

Habitat Directive Assessment

Natura Impact Report

of the

Proposed 2nd Variation of the Killarney Town Development Plan 2009-2015

IN ACCORDANCE WITH THE REQUIREMENTS OF
ARTICLE 6
OF THE
EU HABITATS DIRECTIVE 92/43/EEC



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1. Executive Summary

1.1. Introduction

For the purposes of this report the Killarney Town Development Plan 2009-2015 and proposed variation to same is taken to be 'the Plan'.

The Killarney Town Development Plan 2009-2015 came into effect on the 20th April 2009. That document was subject to a full Strategic Environmental Assessment (SEA) and to a Habitats Directive Assessment (HDA) exercise. Subsequent to this, the first variation of the Town Plan to incorporate a 'Core Strategy' was adopted on the 5th December 2011 and that document was also subject to SEA and to HDA.

Killarney Town Council now proposes to vary the Killarney Town Development Plan under Section 13 of the Planning and Development Act 2000, (as amended) by way of a re-zoning of lands from residential (phase 11) to recreation amenity and open space at Dereen, Killarney. This variation will be known as the second variation of the Town Plan.

There are a considerable number of environmental designations in the vicinity of the Town Development Plan area and accordingly attention and care were given at the initial Town Plan formulation stage and subsequent first variation to same to make sure that objectives, policies and supporting text were framed so as to ensure that the special interest of these was not undermined.

This report, a Habitats Directive Assessment Natura Impact Report, is an assessment of potential impacts of the proposed second variation to the Town Plan on Natura 2000 sites, which are nature conservation sites of international importance.

1.2. Stage I Screening

A detailed screening exercise considered the potential for cumulative and in combination effects, in light of the characteristics and specific environmental conditions of the Natura 2000 sites as a consequence of the proposed variation to the Town Plan.

It was concluded at stage one screening that the proposed variation had indirectly the potential to have significant effects on a Natura 2000 site and accordingly underwent Stage II Appropriate Assessment / Natura Impact Report.

1.3. Stage II Appropriate Assessment / Natura Impact Report

An assessment of the proposed variation considered to have potential significant effects on a Natura 2000 site is detailed in Table 6.1. In line with best practice, a hierarchy of mitigation measures, beginning with avoidance was followed.

Following the stage 11 assessment it was concluded that having regard to the nature of the variation: a plan to re-zone land from residential to recreation amenity and open space, in the absence of specific development work proposals for the site at

this time and taking into account the environmental assessments already carried out in respect of the Killarney Town Development Plan 2009-2015 and the caveats enshrined in that Plan; that subject to the carrying out of an Article 6 Habitats Directive Assessment at project level stage, no significant adverse effect was likely on the ecological integrity of the Natura 2000 networks.

It is considered that the recommended mitigation measures as outlined in this report are sufficient to ensure that adverse impacts on the integrity of Natura 2000 sites will be avoided.

1.4. Conclusion

This report concludes that the variation, either by itself or in combination with other plans and projects, would not adversely impact on the integrity of Natura 2000 sites – provided that the recommended mitigation measures as set out in S.6 of this report are incorporated into the plan and that the variation along with this report is forwarded onto the relevant prescribed bodies for comment and any additional mitigation measures are incorporated as part of the proposed variation where required.

2. Introduction to Habitats Directive Assessment and to Stage One Screening

2.1. Introduction

Killarney Town Council is currently proposing to vary its Town Development Plan; this variation will be known as the second variation of the Town Plan.

The Killarney Town Development Plan 2009-2015 contains the overall strategic spatial framework within which to guide development in the Town over the period of the Plan from 2009 – 2015.

This Habitat Directive Assessment under Article 6 forms part of this initial stage of the variation making process. The variation to the Plan is being considered at this stage to assess if there is likely to be a significant effect on any Natura 2000 site. Following the public consultation period, submissions / observations received in respect of this Natura Impact Report will also be taken into consideration prior to the completion of the process. Any proposed amendments will be further considered in order to fully assess their impacts on Natura 2000 sites. This proactive approach allows for the adjustment of the proposals of the Plan to ensure that no significant adverse effect on Natura 2000 sites is likely prior to its adoption.

2.2. The requirement for Habitats Directive Assessment

The Habitats Directive Assessment (HDA), also known as Appropriate Assessment, is a requirement under the Habitats Directive 92/43/EEC. This Directive indicates the need for plans and projects to be subject to Habitats Directive Assessment if the plan or project is not directly connected with or necessary to the management of a Natura 2000 site, but is likely to have a significant effect either individually or in combination with other plans or projects on Natura 2000 sites. This was reinforced in the ECJ ruling against Ireland in Case 418/04.

2.3. The purpose of Habitats Directive Assessment

Principally the purpose of a Habitats Directive Assessment is to identify the possible effects of implementing a plan (or project) on the conservation status of designated Natura 2000 sites within sphere of influence of the plan (or project). The *Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna* – the ‘Habitats Directive’ provides legal protection for habitats and species of European importance. Article 2 of the Habitats Directive requires the maintenance or restoration of habitats and species of interest to the EU in a favourable condition. The Directive was transposed into Irish law by the European Communities (Natural Habitats) Regulations, SI 94/1997.

Under Article 6(3) of the Habitats Directive an Appropriate Assessment must be undertaken for any plan or program that is likely to have a significant effect on the conservation objectives of a Natura 2000 site. Article 6 paragraph 3 states:-

Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment

of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.

In summary, a HDA is an evaluation of the potential impacts of a plan or project on the conservation objectives of a Natura 2000 site and the development, where necessary, of mitigation or avoidance measures to preclude negative effects.

Plans or projects can only be permitted after having ascertained that there will be no significant adverse effect on the integrity of the sites in question. Components within a plan/project, such as objectives or proposals, can be adjusted or removed to avoid significant adverse impacts prior to implementation. The plan or project may also proceed if sufficient mitigation or compensation measures are in place to ensure the overall integrity of Natura 2000 sites.

2.3.1. Consultation with Environmental Authorities

The Natura Impact Report (together with the SEA Screening Report) was forwarded to the Environmental Authorities (Environmental Protection Agency (EPA), Department of Environment, Heritage and Local Government (DoEHLG), Department of Agriculture, Food and the Marine, and the Department of Communications, Energy and Natural Resources (DCENR)) and submissions and observations were invited. (A public consultation phase will follow where further submissions from prescribed bodies and the public will be invited.)

2.3.2. Submissions / observations received from the Environmental Authorities

1. Department of Communications, Energy and Natural Resources

The DCENR indicated that the Minister has been notified however no further comments have been received.

2. Minister for Agriculture, Food and the Marine, indicated the Minister has been notified however no further comments have been received.

3. The Environmental Protection Agency

The content of the EPA's submission is summarised as follows:-

- The Planning Authorities position with regard to the need for a SEA of the variation is noted.
- Future amendments to the draft variation should be screened for likely significant effects on the environment.

4. Geological Survey of Ireland

The content of their submission relates to Datasets available for use. No specific comments relating to the proposed plan were received.

5. Inland Fisheries Ireland (IFI)

The content of the IFI's submission is summarised as follows:-

- IFI welcomes the proposed variation from residential to amenity zoning for this site.
- All the mitigation measures proposed for the protection of water quality, habitat and flood discharge detailed in the Habitat Directive Assessment (HDA) Natura Impact Report to address likely significant effects of the Plan on Natura 2000 sites should be adopted.
- A condition of rezoning should include that any site development would not permit infill of the 100 year flood plain.
- The river should be retained as is without any alteration, widening, drainage or interference. Any interference with the Deenagh River channel should be prohibited.
- A riparian buffer zone of 20 meters should be retained free from development along the Deenagh River. (subject to a specific amenity/ walkway river corridor plan).
- Site Drainage (if required) should be by the use of Sustainable Urban Drainage systems utilising soakage/infiltration rather than by direct piped outlet to the Deenagh.
- If there is any proposal to interfere with the Deenagh River or its immediate bankside e.g. as part of future development of the site Inland Fisheries Ireland is to be consulted.

Response to IFI

The issues raised by the IFI, specifically the issues relating to site drainage, interference with the River or its immediate bankside will be addressed in any future planning applications made on the site. With respect to the request that a 20 metre riparian buffer zone be retained free from development along the Deenagh River, it is noted that the Deenagh River and Natura 2000 site designation: Killarney National Park, Macgillycuddy's Reeks and Caragh River, cSAC is already situated in excess of 100 metres from the proposed site. This variation does not deal with lands immediately abutting the River.

With regard to the point that any site development should not permit infill of the 100 year flood plain, it is considered that this variation seeks to integrate the Flood Risk Management Guidelines (D0EHLG/OPW 2009) by re-zoning lands considered to be at higher risk to the adverse impacts of flooding from residential to recreation amenity and open space to a use that is not especially vulnerable to the adverse impacts of flooding. In addition, it is considered that the recreation amenity and open space zoning will result in a less intensive development with anticipated reduced development site coverage and ultimately is considered a more appropriate and sustainable use of the lands.

Planning applications received for the site (if any) will require a site specific flood risk assessment to accompany any future projects on the site. The flood risk assessment will address the issue of type and design of acceptable development in the flood plain. Points raised in this submission will be imparted to any interested party seeking advice on developing this land and will be raised again when any

application is received to ensure the proper planning and sustainable development of the area.

2.3.3. Consideration of whether or not the proposed second variation of the Killarney Town Development Plan would be likely to have significant effects on the environment.

The submissions / observations received will not warrant any amendment to the proposed initial plan as originally outlined. It is considered that the variation will further integrate the Flood Risk Management Guidelines (D0EHLG/OPW 2009) and national and EU environmental legislation into the Development Plan.

The proposed variation has not been modified from that which was preliminarily screened for therefore a revised screening exercise is therefore not required in this instance.

2.4. Overview of Habitats Directive Assessment Process in relation to the preparation of the 2nd Variation to the Killarney Town Development Plan 2009-2015.

In the preparation of this assessment reference has been made to the following documents:-

- Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities (2009).
- European Commissions: *Managing Natura 2000 Sites. The provisions of Article 6, of the 'Habitats' Directive 92/43/EEC.*
- European Commission: *Assessment of plans and projects significantly affecting Natura 2000 sites Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC.*
- Guidance document on Article 6(4) of 'Habitats Directive' 92/43/EEC.
- Department of the Environment Heritage and Local Government (DEHLG) Circular letter SEA 1/08 & NPWS 1/08 dated 15 February, 2008.
- Department of the Environment (1994). *Planning and Policy Guidance: Nature Conservation (PPG9)* (HMSO).
- The European Communities (Natural Habitats) Regulations, SI 94/1997, recently amended by the Birds and Habitats Regulation SI No. 477 of 2011.

The circular mentioned above refers to the recent ruling against Ireland in Case 418/04 EC Commission v Ireland. The ruling relates to Ireland's transposition and implementation of the Birds Directive 79/409/EEC, as well as its implementation of relevant articles of the Habitats Directive 92/43/EEC. The ruling among other things clarifies that Ireland has not correctly transposed Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC by not providing explicitly for appropriate assessment of land use plans, as opposed to projects (paragraphs 222 to 234 of the ruling).

Accordingly, any draft land use plan (development plans, local area plans, regional planning guidelines, schemes for strategic development zones) or amendment/variation to it proposed under the Planning and Development Act 2000 (as amended) must be screened for any potential impact on areas designated as

Natura 2000 sites (normally called Special Areas of Conservation (SACs) or Special Protection Areas (SPAs)).

