

Limerick County Council  
Comhairle Chontae Luimnigh

# Limerick County Development Plan 2010-2016



NOVEMBER 2010

VOLUME 4: ENVIRONMENTAL REPORT (INCLUDING SEA STATEMENT)  
& APPROPRIATE ASSESSMENT SCREENING REPORT

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**Part 1: Strategic Environmental Assessment:  
Environmental Report and Environmental Statement  
November 2010**



## **1.1 Contents and main objective of the plan and its relationship with other relevant plans.**

**Introduction:** In compliance with the Planning and Development regulations (Strategic Environmental Assessment) 2004, a Strategic Environmental Assessment (SEA) has been carried out for the County Development Plan. What follows is the Environmental Report part of the SEA process. This report has been updated to take into account submissions received and material alterations made during the plan preparation process and also to take into account the emergence of new and updated planning and environmental guidance documents. This report should be read in association with the Limerick County Development Plan adopted in November 2010.

Strategic Environmental Assessment is an assessment of the likely environmental effects of plans, policies or projects. This ensures that the environmental effects of plans are taken into account before decisions are made. In this Environmental Report the likely significant effects on the environment of implementing the Plan are identified, described and evaluated.

The County Development Plan was adopted by Limerick County Council on the 1<sup>st</sup> November 2010. It is a six-year development plan that sets out the planning policy for County Limerick.

The County Development Plan is subject to the Strategic Environmental Assessment process (DEHLG, 2004 p.13). The new Plan will be in place from 2010 until 2016.

In terms of contents the new plan has a number of Volumes and Chapters that cover the following issues:

### **Volume 1**

Chapter 1: Introduction

Chapter 2: Core Strategy

Chapter 3: Urban and Rural Settlement Strategy.

Chapter 4: Housing.

Chapter 5: Economic Development.

Chapter 6: Community and Recreation.

Chapter 7: Environment and Heritage.

Chapter 8: Infrastructure.

Chapter 9: Shannon Estuary.

Chapter 10: Development Management Guidelines.

Chapter 11: Implementation.

Appendix 1: Settlements

Appendix 2: Glossary of Terms

Appendix 3: List of Significant Archaeological Sites and National Monuments

Appendix 4: Statement of Implementation by Limerick County Development Plan of Ministerial Guidelines

- Volume 2:** Maps  
**Volume 3:** Record of Protected Structures  
**Volume 4:** Environmental Report including SEA Statement and Appropriate Assessment Screening Report.  
**Volume 5:** Retail Strategy for the Mid West Region, 2010-2016

### **1.1.1 Relationship with other plans.**

Much of the policy background has been laid for the County Development Plan with the Mid-west Regional Authority Planning Guidelines (2010) providing the most immediate policy backdrop to the Plan. At a higher tier of policy -making the National Spatial Strategy designates Limerick as one of a network of gateway centres which are to function as nodes of development to ensure balanced regional growth outside the eastern part of the Country. This will have implications for the County Development Plan as it will have to guide development and resources in accordance with the contents of these documents.

A planning policy document that is currently under preparation is the Joint Limerick City and County Housing Strategy. The Retail Strategy for the Mid-West region has been completed and accompanies this plan. As before, future revisions and amendments to these guidelines will be taken into account in the County Development Plan.

A range of guidance documents from the Department of Environment Heritage and Local Government (DEHLG) are also available to assist in plan making. Where used, these are referred to throughout the plan and the environmental report.

### **1.1.2 Implications of Strategic Environmental Assessment for the Council and Elected Members.**

The SEA process requires that County Development Plans and other plans that meet the required thresholds are subject to the SEA process. This has particular implications for the Council in that when a plan is adopted, a statement summarising “*how the environmental considerations have been integrated into the plan, how the Environmental Report and the outcome of consultations were taken into account and the reasons for choosing the plan as adopted in the light of other reasonable alternatives considered...*” (Implementation of SEA Directive: Guidelines for Regional Authorities and Planning Authorities, DEHLG 2004, p.47). The statement, which is a legal requirement, must summarise the information gathered which informed the selection of the plan. The Elected Members too, must take into account the contents of the Environmental Report. It must be remembered that the SEA directive has been transposed into Irish Law and that the requirement for SEA became a part of Irish planning law since July 2004. The Guidelines for Regional Authorities and Planning Authorities (DEHLG, November 2004 p. 47) state the following:

*Article 8 of the SEA Directive requires that the Environmental Report, the opinions expressed by the Environmental Authorities and the public and any trans-boundary consultations **must** be taken into account during the preparation of the plan and before its adoption.*

*The attention of Elected Members of the regional or planning authority should be drawn to the fact that the SEA Directive creates this new statutory responsibility.*

In short cognisance must be had when arriving at the final form of the plan, of the contents of the Environmental Report and the submissions received from the Environmental Authorities as well as those received by the general public.

### **1.1.3 SEA and Appropriate Assessment.**

In tandem with the preparation of the Environmental Report Article 6 Assessments or Appropriate Assessments under the Habitats Directive had been prepared at earlier stages of the plan preparation process. These had been placed on public display with earlier drafts to the plan. The latest amendments made during the adoption meeting of the plan were minor in nature and did not require either article 6 assessment or assessment under the environmental report. This is dealt with in the AA screening report that accompanies this document. This is intended to assess the effects of the plan on designated sites such as Special Areas of Conservation, Special Protection Areas and Natural Heritage Areas in County Limerick. As such this process has a lot in common with SEA. It could well be argued that at strategic level the SEA process is more suitable for this as when dealing with policy the fine grain of detail that would be available at planning application stage is absent. This makes assessment of the effects of policies more difficult. As a result there will be much cross referencing between both documents in order to ensure that the assessment of the policy effects of the plan on designated natural history sites is as complete as possible.

