

CHAPTER 11

Natural Environment

11.1 Environmental Protection

11.1.1 The Council's responsibilities regarding water, air and pollution arise under specific domestic legislation and EU Directives.

11.1.2 Central to this issue is the maintenance and expansion of the Council's Environmental Awareness Programme that aims to focus on the principle of sustainability and the practical aspects of pollution prevention. In tandem with this, the Council recognises the need to maintain its current monitoring programme in relation to water quality.

| Objective No. | Environmental Protection |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | It is an objective of the Council to: |
| EN 11-1 | Take all necessary measures to prevent pollution in order to maintain the quality of the environment of County Kerry. |
| EN 11-2 | Ensure that policies to counter global warming and climate change are incorporated into the policies and the development management system of Kerry County Council. |
| EN 11-3 | Take all necessary measures to ensure that the Natural Environment of the County is managed and protected in a sustainable manner. |
| EN 11-4 | Promote the interaction of the public with the environment through environmentally sustainable projects which can improve access without detriment to the environment. |
| EN 11-5 | Ensure that development throughout the County is managed in an environmentally sustainable manner. |

Water Quality

Water Framework Directive

11.1.3 The adoption into Irish law of the EU Water Framework Directive in December 2000 means that the issue of water quality is now being tackled increasingly on an integrated basis. A common approach is being established for the protection of groundwater and surface water with the ultimate objective of attaining good status for all waters by 2015.

11.1.4 Implementation of the Water Framework Directive has seen the establishment of a number of River Basin Districts nationally.

These will form regional management and monitoring units. County Kerry is divided between two of the proposed River Basin Districts: South Kerry and parts of Counties Cork, Waterford, Limerick and Tipperary will form the South Western River Basin District while North Kerry will form part of the River Basin District for the Shannon Catchment.

| Objective No. | Water Framework Directive |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | It is an objective of the Council to: |
| EN 11-6 | <p>(a) in partnership with other Local Authorities and relevant bodies, to prepare and implement River Basin Management Plans in accordance with the requirements of the EU Water Framework Directive for those River Basin Districts within which it is active.</p> <p>(b) Incorporate, by means of a variation to this plan, the specific objectives and measures from the River Basin Management Plan (RBMP) and associated Programmes of Measures (POMs).</p> |

Critical Lake Catchments

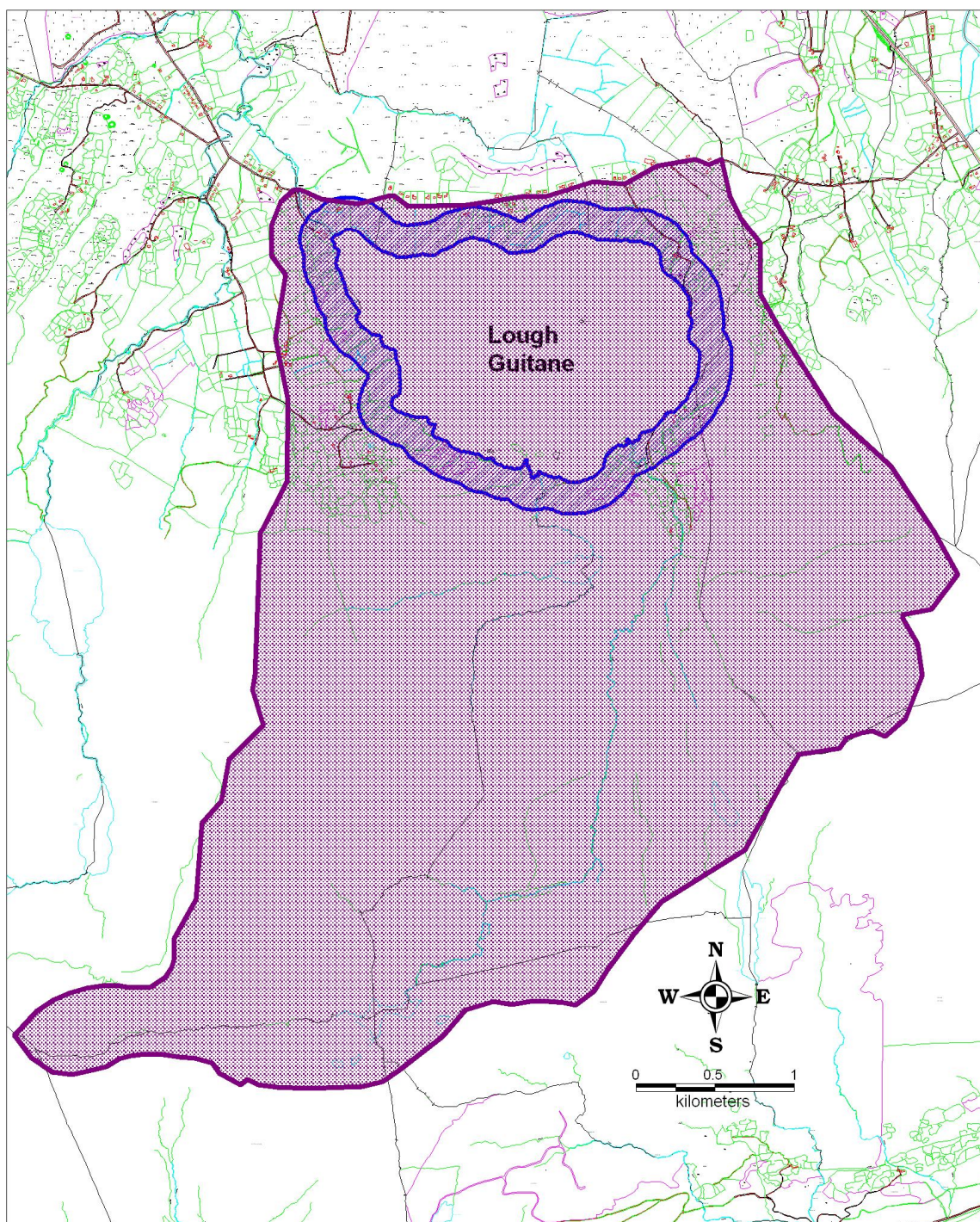
11.1.5 Experience has shown that the cumulative effect of effluent discharges, even in situations where treatment is provided, can lead to pollution of watercourses. It is generally recognised that small on-site wastewater treatment systems are not effective at long-term removal of phosphorous. This leads to the possibility of a build-up of phosphorous in the soil and subsequently to a risk to water quality.