The European Commission's Methodological Guidance recommends a 4 stage approach as outlined below. Each stage determines whether a further stage in the process is required. If, for example, the conclusions at the end of Stage One are that there will be no significant impacts on Natura 2000 sites, there is no requirement to proceed further.

Stage 1 Screening: Determining whether the plan 'either alone or in combination with other plans or projects' is likely to have a significant effect on a Natura 2000 site.

Stage 2 Appropriate Assessment: Determining whether, in view of the site's conservation objectives, the plan 'either alone or in combination with other plans or projects' would have an adverse effect (or risk of this) on the integrity of the site. If not, the plan can proceed.

Stage 3: Assessment of Alternative Solutions: Where it has not been proven that measures considered will not avoid or mitigate the adverse affect on the Natura 2000 site, then an assessment of the alternatives will be required; and if none are acceptable then stage 4 is required to be considered.

Stage 4 Assessment where no Alternative Solutions Exist and where Adverse Impacts Remain This will involve assessment where the Plan is considered to result in adverse impacts on the Natura 2000 site and no alternative solutions remain – the imperative reasons of overriding public interest (IROPI) test must be met before authorisation, permission or adoption of the Plan is agreed. This includes the agreement of compensatory measures.

2.5. Introduction to Stage One Screening

The Screening Stage of the report is used to identify whether the variation to the Plan, either alone or in combination with other plans or projects, is likely to have a significant effect on a Natura 2000 site. This report follows European Commission (2001) guidance which recommends that screening should follow a four step process as outlined below:-

Step one: Determine whether the variation to the Plan is directly connected with or necessary to the management of the site. If it is, then no further assessment is necessary.

Step two: Describe the variation to the plan and other plans and projects that, 'in combination', have the potential to have significant effects on a European site.

Step three: Identify the potential effects on the European site.

Step four: Assess the significance of any effects on the European site.

As the Killarney Town Development Plan 2009-2015 and the proposed variation to same is a land use plan and is not directly connected with or necessary to the management of any Natura 2000 site, this assessment will proceed to step two of the process. The results and recommendations of the Stage One Screening Process are outlined in Section 5 of this report.

3. Description of the plan and other plans and projects that, 'in combination', have the potential to have significant effects on a European or Natura 2000 site

3.1. Introduction

This is the second step of the Stage One Screening process and provides a description of the plan and other plans and projects that, 'in combination', have the potential to have significant effects on a European or Natura 2000 site.

3.2. Description of the Plan

For the purposes of this HDA, the 'plan' is taken to be the Killarney Town Development Plan 2009-2015 and proposed second variation to same. The Plan sets out an overall strategy for the proper planning and sustainable development of the town. It is the guiding document for private and public sector development ensuring that developments are carried out in an orderly, cohesive and planned manner. The Plan aims to harmonise economic, social and environmental concerns in a positive way with the end objective of improving the quality of life of the town's citizens.

3.2.1. Brief outline of the proposed variation

A complete version of the proposed variation is on public display in conjunction with this Natura Impact Report.

The proposed second variation involves the following key elements:-

- Re-zoning of lands at Dereen, Killarney from residential (phase 11) to recreation amenity and open space.
- Additional proposed mitigation measures include:
 - Inclusion of additional guidance with regard to maintaining ecological integrity of Natura 2000 sites.
 - Compliance with the requirements of other government guidance including 'The Planning System and Flood Risk Management' (DEHLG 2009).

3.3. Description of other strategies, plans and legislation reviewed to identify potential in combination effects on Natura 2000 sites.

In describing the Plan, it is necessary to identify all those elements of the Plan, alone or in combination with other projects or plans that have the potential for having significant effects on the Natura 2000 site. 'In combination' is taken to refer to the cumulative effect of influences acting on sites from all plans and projects in the context of prevailing environmental conditions. Underlying environmental trends such as sea level rises, climate change and increased flood risk where also taken into account. Some other plans and projects which may pose 'in combination effects' include:

Table 3.1 International and European Conventions, Treaties and Legislation

International Conventions and Treaties	Key Environmental Objectives
Agenda 21	Agenda 21 was the main outcome of the United Nations' Conference on Environment and Development that was held in Rio de Janeiro in 1992. That Conference endorsed the concept of sustainable development, requiring that economic growth must be compatible with the needs of both present and future generations and that environmental protection should form an integral part of the development process. These principles are required to be supported by a precautionary approach, which ensures that an absence of complete scientific certainty is not a justification of postponing measures to prevent environmental degradation. The key role of environmental impact assessment is stressed in respect of activities that may have a significant affect on the environment. Local Agenda 21 aims to promote sustainable development at local and regional level.
Kyoto Protocol	The Kyoto Protocol is an agreement made under the United Nations' Framework Convention on Climate Change. It was decided in December 1997 and entered into force on 16 February 2005. Its objective is to substantially reduce greenhouse gas emissions as a response to climate change. Developed countries, the so-called Annex I states, have to reduce their greenhouse gas emissions by a collective average of 5% below their 1990 levels. An Annex I country which fails to meet its Kyoto obligation is subject to possible penalties, although the Protocol also makes provision for flexible mechanisms which permit the purchasing of greenhouse gas emission allowances from other states. The National Climate Change Strategy sets out how Ireland is participating in this process. In 2007, the European Union agreed new climate and energy targets- 20-20-20 by 2020 – 20% reduction in greenhouse gas emissions by 2020; 20% energy efficiency by 2020 and 20% of the EU's energy consumption to be from renewable sources by 2020. Directive 2009/28/EC on the promotion of the use of energy from renewable sources establishes the basis for the achievement of the EU's 20% renewable energy target by 2020. Under the terms of the Directive, each Member State is set an individually binding renewable energy target, which will contribute to the achievement of the overall EU goal. Member states are to achieve their individual target across the heat, transport and electricity sectors and apart from a sub-target of a minimum of 10% in the transport sector that applies to all Member States, there is flexibility for each country to choose how to achieve their individual target across the sectors. Ireland's overall target is to achieve 16% of energy from renewable sources by 2020. Directive 2009/28/EC requires each Member State to adopt a national renewable energy action plan and submit these to the European Commission. These plans are to set out Member States' national targets for the share of energy from renewable sources consumed in transport, electricity and heating and cooling in 2020, taking into account the effects of other policy measures relating to

International Conventions and Treaties	Key Environmental Objectives
	energy efficiency on final consumption of energy.
Johannesburg Plan of Implementation	This international policy initiative sets out an action plan for the implementation of the activities adopted at the World Summit on Sustainable Development in 2002. It covers topics such as poverty eradication, changing unsustainable patterns of production and consumption, managing natural resources, sustainable development and other aspects of the implementation of Agenda 21.
UN Convention on Biological Diversity	The UN Convention on Biological Diversity was a direct result of the Earth Summit in Rio de Janeiro. It came into force in 1993, being ratified by Ireland in 1996. Its objective is the conservation of global biodiversity, as well as to ensure equitable access to the world's genetic resources. It requires each party to develop strategies, plans or programmes for the conservation and sustainable use of biological diversity and that these should be integrated into other national initiatives that may have biodiversity implications. Monitoring programmes and appropriate designations for protected areas must be established, while undesirable alien species which threaten ecosystems should be controlled. In April 2002, the Parties to the Convention committed themselves to achieve, by 2010, a significant reduction of the current rate of biodiversity loss at global, regional and national levels.
OSPAR Convention	The purpose of the 1992 OSPAR Convention is to encourage international cooperation to protect the marine environment of the North-East Atlantic. It replaced the earlier 1972 Oslo Convention on dumping waste at sea and the 1974 Paris Convention on land-based sources of marine pollution. It was ratified by Ireland in 1997 and entered into force in 1998. Convention signatories are required to take steps to prevent and eliminate marine pollution and to protect the maritime area, thereby safeguarding human health and conserving marine ecosystems. Where practicable, damaged marine areas are to be restored. Both the precautionary principle and polluter pays principle are to apply. All possible steps are to be taken to prevent and eliminate pollution from land-based sources, with joint assessments of the quality of the marine environment being undertaken by party states.
ESPOO Convention	The Convention on Environmental Impact Assessment in a Transboundary Context is also known as the ESPOO (EIA) Convention. The Convention entered into force in September 1997, being ratified by Ireland in 2002. It requires Parties to put in place appropriate and effective measures to prevent, reduce and control significant adverse transboundary environmental impacts from proposed industrial and other activities. This must be achieved in the context of each country having legal and other measures in place to ensure that specified projects which may cause significant adverse transboundary impacts are subject to environmental impact assessment (EIA) prior to any formal approval being granted on their commencement. States that may be affected by a proposed project must be notified and may participate in the EIA process. The Convention also promotes EIA procedures being extended to cover not only projects but also a state's policies, plans and programmes.
Protocol on Strategic Environmental Assessment (SEA)	The Protocol was adopted at a meeting of the Parties to the ESPOO Convention on 21 May 2003 during a Ministerial Environment for Europe Conference in Kiev. It develops from the ESPOO Convention by requiring Parties to evaluate the environmental and health-related consequences of their official draft plans and programmes using strategic environmental assessment (SEA). It was signed by Ireland in 2003.
UNESCO Convention concerning the Protection of the World Cultural and Natural Heritage	This Convention was drawn up in 1972 and ratified by Ireland in 1991. It covers not only monuments, groups of buildings and sites which have outstanding universal value but also natural sites of major importance. Parties are required to identify these locations and to ensure that they are protected and conserved for future generations. A World Heritage Committee has been established to approve the inclusion of individual
United Nations Framework Convention on Climate Change	The Convention on Climate Change sets an overall framework for intergovernmental efforts to tackle the challenge posed by climate change. It recognizes that the climate system is a shared resource whose stability can be affected by industrial and other emissions of carbon dioxide and other greenhouse gases. The Convention enjoys near universal membership.

International Conventions and Treaties	Key Environmental Objectives
	<p>Under the Convention, governments:</p> <ul style="list-style-type: none"> • gather and share information on greenhouse gas emissions, national policies and best practices • launch national strategies for addressing greenhouse gas emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries • cooperate in preparing for adaptation to the impacts of climate change <p>The Convention entered into force on 21 March 1994.</p>
Stern Review	<p>Sir Nicholas Stern, Head of the Government Economic Service and Adviser to the British Government on the economics of climate change and development, presented his report to the British Prime Minister and the Chancellor of the Exchequer on the Economics of Climate Change in October 2006. It concluded that scientific evidence was overwhelming: climate change was a serious global threat, and demands an urgent global response. The Review assessed a wide range of evidence on the impacts of climate change and on the economic costs, and used a number of different techniques to assess costs and risks. From all of these perspectives, the evidence gathered by the Review lead to a simple conclusion: the benefits of strong and early action far outweigh the economic costs of not acting.</p> <p>The report recommended that key elements of future international frameworks should include: Emissions trading; Technology cooperation; Action to reduce deforestation and Adaptation</p>
Intergovernmental Panel on Climate Change (IPCC) 4th Report on Climate Change	<p>The Intergovernmental Panel on Climate Change (IPCC) was jointly established in 1988, by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP), with the mandate to assess scientific information related to climate change, to evaluate the environmental and socio-economic consequences of climate change, and to formulate realistic response strategies. The IPCC multivolume assessments have since then played a major role in assisting governments to adopt and implement policies in response to climate change, and in particular have responded to the need for authoritative advice of the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC), which was established in 1992, and its 1997 Kyoto Protocol.</p> <p>Since its establishment, the IPCC has produced a series of Assessment Reports (1990, 1995, 2001 and 2007), Special Reports, Technical Papers and Methodology Reports, which have become standard works of reference, widely used by policymakers, scientists, other experts and students.</p> <p>Adopted in Valencia, Spain, on 17 November 2007, the four-volume Fourth Assessment Report (AR4), was released in various steps throughout the year under the title “Climate Change 2007”. It summarises the findings of the three Working Group reports and provides a synthesis that specifically addresses the issues of concern to policymakers in the domain of climate change: it confirms that climate change is occurring now, mostly as a result of human activities; it illustrates the impacts of global warming already under way and to be expected in future, and describes the potential for adaptation of society to reduce its vulnerability; finally it presents an analysis of costs, policies and technologies intended to limit the extent of future changes in the climate system.</p>
Bali Road Map	<p>After the <u>2007 United Nations Climate Change Conference</u> on the island Bali in Indonesia in December, 2007 the participating nations adopted the Bali Road Map as a two-year process to finalising a binding agreement in Copenhagen in 2009. The Bali Road Map includes the Bali Action Plan. The Bali Action Plan is centred on four main building blocks – mitigation, adaptation, technology and financing. Parties also agreed that the negotiations on a long-term agreement should address a shared vision for long-term cooperative action, including a long-term global goal for emission reductions. Furthermore, it outlined how future discussions should address enhanced national/international action, including the consideration of:</p> <ul style="list-style-type: none"> • measurable, reportable and verifiable nationally appropriate mitigation commitments or actions by all developed countries, and; • nationally appropriate mitigation actions by developing country Parties,

