

CHAPTER 17

NATURAL ENVIRONMENT

17.1 Introduction

The 'natural environment' encompasses all living and non-living things occurring naturally and are not primarily or solely of human creation, in contrast to the 'built environment'. However, it is impossible to separate the natural environment from human beings as most natural environments have been directly or indirectly influenced by humans at some period in time. Therefore some level of human influence is thus allowable, without the status of any particular landscape ceasing to be "natural".

Wicklow supports a good diversity of natural and semi natural habitats such as marine, coastal, wetland, woodland, lake, river and upland environments that in turn support a wide range of wild plant and animal species. This biodiversity provides intrinsic economic and social benefits for the County and contributes greatly to quality of life, recreational, amenity and tourism value. The conservation and management of the natural environment must be viewed as a central element in the long-term economic and social development of the County. The Council has an important role to play when it comes to promoting a reasonable balance between conservation measures and development needs, in order to avoid negative impacts upon the natural environment, mitigate the effects of harm where it cannot be avoided, and to promote the appropriate enhancement of the natural environment as an integral part of any development. The County Wicklow Heritage Plan provides one framework through which the Council works actively with other partner organisations on initiatives to further our understanding, protection and appreciation of Wicklow's natural heritage resource.

This chapter will also address landscape issues not specifically related to nature conservation, such as landscape characterisation and identification of views and prospects worthy of protection. The recreational use of the natural environment will also be addressed.

Strategy

- To avoid negative impacts upon the natural environment;
- To promote appropriate enhancement of the natural environment as an integral part of any development;
- To mitigate the effects of harm where it cannot be avoided;
- To promote a reasonable balance between conservation measures and development needs in the interests of promoting the orderly and sustainable development of Wicklow.

17.2 Context

17.2.1 Planning & Development Act 2000 (as amended)

The Planning & Development Act requires that a development plan includes objectives for:

"The preservation of the character of the landscape where, and the extent that, in the opinion of the Planning Authority, the proper planning and sustainable development of the area requires it, including the preservation of views and prospects and the amenities of places and features of natural beauty or interest", and

"The conservation and protection of the environment including, in particular the archaeological and natural heritage and the conservation of European sites and any other sites which may be prescribed."

17.2.2 EU Habitats Directive

The Habitats Directive (together with the Birds Directive) is the principle source of legislation for nature conservation policy. It is built around two pillars: the Natura 2000 network of protected sites and the strict system of species protection. The Directive protects over 1,000 animals and plant species and over 200 "habitat types" (e.g. special types of forests, meadows, wetlands, etc.) which are of European importance.

17.2.3 Water Framework Directive 2000 & Groundwater Directive 2006

The EU Water Framework Directive is an important piece of EU environmental legislation which aims at improving our aquatic environment. It requires governments to take a new holistic approach to managing their waters. It applies to rivers, lakes, groundwater, estuaries and coastal waters. The Groundwater Directive complements the WFD by establishing environmental objectives for groundwater chemical status and ensuring continuity with previous Groundwater Directives. These directives aim to achieve good ecological status in all waters by 2015, protect high ecological status in our pristine waters and must ensure that status does not deteriorate in any waters. Local Authorities are charged with implementing the Water Framework and Groundwater Directive objectives.

For the purpose of implementing the WFD, Ireland has been divided into eight river basin districts or areas of land that are drained by a large river or number of rivers and the adjacent estuarine / coastal areas. The management of water resources will be on these river basin districts. The Plan area is located in both the Eastern River Basin District (ERBD) and South Eastern River Basin District (SERBD). Within each River Basin District - for the purpose of assessment, reporting and management - water has been divided into groundwater, rivers, lakes, estuarine waters and coastal waters which are in turn divided into specific, clearly defined water bodies. River Basin Management Plans list the current status of our waters and detail the measures required to bring those failing back to good status and maintain the high status of our pristine sites.

Twenty-seven Draft Management Plans for the Freshwater Pearl Mussel have also been prepared, the objective of which is to restore the freshwater pearl mussel populations in 27 rivers, or stretches of rivers that are within the boundaries of Special Areas of Conservation. The Derreen Sub-Basin Management Plan is partially located in County Wicklow, the Derreen being a tributary of the River Slaney.