### **1.1.4 SEA Methodology:**

Screening the amendments to the plan was part of the plan making process. In this environmental report the final amendments to the plan are analysed. While many of them would not have significant environmental effects they have been included in the report for the sake of completeness. Following the preparation of the Environmental Report and the selection of a particular plan alternative a SEA statement has been prepared, which indicates how environmental factors have been included in the plan. In short it states clearly why the plan in its selected format has been chosen and justifies this choice on environmental grounds.

### **1.1.5 Difficulties Encountered:**

Baseline data for the differing environmental aspects of the County is difficult to access coming as it does from sources as diverse as the National Parks and Wildlife Service, the Environmental Protection Agency and the Council itself. The lack of a centralised data base is a huge obstacle to gathering such information.

## 2.1 SEA objectives:

The SEA objectives are outlined below.

**Table 1 SEA Objectives**

Issue	SEA Objective
Water	Prevent further deterioration in water quality, achieve improvement in water quality.
Bio-Diversity	Maintain and enhance bio-diversity.
Landscape	Protect historic and natural features of note in landscapes. Sensitively manage landscape change.
Cultural Heritage	Protect and conserve archaeology, heritage items.
Population/Human Health	Promote compact settlement patterns, and high quality residential development.
Soils and Geology	Conserve and sensitively exploit geological resources. Preserve sensitive geological sites.
Material assets	Sensitively manage natural and man and material assets.
Air and Climate	Reduce air pollution, implement climate change aspects of plan.
Flood risk	Promote good practice in flood risk management.

## 3.1 Description of the area i.e. summary of the baseline environment and County Development Plan responses to environmental issues:

In this section a brief description of the Limerick environment is presented together with responses to the environmental issues that have been suggested as policy or objectives in the plan. The SEA objectives presented above should be read with these issues and policy responses in mind.

### 3.1.1 Bio-diversity flora and fauna:

The functional area of Limerick County Council is approximately 2590 km<sup>2</sup>. It comprises the areas outside Limerick City. The Environs of the City i.e. the areas covered by the Southern Environs and Castletroy Local Area Plans lie within the area of Limerick County Council. Outside of the City Environs and the settlements of the County the predominant land use is agricultural. The main agricultural enterprises are cattle rearing and dairying, which is reflected in the presence of a well-enclosed pastoral landscape. Little tillage is practised with the exception perhaps of maize, which is grown as a forage crop for livestock. In the uplands an increasing amount of land is devoted to forestry which is composed mostly of conifers though over the last ten years or so particularly on low-land sites there has been an increasing proportion of broadleaves planted.

From a planning policy perspective Limerick has been divided into ten differing landscape areas (County Development Plan, Chapter 7).

In the lowland parts of the County the presence of well developed and from a vegetation perspective, diverse, field boundary system is a key feature. The types of habitats present in these areas are those, which are typically found in many lowland farming landscapes, such as hedgerow networks, and improved grassland. Some pockets of unimproved and often poorly drained non-intensively managed grassland survive, but such non-intensively managed areas are rare. Remnants of former demesne plantings with species such as beech and horse chestnut are also a feature of parts of the County and are worthy of preservation where they occur. Commercial planting is not yet a large feature of the low land areas but where it occurs it tends to comprise higher proportion of broad leaves than upland planting.

The Lower River Shannon SAC (002165) site is perhaps the most extensive riparian network in the County. The estuarine habitats of the Shannon Coastal area are internationally important not only for aquatic species but also for migrating and locally breeding wildfowl and wader species.

In terms of area this is one of the most important designated sites. Other larger-scale sites are the Special Protection Areas in the West and Northeast of the County. These have been designated specifically for the protection of the hen harrier. There are a number of designated sites in the County that have large surface areas and these are listed in table 2.

**Table 2: Larger Designated sites in Limerick.**

Site description	SPA	SAC
Stacks to Mullagherirks, West Limerick and Mount Eagle 004161	X	
Slieve Felim to Silvermines Mountains 004165	X	
Curraghchase Woodlands 000174		X
Lower River Shannon site 002165		X
Askeaton Fen Complex		X
Galtee Mountains 00646		X
Ballyhoura Mts. 002036		X

The Galtee and Ballyhoura Special Area of Conservations have been designated because of the presence of heath and blanket bog habitats.

The river networks throughout the County is also an important linear habitat network and wildlife corridor. While the hedgerow network and generally enclosed pastoral nature of the Agricultural lowlands are it's defining characteristics, the presence of the estuary is the defining characteristic of the Shannon Coastal Zone.

The Stacks to Mullagherirks, West Limerick and Mount Eagle and Slieve Felim to Silvermines Mountains Special Protection Areas is designated for the protection of the Hen Harrier. Also found in portions of these sites are the merlin, another raptor and the red grouse. Both these sites are of huge importance for the conservation of the harrier and Limerick currently possesses over 30% of the remaining population of these birds.