International Conventions and Treaties	Key Environmental Objectives
	supported and enabled by technology
Copenhagen Accord	<p>The Copenhagen conference on Climate Change culminated two years of intense negotiations launched with the 2007 Bali Action Plan. Known formally as the Fifteenth Session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP 15) and the Fifth Session of the Meeting of the Parties to the Kyoto Protocol (CMP 5), the gathering drew a level of political attention well beyond that of any previous climate meeting.</p> <p>The conference culminated in the Copenhagen Accord, a document that delegates agreed to “take note of” at the final plenary on 18 December 2009. Key elements of the Copenhagen Accord include: an aspirational goal of limiting global temperature increase to 2 degrees Celsius; a process for countries to enter their specific mitigation pledges by January 31, 2010; broad terms for the reporting and verification of countries’ actions; a collective commitment by developed countries for \$30 billion in “new and additional” resources in 2010-2012 to help developing countries reduce emissions, preserve forests, and adapt to climate change; and a goal of mobilizing \$100 billion a year in public and private finance by 2020 to address developing country needs. The accord also calls for the establishment of a Copenhagen Green Climate Fund, a High Level Panel to examine ways of meeting the 2020 finance goal, a new Technology Mechanism, and a mechanism to channel incentives for reduced deforestation.</p>

Table 3.2 National Plans, Policy, Guidelines and Legislation

National Plans, Policy and Guidelines	Key Environmental Objectives
<p>The National Spatial Strategy 2002-2020 (NSS)</p>	<p>The National Spatial Strategy 2002-2020 (NSS) is intended to provide a 20-year strategic planning framework to facilitate the development of a more balanced pattern of social, economic and physical development in Ireland. The NSS was a direct response to the concentration of development in certain areas of Ireland which has tended to occur at the expense of other locations, where economic weakness remains. Its goal is for a more balanced system of regional development, thereby facilitating all areas of the country contributing to their full potential.</p> <p>The NSS is intended to provide an upper-tier of strategic guidance that feeds into general government policy-making and also into the regional and local Development Planning framework. Acknowledging both the critical influence of and the need for consolidation in the greater Dublin region, the NSS supports the development of regional gateways in Cork, Limerick/Shannon, Galway, Waterford, Dundalk, Sligo, Letterkenny/Derry and Athlone/Tullamore/Mullingar. These gateways are to be supported by nine hubs: Ballina/Castlebar, Cavan, Ennis, Kilkenny, Mallow, Monaghan, Tralee/Killarney, Tuam, and Wexford. In order to further these aims, the NSS sets down a series of policies in relation to employment, housing, rural development, access to services and quality of life/environmental quality.</p>
<p>National Development Plan 2007 – 2013</p>	<p>The National Development Plan (NDP) was published in January 2007, replacing the earlier plan for 2000-2006. It proposes investment of some €184 billion in the economic and social infrastructure of Ireland. Unlike the 2000 NDP, which envisaged an extensive contribution from EU funding, the 2006 NDP indicates that this will be raised mainly from domestic sources. A particular emphasis is placed on economic and social infrastructure deficits in areas such as transport, energy, housing, water supply, education and health. The NDP interlinks with the regional development policies in the National Spatial Strategy, being intended to develop the gateway cities and hub towns to achieve the goals of economic growth in the regions and provide for major investment in the rural economy.</p>
<p>South-West Regional Planning Guidelines 2010-2022</p>	<p>The Regional Planning Guidelines (RPG's) have been developed on the basis of guidance provided through the National Spatial Strategy and a wide range of plans that exist at individual agency level throughout the region. The task of the guidelines is to provide a broad canvas to steer the sustainable growth and prosperity of the region and its people up to 2022. Among the goals outlined in the guidelines is the goal to 'promote the sustainable development of Mallow and Tralee/Killarney as vibrant hub towns - creating a critical mass in terms of population, employment and services, which will enable them to attract investment and people – thereby supporting the role of the Gateway and delivering balanced regional development within the Southwest, through energising smaller towns and rural areas within the sphere of influence'.</p> <p>The following are indicated to be the key principles of the South West Regional Planning Guidelines 2010-2022, which underpin the vision for the South West Region:-</p> <ul style="list-style-type: none"> • Prioritise sustainable economic growth and increased competitiveness within the Gateway and Hubs and encourage balanced growth in the key settlements of the rural areas. • Promote and develop the region as an attractive area to live and work with an excellent quality of life and strong sense of place. • Promote security of energy supply and develop renewable energy in the region in a sustainable manner. • Deliver an integrated and cost effective transportation and infrastructure system (including broadband) throughout the region in a sustainable manner. • Protect and enhance the natural landscape and heritage assets of the

National Plans, Policy and Guidelines	Key Environmental Objectives
	region and promote sustainable urban and rural tourism.
County and City Development Plans	The Planning and Development Act 2000 introduced a more tiered and plan-led system for development control, the hierarchy approach moves down from national strategies to local area plans. The Development Plan is the foundation of this system, transposing national and regional policies into practice. The scale, location and nature of virtually all forms of new development is determined in the context of the content of the Development Plan, with compatibility with the Development Plan being a key factor in the consideration of planning applications. Development Plans have a six year life and replacement plans are required to be drawn up in accordance with the Department of the Environment, Heritage and Local Government's 2007 document Development Plans - Guidelines for Planning Authorities.
Local Area Plans	Local area plans (LAPs) are required for locations that have a population in excess of 2,000 people and which are designated as towns in the most recent census. They may also be developed for towns that are to be located on substantial brown-field or Greenfield sites. The purpose of LAPs is to facilitate the sustainable development of the area, thereby avoiding piecemeal and incoherent expansion and ensuring that the social or physical infrastructure required is provided alongside residential development. LAPs also are intended to give infrastructure providers forward-planning information that is relevant to their investment programmes in future service provision.
Sustainable Development: A Strategy for Ireland	Ireland's 1997 Sustainable Development Strategy sets down a strategic framework for all of the main sectors of the Irish economy. The key aim of this document – which is developed upon by a number of the other, more recent, national policy documents discussed in this section – is to achieve sustainable development by the balancing of economic growth with a continued commitment to promoting environmental quality.
Making Ireland's Development Sustainable Review, Assessment and Future Action.	Making Ireland's Development Sustainable: Review, Assessment and Future Action was published as the country's contribution to the World Summit on Sustainable Development in 2002. It develops upon the 1997 report, Sustainable Development: A Strategy for Ireland, being intended to place sustainable development principles more centrally in response to the national environmental challenges associated with economic growth. Having reviewed progress to-date since the World Summit, the implications of current national and international environmental challenges are analysed, with a series of priorities for sustainable development policy being set out for a period to 2010.
The National Climate Change Strategy 2007 - 2012	This National Climate Change Strategy 2007-2012 develops from the 2000 Climate Change Strategy, taking into account the review contained in Ireland's Pathway to Kyoto Compliance (2006). Its purpose is to demonstrate how Ireland is to meet its 2008-2012 Kyoto commitments and to identify further policy measures needed for the period from 2012 and after 2020. The Strategy shows, sector by sector, how the 2008-2012 commitment is to be met by a range of existing and additional measures which collectively will cause Ireland's greenhouse gas emissions to reduce by over 17 million tonnes of carbon dioxide equivalent. For the period from 2012 to 2020, the Strategy describes a number of possible avenues to respond to the EU's commitment to reduce greenhouse gas emissions by at least 20% of the 1990 level.
Government White Paper – Delivering a Sustainable Energy Future for Ireland	Sub-titled the Energy Policy Framework 2007–2020, this document addresses how Ireland is to respond to international energy supply issues in the context of severe limitations on indigenous fuel supplies. Recognising that 90% of energy is currently imported, the White Paper sets down a series of strategic goals. These include actions relating to security of energy supply, of which the development of additional electrical inter-connectors with other European Countries is a particular priority. Other measures include ensuring fuel diversity, the upgrading of the national transmission networks, stimulating hydrocarbon exploration and contingency planning in respect of possible energy supply disruption. The sustainable supply and use of energy is also a theme, with policy proposals to address climate change and energy efficiency. In relation to the use of renewables,

National Plans, Policy and Guidelines	Key Environmental Objectives
	a highly ambitious 33% contribution to electricity generation by 2020 is proposed.
Green Paper – Towards a Sustainable Future for Ireland 2006	In 2006, the Irish government published a Green Paper on Sustainable Energy, which outlines the country's aim "to become a world leader in sustainable energy by 2020." The paper set out a series of actions to develop clean coal technology, biomass energy, renewable electricity and energy efficiency. In relation to renewables, this included a goal of increasing the share of renewables in electricity consumption to 30% by 2020, which implies a quadrupling of renewables generation capacity and compares with a share of only 5% in 2004. Earlier in 2006, the government raised its target for renewables' share of electricity in 2010 from 13.2% to 15%.
All Island Grid Study 2008	<p>In July 2005 the Governments of Ireland and Northern Ireland jointly issued a preliminary consultation paper on an all-island '2020 Vision' for renewable energy. The paper sought views on the development of a joint strategy for the provision of renewable energy sourced electricity within the All-island Energy Market leading up to 2020 and beyond, so that consumers, North and South, continue to benefit from access to sustainable energy supplies provided at a competitive cost.</p> <p>The report was published in January 2008 and examined:</p> <ul style="list-style-type: none"> • a range of generation portfolios for Ireland, • the ability of our power system to handle various amounts of electricity from renewable sources, • the investment levels required, and • climate change and security of supply benefits that would accrue.
Strategy for Intensifying Wind Energy Development 2000	The main aim of the strategy was a support hierarchy to deliver the revised target of 500 MWe of renewable energy based electricity generating plant announced in the Green Paper on Sustainable Energy, the majority of which was to be supplied by wind energy. The recommended strategy was an integrated one led by planning considerations incorporating resource studies and access to the national electricity grid. The report recommended the targets be met at least cost, taking into account the benefits of wind energy, in particular with regard to reducing greenhouse gas emissions. In this regard, the Renewable Energy Strategy Group favoured a withdrawal of the project size cap in favour of an open market approach constrained only by commercial considerations and technical limitations. According to the strategy the three principal elements which required integration in a plan led approach are appropriate location, adequate availability of the wind resource and accommodating electricity network infrastructure.
Ireland's National Renewable Energy Action Plan 2010	Article 4 of Directive 2009/28/EC on renewable energy requires each Member State to adopt a national renewable energy action plan (NREAP) to be submitted to the European Commission. The plan is to set out the Member State's national targets for the share of energy from renewable sources consumed in transport, electricity and heating and cooling in 2020, demonstrating how the Member State will meet their overall national target established under the Directive. Ireland submitted its NREAP in 2010. It sets out how the State plans to reach its 16% overall target for RE. Of this 16%, 12% will involve heat from renewable sources (RES-H), 10% transport from renewable sources (RES-T) and 42.5% electricity from renewable sources (RES-E).
Guidelines for Planning Authorities – Wind Energy Development	These guidelines offer advice to planning authorities on how wind energy should be embraced in Development Plan policies and on the consideration of applications for planning permission for wind farms. An objective is to ensure a national consistency of approach in the identification of appropriate locations for wind farm development and in the treatment of planning applications. They replaced earlier guidelines issued in 1996.
The Strategic Infrastructure Act	The strategic infrastructure provisions of the Planning and Development (Strategic Infrastructure) Act 2006 (the 2006 Act) came into effect on 31 st January 2007. The Act, which amends the Planning and Development Act 2000 (the 2000 Act), provides generally for applications for permission/approval for specified private and public strategic infrastructure developments to be made directly to the Board.
DRAFT Renewable Offshore Energy	The Department of Communications, Energy and Natural Resources, as the competent authority, is currently preparing plans for the development of Offshore