17.2.4 National Biodiversity Plan

Biodiversity – or biological diversity - is the term given to the variety of life on earth. It includes the habitats and ecosystems, which support this life and how life-forms interact with each other and the rest of the environment. Biodiversity covers plants, animals and micro-organisms both on land and in water. It relates to both wildlife and domesticated crops and animals. The biological diversity we see today is the result of millions of years of evolution. Ireland's national policy is set out in the National Biodiversity Plan. The Plan contains 91 Actions aimed at securing the conservation and sustainable use of biodiversity in Ireland, and where possible its enhancement, and also to contribute to the conservation and sustainable use of biodiversity globally

17.3 Biodiversity

The conservation and enhancement of biodiversity will require the suitable and sustainable protection of designated habitats, the linkages between natural sites (whether they are natural or man-made) and the range of species in the ecosystem.

County Wicklow has a rich and diverse natural landscape containing such habitats as upland bog and heath, fen, woodland, hedgerows, rivers, lakes, cliffs, dunes and coastal areas, many of which are recognised as being of local, national and EU importance, and many are designated for protection /

preservation under national and/or EU legislation¹. County Wicklow has one National Park, 14 Special Areas of Conservation (SAC), 34 (proposed) Natural Heritage Areas (NHAs), 4 Special Protection Areas (SPA), and 6 Nature Reserves (as set out in Schedules 17.1 – 17.4 and Maps 17.01 - 17.04 (Volume 2) of this plan.

There are many habitats that do not have the benefit of specific protection at a local, national or EU level, but which are still valuable as they, together with the designated sites, form a network of interlinked areas, which allow wildlife to exist, move and flourish.

Objectives

- BD1** To produce a Local Biodiversity Action Plan (in accordance with the objectives of National Biodiversity Plan 2002), identifying species and habitats of importance at a County level, and identifying and promoting appropriate action for the conservation and management of these.
- BD2** To ensure that the impact of new developments on bio-diversity is minimised and require measures for the protection and enhancement of bio-diversity in all proposals for large developments.
- BD3** To maintain the favourable conservation status of existing and future Natura 2000 sites (SACs and SPA's) and Annex I-*Habitats* and Annex II-*Animal and Plant* species in the County.
- BD4** Any programme, plan or project carried out on foot of this development plan, including any variation thereof, with the potential to impact upon a Natura 2000 site(s) shall be subject to an Appropriate Assessment in accordance with Article 6(3) of the EU Habitats Directive 1992 and "*Appropriate Assessment of plans and projects in Ireland-Guidance for Planning Authorities*" (DoEHLG 2009).
- BD5** To maintain the conservation value of all proposed and future Natural Heritage Areas (NHAs) in Wicklow.
- BD6** The Council recognises the natural heritage and amenity value of the Wicklow Mountains National Park and shall consult at all times with National Park management regarding any developments likely to impact upon the conservation value of the park, or on issues regarding visitor areas.
- BD7** To protect non-designated sites from inappropriate development, where it is considered that such development would unduly impact on locally important natural habitats or wildlife corridors.
- BD8** To facilitate, in co-operation with the relevant statutory authorities and other groups, the identification of valuable or vulnerable habitats of local or regional importance, not otherwise protected by legislation.
- BD9** The National Parks and Wildlife Service will be invited to prioritise the preparation of Management Plans for Natura 2000 Sites. This will facilitate the development of site specific Conservation Objectives in the context of the proper planning and sustainable development of the County.

¹ SPAs are designated under EU birds Directive (79/409/EEC), SACs are designated under EU Habitats Directive (92/43/EEC), transposed into Irish Law by the EU (Natural Habitats) regulations, 1997. SACs and SPAs are collectively now known as 'Natura 2000' sites. NHAs are legally protected under The Wildlife (Amendment) Act 2000.

17.4 Woodlands, trees & hedgerows

Woodlands, trees and hedgerows are important natural habitats and groups and lines of trees/hedgerows are important wildlife corridors. Woodlands and trees have an amenity function, providing not only important recreational areas but also adding to the overall beauty of the County. A sizeable proportion of the forestry estate in Wicklow consists of the remains of old demesne planting. In addition to being an environmental and forestry resource, these areas are also of significant amenity value.

Objectives

- WH1** To promote the protection of trees, in particular native species, and those associated with demesne planting, which are of conservation and/or amenity value, as set out in Schedules 17.5 & 17.6 and Maps 17.05 & 17.06 (Volume 2) of this plan.
- WH2** To consider the making of Tree Preservation Orders (TPOs) to protect trees of high value, where it appears that they are in danger of being felled.
- WH3** Development that requires the felling of mature trees of conservation and/or amenity value, even though they may not be listed in the Development Plan, will be discouraged.
- WH4** To discourage the felling of mature trees to facilitate development and encourage tree surgery rather than felling where possible
- WH5** To encourage the preservation and enhancement of native and semi-natural woodlands, groups of trees and individual trees, as part of the development control process, and require the planting of native, and appropriate local characteristic species, in all new developments
- WH6** To encourage the retention, wherever possible, of hedgerows and other distinctive boundary treatment in the County. Where removal of a hedgerow, stone wall or other distinctive boundary treatment is unavoidable, provision of the same type of boundary will be required of similar length and set back within the site in advance of the commencement of construction works on the site.