The *Sustainable Rural Housing Guidelines*, DEHLG (April 2005) also indicate that the need to take landscape considerations into account. In many parts hedgerows are among their most defining features. What the Rural Housing Guidelines point out, as “piecemeal habitat loss” would be a feature of the County following an increase in development on green field sites. The consequent removal of hedgerow boundaries would lead to such piecemeal habitat loss. This would affect “species movement and dispersal”.

### **Responses to bio-diversity issues in the Plan:**

In the absence of the plan there would not be a framework within which to regulate development. Within the plan several important alterations have taken place within conservation led policies, these are mostly listed in Chapter 7 (Environment and Heritage).

The emphasis in the plan is on consolidation of development patterns and the use of brown field sites in the plan i.e. “infill and brown field sites will be the preferred location for new development” (Objective SSO4-Chapter 3). This will mean that there will be less pressure for development in the wider countryside with less piecemeal removal or alteration of habitats such as hedgerows. The consolidation of the settlement strategy into three policy areas i.e. Areas under Strong Urban Influence, Areas of Strong Agricultural Base and Structurally Weak Areas with the removal of the Extended Structurally Weak Area also helps in reducing pressure on habitats in the open countryside.

Part of the River Shannon coastal zone that had previously been a preferred area for wind energy is now open for consideration (Table 9.1 Chapter 9 and Objective SE O8) indicating that there may be significant ecological issues to be overcome in the area prior to development of wind farms. One part of the county that had not been open for consideration for wind energy, the Slieve Felims, is now open for consideration. While the appropriate assessment carried out by the council in July 2010 considers that there would be ecological effects the response from the DEHLG (July 2010) stated that it would be possible to allow the area to be open to consideration provided the possible ecological effects of wind energy development would be dealt with at project level through appropriate assessment of individual development proposals.

The Special Protection Areas have been included in the mapping of designated sites.

The question of appropriate assessment in relation to individual planning applications has been raised in Chapter Seven in Section 7.2.2 where the importance of this form of ecological assessment as required for designated sites by the Habitats Directive is outlined. This is reinforced in Objective EH O1 (b) where if it appears that a development might have an effect on designated sites such an assessment will be required.

In the introduction to the plan (Section 1.5) the importance of Appropriate Assessments is further stressed at plan or policy level rather than at project level.

The question of maintenance of water quality is also an important one from a natural history perspective. In this regard Objective IN O24 in Chapter 8 seeks to protect human health and designated habitats. This policy also draws attention to the need to restore the integrity of vulnerable water bodies due to low “assimilative capacity”.

### **Bio-diversity in the absence of the Plan:**

Without the plan the newly designated Special Protection Areas would not have been incorporated into the wind energy maps with a consequent lack of protection. The requirements of appropriate assessment or Article 6 Assessment would also go unrecorded which would mean that policy guidance in the plan would not have taken into account the latest statutory requirements.

The additional policies that relate to water quality would be absent which would make regulation of activities towards water quality from a planning perspective more difficult.

There would be less emphasis on concentration of development that would reduce pressure for development in the wider countryside.

The additional emphasis and policies in relation to designated sites would also be absent which mean that development would be less regulated in sensitive ecological areas.

### **3.1.2 Geology of the Area:**

The soil component of the County is variable and varies from Gleys to Grey Brown Podzolics, to Brown Earths. In terms of agricultural use they support grazing enterprises for the most part with little tillage and hence little direct mechanical intervention. They are also variable in their percolation and drainage characteristics and this has differing implications for both surface and ground water resources of the area.

The question of soil depth is also an issue and in areas where ground water vulnerability is described as extreme soil depth are generally less than 3m. In some situations a minimum of 2m of soil thickness is required below a percolation area of individual treatment system which itself may be over a meter below the ground. With free draining soils there are implications for ground water protection. Soil permeability is variable in the soils of the County with permeability varying from high in some situations, though for the most part it is poor. Seasonal variation in water tables is also a factor to be borne in mind as this can have marked effects on rates of surface run off.

### **Responses to Soils and Geology in the Plan:**

The contents of the plan have strengthened in terms of areas of geological interest where in Objective EH O4 (Chapter 7, S. 7.2.7) it stated that it will be an objective of the council to seek the conservation and protection of sites of geological interest particularly those which were recognised in the past as Areas of Scientific Interest.

Mineral extraction policies have been strengthened from the previous plan and are regulated through Objective ED O26 (Chapter 5, Economic Development, Section 5.6.3). This now seeks to protect water sources, residential and other amenities and mentions phasing and reinstatement works.

### **Soils and Geology in the absence of the Plan:**

In the absence of the plan there would be no policies in relation to areas of geological interest and there would be no strengthening of policies which reinforce the need for sensitive development of aggregate resources.

### **3.1.3 Population and Human Health.**

Based on the CSO Census of Ireland the population of County Limerick in 2006 was 131,516. This represents an increase of 18,513 since the 1996 Census, which equates to approximately 16% increase over this 10-year timeframe. This percentage increase parallels that of the State, which was almost 17% from 1996 to 2006. The rate of growth for the Mid West Region over the time period was just under 14% which is slightly less than that of Limerick County. The key towns of Kilmallock and Newcastle West have also shown population increases of 1.5% and 12.2% respectively.