National Plans, Policy and Guidelines	Key Environmental Objectives
Development Plan (Version 1.3) November 2010	Renewable Energy in Ireland. The plan will take into account offshore wind, wave and tidal energy technologies in all viable locations in Irish waters.
Bioenergy Action plan	The Bioenergy Action Plan, published on 4th March 2007, sets out an integrated strategy for collective delivery of the potential benefits of bioenergy resources across the agriculture, enterprise, transport, environment and energy sectors. It will require sustained multi-agency collaboration, at national, regional and local level, working in strategic alliances to ensure that we realise this potential. It is a key component of the Government's objectives under the Energy Policy Framework 2007 - 2020.
South West Bioenergy Plan 2009 – 2020, SW Regional Authority, 2007	The South West Regional Authority in its Regional Planning Guidelines recognises the important role that alternative and renewable energies must play in the overall development of a sustainability strategy for the region. In order to increase the development and application of these alternative energy options the Authority formed a Forum for Efficient and Sustainable Energy, comprising organisations in the Region in the energy and other sectors that could bring and share their knowledge and experiences on the subject. This resultant South West Bioenergy Plan provides a framework for the development of the bioenergy sector in the region. The Regional Authority acknowledges that the introduction of relevant focussed policies and strategies in the area of sustainable energy and planning, both at national and regional level, can pave the way for effective change.
National Programme for Ireland on Transboundary Pollutants – Update and Revision	The 2007 publication, Update and Revision of the National Programme for Ireland under Article 6(3) of Directive 2001/81/EC for the Progressive Reduction of National Emissions of Transboundary Pollutants by 2010, sets out Ireland's progress in reducing four transboundary air pollutants: nitrogen oxides, volatile organic compounds, ammonia and sulphur dioxide. Significant reductions are documented from the power generation, transport and agriculture sectors and projections suggest that emissions of all four pollutants will continue to fall in the period up to 2010 and beyond. With the exception of nitrogen oxides, Ireland is noted to on target to comply. However, further additional measures are stated to be required to ensure that the required reduction of nitrogen oxides takes place in accordance with EU law.
Development Management Guidelines (DEHLG, 2007)	Development Management - Guidelines for Planning Authorities was published in June 2007, replacing former "yellow book" entitled Development Control Advice and Guidelines which was issued in 1982. These Guidelines are of relevance to all types of planning application, being intended to assist both the technical and administrative staff of planning authorities, as well as applicants and their advisers, on the operation of the planning process. They are also intended to promote best practice within planning authorities. Unlike many of the other guidelines on development control, Development Management - Guidelines for Planning Authorities focuses on the planning process rather than planning policy. They therefore act as an essential guide to anybody who wishes to interact with the planning system.
Discussion Paper – Strategy to Reduce Emissions of Transboundary Air Pollution by 2010	The Government's 2003 Discussion Paper, entitled Strategy to Reduce Emissions of Transboundary Pollution by 2010 to comply with National Emissions Ceilings, sets out how Ireland intends to meet its commitment to reduce, by 2010, the level of emissions of four transboundary air pollutants: nitrogen oxides, volatile organic compounds, ammonia and sulphur dioxide. This is a requirement of the 1999 Gothenburg Protocol, as these pollutants contribute to regional acidification, eutrophication and local air pollution across Europe. This commitment is additional to the separate undertakings relating to the Kyoto Protocol. The Discussion Document summarises the present and future obligations on Ireland, analysing the potential for emission reductions in the context of the economic costs and benefits of the necessary measures. The Paper concludes that meeting the nitrogen oxides and volatile organic compounds will be most challenging, with the ammonia and sulphur dioxide targets being met with relative ease.
Grid 25 (Eirgrid)	Eirgrid, which is the Transmission System Operator (TSO), has put in place an

National Plans, Policy and Guidelines	Key Environmental Objectives
2008)	<p>infrastructure initiative / strategy until 2025 (Grid 25) aimed at facilitating reliable, secure and affordable electricity supplies throughout Ireland. Aims include:-</p> <ul style="list-style-type: none"> • Supporting growth in the regions and ensuring continued reliability and security of supply; • Providing high-quality, high voltage bulk power supply for Ireland that will enable the different regions to attract in future industry and boost existing industry; • Exploiting Ireland's natural renewable sources of energy (wind and wave); • Reducing Ireland's carbon emissions by transmitting renewable energy in line with Government policy; • Increasing Ireland's connectivity to the European Grid, allowing for both bulk exports of electricity and imports of electricity when appropriate. <p>Eirgrid has divided up the network into seven regions. With the exception of part of North Kerry the 'South West Planning Region' is contained within Eirgrids South West Region. North Kerry is located within Eirgrids Western Region.</p> <p>West Region Key Developments include:</p> <ul style="list-style-type: none"> • Up-rating over 250 km of existing networks to facilitate higher capacity power flows, using existing corridors where possible (which will allows for renewable resources from both wind and wave to feed into the National Electricity Grid) • Strengthening the transmission capacity across the Shannon Estuary. <p>South West Key Developments include:</p> <ul style="list-style-type: none"> • €730m will be invested in the infrastructure of the region, to include the upgrading of approximately 130 km of transmission network and new transmission developments; • Strengthening of the Cork network to allow power to be exported from the two large gas fired generators in East Cork; • Planned grid reinforcements to connect significant amounts of wind generation; • Significant strengthening of capacity between the South West and the South East to allow excess power to flow from both renewable and conventional sources to supply demand in other parts of the country.
Actions for Biodiversity 2011-2016. Irelands National Biodiversity Plan (2011-2016)	<p>'Actions for Biodiversity 2011-2016' builds upon the achievements of the previous plan and focuses on actions that were not fully completed and addresses emerging issues. It has been developed in line with the EU and International Biodiversity strategies and policies. The measures Ireland will take are presented as 102 actions under a series of 7 Strategic Objectives. The objectives cover the conservation of biodiversity in the wider countryside and in the marine environment, both within and outside protected areas; the mainstreaming of biodiversity across the decision making process in the State; the strengthening of the knowledge base on biodiversity; increasing public awareness and participation; and Ireland's contribution to international biodiversity issues, including North South co-ordination on issues of common interest.</p>
National Heritage Plan	<p>The purpose of the National Heritage Plan is to establish five year strategy and frameworks for the protection of heritage as defined by The Heritage Act, 1995. Key priorities include preparation of local plans at a county level.</p>
Guidelines on Architectural Heritage Protection	<p>The 2004 document, Architectural Heritage Protection - Guidelines for Planning Authorities provides relevant guidance in the context of Part IV of the Planning and Development Act 2000. These guidelines are a response to Section 52 of the Act, which requires that guidelines are issued to planning authorities on the need to protect structures of architectural, historical or other importance and on the preservation of the character of architectural conservation areas. These Guidelines contain criteria to be applied when a local authority is selecting buildings for inclusion in its Record of Protected Structures. Guidance is also offered about the issuing of declarations on protected structures, as well as in respect of determining planning applications affecting both protected structures and the exteriors of buildings within Architectural Conservation Areas.</p> <p>A separate publication originally covered issues relating to churches and cathedrals: Architectural Heritage Protection for Places of Public Worship - Guidelines for Planning Authorities. This has now been included as Chapter 5 of the Architectural Heritage Protection - Guidelines for Planning Authorities.</p>

National Plans, Policy and Guidelines	Key Environmental Objectives
Guidelines on Telecommunications Antennae and Support Structures	These 1996 guidelines are intended to assist planning authorities in balancing the need for the comprehensive national provision of telecommunications services against local environmental and public health-related concerns. While upland areas are often favoured for technical reasons, there is an obvious need to consider other relevant impacts; similarly the location of free-standing masts in residential areas or in proximity to schools is discouraged. Mast sharing by different service providers is also stressed.
Guidelines for the Treatment of Air Quality During the planning and Construction of National Road Schemes (National Roads Authority, 2006).	Provides guidance for the assessment of air quality impacts during the planning and design of national road schemes. The guidelines are not mandatory, but are recommended in order to achieve consistency with respect to the Constraints Study, Route Corridor Selection and Environmental Impact Assessment phases of road scheme planning and development undertaken in accordance with the National Roads Authority's (NRA's) <i>National Roads Project Management Guidelines</i> (NRPMG) (National Roads Authority, 2000).
Guideline for the Treatment of Noise and Vibration in National Road Schemes (1st Rev., National Roads Authority, 2004).	Provides guidance on the treatment of noise and vibration during the planning and design of national road schemes. The guidelines are not mandatory but are recommended to achieve appropriate consistency with respect to the treatment of noise and vibration during the Constraints, Route Corridor Selection, Environmental Impact Assessment and construction phases of road scheme planning and development undertaken in accordance with Authority's National Roads Project Management Guidelines (NRPMG).
NRA policy Statement on Development and Access National Roads, 2006	NRA Policy Statement with the primary aim of informing developers and decision makers of the principles guiding the Authority's approach towards proposed developments impacting upon national roads. The Statement highlights the key policies and issues concerning national roads such as the protection of the investment made in upgrading the network, maintaining efficiency/satisfactory level of service, preserving high standards of road safety and avoiding the premature erosion of these benefits.
Spatial Planning and National Roads Draft Guidelines, DoEHLG, 2010	Guidelines, which have been drafted in consultation with representatives from local authorities, the Department of Transport and the National Roads Authority, to assist road and planning authorities, the National Roads Authority and providers of public transport in relation to their involvement in the overall planning process. The guidelines set out planning policy considerations relating to development affecting national roads outside the 50-kph speed limit zones for cities, towns and villages, including motorways, national primary and national secondary roads. The key principles are that: <ul style="list-style-type: none"> • Land-use and transportation policies are highly interdependent; • Plans must enable development and development should be plan-led; • Planning Authorities and the National Roads Authority must work closely together in integrating land-use and transport planning; • Effective development management is the key to implementing plans; and • Planning plays a major role in ensuring high standards of road safety.
The Planning System and Flood Risk Management (DEHLG 2009)	These guidelines require the planning system at national, regional and local levels to: <ul style="list-style-type: none"> • Avoid development in areas at risk of flooding by not permitting development in flood risk areas, particularly floodplains, unless where it is fully justified that there are wider sustainability grounds for appropriate development and unless the flood risk can be managed to an acceptable level without increasing flood risk elsewhere and where possible, reducing flood risk overall; • Adopt a sequential approach to flood risk management based on avoidance, reduction and then mitigation of flood risk as the overall framework for assessing the location of new development in the development • Incorporate flood risk assessment into the process of making decisions on