11.1.6 Continued development in the vicinity of the lakes listed in Tables 11.1 and 11.2 could result in increased risk of pollution to these water bodies and it is, therefore, appropriate that the precautionary principle be adopted with regard to development in these areas.

Lough Guitane


11.1.7 Lough Guitane is the primary source of drinking water for County Kerry. A high level of importance shall therefore be afforded to maintaining the quality of its waters. Continued development within the vicinity of the lake could result in increased risk of pollution to the water body, and it is therefore important that the precautionary principle be adopted with regard to development within the catchment area of the lake.

| Objective No. | Lough Guitane |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | It is an objective of the Council to: |
| EN 11-7 | <ul style="list-style-type: none"> a) Prohibit any form of development within the catchment area of Lough Guitane (including Lough Guitane itself), as shown on Map 11.4, that will have a potentially detrimental effect on water quality. b) Have regard to the Lough Guitane Source Protection Plan. |



Map 11.4 Lough Guitane, April 2009
Loch Coiteáin, Aibreán 2009
Léarscáil Uimh 11.4

 Lough Guitane catchment area.
Dobharcheantar Loch Coiteáin

 Prohibit all new percolation areas for on-site waste water treatment facilities within 200m of the shore. (Objective 11-8).

Cosc a chur ar limistéir sliothúcháin nua le haghaidh saoráidí cóireála fuíolluisce ar an láithreán laistigh de 200m ón gcosta. (Cuspóir 11-8)

Lakes used as drinking water supply sources and / or exhibiting vulnerability to phosphorous pollution

11.1.8 A number of smaller public and group scheme supplies in the county either abstract water directly from lake sources or from rivers drawing from lakes. In the interests of public health it is extremely important that water quality be protected in each case and that appropriate measures be applied. A number of lakes as listed in Table 11.1 are also used for the abstraction of water. It is the policy that no water abstraction will be permitted which will damage the fisheries on these lakes. Proposals for water abstraction shall consider the potential impacts on the fish and invertebrate life of the waterbody.

These Lakes are as follows:

| Table 11.1. Lakes | Water Scheme |
|----------------------|----------------------------|
| Coomaglaslaw Lake | Mountain Stage / Glenbeigh |
| Coomclogherane Lake | Kilgarvan |
| Dromoghty Lake | Dawros (Group) |
| Dromtine Lake | Sneem |
| Eirk Lough | Kenmare |
| Gowlawn Lough | Tuosist (Group) |
| Lough Acoomeen | Aughacaslagh |
| Lough Adoon | Liscarney |
| Lough Callee | Mid-Kerry |
| Lough Comernamuc | Killorglin Area |
| Mount Eagle Lough | Ventry |

Proposals for water abstraction shall consider the potential impacts on the fish and invertebrate life of the waterbody.

11.1.9 A number of other lake catchments within the county have also proven to be particularly vulnerable to phosphorous pollution. This has resulted in elevated phosphorous levels on a periodic basis and, in some cases, transient algal accumulations. Pollution of this type, and its effects, pose a particular threat to fishery resources and to the ecological well being of these lakes in general.

Lough Leane experienced a significant sustained algal bloom in 1997. This event resulted from excessive phosphorus levels within the lake body and had the potential to cause significant damage to the ecology of the lake. Following completion of a comprehensive catchment monitoring project, a series of specific management proposals were drawn up to bring about a reduction in the phosphorus inputs to the lake. It is Kerry County Council's policy to implement the proposals in question and to take all measures necessary to protect water quality within the lake.