Not all parts of the County have shown a population increase. While majority of towns and villages have shown a population increase, towns such as Rathkeale, Montpelier, Patrickswell, Kilfinnane and Hospital have shown decreases of between 3.3. and 13.1 %. (Chapter 1, County Development Plan, Table 1.2). In the wider rural area 40 Rural Electoral Divisions out of 135 have shown a decline in population.

Human health can be viewed in different ways in the County Development Plan. The first would be to look at direct risk to Human health from potentially dangerous developments such as oil tank farms. Hazards to human health can also result from incompatible nearby land uses. In general terms this is catered for by the zoning mechanism, which is present in Local Area Plans and in this case also for the settlements of Foynes, Murroe and Athea.

Health issues can also be considered from the point of view of air or water or soil contamination. Inadequate provision of wastewater infrastructure or overloaded or poorly functioning systems can pose a pollution or contamination risk.

### **Responses to Population in the Plan:**

The settlement strategy is the main focus of efforts to build a settlement structure which will be able to sustain basic services such as schools, shops, post offices and banking services. The revised settlement structure for the County is shown in Table 3.1 Chapter 3 of the County Development Plan. One settlement has been added to the hierarchy that of Knockdown which is included in Tier 6. In short, it is through the urban settlement strategy that measures are put forward to ensure population growth will continue to take place within settlements that will provide opportunities for the provision of employment and services. This is achieved through an emphasis on more compact and hence more

easily and cheaply serviced settlement patterns. The development boundary strategy that existed in the 2005 County Development Plan has been replaced with a policy led strategy based on sequential growth and making the best use of brown-field or in fill sites-Objective SS O4, Chapter 3 Settlement Strategy. This approach has been referred to in the Development Plan Guidelines (DEHLG 2007, p. 31) where it says in deciding an approach to development that “*where likely development activity, is such that it can be dealt with within the development management process taking on board relevant objectives and policies in the development plan*” that policy would provide an alternative to zoning or other forms of development guidance. The policy led approach to development is intended to avoid pressure to expand development boundaries in smaller settlements. In smaller settlements in particular this can lead to large areas being included within development boundaries, which can result in a development pattern that is both difficult and expensive to service.

Of the other amendments made to the plan these are minor in nature. In terms of the policies governing the amounts of development in settlement in Tiers 2-6 Objective SSO1 *Scale of development within tiers 2-6* has been modified to allow a limited increase in the level of residential development permitted in tiers 5-6. It is not anticipated that this will have any environmental effects as consolidated development proportionate to the scale of the settlement will be more easily serviced than more scattered development outside development boundaries.

Text changes to other objectives are minor in nature and do not alter the fundamental thrust of the plan which is to promote consolidated development in a centre out pattern from the development core.

One amendment has been made to the S.3.9.2 which defines local rural persons and local rural area for establishing criteria for the purpose of assessing rural housing applications This amendment is to section 3.9.2 (b) which now states (additional text underlined)

*The Local Rural Area for the purpose of this policy is defined as the area generally, but not exclusively, within a 10km radius of the applicants’ family home.*

This is designed to take into account the possibility of a limited number of exceptional cases and as such is not expected to have significant environmental effect.

The review of Local Area Plans and the preparation of local level planning documents has a role to play in strengthening the population structure. Building on the work that had been carried out in Village Design Statements and also in the Foynes Theme Town plan, three settlements have had zoning assigned to them, Foynes, Murroe and Athea. The introduction of zoning for these settlements is in line with the contents of Sustainable Residential Development in Urban areas (May 2009 p.12) that indicates the usefulness of Village Design Statements that may “*provide useful supplementary guidance*” or locally prepared planning documents that could inform local planning decisions.

To further assist in consolidating the settlement structure of the County a commitment has been made in Objective SS O16(b) to prepare or support the preparation of Village Design Statements or local framework development plans for villages in tier four of the settlement structure. The addition of objective SSO16 in which the council seeks to assist local

groups in the preparation of village design statements for tier 5 and 6 is expected to have beneficial effects as it means that local development initiatives will be plan led.

The move towards a more regulated and policy led settlement strategy for Limerick settlements (see Chapter 3 of the Plan) means that more emphasis is placed on the use of brown field and in fill sites. In addition the reversal of the CLAR areas as extended structurally weak areas- in the 2005 plan Chapter 3- which had been introduced as a variation to the current plan in June 2007, contrary to the advice of the SEA process at the time, means that there has been a modification to the settlement strategy in the wider countryside. The proposed three policy areas; Area of Strong Urban Influence, Area of Strong Agricultural Base and Structurally Weak Areas, together with more clearly defined settlements objectives means that the settlement structure, urban and rural is closer in content to that which has been put forward in the Sustainable Rural Housing Guidelines (DEHLG, 2005). This would have the effect of more regulated development in the wider countryside and a diversion of development into local settlements.

The current Regional Planning Guidelines (MWRA 2010) points out that medium-sized towns can develop their base for business, residential and retailing functions, while service programmes for villages are mooted in order to increase their attractiveness for investment and settlement (Objective IN O25 Chapter 8). The settlement strategy in its current format seeks to achieve these aims.