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	<p>planning applications and planning appeals.</p> <p>Ensuring that the requirements of EU and national law in relation to the natural environment and nature conservation are complied with at all stages of flood risk management is a core objective of the draft guidelines.</p>
National Strategy for Biodegradable Waste	<p>The National Strategy for Biodegradable Waste was published in April 2006, being an obligation on Ireland under the Landfill Directive. An aim is to set out how the three progressive landfill diversion targets of the Directive are to have effect. While significant progress in the development of recycling and waste reclamation initiatives is noted, the continuing national dependency on landfill is described as substantial. It states that a major increase in recycling and biological treatment capacity is necessary in order to facilitate the EU requirements for the diversion of biodegradable municipal waste away from landfill.</p>
Water Framework Directive / River Basin Management Plans	<p>These provide for a programme of measures and a river basin management strategy, designed to achieve at least good status for all waters and to maintain high status where it exists. The County of Kerry is partly located in the Shannon and South West River Basin Districts (RBD). The associated River Basin Management Plans for these RBDs outlines measures so as to sustainably manage the water resource / development within the RBD.</p>
The Wildlife (Amendment) Act (2000)	<p>The Wildlife Act, 1976 provided a legislative base for nature conservation. Nature conservation legislation was substantially enlarged and improved by the Wildlife (Amendment) Act, 2000 and the European Union (Natural Habitats) Regulations 1997-2005.</p> <p>The main objectives of the Wildlife (Amendment) Act, 2000 are to:</p> <ul style="list-style-type: none"> • provide a mechanism to give statutory protection to NHAs; • provide for statutory protection for important geological and geomorphological sites, including fossil sites by designation as NHAs; • improve some existing measures, and introduce new ones, to enhance the conservation of wildlife species and their habitats; • enhance a number of existing controls in respect of hunting, which are designed to serve the interests of wildlife conservation; • broaden the scope of the Wildlife Acts to include most species, including the majority of fish and aquatic invertebrate species which were excluded from the 1976 Act; • introduce new provisions to enable regulation of the business of commercial shoot operators; • ensure or strengthen compliance with international agreements and, in particular, enable Ireland to ratify the Convention on International Trade in Endangered Species (CITES) and the African-Eurasian Migratory Waterbirds Agreement (AEWA). • increase substantially the level of fines for contravention of the Wildlife Acts and to allow for the imposition of prison sentences; • provide mechanisms to allow the Minister to act independently of forestry legislation, for example, in relation to the acquisition of land by agreement; • strengthen the provisions relating to the cutting of hedgerows during the critical bird-nesting period and include a requirement that hedgerows may only be cut during that period by public bodies, including local authorities, for reasons of public health or safety; • strengthen the protective regime for Special Areas of Conservation (SACs) by removing any doubt that protection will in all cases apply from the time of notification of proposed sites; • and give specific statutory recognition to the Minister's responsibilities in regard to promoting the conservation of biological diversity, in light of Ireland's commitment to the UN Convention on Biological Diversity.
Flora Protection Order	<p>Lists plant species protected by Section 21 of the Wildlife Act, 1976 is set out in the Flora (Protection) Order, 1999.</p> <p>It is illegal to cut, uproot or damage the listed species in any way, or to offer them</p>

National Plans, Policy and Guidelines	Key Environmental Objectives
	for sale. This prohibition extends to the taking or sale of seed. In addition, it is illegal to alter, damage or interfere in any way with their habitats. This protection applies wherever the plants are found and is not confined to sites designated for nature conservation.
Architectural Heritage (National Inventory) and Historic Monuments, 1999	The National Inventory of Architectural Heritage (NIAH) is a state initiative established on a statutory basis under the provisions of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999. The purpose of the NIAH is to identify, record, and evaluate the post-1700 architectural heritage of Ireland, uniformly and consistently as an aid in the protection and conservation of the built heritage. NIAH surveys provide the basis for the recommendations of the Minister to the planning authorities for the inclusion of particular structures in their Record of Protected Structures (RPS).
The National Monuments Acts 1930 to 2004	Irish legislation for the protection of archaeological heritage is based on the National Monuments Acts 1930 and amendments of 1954, 1987, 1994 and 2004. These acts are the principal statutes governing the care of monuments in the Irish Republic.
Guidelines on the Planning, Design, Construction and Operation of the Small-scale Hydro Electric Schemes and Fisheries	Provides guidance for developers, planners and interested groups in hydro schemes, on specific requirements for fisheries water and habitat protection. These guidelines also have relevance for other forms of development which may impact on fisheries waters and to the Water Framework Directive (2000/60/EC) where the overall objective is to ensure there is no deterioration in water status.
Clare County Development Plan 2011-2017	The Clare County Development Plan has been prepared for the period 2011-2017. It aims to provide a County where people want to live and work sustainably and visit because of its unique quality of life. The County Development Plan provides the vehicle through which this vision can be realised by the inclusion of specific and measurable goals and objectives. The key goals of the Clare County Development Plan 2011-2017 are -Promoting tourism development; Harnessing the potential of the Shannon Estuary; Prioritising the growth & development of Shannon Airport; Maximising the County's renewable energy resources and developing clean technology; Driving the continued development of Ennis Hub Town; Realising the full potential of Shannon Linked Gateway; Ensuring a vibrant retail offer; Proactively pursuing economic growth and maximising natural resources; Investing in infrastructure and maintaining a high quality environment.
County Clare Wind Energy Strategy	Clare's Wind Energy Strategy forms Volume 5 of the Clare County Development Plan 2011 – 2017. The Wind Energy Strategy was prepared to reflect the changing economic environment and to respond to anticipated commercial demands for wind energy developments. The Wind Energy Strategy will facilitate development of wind farms by maximising the wind resource of the County having regard to recent technological advances in turbine design, updated information on wind speeds, proximity and availability to grid connections and to changing energy and grid connection regulations, while minimising any environmental and visual impacts.
Cork County Development Plan 2009-2015	Cork County Development Plan is a six year development plan that attempts to set out Cork County Council's strategy for the proper planning and sustainable development of the County. The plan looks forward to the 2020 so that it is aligned with National and Regional planning policies and also so that it can provide an adequate framework for the County's Electoral Area Local Area Plans. Chapter 6 of the Plan details the county's wind and renewable energy objectives and policies. The wind development areas of <i>Strategic Search Areas</i> and <i>Unstrategic Search Areas</i> are outlined and mapped in figure 6.3.
Limerick County Development Plan 2010-2016	This County Development Plan sets out Limerick County Council's overall strategy for the proper planning and sustainable development of the County to 2016. It has been formulated following a period of consultation and builds on the review of the County Development Plan 2005-2011. The Plan takes into account recent key development trends and national, regional and local policy developments and the EU requirement to include the application of Strategic Environmental Assessment to certain plans and programmes. The plan seeks to

National Plans, Policy and Guidelines	Key Environmental Objectives
	<p>develop and improve, in a sustainable manner, the social, economic, cultural and environmental assets of the County.</p> <p>Chapter 8 of the Plan contains a <i>Renewable Energy Strategy</i> for the county. It provides policies and objectives for bio-mass, wind power, and small scale hydro power. Map 8.4 shows specific wind development areas including preferred areas, areas open to consideration and areas which are not considered suitable for wind energy due to either scenic or ecological concerns. Development within the Shannon Estuary including renewable energy is discussed in Chapter 9. It provides specific objectives to develop alternative energy in the estuary, further to the protection of the Lower Shannon SAC and Lower Shannon and River Fergus SPA designations.</p>
<p>Strategic Integrated Framework Plan for the Shannon Estuary, 2013-2020.</p>	<p>Kerry County Council in conjunction with Clare County Council, Limerick City and County Councils, Shannon Development and the Shannon Foynes Port Company commissioned a inter-jurisdictional land and marine based plan to guide the future development and management of the Shannon Estuary. This plan - the Strategic Integrated Framework Plan for the Shannon Estuary (SIFP) – was published in 2013. It is intended that the policies and objectives of the SIFP, as they relate to each participating authority’s Functional Area, will be incorporated into the development plans of those planning authorities. In the case of Kerry County Council the adopted SIFP will be incorporated into the Kerry County Development Plan 2015 -2021.</p>
<p>National Standard Forest</p>	<p>The <i>National Forest Standard</i> is published by the Forest Service, and follows the the principles of Sustainable Forest Management (SFM). As the national regulatory body for forestry, the Forest Service of the Department of Agriculture, Fisheries and Food implements SFM through environmental guidelines that acknowledge environmental considerations at all stages in the forestry sector.¹ There are a suite of guidelines from the Department of Agriculture, Food and Marine that cover water quality and other issues of relevance to this document including <i>Forestry and Water Quality Guidelines</i>, <i>Forestry and Freshwater Pearl Mussel Requirements</i>, <i>Forest Biodiversity Guidelines</i>, <i>Forest Harvesting and Environmental Guidelines</i>; <i>forestry and Archaeology</i>; <i>Forestry and Landscape</i> and <i>Forest Protection Guidelines</i>.</p>
<p>Coillte Lower Shannon District (S2) District Strategic Plan, 2011-2015</p>	<p>The District Strategic Plan (DSP) sets out the economic, social and environmental strategies and priorities for the long and medium term in the District and gives a clear direction for the management of the forests at local level for the next 5 years. It incorporates the plans for the development of forestry stock in the Stacks mountains, including areas that over lap with the Stacks to Mullaghareirk Mts, West Limerick Hills and Mount Eagle SPA 004161.</p>

¹ www.agriculture.gov.ie/forests-service/environmentalinformation/

3.4. Key elements of the Plan, alone or in combination with other projects or plans that were considered to have the potential for having significant effects on Natura 2000 sites.

The key elements of the Plan, alone or in combination with other projects or plans that are considered to have the potential for having significant effects on Natura 2000 sites:-

- Re- zoning of land at Dereen has the potential to indirectly impact on the riparian habitat of the River Deenagh, which forms part of the Natura 2000 site: Killarney National Park, Macgillycuddy's Reeks and Caragh River, cSAC, site code 000365 as a consequence of future planning applications that are likely to be made on the site. Potential significant impacts include habitat loss, fragmentation or degradation of habitat with potential for impacts on its water quality and water dependent species for example also likely.

4. Characteristics of the Natura 2000 Sites

4.1. Introduction

This is the third step of stage one screening the purpose of which is to map and tabulate the information available on all Natura 2000 sites within or immediately adjoining the region. As part of this, reasons for site designation and environmental conditions necessary to support site integrity will be indicated where possible. It should be noted that Natura 2000 sites include Special Protection Areas, (SPAs), Special Areas of Conservation, SACs, as well as proposed sites awaiting approval – potential SPAs (pSPAs) and candidate SACs (cSACs).

4.2. Identification and consideration of Natura 2000 sites located within or immediately adjoining the plan are in situ and ex situ.