These Lakes are as follows:

| Table 11.2. | Lakes |
|-------------|----------------------------|
| | Lough Currane |
| | Caragh Lake |
| | Cloonaghlin Lake |
| | Lough Gill |
| | Lough Leane |
| | Lough Namona |
| | Muckross Lake |
| | The Upper Lake – Killarney |

| Objective No. | Lakes Used as Drinking Water Supply Sources and / or Exhibiting Vulnerability to Phosphorous Pollution. |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | It is an objective of the Council to: |
| EN 11-8 | Prohibit all new percolation areas for on-site wastewater treatment facilities within 200m of the shore of each lake. |
| EN 11-9 | Assess any proposed development that has the potential to discharge to a watercourse which drains into any of the lakes identified in terms of its potential impact on the lake. |
| EN 11-10 | Require the installation of additional nutrient reduction measures involving the use of on-site wastewater treatment for all new private development within the catchments of these lakes. |
| EN 11-11 | Continue the implementation of the Local Authority Management Proposals recommended in the Lough Leane Management and Monitoring Report. |
| EN 11-12 | Have all forestry proposals within the catchment of each lake assessed in terms of their potential impact on the water quality of the lake. |
| EN 11-13 | Prohibit any development which would have an adverse impact on the water quality in these lakes. |

Objectives EN 11-8 to EN 11-13 shall apply to lakes named in Tables 11.1 and 11.2 and to Lough Guitane.

Branded Lakes*

11.1.10 In the interest of maintaining good water quality and in light of the objectives under the EU Water Framework Directive, the following objectives are proposed in relation to branded Lakes.

| Objective No. | Branded Lakes |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | It is an objective of the Council to: |
| EN 11-14 | Require the installation of additional nutrient reduction measures involving the use of on-site wastewater treatment for all new private development within the catchments of these lakes. |

* = Branded Lakes are designated by Fáilte Ireland and the Central Fisheries Board and are considered significant in terms of their value as salmon and trout fisheries.

| Table 11.3 Branded Lakes | | |
|--------------------------|-----------------|-----------------|
| Acoose | Annascaul | Augher |
| Barfinnihy Black | Brin | Capall |
| Cappanalea | Clonee | Cloon |
| Coomasaharn | Coomloughra | Coomnacronia |
| Crohane | Cummeenadillure | Cummeenaloughan |
| Cummeenduff | Cummer | Curran |
| Cushvally | Derriana | Doo |
| Eagher | Fadda | Garagarry |
| Glan | Glanmore | Inchiquin |
| Iskanamacteery | Iskgahiny Kells | Kilbrean |
| Lackagh | Looscaunagh | Nakirka |
| Nambrackdarrig | Napeasta | Reagh (2) |
| Uragh | | |

Groundwater Protection

11.1.11 Groundwater is a significant resource. A number of public water supplies in County Kerry are taken from groundwater reserves and a significant proportion of rural dwellers in the county are dependant on individual private groundwater supplies.

11.1.12 Groundwater quality is subject to pressures from a variety of sources including agriculture, poorly designed / constructed / maintained domestic on-site wastewater treatment systems, industry etc. Groundwater also contributes to surface water systems, providing residuals flows for river and streams and are also integral to the support of wetlands.

| Objective No. | Groundwater Protection |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | It is an objective of the Council to: |
| EN 11-15 | Develop groundwater protection schemes in line with the recommendations contained within the DoEHLG / GSI / EPA publication 'Groundwater Protection Schemes, 1999' or any revised or replacement publication and prioritise based on the Water Framework Directive risk assessments and over the period of the plan to identify aquifer vulnerability zones for the County. |

| Objective No. | Groundwater Protection |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EN 11-16 | Assess all planning applications within 300m of any public or group scheme groundwater source in terms of their potential impact on the water quality of that source. |
| EN 11-17 | Ensure that planning applications shall have regard to any existing groundwater protection schemes and / or the likely impacts the development may have on groundwater quality. Development considered inappropriate by the Planning Authority will be prohibited in the vicinity of important aquifers. The cumulative impact shall also be considered. |
| EN 11-18 | Encourage the use of proprietary wastewater treatment plants in areas of important aquifers. |

Nitrates Directive

11.1.13 Ireland has an obligation under EU Directive 91/676/EEC to prevent pollution of groundwater and surface water by nitrates from agricultural sources. Nitrates in water pose a number of risks. These include effects resulting from eutrophication and the risk posed to human health resulting from excessive levels of nitrates in drinking water.

| Objective No. | Nitrates Directive |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | It is an objective of the Council to: |
| EN 11-19 | Protect this county's waters from pollution by nitrates and phosphates from agricultural sources through implementation of the European Communities (Good Agricultural Practice for Protection of Waters) Regulations, 2006. |

Air Quality

11.1.14 Kerry's location on the western seaboard coupled with the prevailing south-westerly winds and the absence of heavy industry has meant that air quality has traditionally been of a high standard. It is important that this be maintained.

| Objective No. | Air Quality |
|-----------------|------------------------------------------------------------------------------|
| | It is an objective of the Council to |
| EN 11-20 | Protect air quality in County Kerry in accordance with prescribed standards. |

Water Abstraction

11.1.15. The abstraction of surface waters from rivers, streams and lakes has the potential to cause adverse impacts on the ecology of these water systems. It is, therefore, an objective of Kerry County Council to ensure that any private development proposals involving the abstraction of surface waters would be thoroughly assessed for any potential ecological impacts and to prohibit any such abstractions which would be considered potentially detrimental.

| Objective No. | Water Abstraction |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | It is an objective of the council to: |
| EN 11-21 | Prohibit any non-public water abstractions from surface water bodies in the county which would be considered to have a potentially detrimental impact on the ecology of that water body, or any associated water body. |

11.2 Natural Environment

11.2.1 The landscape of an area is a combination of natural and man made features. In Kerry a variety of physical features and Biodiversity combine to produce some of the most intriguing diversity of flora and fauna and spectacular scenery in Ireland.