In the future, energy and communication networks will require the provision of both concentrated and linear network development. These networks will link nodes for production or distribution of the resources and energy. The current settlement strategy is a step towards this with its tiers of settlements combined with the different settlement categories of rural area. The identification of Limerick as a gateway will increase pressure on rural areas and the settlement strategy in its current format is an attempt to cater for this. The Plan in its current form seeks to promote the aims of the *Sustainable Rural Housing Guidelines* (April, 2005 p.23):

- (1) The orderly and efficient development of newly developing areas on the edges of cities and towns.
- (2) Avoid obstructing alignments for the future provision of infrastructure such as roads and electricity lines.
- (3) Avoid undermining the viability of public transport because of very low densities.
- (4) Avoid attendant later problems in terms of demands for higher public expenditure.

There will be future difficulties, in addition to the economic cost of a dispersed settlement pattern. The environmental cost of servicing the dispersed settlement pattern will have to be borne in mind. There would be a double cost in that a dispersed settlement pattern would draw people from villages which may be suffering from population decline and loss of services, while adding to the environmental cost of dispersed settlement. The cumulative effects of this pattern of development would compound current issues in the rural areas such as ribbon development, scarcity of sites, traffic issues, undermining of village viability and ground and surface water contamination. This would gradually undermine the settlement strategy as presented and go against the need to:

“strengthen the established structure of villages and smaller settlements both to support local economies and to accommodate additional population in a way that supports the viability of public transport and local infrastructure and services such as schools and water services”. (Source: Sustainable Rural Housing Guidelines April 2005 p.8).

In the housing chapter of the plan Chapter 4 S.4.3 Housing Density Objective HOU O1 Density of Residential development has been modified to encourage increased density of development in centrally located brown field sites. This is in accordance with SEA guidance which mentions the need to “*give preference to the use of brown field lands*” (DEHLG p.30). The other major policy addition to the housing chapter is the addition of HOU O19 S.4.8 that supports the initiatives of the Limerick Regeneration Agencies is expected to have environmentally beneficial effects as it places a new emphasis on a coordinated approach towards regeneration led development.

### **Responses to Human Health in the Plan:**

In order to provide needed infrastructure in smaller villages the Council has undertaken in Objective SSO8 to undertake a partnership in the provision of sewerage facilities in particular, together with “some reserve capacity”. In addition to preventing pollution and danger to human health, this will have the added benefit of also contributing to water quality and bio-diversity- see section 3.1.1 of the Environmental Report.

In addition policies catering for those with special needs in terms of residential accommodation have been included in Chapter 4. This is covered in Section 4.5 which contains policies for residential care and independent living and alteration of dwellings for dependant relatives.

Objectives in relation to Seveso sites exist both in the Economic Development Chapter 5 but also in the Shannon Estuary chapter (Chapter 9, Objective SE O5). In these policies the advice from the Health and Safety Authority will be taken in relation to applications that might pose a risk to human health.

The issue of facilities which are essential to well being are dealt with in Chapter 6, Community and Recreation. Objective COM O1 is to identify the facilities required by communities while COMO2 is to ensure that new residential developments incorporate appropriate provision for community and recreational facilities. Policy COM O7 seeks to safeguard existing community facilities. In terms of the provision of health facilities Section 6.3 and Objective COM O9 encourages the provision of suitable health care facilities in appropriate locations.

### **Population and Human health in the absence of the Plan:**

The new policies that relate to the settlement structure which is designed to reinforce the existing settlement structure by concentrating on the development of compact and easily serviced settlements would be absent. In addition the rationalisation of policies in relation to settlement in the wider countryside would not exist and the reduction to three policy areas Area Under Strong Urban Influence, Area of Strong Agricultural base and

Structurally Weak Areas would be reversed. In short, the stronger, more clearly articulated settlement policies that are put forward would not exist to guide population growth and settlement patterns. It is worth remembering that servicing such developments has a financial cost that is borne by the tax payer and ultimately affects national competitiveness.

The stronger measures for the provision of community facilities including phasing of development together with the provision of such facilities also would not exist.

**3.1.4 Material assets:** For the purposes of this report material assets are considered to be resources considered of value and that are location specific. Material assets can be divided into following headings:

- Economic assets of natural origin.
- Economic assets of human origin, such as settlements transport infrastructure and utilities.
- Cultural assets –considered separately. For this section assets will be considered to be economic.
- The chief natural assets in County Limerick are productive farmland and forestry. Water supplies and aggregate and mineral resources are also important natural assets. Forestry, particularly conifers, is present in the uplands of the County with a strong western bias. The more productive agricultural soils lie primarily in the east and south of the county and in the central plain of the County.
- Water resources will be considered in a separate section.
- Chief man made assets are settlements and infrastructure and developable land. Wind energy is included amongst infrastructure.

#### **Responses to Material Assets in the Plan:**

One of the main threats to man-made assets in certain locations is that of flooding. Section 8.3.6 (Chapter 8) and Objective IN O35 relate to flood risk and state that the council will have regard to the newly issued guidelines “ The Planning System and Flood Risk Guidelines” and Office of Public Work data. The OPW data is currently being compiled. The Council will have regard to the to the updated flood data. Objective SE O16 (Chapter 9) also relates to flooding.

Settlements and developable lands are covered in chapter three of the plan and also in Limerick County Councils series of Local Area Plans.

An objective governing the identification of strategic areas containing significant aggregate resources exist in Chapter five in Objective ED O19.

The emphasis on more compact development patterns outlined in the Population Section will help to conserve farmland.

In terms of infrastructure the consolidation of development patterns will help to ensure adequate linkages for future infrastructure provision such as roadways-see 3.1.3 above.