As the proposed variation to the plan includes an area of land located within Killarney Town Council development boundary the following table shows the Natura 2000 sites located within the 15km zone of influence of the plan (there are no Natura 2000 sites identified within the plan area) while the maps accompanying this report illustrate the location and extent of the SAC and SPA within 15 km of the plan area, in consideration of the 2009 DoEHLG guidelines on *Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities*.

The conservation status of the Annex 1 and Annex 11 habitats and species identified in this plan has been confirmed using the NPWS document '*The Status of EU Protected Habitats and Species in Ireland.*'

Table 4.1: Natura 2000 sites outside (ex-situ) of proposed variation to Plan*

Designation	Site Name and Code
cSAC (ex- situ)	Killarney National Park, Macgillicuddy's Reeks And Caragh River, 000365
cSAC (ex-situ)	Castlemaine Harbour, 000343
SPA (ex-situ)	Killarney National Park 004038
SPA (ex-situ)	Stacks to Mullaghareirk Mountains, West Limerick and Mount Eagle Hills 004161

* No Natura 2000 sites identified within (insitu) of the plan area, the subject of this variation

The Natura 2000 sites are listed in more detail in table 4.2 and 4.3 including their qualifying interests, conservation status, conservation objectives and conditions required for site integrity.

Maps highlighting the designated Natura 2000 sites within 15Km of the plan area are attached at the end of this report. Up to date information, data and maps of Irish Natura 2000 sites, including those identified above is available from the Maps and Data Section on the NPWS website at <http://www.npws.ie/en/maps/data>

Table 4.2 cSAC sites, the reasons for their designation, (draft) conservation objectives and the environmental conditions considered necessary to support their site integrity.

cSAC Site Name and Code	Qualifying Interests		Conservation Objectives	Environmental conditions necessary to support site integrity
	Habitat – Annex I (*Priority Habitat)	Species – Annex II		
Castlemaine Harbour 000343	<ul style="list-style-type: none"> • Estuaries [1130] • Mudflats and sandflats not covered by seawater at low tide [1140] • Annual vegetation of drift lines [1210] • Perennial vegetation of stony banks [1220] • Salicornia and other annuals colonizing mud and sand [1310] • Spartina swards (<i>Spartinion maritimae</i>) [1320] • Atlantic salt meadows (<i>Glaucopuccinellietalia maritimae</i>) [1330] • Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] • Embryonic shifting dunes [2110] • Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] • *Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] • Dunes with <i>Salix repens ssp.argentea</i> 	<ul style="list-style-type: none"> • Sea lamprey (<i>Petromyzon marinus</i>) [1095] • River lamprey (<i>Lampetra fluviatilis</i>) [1099] • Salmon (<i>Salmo salar</i>) [1106] • Otter (<i>Lutra lutra</i>) [1355] • Petalwort (<i>Petalophyllum ralfsii</i>) [1395] 	<p>The Conservation objectives for each qualifying interest in Castlemaine SAC have been defined in detail. Conservation objectives are defined by attributes, measures and targets.</p> <p>For Annexed species this includes population numbers for adults and juveniles; population structure; availability of suitable habitat and spawning grounds. For Annexed habitats attributes/measures/targets include habitat area; community extent and composition; vegetation structure and composition; zonation and negative indicator species.</p>	<p>Habitat Management (control of drainage, aquaculture, fishing, grazing / mowing, burning, fertiliser / lime input, reseedling, dumping, tree felling, killing / removal of significant biological material, pesticide use etc)</p> <p>No significant erosion / trampling / accretion associated with human impacts (fires, livestock grazing, motorised vehicles, recreational activities etc).</p> <p>Adequate water supply</p> <p>Adequate water quality (limited sediment input, limited nutrient input etc)</p> <p>Limited alteration of the banks, bed or flow of watercourses</p> <p>Presence of suitable quiet stretches of river for Otters</p> <p>No artificial barriers significantly impairing adult salmon and lamprey from reaching existing and historical spawning grounds and smolts from reaching the sea</p> <p>No change in land use which would result in significant habitat loss or fragmentation (land improvement / reclamation, development etc)</p> <p>Limited disturbance (light, noise, human activity including recreational pressures such as motorised and non motorised vehicle use, walking, horse riding, bait digging etc)</p> <p>The control of introduced or invasive species</p> <p>Maintain natural regeneration and diverse vegetation structure of the woodlands</p> <p>Limited dredging activities</p> <p>No significant aggregate extraction</p> <p>No physical barriers to significantly restrict movement of sand and communities associated with mobile substrate</p> <p>Lack of physical constraints & ability to modify dune distribution in response to natural dynamic coastal processes</p>

cSAC Site Name and Code	Qualifying Interests		Conservation Objectives	Environmental conditions necessary to support site integrity
	Habitat – Annex I (*Priority Habitat)	Species – Annex II		
	<p>(Salix arenariae) [2170]</p> <ul style="list-style-type: none"> • Humid dune slacks [2190] • *Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0] 			
Killarney National Park, Macgillycuddy's Reeks and Caragh River 000365	<ul style="list-style-type: none"> • Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] • Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoto-Nanojuncetea [3130] • Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation [3260] • Northern Atlantic wet heaths with Erica tetralix [4010] • European dry heaths [4030] • Alpine and Boreal heaths [4060] • Juniperus communis formations on heaths or calcareous grasslands [5130] • Calaminarian grasslands of the Violetalia calaminariae [6130] • Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion 	<ul style="list-style-type: none"> • Kerry slug (Geomalacus maculosus) [1024] • Freshwater pearl mussel (Margaritifera margaritifera) [1029] • Marsh fritillary (Euphydryas aurinia) [1065] • Sea lamprey (Petromyzon marinus) [1095] • Brook lamprey (Lampetra planeri) [1096] • River lamprey (Lampetra fluviatilis) [1099] • Twaite shad (Alosa fallax fallax) [1103] • Salmon (Salmo salar) [1106] • Lesser horseshoe bat (Rhinolophus hipposideros) [1303] • Otter (Lutra lutra) [1355] • Killarney fern (Trichomanes speciosum) [1421] • Slender naiad 	<p>To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected: Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110]; Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoto-Nanojuncetea [3130]; Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation [3260]; Northern Atlantic wet heaths with Erica tetralix [4010]; European dry heaths [4030]; Alpine and Boreal heaths [4060]; Juniperus communis formations on heaths or calcareous grasslands [5130]; Calaminarian grasslands of the Violetalia calaminariae [6130]; Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410]; Blanket bog (*active only) [7130]; Depressions on peat substrates of the Rhynchosporion [7150]; Old sessile oak woods with Ilex and Blechnum in British Isles</p>	<p>Habitat Management (control of drainage, grazing / mowing, burning, fertiliser / lime input, reseeding, fishing, dumping, tree felling, killing / removal of significant biological material, pesticide use etc)</p> <p>No significant erosion / trampling associated with human impacts (drainage, fires, peat extraction, livestock grazing, motorised vehicles, recreational activities etc).</p> <p>Adequate water supply</p> <p>Adequate water quality (limited sediment input, limited nutrient input etc)</p> <p>Limited alteration of the banks, bed or flow of watercourses</p> <p>No change in land use which would result in significant habitat loss or fragmentation (human activities such as reclamation, afforestation / commercial forestry, deforestation, peat extraction, development, track / roadway provision etc)</p> <p>No significant loss of bat roosting sites or of woodland / scrub / hedgerows located in the vicinity of roosting sites</p> <p>Limited disturbance (light, noise, human activity including recreational pressure, camping etc)</p> <p>The control of fish stocking and introduced or invasive species (Rhododendron, Zebra Mussel, bracken etc)</p> <p>Maintain natural regeneration and diverse vegetation structure</p> <p>Presence of suitable quiet stretches of river for Otters</p> <p>No artificial barriers significantly impairing adult salmon and lamprey from reaching existing and historical spawning grounds and smolts from reaching the sea</p> <p>No significant aggregate extraction</p>

cSAC Site Name and Code	Qualifying Interests		Conservation Objectives	Environmental conditions necessary to support site integrity
	Habitat – Annex I (*Priority Habitat)	Species – Annex II		
	caeruleae) [6410] <ul style="list-style-type: none"> ● Blanket bog (*active only) [7130] ● Depressions on peat substrates of the Rhynchosporion [7150] ● Old sessile oak woods with Ilex and Blechnum in British Isles [91A0] ● *Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0] ● *Taxus baccata woods of the British Isles [91J0] 	(Najas flexilis) [1833]	[91A0]; Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]; Taxus baccata woods of the British Isles [91J0]; Twaite shad (Alosa fallax fallax) [1103]; Salmon (Salmo salar) [1106]; Lesser horseshoe bat (Rhinolophus hipposideros) [1303]; Otter (Lutra lutra) [1355]; Killarney fern (Trichomanes speciosum) [1421]; Slender naiad (Najas flexilis) [1833] Source: NPWS (2011) Conservation objectives for Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC [000365]. Generic Version 3.0. Department of Arts, Heritage & the Gaeltacht.	

**Number in [] refers to classifications in *Interpretation Manual of European Union Habitats – EUR25*, 2003, DG-Environment – Nature and Biodiversity, Brussels, Commission of the European Communities.

Table 4.3 SPA sites, the reasons for their designation, (draft) conservation objectives and the environmental conditions considered necessary to support their site integrity.

SPA/pSPA Site Name and Code	Special Conservation Interest	Conservation Objectives	Environmental conditions necessary to support site integrity
Killarney National 004038	<ul style="list-style-type: none"> • Merlin, • Greenland White –fronted Goose 	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA	Habitat Management (control of drainage, grazing / mowing, erosion etc) Adequate water quality No change in land use which would result in significant habitat loss or fragmentation (human activities such as land improvement / reclamation etc) Limited disturbance (noise, motorised vehicles, human activity including recreational pressure etc) The control of introduced or invasive species such as Rhododendron.
Stacks to Mullaghareirk Mountains, West Limerick 004161	<ul style="list-style-type: none"> • Hen Harrier 	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA Source: NPWS (2011) Conservation objectives for Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA [004161]. Generic Version 4.0. Department of Arts, Heritage & the Gaeltacht.	Habitat Management (control of drainage/reclamation, under/overgrazing, burning, stocking rates; cutting of peat and afforestation) No significant erosion / trampling / accretion associated with human impacts (fires, livestock grazing, motorised vehicles, recreational activities etc). Optimum hydrological conditions naturally required to ensure the long term viability of the blanket bog and wet heath habitats, No change in land use which would result in significant habitat loss; fragmentation or upset to the natural hydrology of blanket bog and wet heath habitats (land improvement / reclamation, intensive peat cutting, afforestation and development etc) The control of introduced or invasive species

4.3. Summary of key issues identified as being of importance in maintaining site integrity

Having regard to the Natura 2000 sites identified, the following key issues were identified as being of importance in maintaining site integrity:- water supply and hydrology issues, water quality issues, air quality issues, disturbance, trampling and erosion associated with recreation and tourism issues, disturbance, habitat loss / fragmentation associated with development issues, coastal squeeze issues, site management issues and invasive species issues.

4.3.1. Water supply and hydrology

An adequate water supply is often required in order to maintain the biodiversity or ecological health of an ecosystem. Changes in local groundwater and surface water hydrology, which can result from drainage, water abstraction or damming of watercourses, can be a threat to site integrity. Peatlands, freshwater and riparian ecosystems are particularly susceptible to alterations in water supply and hydrology. Other important hydrology conditions include the protection of the banks, beds and flows of watercourses. The provision of artificial barriers which would significantly impair adult salmon and lamprey from reaching spawning grounds and smolts from reaching the sea is a threat in certain instances. Pressures on water resources may be exacerbated by climate change impacts as water supply, as this is primarily dependent on climatic conditions.