The Council recognises the importance of these natural elements to the overall landscape and will strive to protect and enhance the landscape and physical beauty of the county.

EU and National Designations

11.2.2 Areas of zoological and botanical interest, areas of ecological interest and areas of scientific interest were identified in the previous County Development Plan. Since the publication of that plan European and National Legislation, Wildlife and Habitat Directives have replaced those designations and the following are now used to protect the most valuable aspects of our natural environment:

| Table 11.4 Type of Designation | Abbreviation | Level of Designation |
|-----------------------------------|--------------|----------------------|
| Special Area of Conservation | SAC | EU |
| Special Protection Area | SPA | EU |
| Natural Heritage Area | NHA | National |
| National Park | | National |

11.2.3 The obligations of the Council in relation to planning applications within NHA's, SAC's and SPA's are set out in the European Communities (Natural Habitats) Regulations 1997 and the Wildlife (Amendment) Act 2000, respectively.

SAC's and SPA's together form part of the 'Natura 2000' network of sites throughout Europe. The SAC's, SPA's and NHA's designated throughout the County at time of publication are marked on Maps 11.1 - 11.3

| Objective No. | EU and National Designations |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | It is an objective of the Council to: |
| EN 11-22 | <p>(a) Ensure that development likely to have serious adverse effects on the areas listed will not normally be permitted. The designation of sites does not imply a total restriction on all development. Applicants must demonstrate that the proposed development will not have a negative impact on the fauna, flora or habitat being protected through an Appropriate Assessment under Article 6 of the Habitats Directive which is a requirement for development proposals affecting European Sites.</p> <p>(b) Ensure that any development proposal in the vicinity of or affecting in any way a designated European Site or NHA provides sufficient information showing how its proposals will impact on the designated site. Appropriate mitigation measures must be indicated.</p> <p>(c) Support and promote measures to control and manage the presence of alien/ invasive species and weeds in consultation with the National Parks and Wildlife Service.</p> |

Special Areas of Conservation

11.2.4 In 1992 the Council of the European Communities adopted the Habitats Directive (92/43/EEC), on the conservation of natural and semi-natural habitats and species of flora and fauna. It is the responsibility of each member state to designate Special Areas of Conservation (SACs) to protect habitats and species.

The Commission of the European Union calls the sites 'candidate sites' because they are currently under consideration.

| Objective No. | Special Areas of Conservation |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | It is an objective of the Council to: |
| EN 11-23 | Maintain the conservation value of those sites as defined in the Planning & Development Act 2000 (Special Areas of Conservation, Special Protected Areas or Lands Proposed for inclusion in such sites) identified by The National Parks and Wildlife Service of the Department of Environment, Heritage & Local Government, as well as any other sites that may be so designated during the lifetime of this plan. |

Special Protection Areas

11.2.5 The requirement to protect SPA's is contained within the EU Birds Directive (79/409/EEC). These have been selected because they support populations of birds of particular species that are rare or threatened in Europe and require particular measures, including the designation of protected areas, to conserve them.

| Objective No. | Special Protection Areas |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | It is an objective of the Council to: |
| EN 11-24 | Maintain the conservation value of those European sites as defined in the Planning & Development Act 2000 (Special Areas of Conservation, Special Protected Areas or Lands Proposed for inclusion in such sites) selected by The National Parks and Wildlife Service of the Department of Environment, Heritage & Local Government, as well as any other sites that may be so designated during the lifetime of this plan |

Natural Heritage Areas

11.2.6 The Wildlife (Amendment) Act 2000 contains provisions for designation of NHA's. NHA's cover sites of national or higher importance for wildlife, and also geological interest. NHA's include peatlands, native woodlands, grasslands, wetlands, rivers, lakes, machair, limestone pavement, islands, cliffs and estuaries.

| Objective No. | Natural Heritage Areas |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | It is an objective of the council to: |
| EN 11-25 | Maintain the conservation value of all Natural Heritage Areas and also Natural Heritage Areas proposed for designation by the Department of Environment Heritage & Local Government, by The National Parks and Wildlife Service of the Department of Environment Heritage & Local Government, during the lifetime of this plan, as well as any other sites that may be so designated during the lifetime of this plan. |

11.2.7 Certain species of fauna and flora are protected by law. These includes species listed in the *Flora Protection Order 1999*, animals and birds listed in the *Wildlife Act 1976* and subsequent statutory instruments, those listed under Annex IV of the *Habitats Directive*, and those listed in Annex 1 of the *Birds Directive*. The planning process will seek to protect and enhance designated species and their habitats.

Biodiversity

11.2.8 Much of our biodiversity occurs outside sites which are subject to legal protection under national or EU law. Throughout the landscape there are many habitats and features which are of particular importance for biodiversity. These include woodlands, hedgerows and other field boundary types such as stone walls, earthen embankments and ditches; sand dunes, salt marshes, rivers, streams and associated riparian zones; canals, marine and freshwater wetlands. These elements must be protected and enhanced.