The Port of Foynes has been included specifically in policy content in Objective EDO5 *Appropriate Industrial development at Foynes and deep water facilities In the Shannon Estuary* which places emphasis on the development of the port and recognises its role within the estuary as a whole, while respecting the ecological constraints that the Special Area of Conservation Designation of the Shannon might impose.

Other changes to the policies in relation to economic issues relate to text but do not alter the thrust of policies in the County Development Plan. One change that is important in relation to retail policy, though not significant enough to undergo the SEA process, is the change to Policy ED13 (S. 5.5.1) relating to the regional retail strategy that permits limited expansion to retail facilities in the Crescent Shopping Centre. The SEA screening carried out for this change in policy did not find that it would cause any significant environmental effects as it was location specific and limited in scale.

Other policies that have been included in the final plan are positive in nature as they support the establishment of town centre retail facilities –Policy ED 12 encourage centre out development in major town centres –this is in line with good practice and also in accordance with the Retail Planning Guidelines (pp 8-11) published in January 2005.

Other policies and objectives in the retail section also place further emphasis on the regional management of retail activity and on the encouragement of retail activity in core areas and town centres and place emphasis on the sequential text (Policies ED16 and 17 and objectives ED 011-13).

### **Material assets in the absence of the plan:**

Existing development pressure would continue unregulated which would make the provision of appropriate infrastructure more difficult and expensive. Objectives and development management in relation to quarries would also be discontinued. Objectives to continue with Local Area Plans and also to provide further planning guidance documents for local settlements would be discontinued which would mean that there would be no overall coherent plan for development in these areas.

### **3.1.5 Water.**

Figures indicate that samples from just over 48% of river monitoring stations in County Limerick are classed as unpolluted. The Rivers Maigne and Deel, the two largest rivers that drain the County have high phosphorus loadings.

Surface water quality is variable in that some rivers in the area have undergone a decline in water quality, while others have remained the same, based on the contents of the 2004 Implementation Report of the Phosphorus Regulations. Septic tanks have been shown to create “local problems” in relation to surface water quality as many of the County’s soils

are unsuitable for this method of sewage disposal (Implementation Report, Limerick County Council, 2004 p. 14). In general in Limerick it could be said that surface water quality is poor.

Much debate has centred on the sources of such pollution with agriculture, forestry and human waste all being blamed and it is true that all have played a part in contributing to this problem. Ground water too has suffered with Maps from the River Shannon Basin District Management Plan indicating that large parts of central County Limerick have polluted ground water sources. This has implications for rivers as ground water provides a substantial amount of the base flow during summer months. With generally less water during the summer months and less dilution capacity the problems of pollution become more acute.

While proprietary treatment systems are often cited as being suitable alternatives to septic tanks in areas where ground conditions are suitable, they depend on careful maintenance and require considerable after care. One source (O Grada, 2002) estimates countrywide that by year three following construction, fewer than 18% of householders have a current maintenance agreement. Survey work by the Environment Department in Limerick County Council indicated varying problems with individual treatment systems that include contamination of surface water, ponding and localised contamination that poses a threat to health. With the large amount of houses depending on one off treatment systems it is probable that a sizeable proportion are not functioning properly. This is borne out by an internal document produced in Limerick County Council in 2002. (*Wastewater treatment: A Guide to Best Practice in Limerick County Council*). Limerick depends on groundwater for 42% of its drinking water sources and potential contamination of this resource is a matter of major environmental concern.

#### **Responses to water issues in the Plan:**

These have been outlined in the section on population and human health and also in the section on Bio-diversity. In short the emphasis on condensed, more easily serviced settlements together with the requirement for all individual treatment systems to comply with the EPA 2000 Guidelines are a response to water quality issues. Objective IN O24 that seeks to protect human health and designated habitats will play an important role. This policy also draws attention to the need to restore the integrity of vulnerable water bodies due to low “assimilative capacity”. Related to water issues is the question of water-based habitats. The Lower River Shannon SAC site is the most extensive site of its kind in the county. Where any effects are deemed likely the project or plan will be subjected to the requirements of Article 6 of the Habitats Directive.

#### **Water issues in the absence of the Plan:**

In the absence of the plan the trend towards more dispersed development would occur and its reliance on individual treatment systems. This would make it more difficult to service these sites and to provide the necessary strategic infrastructure. Indirect effects on bio-diversity water quality and drinking water supplies would result.

One of the important provisions included in Objective IN025 is that which says “*the council will monitor the cumulative effects of grants of permission on the available wastewater treatment capacity*” this will help ensure that infrastructure is not overloaded with consequent risk to surface water quality.

### **3.1.6 Air and Climate:**

One of the main influences the plan will exert on air and climate will be through its influence on transport patterns. An increase in car traffic would have effects on air quality. The implications for air quality would be greater at areas where traffic concentrates such as at intersections of roadways or when it eventually reaches large urban centres such as Limerick. There would be localised effects on air quality in areas such as these. Limited data is available on the effects of traffic on air quality in Limerick with the exceptions of that which had been generated in individual Environmental Impact Assessments. One such assessment (RPS Mc Hugh, 2004 pp. 75-84) indicates that projected traffic trends in one location in the city environs will not breach EU air quality limits. Part of the reason behind this is that improvements in car engine technology will reduce output of traffic-derived pollutants. Notwithstanding the fact that no emission limits are breached, an increase in the output of pollutants will result.

