.

## Radon

Radon is a radioactive gas that can be damaging to peoples' health. The plan area is within an area that has a high to medium prevalence of radon. The Radiological Protection Institute of Ireland (RPII) is responsible for the regulation and licensing of radiation matters. Building

Regulations, 1997 - Technical Guidance Document C provides guidance of the management of radon during the building process.

## Climatic Factors

Global climate change is now a recognised phenomenon of our times. The EPA's Climate Change: Regional Climate Model Predictions for Ireland (2005) report provides an analysis of future Irish climate conditions for the period 2021-2060 based on the outputs from a new regional climate modelling facility located in Met Eireann. Projected temperature changes from the model output show a general warming in the future period with mean monthly temperatures increasing typically between 1.25 and 1.5 degrees celcius. In addition, it is predicted that the intensity of rain falls is likely to increase. Such changes in weather patterns are likely to result in effects such as increased likelihood and magnitude of river and coastal flooding, water shortages in the summer, negative impacts on water quality, changes in the distribution of species, and effects on fisheries that are sensitive to small changes in temperature.

Towns along the coast will also become increasingly vulnerable to the effects of climate change in terms of factors such as rises in sea levels and coastal erosion.

## Coastal Protection

In 2007 a coastal protection study was undertaken for the Murrough area, extending the coastal stretch from Wicklow Harbour to Five Mile Point. The study predicts that coastal erosion is predicted to occur at a distance of between 15 and 30 metres by 2050 and recommends the installation of a rock revetment and breakwaters in order to protect the coast and to provide a beach for recreational activity. Figure 11 indicates the predicted erosion line in 2050.

## Material Assets

In general, the provision of water and wastewater services, solid waste disposal and the capacity of the existing facilities to accommodate any proposed development will be addressed as part of the SEA. Information on economics and infrastructure, including rail, road, water supply, wastewater treatment etc., will be compiled as relevant, as part of the material assets baseline. References will also be made to documents such as discharge licenses as appropriate, to the 'Wicklow County Council Water Services Investment Programme 2010-2012' and to 'Wicklow and Environs Integrated Framework Plan for Land Use and Transportation (IFPLUT), 2003'.

## Cultural Heritage

## Record of Protected Structures

The plan area includes a number of structures that are included on the Record of Protected Structures (RPS) of the Wicklow CDP, 2010 and Wicklow Town Development Plan, 2007. These structures are included on Figures 12 and 13.

## National Inventory of Archaeological Heritage

Regard will be paid to the surveys of the National Inventory of Architectural Heritage. Features identified in the survey are included in Figure 14.

## Architectural Conservation Area

An Architectural Conservation Area (ACA) is included in the Wicklow Town Development Plan 2007, extending along Main Street from Fitzwilliam Square to Market Square. The Town Centre ACA has been designated based on its architectural, historical and cultural importance.

Objectives are included for the protection of the special character and interest of the area. The Wicklow Town ACA is indicated on Figure 15.

## Zone of Archaeological Potential

The Wicklow Town Development Plan, 2007 includes a 'Zone of Archaeological Potential' within which archaeological remains are to be protected and preserved. The Zone of Archaeological Potential is indicated on Figure 15.

## Record of Monuments and Places (RMP)

The Record of Monuments and Places (RMP) includes a list of monuments and places that are protected under the National Monuments Act 1994 (as amended). These are indicated on Figure 16.

## Public Realm

The following guidance documents aim to protect and enhance the physical features that contribute to the town's special character and setting:

- 'Wicklow Town Public Realm Plan' (2008) includes proposals for a series of initiatives for the improvement of the town's natural and urban public spaces and landmarks.
- 'Wicklow Town - A Gallery of Shopfronts' (2010) includes an inventory and guidance notes for the repair and renewal of shopfronts in the town centre.


## Landscape

## Landscape Characterisation Assessment

The Wicklow CDP 2010-2016 Landscape Characterisation Assessment classified landscapes in Wicklow according to their sensitivity. The landscape of the plan area is within the 'urban' area, which is a designation of low vulnerability. The Landscape Characterisation Assessment is indicated in Figure 17.

## Coastal Zone Management

The Wicklow CDP 2010-2016 Coastal Zone Management objectives set out objectives for the proper planning and development of cells along the coast. Cell 7 'Wicklow Town and Environs' comprises lands within the boundaries of Wicklow Town Council and the environs area, as defined by the 'Wicklow Environs and Rathnew LAP 2008'. Objectives in the CDP aim to (i) support the coastal protection and development objectives of the area, (ii) restrict development that may adversely impact on the integrity of The Murrough cSAC, (iii) facilitate the development of visitor and recreational facilities, (iv) support investigations into alternatives for the development of Wicklow port, and (v) retain Wicklow Golf Club at its present location and preserve the open character of this area.
Cell 6 'Kilcoole - Wicklow Town’ and Cell 8 'Wicklow Head/Kilpoole’ adjoin the northern and southern boundaries of Cell 7.