17.5 Water systems

Chapter 12 of this plan specifically deals with the issue of the exploitation of the County's water resources as an input into our water supply system. Our natural water system (aquifers, rivers, lakes and coastal waters) are also fundamental to the survival of our natural habitats and the species therein.

Objectives

- WT1** To implement the *EU Water Framework Directive* and associated River Basin and Sub-Basin Management Plans and the EU Groundwater Directive to ensure the protection, improvement and sustainable use of all waters in the County, including rivers, lakes, ground water, coastal and estuarine waters, and to restrict development likely to lead to a deterioration in water quality.
- WT2** To resist development that would interfere with the natural water cycle to a degree that would interfere with the survival and stability of natural habitats.
- WT3** To prevent development that would pollute water bodies and in particular, to regulate the installation of effluent disposal systems in the vicinity of water bodies that provide drinking water or development that would exacerbate existing underlying water contamination

- WT4** To minimise alterations or interference with river / stream beds, banks and channels, except for reasons of overriding public health and safety (e.g. to reduce risk of flooding); a buffer of 10m along watercourses should be provided free of built development, with riparian vegetation generally being retained in as natural a state as possible. In all cases where works are being carried out, to have regard to Regional Fisheries Board *“Requirements for the protection of fisheries habitat during the construction and development works at river sites”*
- WT5** To promote the development of riverine walks and parks, subject to the sensitivity and / or designation of the riverside habitat, particularly within 10m of the watercourse.
- WT6** To ensure that any development or activity with the potential to impact on ground water has regard to the GSI Groundwater Protection Scheme (as shown on Map 17.12, Volume 2)

17.6 Soils & Geology

Soil is a complex, variable and living medium and performs many vital functions including food and other biomass production, storage, filtration and transformation of many substances including water, carbon, and nitrogen. Soil has a role as a habitat and gene pool, serves as a platform for human activities, landscape and heritage and acts as a provider of raw materials. Such functions of soil are worthy of protection because of their socio-economic as well as environmental importance. To date, there is no legislation, which is specific to the protection of soil resources. However, there is currently an EU Thematic Strategy on the protection of soil which includes a proposal for a Soil Framework Directive which proposes common principles for protecting soils across the EU.

Sites and features of geological importance are non-renewable elements of our natural heritage, contributing greatly to the scientific, visual and conservation value of the landscape. It must also be acknowledged however that our geological resources are an economic asset that can be exploited. Therefore this plan will aim to protect unique geology or geological features of importance and to allow the exploitation of our geological resources in an environmentally sensitive manner.

The Geological Survey of Ireland is undertaking an assessment of geological features of value and these sites are to be proposed for designation as ‘Geological Natural Heritage Areas’. These sites are referred to as ‘Areas of Geological and Geomorphological Interest’ in this plan, pending national designation and are located in Schedule 17.7 and Map 17.07 (Volume 2) of this plan.

Objectives

- SG1** Geological and soil mapping where available shall be utilised to inform planning decisions relating to settlement, excavation, flooding, food production value and carbon sequestration, to identify prime agricultural lands (for food production), degraded/contaminated lands (which may have implications for water quality, health, fauna), lands with unstable soils / geology or at risk of landslides, and those which are essential for habitat protection, or have geological significance.
- SG2** ‘Sites of Geological Importance’ will be protected from inappropriate development at or in the vicinity of the site, such that would adversely affect their existence, or interpretation
- SG3** The Council will consult with the Geological Survey of Ireland as it deems necessary, when dealing with any proposals for major developments, which will entail ‘significant’ ground excavation, such as quarrying, road cuttings, tunnels, major drainage works, and foundations for industrial or large buildings and complexes.
- SG4** To facilitate public access to ‘Sites of Geological Importance’, on the principle of “agreed access” subject to appropriate measures being put in place to ensure public health and safety
- SG5** The Council will support efforts by the Geological Survey of Ireland, and other interested bodies regarding promotion of the interpretation of geological heritage in Wicklow, and will encourage the development of a “Wicklow Rock Trail”, Geopark or other similar geo-tourism initiatives.

SG6 To facilitate the exploitation of mineral resources, in an environmentally sensitive manner, in accordance with the policies and control measures set out in Chapter 8.