The free flow of traffic is essential in order to minimise the generation of traffic-based pollutants as emissions are higher under slow speed and start-stop conditions. Increases in incoming traffic to the City, where the bulk of employment is concentrated, will have an effect on traffic flows.

Generation of green house gases is another issue. While in the short term (3 to 5 years) it is not envisaged that concentration of development will not result in any reduction in carbon emissions through increased use of public transport, due to its relative unavailability, concentration of development in settlements along transport routes would ensure that in future they would be more easily serviced. This is an important consideration as currently economic trends such as increasing oil prices could well increase the attractiveness of public transport use and its further development. Car pooling could also become popular. Each of these responses functions best where settlement nodes are concentrated along routeways, a factor that was taken into account in drawing up the current settlement strategy.

The Limerick Clare Energy Agency has prepared a Climate Change Strategy and Energy Balance Strategy for County Limerick and County Clare, which deals with developing a low carbon economy. To achieve this there will need to be huge changes in how energy is used and this has implications for the location of future development in the County and indeed how these developments are carried out.

### **Air and Climate responses in the Plan:**

Section 7.4.4, Chapter 7 Environment and Heritage, presents the following responses:

- Presenting a renewable energy strategy as part of the Development plan. Bio- mass in particular in an agricultural County has huge potential. The inclusion of Objective EHO24 Renewable Energy strategy is a step towards an integrated approach towards guiding the development of all renewable energy strategies in Co. Limerick. This marks an integrated approach towards renewable energy technologies as to date it has been the case that wind energy has dominated discussions for renewable energy.
- The protection of strategic regional roads (S. 8.2.6.1), a roads system that provides important links between settlements in the county and the city, is included in Objective INO15. This limits development requiring direct access onto strategic regional roads. By doing so it is hoped that the efficiency of these routes as transport corridors is preserved.
- Consolidating development patterns as required under the DEHLG “Residential Density Guidelines in Urban Areas”, May 2009.
- Introducing energy conservation measures in its sustainability statement-see Development Management chapter of the plan. Developments will be encouraged to use the best available technology and design in order to achieve as much energy savings as possible. This will relate not just to materials but also to the operational phases of developments.
- The development of district heating schemes will be encouraged. These could work hand in hand with local producers of bio-mass in order to begin and sustain a local bio-mass industry.
- In terms of dealing with flooding risk the Objective INO 38 Flood Risk Management and Development, further mention has been made of the Planning system and Flood Risk Management guidance while policies relating to the screening for flood risk and the preparation of Strategic Flood Risk Assessments have been included in S8.3.6 Flood risk in Chapter 8 of the plan.

### **Air and Climate in the absence of the Plan:**

Without the plan the trends towards increased use of private transport made necessary by dispersed settlement would continue. Despite improvement in engine technology the levels of green house emissions would continue to rise. In the absence of the plan the new measures in relation to energy efficiency and renewable energy would be unlikely to be realised.

### **3.1.7 Cultural Heritage and Archaeology:**

Cultural heritage is a broad term covering everything from buildings structures and individual objects, which have been left in the landscape by previous or current

inhabitants. One of the most common features of cultural heritage is the built environment. The Record of Protected Structures included in the plan is the most up to date list of buildings of architectural significance in the County. Their settings, and attendant grounds are also protected. One of the major amendments in the plan over previous plans has been an increase in the number of Architectural Conservation Areas (ACAs) that have been established

The Record of Monuments and Places, which is maintained and up-dated by the Archaeological Survey of Ireland, a branch of the National Monuments Service indicates the known archaeological sites for County Limerick. The sites vary from individual archaeological sites to medieval towns such as Kilmallock. Some of the most important of these sites are mapped in Volume 2. In terms of the numbers of sites the most frequent is that of the ring fort of which Limerick has a higher number and greater concentration than almost any other County- a reflection of it's agricultural past.

#### **Responses to cultural heritage and archaeology in the Plan:**

From the point of view of the built heritage the mapping of the additional Architectural Conservation Areas in Volume 2 of the plan helps to up date the inventory of significant buildings and structures and marks an increased emphasis on an area based approach to architectural heritage conservation rather than relying on the listing of individual buildings. This area-based approach is echoed in a new approach towards the identification of historical and archaeological landscapes that could provide an additional basis for niche tourist attractions in County Limerick. There is also an approximately 20% increase in the numbers of protected structures in the plan.

#### **Cultural heritage and archaeology in the absence of the Plan:**

Without the guidance present in the plan development would not have any direction in how to avoid damage to these aspects of Limericks heritage. The need for sensitive layout to minimise interference with archaeological monuments would be missing. In terms of the built environment the protection afforded individual buildings and also the more sensitive areas of settlements now covered by ACAs would be lost, while the implementation of the architectural conservation grants scheme would be suspended, a source of financial support for those who wish to carry out works on protected structures.

#### **3.1.8 Landscape:**

Limerick has a variety of landscape types. The uplands of the Galtees provide a scenic backdrop to the south east of the County while the estuary, located along the northern boundary to the County, adds distinctiveness to that area. The uplands of the County are concentrated in the west and south, while the middle of the County is mainly lowlands. In the middle of the County the well-developed bocage landscape is a feature that is often underestimated. Only parts of northwest Europe such as England and Northern France possess a similar landscape. The landscape of the County is mainly rural in character and has been shaped by centuries of agricultural management.