It is also important to recognize that habitats and landscape features cannot be sustained in the long term in isolation from one another. There must be a network of protected areas, ecological corridors and ecological 'stepping stones' available to support the movement of species and to sustain the habitats, ecological processes and functions necessary to maintain biodiversity. Key elements in this 'Ecological Network' need to be identified, protected and enhanced.

| Objective No. | Biodiversity |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | It is an objective of the council to: |
| EN 11-26 | <p>(a) Promote biodiversity throughout the County and implement the recommendations of the National Biodiversity Plan when made available.</p> <p>(b) Support the preparation of a county-wide Habitat Mapping survey subject to consultation with the National Parks and Wildlife Service – Department of the Environment Heritage and Local Government, the Heritage Council and other relevant statutory and non statutory nature conservation interest groups.</p> <p>(c) Facilitate the maintenance and development of an ecological network where necessary through the planning process.</p> <p>(d) To consider the preparation of a Wetland Survey of the County subject to consultation with the National Parks and Wildlife Service – Department of the Environment Heritage and Local Government, the Heritage Council, Waterways Ireland and other relevant statutory and non statutory nature conservation interest groups.</p> |
| EN 11-27 | Ensure that development does not have a significant adverse impact, on plant or animal (including bird) species protected by law. |
| EN 11-28 | Consult with the National Parks and Wildlife Service and take account of any licensing requirements when undertaking, approving or authorizing development which is likely to affect plant, animal or bird species protected by law. |
| EN 11-29 | Ensure that proposals for development protect and enhance biodiversity, wherever possible, by minimizing adverse impacts on existing habitats and by including mitigation and /or compensation measures ,as appropriate , which ensure that biodiversity and landscape character is maintained. |

Blasket Islands

11.2.9 The protection of the natural environment of the Great Blasket Island and of the marine zone around the Island is necessary. Accordingly it is envisaged that an E.I.A. should be carried out for any developments envisaged for the Island. These include the pier, the water supply system, the village conservation and restoration project and wastewater treatment and disposal systems. This will ensure that no lasting damage will occur as a result of providing the minimum necessary level of facilities for access and service of the Island.

| Objective No. | Blasket Islands |
|-----------------|-------------------------------------------------------------------------------------|
| | It is an objective of the council to: |
| EN 11-30 | Support and promote the implementation of the Great Blasket Island Management Plan. |

Tree Preservation /Woodland Areas

11.2.10 Woodland amenities developed for the public enjoyment and located in and around villages and towns create a host of social, environmental and economic benefits. Trees, groups of trees or woodlands that are important landscape features should be protected.

| Objective No. | Tree Preservation / Woodland Areas |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | It is an objective of the planning authority to: |
| EN 11-31 | Carry out a study of the trees within the County in order to identify trees that are of special amenity value. |
| EN 11-32 | Protect the woodlands listed in table 11.5. and any other woodlands subsequently identified as meeting the requirements of the habitat directive. |
| EN 11-33 | Protect any tree, group of trees or woodland where these are of special amenity value. |
| EN 11-34 | Ensure that any application for development within the woodlands listed in table 11.5 shall be accompanied by a tree survey and a report on the potential impact of the development on the woodland, or an Appropriate Assessment if necessary. |

| Table 11.5 Protected Woodlands |
|----------------------------------------|
| Ballyseedy Wood, Tralee |
| Benson's Point, Tomies Wood |
| Bunrower Wood (Flesk R.) Lough Leane |
| Camillaun Wood, Muckcross, Killarney |
| Cloghereen Wood, Muckcross, Killarney |
| Coolbane West, R. Laune |
| Dunmaniheen Wood, Killorglin |
| Farrantoreen Wood, Killorglin |
| Game Wood, Knockreer, Killarney |
| Kilbonane, R. Laune |
| Meanus Island, R. Laune |
| Reennadinna Wood, Muckcross, Killarney |
| Reen Wood, Killarney |
| Ross Island Wood, Killarney |
| Roughy Valley Woods |
| Glena Woods |
| Uragh Wood |
| John F. Leslie Woodland |

*River and Waterway Corridors**11.2.11*

| Objective No. | River and Waterway Corridors |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | It is an objective of the council to: |
| EN 11-35 | <ul style="list-style-type: none"> • Ensure that any application for development bounding salmonid rivers shall be accompanied by a report detailing proposed river treatment. • Promote the Integration of waterways as landscaping features within development sites. • Provide a riparian corridor of at least 10 meters along waterways along salmonid waters to provide for biodiversity, amenity and recreational purposes. • Any proposal for land filling, diverting, culverting or realignment of river and stream corridors will only be considered where there is clear justification based on the provision of a technical feasibility study demonstrating the impact of the proposal. |

11.3 Coastal Areas

11.3.1 Kerry has a coastline of approximately 1000km, which accommodates various uses - i.e. ports and harbours, leisure, amenity, fishing and mariculture / aquaculture.

11.3.2 The coastal zone is of intrinsic natural and special amenity value and contains a number of areas that have been designated at European / National or County level. These designations are based on the conservation value of particular habitats and the species of flora and fauna contained within them or the desire to preserve areas of high quality physical landscape.