The coastal cells are indicated in Figure 18.

## Listed Views and Prospects

The Wicklow CDP 2010-2016 includes a list of prospects that are designated for protection. The following are located within the study area:

- Listed Prospect no.31: prospect from 'R750 Wicklow to Arklow' to 'Prospect towards sea from coast road'.
- Listed Prospect no.29: prospect from 'N11 south of Rathnew' to 'Murrough and sea'
- Listed prospect no.30: prospect from 'N11 Ballinabarney' to 'Hawkstown Hill'
- Listed prospect no. 7: prospect from 'Railway from Greystones to Wicklow town' to 'coast along railway line'.

The 'Wicklow Town Development Plan 2007' includes an objective to protect five listed views. Three views are from the Dunbur Road and two are from the edge of the Blackcastle area. Policy NE7 requires the 'protection of listed views from inappropriate development or obstruction from public access'.

Listed views and prospects are indicated on Figure 19.

## Scoping Question No. 2

Are there any other significant information sources that should be considered?

## EXISTING ENVIRONMENTAL PRESSURES

Any development arising from the implementation of the Development Plan will place increased pressure on existing infrastructure. In particular, adequate and appropriate water supply, wastewater treatment, surface and storm water drainage, transport, waste management, community services and amenities etc., will need to be planned and phased to address any current problems or deficits and to reflect any changes in population.

Some of the most significant environmental issues that are currently affecting the area are outlined in the following sections:

## Water Quality

Problems with regard to water quality have the potential for a significant adverse impact upon biodiversity and flora and fauna, drinking water supplies and human health. All water bodies rivers, transitional and coastal - within the study area have been classified as being at risk of failing to achieve a 'good' ecological status, as required by the WFD's objectives, by 2015. The area's groundwater has been classified as being at probable risk of not achieving a good status by 2015.

The pressures on the Rathnew WMU are mainly from wastewater and industrial discharges, with a limited amount of pressure attributed to agriculture. Pressures on the Potters WMU and Vartry WMU are from a range of pressures including agriculture and wastewater/ industrial discharges, with a lesser degree of pressure caused by uses such as unsewered properties and forestry. In all Water Management Units, considerable pressure arises from abstractions and physical modifications. Pressures on the Southwestern Irish Sea-Killiney Bay coastal water body and Broad Lough are mainly from wastewater and industrial discharges, with agriculture, dangerous substances and landfills accounting for a lesser degree of pressure. Pressures on the Wicklow East ground water body are equally from agriculture and wastewater/ unsewered properties.

Regard will be paid to ensuring the protection of all areas that are designated on the WFD register of 'protected areas' which are relevant to the study area, including Vartry (River) salmonid waters, Vartry (River) Protected Drinking water area, Wicklow East (protected groundwater drinking supply), and all NHAs, SPAs and SACs.

Provisions will be made in the plan for the incorporation of the specific objectives and measures set out in Eastern River Basin Management Plan (RBMP) and associated Programme of Measures (POM) as appropriate.

## Water Supply

There is sufficient water supply to provide for the future growth of the town. Notwithstanding the available supply, future growth and development may be constrained, for the most part by the lack of a high level reservoir, which is required in order to service high level lands in the area.

## Wastewater

The Wicklow Wastewater Treatment Plant is located at Knockrobin, which is in close proximity to the Murrough SPA and the Murrough Wetlands SAC. The SEA process will consider options with regard to reducing, offsetting and avoiding any potential impacts that may result from the proximity of conflicting land uses, while the Appropriate Assessment process will aim to ensure that there is no adverse impact on a Natura 2000 site.

It should be noted that any potential environmental effect is mitigated by the compliance of the Wicklow Sewerage Scheme with the Urban Wastewater Directive. All treated effluent is discharged at a standard that complies with the requirements of the Urban Wastewater Directive.