4.3.2. Water quality

Adequate water quality is often required in order to maintain the biodiversity or ecological health of an ecosystem. The quality of water can be affected in a number of ways, including alterations to sediment input, nutrient input (eutrophication), temperature or chemical composition e.g. salinity. Hydrocarbons such as oils also affect water quality. In addition, certain water bodies, such as lagoons are known to be sensitive to the accumulation of organic material.

Eutrophication of freshwater and coastal sites may be exacerbated by nutrients discharged in waste water treatment effluent or by diffuse pollution from agricultural land and individual wastewater treatment plants. In addition to pressures on waste water infrastructure, there is also increasing risk associated with runoff from hard surfaces, particularly if this carries pollutants such as oils directly into drains and watercourses.

A wide range of activities can exacerbate sedimentation in water systems. These include development (particularly Greenfield), the planting and harvesting of forestry and certain agricultural activities such as soil poaching by livestock. Increased sedimentation can affect water clarity / average light attenuation and can alter the substrate structure of freshwater systems, which can affect site integrity.

4.3.3. Air quality

The main potential air quality issues identified relate to hydrocarbon pollution, ozone pollution, acid deposition and nitrogen deposition / eutrophication. Airborne pollutants may have direct or indirect impacts on habitats and species. Direct impacts include those which cause injury directly from exposure to a pollutant (e.g. from gaseous uptake by sensitive vegetation of tropospheric ozone). In addition, certain pollutants such as SO₂ and NO_x can indirectly affect habitats and species by contributing to acidification of sensitive soils. Similarly Nitrogen oxide (NO_x) emissions can cause long-term eutrophication of nutrient poor terrestrial ecosystems, such as ombrotrophic peatlands, which can affect site integrity. Motorised vehicles are sources of nitrogen oxides (NO_x) and ground level (tropospheric) ozone.

4.3.4 Disturbance, trampling and erosion associated with recreation and tourism

Human disturbance can restrict access of wildlife to habitats and / or can alter wildlife behaviour. Bait digging is an example of an activity which can disturb wading birds. Nature-based tourism and water sports are other themes that represent disturbance risks to marine mammal and bird populations. In freshwater systems other populations benefit from the presence of suitably quiet stretches of waterways. Excessive levels of artificial lighting and noise can disturb bats species.

Increased levels of recreational use can also be associated with localised soil erosion and trampling of vegetation. This 'trail spread' is generally associated with high track usage on vulnerable soils, such as peats and this can be exacerbated by the use of motorised vehicles. Dune systems are also vulnerable to trampling and erosion associated with recreation and tourism activities, e.g. walking, motorised vehicles and camping.

4.3.5 Disturbance habitat loss / fragmentation associated with development

Development can be harmful to biodiversity as it can involve a change or intensification of land use in an area. Development located in or in close proximity to protected sites can impact on their ecological integrity by way of increased disturbance associated with noise or light. Human disturbances such as these can restrict access of wildlife to habitats and / or can alter wildlife behaviour.

Development within protected sites can also result in direct loss or fragmentation of habitat to development, which can affect site integrity. Developments which seek to retain and incorporate natural features such as hedgerows and water features generally constitute less of a threat to biodiversity.

4.3.6 Physical barriers at coastal locations

The provision of physical barriers at coastal locations can interfere with mobile ecosystems ability to modify in response to dynamic coastal processes. Dune and intertidal ecosystems associated with mobile substrates are particularly susceptible in this regard.

Coastal squeeze is the term used where the intertidal habitats are trapped between rising sea levels (and extent of tidal ranges) and coastal flood defences. It is important to recognise that sea levels are predicted to rise over the coming years and that where there are fixed landward boundaries (e.g. a flood defence walls) intertidal habitats such as saltmarsh and mudflat will reduce in extent if they are unable to migrate landwards.

4.3.7 Site management

Management of protected sites has a major impact on their ecological integrity and the extent to which they meet their conservation objectives. In general terms, changes in land use which result in significant habitat loss or fragmentation constitute treats to site integrity.

A wide range of issues fall within this category and the significance of these can vary greatly between individual sites. Examples of human activities which can result in habitat loss or fragmentation include; land improvement / reclamation (including drainage, reseeded, burning, fertiliser / lime input), afforestation or deforestation, peat extraction, development (including aggregate extraction and track / roadway provision), dumping, loss of sensitive bat roosting sites, aquaculture and the killing / removal of significant biological material. In addition in certain instances it is important that levels of grazing are controlled so as to maintain biodiversity, natural regeneration and vegetation structure.

4.3.8 Invasive species

Ireland has a relatively low number of native species. Many non-native species have been introduced to the country through a variety of mechanisms, including accidentally transported biota (e.g. through ballast water) and intentional introductions for ornamental gardening or agricultural / commercial purposes. Some of these species have become invasive, with resultant ecological impacts. For instance, *Rhododendron ponticum* is known to affect the ecological integrity of Native Oak Woodlands.

Coastal and estuarine sites may be of particular risk due to increased shipping with associated increases in discharge of ballast water. Roadsides and brownfield / derelict lands are also of particular risk due to their accessibility and to the high concentrations of disturbed soil generally found at these locations.

4.4. Natura 2000 sites which may be potentially affected by the Plan

The proposed variation relates to the Killarney Town Development Plan 2009-2015 and therefore all Natura 2000 sites identified in table 4.1 above located within its sphere of influence (15km) could potentially be affected. Accordingly, this assessment considers the potential impacts on all four Natura 2000 sites.

5. Assessment of the significance of any impacts on Natura 2000 Sites

5.1. Introduction

This is the fourth and final step of Stage One Screening and involves an assessment of the significance of any impacts on Natura 2000 Sites. In identifying the potential issues which could affect the integrity of these sites a range of factors were taken into account, including the possibility of effects manifesting themselves in the short, medium and long-term, in combination effects and the potential impacts of flooding on the site. In addition the precautionary principle was adhered to in the carrying out of this assessment.

Where potential effects have been identified, mitigation measures are recommended where possible, so as to ensure that significant effects on Natura 2000 sites are avoided. If this can be achieved there may not be a need to proceed to Stage Two – Appropriate Assessment.

5.2. Data sources, consultation, gaps and limitations

The Habitats Directive Assessment of potential impacts on the integrity of Natura 2000 sites in this study is based on consultation, a desktop review of literature, existing and relevant NPWS Natura 2000 Site Synopses Data, Qualifying Interests, Conservation Management Plans and the (draft) Conservation Objectives. A review was also carried out of Habitats Directive Assessments/Natura Impact Assessments and Reports recently carried out in relation to plans /projects in the area – including those of the South West Regional Planning Guidelines 2010-2022, Kerry County Development Plan 2009-2015 as amended, Draft Kerry County Development Plan 2015-2021, Killarney Town Development Plan 2009-2015, The Tralee-Killarney Hub FALAP 2013-2019 and the River Basin Management Plans for the Shannon and South West Basins.

In line with best practice this report is available to the Environmental Authorities and to the wider public together with the proposed variation. Submissions / observations in respect of same are invited within the specified timeframes. Any such submission / observation will be considered prior to the finalisation of the variation / Habitats Directive Assessment process.

There are a number of issues relating to data gaps and limitations which were identified as part of this study. These include:-

- Availability of Natura 2000 site conservation management plans and data on individual site integrity.

- The generic nature of the (draft) conservation objectives, often based on qualifying interests with site-specific quantitative objectives for each qualifying interest yet to be identified.
- The NPWS have advised that the special conservation interests (SCIs) for at least some of the SPAs may still be subject to adjustment.

5.3. Detailed Screening for Potential Effects on Natura 2000 Sites

The results of the screening exercise of the proposed variation for potential significant effects on Natura 2000 sites are presented in table 5.1 below.

Table 5.1 Detailed level screening of variation for potential effects on Natura 2000 sites

Variation no. 2	Natura 2000 Sites Potentially Affected	Risk of Significant 'Effects (including in combination and accumulative effects)	Recommended Change (as a result of the HDA indicated in blue)
<p>Proposed 2nd Variation of the Killarney Town Development Plan 2009-2015: re-zoning of lands from Residential phase 11 to Recreation Amenity and Open Space, at Dereen, Killarney</p>	<p>Ex-situ: Killarney National Park, Macgillycuddy's Reeks and Caragh River, cSAC 000365, Killarney National Park SPA, 004038, Castlemaine Harbour, cSAC, 000343, Stacks to Mullaghareirk Mountains, West Limerick, SPA, 004161</p>	<p>The plan has a site area of 1.27373ha and forms part of a larger greenfield. It is situated within the functional area of Killarney Town Council in the townland of Dereen, Killarney, c. 1.5km north of the town centre, see attached map at end of report showing site location. The site is accessed off a local tertiary road L-11027-0, which is located north of the N22, Tralee-Cork Road (Killarney By-pass) and is situated between the Legion G.A.A. club which is located to the east of the site and Killarney Celtic football club which is located immediately to the west of the site. The Tralee-Killarney railway line passes c. 80 metres to the east of the site abutting the Legion club. The River Deenagh flows through the extreme north west / northern end of the greenfield, c. 110 metres from the plan area. That riparian habitat is located within the Natura 2000 site: Killarney National Park, Macgillycuddy's Reeks and River Caragh Catchment cSAC.</p> <p>Based on the preliminary Flood Risk data available, the subject site is at risk from flooding. The flood plain of the River Deenagh is found in flood zones A and B.</p> <p>The proposed variation refers to a re-zoning of land. The land is currently zoned for residential development, identified for phase</p>	<p>Proceed to stage 11 HDA</p>

		<p>two development in the Core Strategy of the Killarney Development Plan 2009-2015. It is proposed to rezone this land from residential phase 11 to recreation amenity and open space and while no development works are proposed at present it is intended to make the lands available to sporting clubs, where it is likely that planning applications will be received to develop the land for various recreation amenity and open space uses in compliance with the Killarney Town Development Plan 2009-2015.</p> <p>Lands immediately abutting the site to the north, east and west are already zoned for recreation amenity and open space development.</p> <p>The site is currently largely undeveloped, with no planning history recorded on the subject site. Significant planning history is however noted on the lands to the east and west of the site, this planning history relates to the development of both sporting clubs.</p> <p>A temporary access track has been constructed through the plan area facilitating access in and around the site and giving access to the remainder of the field and stone and concrete material was observed on the site at the time of inspection, see photos attached in appendix A of the report.</p> <p>An area of improved grassland to the southern area of the site abutting Killarney Celtic has been temporarily fenced off and would appear to be available for use by that club.</p>	
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		<p>While the plan area forms part of a larger field which is partially located at its northern end within a Natura 2000 designation: Killarney National Park, Macgillycuddy's Reeks and Caragh River, where the River Deenagh flows through, the other closest designated Natura 2000 site to the plan area is the Killarney National Park SPA, site code: 004038 c. 1km to the south-west.</p> <p>The following Natura 2000 sites are also partially located within 15km of the plan area:</p> <ul style="list-style-type: none"> • Castlemaine Harbour cSAC (Site Code 000343) c. 7km to the west of the plan area, • Stacks to Mullaghareirk Mountains, West Limerick, SPA, 004161, is located approx 14-15km to the north/north-east from the plan area. <p>No other Natura 2000 sites are identified within 15km of the proposed development.</p> <p>The Castlemaine Harbour cSAC Natura 2000 site which is partially located within 15km of the plan is hydrologically connected to the site through Lough Leane/River Laune. However having regard to the location, nature and scale of the plan and the distance from the Castlemaine Harbour cSAC, it is considered that significant effects on that Natura 2000 site are not likely, either from the proposed plan on its own or in combination with other plans and projects. The proposal here is for a re-zoning only and will not generate any works at this stage therefore it is considered that there will be no direct habitat loss or land take from that</p>	
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		<p>Natura 2000 site or harm to key species or to water quality or other potential effects as a result of this proposal. Further any future projects will be subject to a Habitats Directive Assessment under Article 6 (3) to ensure the protection of the ecological integrity of Natura 2000 sites.</p> <p>With respect to the the Stacks to Mullaghareirk Mountains, West Limerick, SPA, it is considered that significant effects on that Natura 2000 site are not likely, either from the proposed development on its own or in combination with other plans and projects, having regard to its physical distance and higher elevation and the absence of hydrological connectivity to the plan area and taking into account the environmental conditions necessary to support site integrity for the Hen Harrier, <i>Circus cyaneus</i> (qualifying interest).</p> <p>The Killarney National Park SPA, site code: 004038 is located c. 1km to the south-west of the plan. However it is considered that significant effects on that Natura 2000 site are not likely, either from the proposed development on its own or in combination with other plans and projects having regard to the environmental conditions necessary to support site integrity for the qualifying interests, Merlin (<i>Falco columbarius</i>,) and Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>)</p> <p>Having regard to the proximity of the River Deenagh, which flows within c.110 metres of the plan area, the following Natura 2000 site is</p>	
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		<p>considered to be hydrologically connected with the plan:</p> <ul style="list-style-type: none">• Killarney National Park, Macgillycuddy's Reeks and Caragh River, site code: 000365. <p>It is therefore considered that there is the potential for significant effects not specifically from the proposed development but <u>indirectly</u> as a consequence of the re-zoning and in combination with other plans and projects likely to arise in the future and consequently this variation should be assessed at Appropriate Assesement stage.</p>	
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5.4. Summary and Recommendations from the Detailed Screening for Potential Effects on Natura 2000 Sites