11.3.3 The coastline has always been perceived as an attractive place to live. Recently coastal areas have been coming under increased pressure from development trying to utilise its value as a social, economic and recreational resource.

Coastal Management

11.3.4 The Council recognises that the coastal zone is a vital asset with limited capacity to absorb development. Due to its unique character it requires special attention and management to ensure its long term sustainable use. This necessitates an emphasis on the scale and rate of development that can be accommodated without damaging or detracting from the basic qualities and attractions of the coast.

11.3.5 A number of different agencies have responsibilities in the area of the coastal zone management. These include local authorities, the National Parks & Wildlife Service, the Department of Community, Rural and Gaeltacht Affairs, the Department of Agriculture, Fisheries and Food and the Department of Environment, Heritage & Local Government. In some instances, these agencies have overlapping objectives and responsibilities, including the issuing of foreshore licences, which can cause difficulties in regard to adopting an integrated approach to the management of coastal areas.

The scope of land use planning and the development plan is limited to matters directly under the control of planning legislation and cannot, therefore, deal with all the issues that arise on the coastal zone.

| Objective No. | Coastal Management |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | It is an objective of the planning authority to: |
| EN 11-36 | Designate a Coastal Development Zone based on the importance of preserving marine habitats and coastal landscapes throughout the period of the plan and assist in the development of an Integrated Coastal Zone Management Strategy for the county, in conjunction with all other relevant agencies and bodies |

Coastal Development Zone

11.3.6 For the purpose of zoning, a 'Coastal Development Zone' has been defined to include the areas over which the coastline has a functional and visual influence.

| Objective No. | Coastal Development Zone |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | It is an objective of the planning authority to: |
| EN 11-37 | Assess all applications for development, both individually and cumulatively, within the designated Coastal Development Zone. Developments will be judged in terms of their potential impact on natural and cultural heritage whilst considering the potential risks from flooding and erosion. |
| EN 11-38 | Accommodate within existing developed coastal areas developments for which a coastal location is required. |
| EN 11-39 | Prohibit developments that pose a significant or potential threat to the coastal environments in keeping with the precautionary principal. |

Location of Coastal Development

11.3.7 Previously developed areas should be the focus for developments requiring a coastal location. Where development on the coast is justified it should contribute to renewal and regeneration of coastal areas. By concentrating coastal development away from previously undeveloped or isolated areas it will be possible to reduce pressure on more sensitive stretches of the coast.

11.3.8 Where there are no, or only very limited, opportunities for the regeneration of coastal areas, planning authorities shall seek to accommodate new development on the landward side of settlements rather than permitting additional development on the coastal strip.

| Objective No. | Location of Coastal Development |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | It is an objective of the planning authority to: |
| EN 11-40 | Encourage and promote the imaginative reuse of previously developed land and buildings, particularly where there are opportunities to restore or enhance degraded coastal environments, in accordance with the objectives of this plan and relevant legislation. |
| EN 11-41 | Provide a framework for development while protecting the undeveloped coast from unjustified and inappropriate development. |
| EN 11-42 | Have a presumption against new development within sections of the coast deemed to be isolated. |
| EN 11-43 | Promote the appropriate development of locations on the landward side of existing settlements before considering new development on the coastal strip, except in situations where a coastal location is required. |
| EN 11-44 | Discourage the coalescence of development along the coast. |

Development Above and Below the High Water Mark

11.3.9 In its role as the Planning Authority, the Council will deal with coastal developments as appropriate in accordance with the provisions of the Planning and Development Act 2000, as amended.

| Objective No. | Development above and below the high water mark |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | It is an objective of the planning authority to: |
| EN 11-45 | Work closely with The Department of Agriculture, Fisheries & Food and the Department of the Environment, Heritage and Local Government, in order to ensure that a consistent approach is taken with regard to development above and below the high water mark. |

Leisure and Amenity - Bathing Waters

11.3.10 The coastal areas are an established area of leisure and amenity and the county has resorts and beaches of the highest quality, which is recognised by the number of EU designated 'Blue Flag' beaches in the county.

| Objective No. | Bathing Water Standards |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | It is an objective of the Council to: |
| EN 11-46 | Protect bathing waters in order that they meet the required Bathing Water standards and implement the findings and recommendations of the 'Quality of Bathing Water in Ireland' reports as published. |

Tourism / Recreational Development

11.3.11 Coastal areas also have potential for tourist related projects which could generate sustainable employment opportunities. These would include marina type developments, golf courses, and water based sports.