## Flood Risk

The main sources of flooding in the area include the Burkeen Stream, Rathnew Stream and Marlton Stream. As Wicklow is situated close to the sea, the town is also subject to potential coastal and tidal flooding. In order to manage flood risk, an assessment of flood risk will be undertaken in accordance with the 'Guidelines for the Planning System and Flood Risk Management' (DoEHLG, 2009). Significant detrimental environmental effects on flooding can include soil erosion, land sliding, damage to vegetation as well as the impacts on water quality, habitats and flora and fauna and other pollutants carried by flood water. In addition, the damage from flooding can cause damage to properties, businesses and infrastructure, and in extreme cases physical injury, illness and loss of life.

## Traffic

In recent years population growth and increasing residential development has placed additional pressure on the existing road network. The recent opening of the Wicklow Port Access Route has made a significant contribution in removing unnecessary through-traffic between the N11 and port from the town centre.

Of particular concern is the dominance of north-south accessibility and the relatively poor provision for east west movement to support this, particularly at the south of the town between the coastal road towards the south of the town and the key links that lead between the town centre and N11.

The current Wicklow Environs and Rathnew LAP includes a number of objectives relating to the construction and upgrade of the town's road infrastructure. The delivery of this infrastructure is important for the achievement of a sustainable travel and land use pattern around the town and its environs.

Improvements in public transport infrastructure are also required with increased emphasis being placed on sustainable modes of transport. Increases in traffic as a result of development may also result in air quality and climatic impacts.

## Environmental Designations

The plan will provide for the future population growth of the Wicklow and environs area. Any increase in population may result in pressure on the existing environmental designations in the study area. The SEA process will consider potential threats to these sites and will ensure that
these are avoided, reduced or offset. In addition, the Appropriate Assessment process will ensure the removal of any potential detrimental effects on Natura 2000 sites. Potential threats to designated sites include pollution, recreation, farming, drainage, reclamation and afforestation.

## Scoping Question No. 3

Are there any other existing environmental pressures which should be considered?

## FRAMEWORK FOR ASSESSING ENVIRONMENTAL EFFECTS

The table below sets out the Draft SEA Objectives that are being considered to test the Wicklow Town and Environs Development Plan. These objectives are based on the current understanding of the key environmental issues identified. The Detailed Assessment Criteria are examples of the issues that will be considered during the assessment of whether the individual objectives and policies of the Wicklow Town and Environs Development Plan, including proposed alternatives, are meeting the proposed SEA Objectives. It should be noted that these are draft objectives only and will be refined or developed further during the study.

## Draft SEA Objectives

| SEA Topics | Draft Objective | Detailed Assessment Criteria |
| :---: | :---: | :---: |
| Biodiversity, Flora and Fauna | Maintain and enhance biodiversity. | - Conserve protected habitats and species. <br> - Ensure compliance with Habitats Directive with regard to the protection of Natura 2000 sites. <br> - Protect the diversity of habitats and species in non-designated sites. <br> - Protect against invasive species. |
| Population, Human Health | Improve people's quality of life by providing a highquality residential, working and recreational environment, and through the achievement of good quality health. | - Protect human health from hazards or nuisances arising from exposure to incompatible land uses. <br> - Increase modal shift to public transport, walking and cycling. <br> - Improve access to recreation and community facilities. <br> - Reduce pollution <br> - Improve access for mobility impaired. |
| Soil | Maintain the quality of soils. | - Maximise the sustainable re-use of brownfield sites and maximise the use of the existing built environment. |
| Water | Prevent any deterioration in the status of water bodies and achieve the status objectives as set out in the Water Framework Directive. <br> Address flood risk by implementing the Planning Guidelines on the Planning System and Flood Risk Management, | - Maintain and improve the Biotic Quality Rating (Q value) of water bodies - achieve 'good' status is surface water bodies by 2015. <br> - Ensure sustainable levels of abstraction from surface and groundwater. <br> - Promote sustainable use of water and water conservation. <br> - Promote sustainable drainage practices including the implementation of SUDS. <br> - Prevent point source pollution. <br> - Upgrade water services infrastructure |