The preceding section has screened the proposed variation to the Plan. Having regard to the nature of the variation which constitutes a proposal for a re-zoning, where no actual works are proposed at this stage, it can be difficult to predict the scale, exact location, nature and even likelihood of effects on Natura 2000 sites. Looking specifically at the proposed re-zoning on its own it is considered that the potential for significant effects were not identified, however it was recommended that the proposed re-zoning could indirectly lead to significant effects as a consequence of future planning applications on the site and that this aspect - the indirect significant effects of the variation from amenity and associated infrastructural related projects arising out of future planning applications on the site should be assessed by way of a Stage II Appropriate Assessment.

6. Stage II Appropriate Assessment – Natura Impact Report

6.1 Introduction

This stage of the Habitats Directive Assessment process, determines whether, in view of the site's conservation objectives, the plan 'either alone or in combination with other plans or projects' would have an adverse effect (or risk of this) on the integrity of a Natura 2000 site. If not, the plan can proceed.

Where a potential negative impact is identified, mitigation measures have been proposed to reduce or eliminate the impact, where appropriate. None of the mitigation proposed removes the legal obligation to carry out Appropriate Assessment at the project level where required by the provisions of the Habitats Directive or by the implementing legislation in Ireland.

6.2 Likely significant effects of the Plan on Natura 2000 sites

The following aspects of the variation as tabulated in table 6.1 were identified at Stage One Screening Stage, as potentially having significant effects on Natura 2000 sites.

Table 6.1: Likely significant effects of the Plan on Natura 2000 sites

Variation no. 2	Natura 2000 Sites Potentially Affected	Risk of Significant 'Effects (including in combination and accumulative effects)	Recommended Change (as a result of the HDA indicated in blue)
<p>Proposed 2nd Variation of the Killarney Town Development Plan 2009-2015</p>	<p>Ex-situ: Killarney National Park, Macgillycuddy's Reeks And Caragh River, cSAC 000365,</p>	<p>The River Deenagh, flows within c.110 metres of the plan area, that riparian habitat forms part of the Natura 2000 site Killarney National Park, Macgillycuddy's Reeks and Caragh River, site code: 000365 and is hydrologically connected with the plan.</p> <p>Notwithstanding that this proposal is for a re-zoning where no actual works are proposed at this stage it is considered that the plan could indirectly result in habitat loss/ fragmentation or degradation of habitat in a Natura 2000 site as well as having the potential for impacts on water quality as a consequence of future projects on the site. It is known that the land is intended to be sold to sporting clubs and that these clubs are likely to seek planning permission to develop the land for recreation amenity and open spaces uses in the future.</p> <p>Construction works have the potential to impact on water quality for example within Natura 2000 sites, (sedimentation, storage and handling of toxic compounds (hydrocarbons, concrete etc) There is the potential for impact on water dependent species located downstream of the proposed site by way of a pollution event occurring on the site.</p>	<p>Mitigation measures:</p> <p>Require water quality control measures to ensure no further effects on waterways. Mitigation measures will be required as part of all future projects for the site to protect the ecological integrity of Natura 2000 sites.</p> <p>Require a site specific flood risk assessment to accompany any future projects on the site. This is already a requirement under the Planning system and Flood Risk Management, Guidelines for Planning Authority November 2009 and was incorporated as part of the 1st</p>

		<p>There is also the potential for impacts from noise/light/human disturbance associated with the construction and operation phase of any proposed future developments on the site.</p> <p>Having regard to the location of the plan area within c.110 metres of a Natura 2000 site, it is recommended that when planning applications are received for the plan area, water quality control measures will be required to form part of the proposals to ensure that silt and other potentially harmful pollutants, are prevented from entering the watercourse.</p> <p>Based on the preliminary Flood Risk data available, the subject site is at risk from flooding. The flood plain of the River Deenagh is found in flood zones A and B. Consequently it is imperative that appropriate resilient land uses and flood resistant designs are considered only in this vulnerable location. It is noted that on the adjoining sites to the west and east playing pitches take up significant areas of those sites, with club houses located at the southern end of the sites.</p> <p>It is noted that the proposed re-zoning is from residential to recreation amenity and open space. It is therefore considered that this re-zoning is a more appropriate and sustainable land use than a residential zoning. It will by its nature result in a less intensive land use and consequently a reduced area of hard site coverage, which will reduce the potential for run off/contamination into the River Deenagh thus protecting the ecological integrity of the</p>	<p>Variation to the Town Plan as part of the Core Strategy.</p>
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		<p>Natura 2000 sites.</p> <p>Given the location of the plan area on the fringes of an urban centre and having regard to the nature of the plan, namely a re-zoning which does not confer any planning permission or propose any projects on the site at this stage and the site's distance from the other identified Natura 2000 sites and having regard to the proposed mitigation measures identified here; it is considered that significant effects on the Natura 2000 site is not likely, either from the proposed development on its own or in combination with other plans and projects or future plans and projects in terms of the reduction/erosion/fragmentation of key habitats and species and deterioration of water quality for example.</p> <p>Further in compliance with the Habitats Directive and the Killarney Town Development Plan 2009-2015 all future planning applications shall be subject to an Article 6 (3) Habitats Directive Assessment where alternative plans/proposal may be required to ensure no significant effects are likely. In addition a site specific flood risk assessment will be required to accompany any future projects on the site in compliance with the 'The Planning System and Flood Risk Management' Guidelines for Planning Authorities, November 2009.</p> <p>On the basis of the information provided it is considered that no significant effects are likely.</p>	
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7.0 Appropriate Assessment Conclusion and Determination Statements

7.1 Conclusion

This Natura Impact Report presents the findings of a Stage 2 Appropriate Assessment undertaken on the plan where the plan is taken to be the Killarney Town Development Plan 2009-2015 and proposed second variation to same.

The Appropriate Assessment Screening (Stage 1) identified that there was potential for likely significant effect arising from indirect impacts of the proposed variation to the Plan. Accordingly, a Stage 2 Appropriate Assessment / Natura Impact Report was undertaken to ensure that potential adverse impacts on the integrity of Natura 2000 sites were avoided. It was noted that while the proposed variation is not likely to directly result in significant adverse effects on Natura 2000 sites, it is considered that in combination with other future plans and projects for example planning applications it has the potential for significant effects on the ecological integrity of Natura 2000 sites in terms of the reduction/erosion/fragmentation of key habitats and species and deterioration of water quality for example.

At Stage 2 Appropriate Assessment, following a detailed assessment of the proposed variation it was recommended that mitigation such as water quality control measures form part of any future planning applications to ensure that silt and other potentially harmful pollutants, are prevented from entering watercourses. A site specific flood risk assessment should also accompany any future projects on the site. It was considered that the proposed second variation from residential phase 11 to recreation amenity and open space overall seeks to provide for a more sustainable land use zoning at this location, taking into account the environmental designation within c.110 metres of the plan area, the potential flood risk issues associated with the plan area and the location of the plan area itself adjoining existing sporting clubs.

It was concluded following the appropriate assessment that no significant effect on the ecological integrity of Natura 2000 sites is likely. In addition as the Killarney Town Development Plan 2009-2015 (including the plan area) has already been subject to HDA and SEA assessment it is considered that there is sufficient provision throughout the existing Plan to ensure that any future developments proposed on the site will be subject to environmental scrutiny.

Together with the Plan's existing commitments to the Habitats Directive and the mitigation measures proposed here as part of the variation, it can be concluded that the proposed second variation to the Killarney Town Development Plan 2009-2015, will not have a significant effect upon any Natura 2000 site. Potential cumulative and in combination effects, have been taken into account as part of the assessment.

7.2 Determination Statements

7.2.1 Stage I Appropriate Assessment Screening Statement

In accordance with Section 177U of the Planning and Development Act 2000 (as amended), and on the basis of the objective information provided in this report, Killarney Town Council as Competent Authority determines that the proposed 2nd Variation to the Killarney Town Development Plan 2009-2015 individually and in combination with other plans and projects, may have a significant effect on a European site (Natura 2000 Site), and as such, a Stage 2 Appropriate Assessment / Natura Impact Report is required.

Reasons for determination

The Appropriate Assessment Screening Report prepared was unable to rule out the potential for significant effects in respect of the following Natura 2000 site:-

- Killarney National Park, Macgillycuddy's Reeks and Caragh River, c.SAC 000365.

7.2.2 Stage II Appropriate Assessment / Natura Impact Report Statement

In accordance with Section 177V of the Planning and Development Act 2000 (as amended), and on the basis of the objective information provided in this report, Killarney Town Council as Competent Authority determines that the 2nd Variation to the Killarney Town Development Plan 2009-2015 individually and in combination with other plans and projects, shall not adversely affect the integrity of a European Site (Natura 2000 Site).

Reasons for determination

Where potential significant impacts on Natura 2000 sites were identified, mitigation measures were proposed to reduce or eliminate the impact. It is considered that the mitigation as outlined in this report is sufficient to ensure that adverse impacts on the integrity of Natura 2000 sites will be avoided.

Notwithstanding this, none of the mitigation measures proposed remove the legal obligation to carry out Appropriate Assessment at the project level where required by the provisions of the Habitats and Birds Directives.

John Breen

Killarney Town Manager/Director of Housing & Community & Enterprise

8. Appendix A



Fig 1: Existing entrance to site, view of site looking northwards with Killarney Legion G.A.A. to right in picture.



Fig. 2: View of site at Dereen, facing southwards.



Fig 3: Killarney Celtic football club located to the west of the site



Fig 4: Killarney Legion G.A.A. club located to the east of the site.



Fig 5: River Deenagh flows through the northern end of field, c.110 metres north of the plan area.



Fig 6: Existing waste building material left on site.