17.7 Green Infrastructure

To ensure the protection, enhancement and maintenance of the natural environment and recognise the economic, social, environmental and physical value of green spaces through the development of and integration of Green Infrastructure (GI) planning and development in the planning process.

Objectives

- GI1** To recognise the importance and contribution of green infrastructure throughout the region for the maintenance of biodiversity and ensuring that the region will be able to, or be ecologically robust enough to, adapt and respond to climate change issues.
- GI2** To apply the principles of green infrastructure to inform the land use planning and development management process in terms of the location, design and layout of new development areas.

17.8 Recreation use of natural resources

The Council is committed to ensuring sustainable recreational use of the outdoors in County Wicklow in accordance with the objectives of the County Wicklow Outdoor Recreational Strategy 2009-2013. Natural areas provide opportunities for passive and active activities such as picnicking, walking, mountain biking, swimming, fishing and sailing / canoeing / windsurfing.

Objectives

- AW1** To facilitate the use of natural areas for active outdoor pursuits, subject to the highest standards of habitat protection and management and all other normal planning controls
- AW2** The Council shall seek to promote access to amenity areas in the County for the benefit of all, on the basis of cooperation with landowners, recreational users and other relevant stakeholder groups to promote "agreed access" on public and privately owned land in the County on the basis of sustainability, consultation and consensus
- AW3** To protect and promote The Wicklow Way and St. Kevin's Way as permissive waymarked routes in the County. The Council shall work in partnership with relevant stakeholders in relation to management of these routes, and will protect them from inappropriate development, which would negatively infringe upon their use.
- AW4** The Council will preserve the open character of commonage land and similar hill land and secure access over paths and tracks through consensus with local landowners, particularly in mountain areas.
- AW5** To facilitate the development of a coastal walking and cycling route between Greystones and Wicklow Town
- AW6** To implement the measures set out in the Bray Head SAAO (Special Amenity Area Order) and investigate the possibility of the designation of further SAAOs in the County (as shown on Map 17.08 (Volume 2) of this plan)
- AW7** To protect the quality of bathing waters and to endeavour to ensure that bathing waters achieve "sufficient or better status by 2015" and increase the number of bathing waters classified as "good" or "excellent", in accordance with the Bathing Water Directive (Directive 2006/7/EC)

17.9 Landscape & views / prospects

17.9.1 Landscape Characterisation

The landscape of the County is a national asset. County Wicklow is richly endowed with a variety of landscape 'types' and human interaction with the natural heritage has produced a variety of characteristic landscapes and landscape features. The increasing development pressure of recent years has caused changes in the natural landscape, which are unprecedented in scale and nature, and has led to the Government setting out guidelines for landscape appraisal. This assessment of the landscape is to ensure that *"the environment and heritage generally are maintained in a sustainable manner, while at the same time enabling a proactive approach to development"*.

The landscapes of Wicklow are placed in the following hierarchy (as shown on Map 17.09 (Volume 2) of this plan):

Mountain and Lakeshore Areas of Outstanding Natural Beauty (ML-AONB)

Vulnerability: Very high

The Mountain and lakeshore AONB area encompasses those areas which are most vulnerable and sensitive, and which are considered to be of greatest scenic value. This area, due to recent development pressures, tends to be under severe development pressure. It contains

- The central mountain area including the Wicklow Mountains National Park
- The Great and Little Sugarloaf Mountains and Bray Head in north-east Wicklow
- The Glencree and Glencullen river valleys in north-east Wicklow
- Poulaphuca Reservoir Area

The central mountain area extends from the Dublin border in the north, to Aughrim in the south and from the Glen of Imaal in the west, to Roundwood in the east. One of the main characteristics of this area is mountainous topography with U-shaped valleys, lakes and glacial topography. The northern hills area relates mainly to the Great and Little Sugarloaf Mountains and to Bray Head. The Glencree and Glencullen valleys abut the Dublin border.

The Poulaphuca reservoir area generally relates to the area around Poulaphuca Reservoir and extends into Sorrell Hill. The lake dominates the reservoir zone, the area being characterised by views onto and from the lake and by lake vegetation. To the east and south, land is more mountainous with attractive views and vegetation.

Coastal Areas of Outstanding Natural Beauty (C - AONB)

Vulnerability: Very high

The coastal area category covers for the most part, the area of land between the sea and the road nearest the coastline. The coastline covers approximately 5,425ha / 54.25square kilometres. Its length from Bray on the Dublin border to just north of Kilmichael Point at the southern corner is 41 miles. These areas are important not just from a landscape or habitat perspective, but also are increasingly important for recreational activities.