11.3.12 It will be necessary to identify locations on the coast where these developments could be developed and where it can occur without being in conflict with other interests or contrary to the proper planning and development of the area.

| Objective No. | Tourism / Recreational Development |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | It is an objective of the Council to: |
| EN 11-47 | <p>(a) Maintain and upgrade facilities in coastal areas by the appropriate provision of:</p> <ul style="list-style-type: none"> • Car Parking Areas • Public Toilets • Refuse Facilities <p>(b) Prepare and implement Litter Management Plans for coastal zones and carry out its statutory functions in relation to the Litter Pollution Act 1997.</p> |
| EN 11-48 | Ensure that any coastal development permitted should not detract from the visual amenity of an area and conform to the highest standards of design, siting, pollution control and provision of facilities. |

Coastal Protection

11.3.13 Coastal erosion is a dynamic natural process involving the movement of sediment from one area of the coast to another. This process normally takes place slowly but in certain instances the rate of erosion may be accelerated, particularly on soft coastlines, due to violent storm action, pressures from leisure or recreational activities or the presence of inappropriate man-made protection works. Typically, coastal erosion is most immediately evident on soft coastlines such as sand dunes, sand cliffs, glacial cliffs and gravel ridges.

| Objective No. | Coastal Protection |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | It is an objective of the Council to: |
| EN 11-49 | Prohibit development 1. In those parts of the Coastal Development Zone where such development could not be adequately safeguarded over the lifetime of the development without the construction of coastal defences, or 2. Where existing coastal defences, properly maintained, would not provide an acceptable standard of safety over the lifetime of the development. |
| EN 11-50 | Prohibit development in areas of the Coastal Development Zone where the natural erosion process is likely to threaten the viability of such development. |
| EN 11-51 | Prohibit any coastal protection works which have not been the subject of a recognised design process and have not been assessed in terms of their likely impact on the marine and coastal environment. |
| EN 11-52 | Implement site specific management policies to ensure that erosion is not initiated or aggravated by the impact of human activity. |
| EN 11-53 | Prohibit the removal of beach material, aggregates, sand and gravel, including the removal of material from sand dune ecosystems. |

Sand Dune Preservation

11.3.14 Serious sand dune erosion continues to occur in many of the well know recreational areas in the county. The Council proposes to preserve these areas by undertaking appropriate management measures.

| Objective No. | Sand Dune Preservation |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | It is an objective of the Council to: |
| EN 11-54 | Protect the sand dunes of the County and prohibit any development that would damage or lead to the erosion of the dunes in areas where sand dunes have a high amenity value and provide coastal protection. |

Mariculture / Aquaculture

11.3.15 Mariculture / Aquaculture play an important role in the economy and development of coastal areas. The future growth of this sector offers potential for increased employment, particularly in areas remote from the larger centres of population.

11.3.16 The use by a number of systems of large cages, colourful buoys and markers have tended to make developments visually obtrusive as these developments are located and likely in future to be located in areas of high amenity value.

11.3.17 It is an overall strategy of the Council as part of integrated coastal management strategy to put in place a framework that accommodates the various and diverse interests who use the coastal areas including maricultural/aquacultural interests.

| Objective No. | Mariculture / Aquaculture |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | It is an objective of the Council to |
| EN 11-55 | Maintain ports, piers, quays and slipways for which it has responsibility in good repair. |
| EN 11-56 | Facilitate the development of on shore primary and secondary processing units, provided that such developments are in accordance with the proper planning and sustainable development of the area. |
| EN 11-57 | Co-operate with all agencies and bodies involved in the promotion and sustainable development of mariculture / aquaculture. |

11.4 Flood Risk Management

It is the policy of the Council, that development itself should not be subject to an inappropriate risk of flooding nor should it cause or exacerbate such a risk at other locations. In this regard, applicants for development should have particular regard to the Guidelines issued by the DEHLG “The Planning System and Flood Risk Management”.

Impact of Flood Risk on Development

11.4.1 Locating development in an area at risk from flooding can lead to property damage, human stress and hardship, problems obtaining property insurance and consequential demands for the expenditure of local authority or central government resources on flood protection works. The construction of protection works either at the time of the development, or at a later date, will incur additional costs, may not provide absolute immunity from the risk of flooding and can, if not appropriately designed, have detrimental effects on flood risk elsewhere.

Impact of Development on Flood Risk Upstream

11.4.2 In times of flood, the river flows not only through its normal channel but also along the flood plains. Any constriction of the natural flow path can ‘back-up’ the river and lead to increased flood levels upstream. The construction of buildings or houses, and particularly embankments for infrastructure or protection, in or across a floodplain can therefore not only put the development itself at risk of flooding, but can also increase the flood risk for land and properties upstream. The same is obviously true of any construction in, or encroachment into, the normal river channel.

Impact of Development of Flood Risk Downstream

11.4.3 Natural or agricultural land, such as forests, woodland, pastures or crop fields, is normally able to absorb a considerable proportion of any rain that falls onto it. Covering such land with buildings, tarmac (such as for parking areas or roads), or other impermeable materials significantly reduces this ability to absorb rainfall, and will lead to increased land runoff. As a result, large developments, including those away from major rivers, can, in the absence of adequate flood risk assessments and the implementation of sustainable urban drainage systems, increase river flows and the risk of flooding to land and property downstream. A number of smaller developments built up over a period of time can have the same effect.

Impact of Tidal Flood Risk on Development

11.4.4 A combination of high tides, waves, high winds and surges developed from low-pressure systems can lead to extensive flooding. Current predictions of climate change indicate that the risk of flooding from the sea will increase in the future. Any area below current or predicted future peak sea levels, including areas behind existing defences that offer only a certain level of protection, are at risk from flooding in the future.