|  | 2009. | - Protect WFD register of 'protected areas'. <br> - Mitigate the effect of flooding through the incorporation of a risk-based sequential approach to the management of flood risk, in adherence with the Planning Guidelines on flood risk management. |
| :---: | :---: | :---: |
| Climatic Factors, Air | Reduce air pollution and coastal erosion, and control greenhouse gas emissions. | - Reduce coastal erosion. <br> - Minimise greenhouse gas emissions to meet National and International standards. <br> - Building Energy Regulations (Part L) <br> - Promote energy conservation and use of renewable energy systems. <br> - Promote sustainable transportation patterns. |
| Cultural Heritage | Promote the protection and where appropriate, conservation, of cultural heritage, including architectural and archaeological heritage. | - Protect and preserve features of special interest as included in the RPS, RMP and ACA. <br> - Improve protection for the Zone of Archaeological Potential and for undiscovered archaeology. <br> - Protect and enhance physical features and areas that contribute to the town's special character and setting. <br> - Encourage appropriate re-use of the traditional or historic building stock <br> - Enhance access to sites of heritage interest |
| Landscape | Protect and enhance valued natural and built landscapes and features within them. | - Comply with the objectives as set out in the Wicklow County Landscape Assessment. <br> - Protect listed views and prospects. <br> - Maintain clear urban/rural distinction <br> - Enhance provision of, and access to, green space in urban areas |
| Material Assets | Maximise the use of existing infrastructure and plan for future needs. | - Ensure provision of water services to serve existing and new communities - upgrade of existing infrastructure in line with Water Services Investment Programme 2010-2012. <br> - Ensure provision of sustainable transportation infrastructure which reduces the need for car borne travel and reduces journey length. <br> - Promote sustainable waste management practices. <br> - Provide for the development of effective energy and communications infrastructure. |

## Scoping Question No. 4

What are the environmental protection objectives that are relevant to the plan?

## DRAFT TARGETS AND INDICATORS

Targets will be considered over the duration of the baseline data collection and assessment, and through the consultation process, in order to meet the strategic environmental objectives of the Development Plan. The indicators will be selected bearing in mind the availability of data and the feasibility of making direct links between any changes in the environment and the implementation
of the Development Plan. Following the adoption of the plan, the targets and indicators will be used to monitor the consequences of implementing the plan. Wherever possible, quantitative indicators will be used.

## Scoping Question No. 5

What types of indicators or data would be appropriate and practicable to use in the measurement of links between changes in the environment and the implementation of the Wicklow Town and Environs Development Plan?

## CONSIDERATION OF OPTIONS AND ALTERNATIVES

The SEA Directive requires the Environmental Report to 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. Alternatives are required to be realistic and capable of implementation, and should represent a range of different approaches within the statutory and operational requirements of the particular plan. Sometimes the preferred strategy will combine elements from the various alternatives considered. A range of alternatives can be considered and could for example, include the following:

- Phasing - introduction of phasing options for the development of land versus unrestricted development. Phasing options could be considered having regard to infrastructural constraints, including provision of water services and roads infrastructure.
- Review of zoning options - consideration of options for re-zoning and de-zoning of land, in light of needs assessment for the accommodation of projected growth levels.
- Environmental designations - consideration of alternatives for the achievement of the best protection of designated environmental sites.
- Density - High density/mixed development in town centre and proximity to public transport nodes versus low density in all areas.
- 'Do Nothing' scenario may be examined, not as an alternative scenario, but to examine the evolution of Wicklow and its environs in the absence of the plan and to highlight the benefits of the preferred option or scenario.


## Scoping Question No. 6

What different alternatives should be considered of how to achieve the overall strategy?






















[^0]:    ${ }^{1}$ The statutory consultees are established within the 2004 SEA Guidelines as being the Environmental Protection Agency, the Department of Environment, Community and Local Government, the Department of Arts, Heritage and the Gaeltacht and the Department of Communications, Energy and Natural Resources.

[^1]:    ${ }^{2}$ Special Areas of Conservation (SACs) are sites designated under EC Directive 92/42/EEC known as the 'Habitats Directive'. This requires the conservation of important, rare or threatened habitats and species (not birds, which are protected by Special Protection Areas) across Europe.
    ${ }^{3}$ Special Protection Areas (SPAs) are sites designated under the EC Directive 79/409/EEC, known as the 'Birds Directive', to conserve the habitats of certain migratory or rare birds.
    ${ }^{4}$ All Natural Heritage Areas (NHAs) in County Wicklow are 'proposed' and are protected through the planning legislation and the Wildlife Acts.

[^2]:    ${ }^{5}$ The Eastern River Basin District Management Plan 2009-2015 is a plan for the implementation of the EU Water Framework Directive, which commits all member states to preventing deterioration and achieving at least good status in our rivers, lakes, estuaries, coastal and ground waters by the year 2015. The Plan describes the actions that are proposed to ensure the necessary protection of waters over the coming years. It sets out how the aims and objectives of improving and protecting water quality and ecology in the waters of each river basin district could be achieved, by means of a Programme of Measures.
    ${ }^{6}$ Transitional waters are bodies of surface water in the vicinity of river mouths which are partly saline in character as a result of their proximity to coastal waters but which are substantially influenced by freshwater flows.