Areas of Special Amenity (ASA)

Vulnerability: High

This landscape area encompasses those areas, which, whilst not as vulnerable nor as sensitive as those areas in the AONB area, are still subject to pressure for development, which could result in a serious deterioration in the landscape quality. The sensitivity of these areas is made more pronounced by the fact that they act as an effective "gateway" to the more remote and wild upland areas and because the more ameliorative nature of the landform ensures that there is greater development pressure. It contains the North Mountain Lowlands, the South Mountain Lowlands, the Baltinglass Hills and the Southern Hills. The rolling undulating terrain of the hills around Baltinglass distinguishes the Baltinglass Hills category. Possibly the greatest vulnerability within this area is to

the existence of important archaeological remains and monuments. This archaeological wealth must be protected for its heritage value as well as tourism potential.

The southern hill area differs significantly from the other mountainous sub-zones. It generally follows the 300m (1,000 ft) contour line and is in three distinct areas, namely

- the mountainous leg from Moylisha running north-west of Shillelagh, Tinahely and Aughrim,
- the Croghan Mountain area south of Aughrim and Woodenbridge
- the Kilgavan Gap and Hillbrook area

Access Corridor Area (ACA)

Vulnerability: Medium

This landscape area covers the main access corridor areas of Wicklow. The boundaries generally follow what is considered to be the areas upon which the greatest influence is exerted by these access routes. These routes, for the most part, run through the more low lying and accessible tracts of land and connect the major towns. There are two distinct areas, each with their own different attributes. The Eastern Corridor relates to the mainly lowland area of influence of the N11 road. The Western Corridor is focused on the N81 road from Dublin, through Blessington on towards Baltinglass. These corridors are under intense pressure from residential and other sporadic development.

Rural Area (RA)

Vulnerability: Medium

Mainly the area of land lying under the 130m (400ft) contour line determines the rural area landscape character area and the land cover associated with it. It is located along the western and southern extremities of the County. The western segment is adjacent to Co. Carlow and extends from south of Baltinglass to Ballyconnell. The southern segment is adjacent to Co. Wexford and extends from Raheengraney to Coolboy and inland to Aughrim. Whilst the landform, to some extent, corresponds to that found in Carlow and Kildare, it differs considerably in that, relative to their elevation, this land can be described as gently rolling and undulating and could really only be described as low-lying when compared to the rest of the terrain in Co. Wicklow. The area is very rural and is characterised by only a few small towns and villages.

Urban Areas (UA)

Vulnerability: Low

All locations designated as 'settlements' in the County settlement hierarchy are considered 'urban' areas for the purpose of landscape classification, although it is acknowledged that many of the smaller towns and villages are not 'urban' in the same sense as settlements such as Bray or Arklow. In terms of landscape classification, these settlements have already been deemed suitable for development (of the type allowed by the settlement strategy and the development standards of this plan) and the impacts on the wider landscape of such development has already been deemed acceptable. Therefore it will not be necessary for developments in urban areas to have regard to the surrounding landscape classification or to carry out landscape or visual impact assessment.

Objectives

- LA1** All developments and activities shall have regard to the County landscape classification hierarchy.
- LA2** Any application for permission in the AONB or CLA zones shall be accompanied by a Visual Impact Assessment, which shall include, inter alia, an evaluation of visibility and prominence of the proposed development in its immediate environs and in the wider landscape, a series of photos or photomontages of the site / development from clearly identified vantage points, an evaluation of impacts on any listed views / prospects and an assessment of vegetation / land cover type in the area (with particular regard to commercial forestry plantations which may be felled thus altering character / visibility).

LA3 To retain the individual character of towns and development areas by the designation of greenbelts where appropriate.

17.9.2 Views & prospects

The views and prospects listed in this plan for protection are those views / prospects that are considered to be of the highest amenity value in the County. Some views / prospects will form a cohesive set, such as coastal or lake drives, while some appear suddenly and provide the viewer with a new and interesting angle on a natural feature or place. Some views / prospects are intermittent in nature and appear through gaps in vegetation or buildings.

Where listed views / prospect occur in settlements, it is not the intention that all lands in the view / prospect will be 'sterilised' from development. Any application for development in such locations will be required to provide an assessment of the view / prospect and an evaluation of how the development would change or interfere with that view / prospect. Views and prospects listed in this plan are set out in Schedules 17.8 & 17.9 and Map 17.10 and 17.11 (Volume 2) of this plan.

Objective

VP1 To protect listed views and prospects from development that would either obstruct the views / prospect from the identified vantage point or form an obtrusive or incongruous feature in that view / prospect. Due regard will be paid in assessing development applications to the span and scope of the view / prospect and the location of the development within that view / prospect.