Impact of Possible Climate Change

11.4.5 Current predictions of climate change in Ireland indicate that winters will become wetter and the rainfall distribution ‘stormier’, and that sea levels will rise. This would mean that areas not currently prone to flooding may be at risk from flooding in the future.

Recommended Approach

11.4.6 Consideration of flood risk and the related impacts of, or on, development throughout a catchment, rather than on a location-by-location basis, will facilitate sustainable development through the reduction of future flood damage, and hence reduce the potential economic and social costs outlined above. Development Plans (and subsequent Planning decisions) are the key to this approach.

| Objective No. | Flood Risk and Development |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | It is an objective of the council that: |
| EN 11-58 | <p>Development that is sensitive to the effects of flooding will generally <u>not</u> be permitted in flood prone or marginal areas.</p> <p>[Preventing such development, where flooding would result in significant hardship, financial losses or costs, will avoid increasing the existing level of risk and will protect the proposed new development from the human (stress and ill-health, for example) and financial costs of flood events. It will also eliminate or reduce expenditure on flood protection measures and compensation.]</p> |
| EN 11-59 | <p>Appropriately designed development, which is not sensitive to the effects of flooding, may be permissible in flood plains provided it does not reduce the flood plain area or otherwise restrict flow across floodplains.</p> <p>[Examples of such development might include park areas, sports pitches, certain types of industry, warehousing, etc. designed to be flood resistant and/or insensitive. Such development should only be permitted provided it incorporates adequate measures to cope with the ever-existent flood risk, e.g. adequate drainage systems, safety measures, emergency response facilities and/or warning and response systems and where it is considered that flooding would not result in significant hardship/financial loss or cost.]</p> |
| EN 11-60 | <p>Development must so far as is reasonably practicable and environmentally sustainable incorporate the maximum provision to reduce the rate and quantity of runoff. e.g.:-</p> <ul style="list-style-type: none"> - Hard surface areas (car parks, etc.), should be constructed in permeable or semi-permeable materials - On-site storm water ponds to store and/or attenuate additional runoff from the development should be provided - Soak-aways or French drains should be provided to increase infiltration and minimise additional runoff <p>[Such sustainable design/construction measures are desirable in most areas and essential in floodplains, areas liable to flooding, and areas where the conveyancing capacity of watercourses is marginal. In all of these cases development that reduces the rate of absorption or increases the rate of runoff increases the risk of flooding of lands and properties downstream]</p> |

| Objective No. | Flood Risk and Development |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EN 11-61 | <p>For developments adjacent to watercourses of a significant conveyance capacity any structures (including hard landscaping) must be set back from the edge of the watercourse to allow access for channel clearing/maintenance.</p> <p>[A setback of 5m-10m is required depending on the width of the watercourse.]</p> |
| EN 11-62 | <p>Development consisting of construction of embankments, wide bridge piers, or similar structures will not normally be permitted in or across flood plains or river channels.</p> <p>[Such structures restrict/obstruct flow and increase the risk of flooding to property and land upstream. If it is considered necessary, in exceptional cases, to permit such structures, they should be designed to minimise and/or compensate for any potential negative effects]</p> |
| EN 11-63 | <p>All new development must be designed and constructed to meet the following minimum flood design standards:-</p> <ul style="list-style-type: none"> • For Urban areas or where developments (existing, proposed or anticipated) are involved -the 100 year flood • For Rural areas or where further developments (existing, proposed or anticipated) are not involved - the 25 year flood • Along the Coast and Estuaries - the 200 year tide level taking into account predicted sea level rise. • Where streams open drains or other watercourses are being culverted - the minimum permissible culvert diameter is 900mm. (Access should be provided for maintenance as appropriate.) <p>[The application of higher design standards may be appropriate in certain cases where the level of risk and/or uncertainty warrant it e.g. hospitals or other emergency services, main roads, chemical plants, cultural repositories, areas of karst etc.]</p> |
| EN 11-64 | <p>A flood impact assessment and proposals for the storage or attenuation of run/off discharges (including foul drains) to ensure the development does not increase the flood risk in the relevant catchment must accompany applications for Planning Permission for development of areas exceeding 1 Hectare.</p> |
| EN 11-65 | <p>A certificate from a competent person that the development will not contribute to flooding within the relevant catchment must accompany applications for Planning Permission for development of areas of 1 Hectare or less.</p> |

| Objective No. | Flood Risk and Development |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EN 11-66 | Zoning of land for development purposes will not be permitted in areas where a flood risk assessment indicates a risk of flooding exists to that land or other land or property as a result of development. |
| EN 11-67 | A sequential approach and justification approach is as indicated in the Flood Risk Management Guidelines will be utilized in the assessment of zoning and development proposals. |

11.5 Environmental Impact Assessment

The requirements for Environmental Impact Assessment of certain projects are contained in European and National Legislation. Kerry County Council will require Environmental Impact Assessments (EIS) to accompany applications in accordance with the provisions of the relevant legislation. In the case of sub threshold developments, the requirements for an EIS will be determined in accordance with guidelines issued by the DEHLG in August 2003 published by the Environmental Protection Agency.

Kerry County Council shall have regard to the relevant legislation and guidance in relation to assessing development proposals where it is considered that “project splitting” may be a consideration in the proposals presented.