The importance of landscape has been recognised by the Council who have continued with the landscape character assessment process from the last plan. These landscape character areas and associated policies (chapter 7) provide the means of managing change in the landscape.

### **Reponses to landscape issues in the Plan:**

While continuing with the Landscape Character Area template which had been first put forward in the 2005 Plan it is proposed to undertake an historical landscape assessment of the County. This could play a key part in trying to identify unique features of Limerick's past landscape but could also help to provide specialised attractions for niche tourism. This has been included in S7.3.8 Historical landscapes and has been included in policy as objective EHO18 where it says that it is an objective of the council to *“develop an historical landscape appraisal process which will identify key historical landscapes in County Limerick.”* In addition a new designation has been included in the plan in which Sarsfield Rock and its setting has been designated as an Historical Site. In addition there has been two additions to the scenic routes in the plan.

### **Landscape issues in the absence of the Plan:**

In the absence of the guidance framework of the landscape character areas there would be no guidance in terms of location. This coupled with the lack of a scenic route policy would mean that many of the County's most scenic routes would be compromised which would have adverse effects both on the landscape itself but also on efforts to promote Limerick as a tourist attraction.

### **4.1 Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of particular importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC i.e. the Habitats and Birds Directives.**

Existing environmental problems include deterioration of water quality often associated with dispersed settlement or settlements poorly serviced by infrastructure. This also has implications for ecological sites such as water-related sites like the Lower River Shannon SAC site, or Askeaton Fen Complex.

Development pressure for wind farms in Special Protection Areas is increasing.

Settlement sprawl that had caused by overlarge areas within development boundaries and further pressure for the expansion, contributes to under use of settlement cores and encroachment into the wider countryside. These issues have been addressed by new policies and the incorporation national guidance relating to compact settlements.

Scattered development in the wider countryside, which is hard to service and contributes to unsustainable travel and settlement patterns is an issue.

Uncoordinated development has implications for landscape in the wider countryside but also for the architectural and cultural heritage of the settlements that require protection from inappropriate development, in terms of design, location and scale.

#### **4.1.1 Potential Environmental Problems.**

The presence of the Lower River Shannon SAC site in the form of the River Shannon to the North, and other water based sites needs to be considered in the context of settlement planning.

One issue that has come to the fore recently has been that of flooding. Many of the rivers in the County area have had a history of flooding. In light of this history and the concerns raised by the recent DEHLG Flood Guidance document, this is an issue that requires particular attention. This has resulted in additional flood prevention policies being put in the plan as indicated in section 3 of this report.

To service a growing population there is a need to ensure the development of public transport and sustainable transport initiatives, while ensuring smooth traffic flow on existing and proposed roadways.

Ensuring that infrastructural facilities such as wastewater treatment centres keep pace with population growth. This is of particular importance given the number of designated sites that depend on good water quality.

The pace of development has meant that despite pressure to ensure that such development takes place it should do so in a manner that ensures maximum use of brown field sites and should assist in consolidating the existing built form.

#### **4.1.2: The “Do Nothing” Scenario:**

In terms of estimating how environmental conditions might change over time it is assumed that this means that there would be no implementation of a new plan following the expiry of the existing plan in early 2011. Not implementing a new plan would mean that there would be no planning policy framework for the County.

The County has had one of the fastest population growth rates of any in the region. Despite the economic down turn it is likely that population growth will be higher in Limerick than anywhere else in the region. Failure to implement a new plan would mean that the additional measures required to cater for the County’s population would not take place. In addition the opportunity to incorporate the provisions of new guidelines such as *Sustainable Residential Development in Urban Areas*, DEHLG, May 2009 would be missed.

Environmental practices in relation to issues such as re-cycling and waste disposal and ecological protection have altered since the previous plan was put in place, without a new plan this would mean that policies in relation to these issues could not be updated in order to reflect current best practice.

In addition the environmental report should take into account the contents of other plans for the area as outlined in section 4.11 of the SEA guidelines. Both Clare, and North Tipperary and Limerick City have prepared new Development Plans. Not implementing the plan, following expiry of the 2005-2011 Plan would mean that the opportunity to update our planning policy guidance in tandem with neighbouring local authorities would be missed.

Further development scenarios are outlined towards the end of this report.

#### **4.1.3 Identification of potential environmental problems.**

The proximity of the Shannon and its tributaries as part of the Lower River Shannon SAC site are amongst the most important environmental sites that lie within the plan area. Barr and Thomson (2004) identify key issues that could affect water quality in the Shannon basin. Those that might apply within the plan area are sewage, water abstraction, urban drainage and septic tanks, industry and leisure activities.

Policy responses within the plan including that of restricting development that might overload existing waste water treatment systems and the incorporation of Sustainable Urban Drainage Practices (SUDS) are designed to ensure that development activities that fall within the remit of the plan do not cause damage to these sites or affect their water quality.

Without the consolidation of the plan area brought about by the non-expansion of the settlement boundaries, urban sprawl and associated under use of development land would otherwise have come about. This has also indicated as a suitable policy response by higher level guidance documents such as the NSS and RPGs which view Limerick as a Gateway City.

### **5.1 Environmental protection objectives relevant to the plan and description of how those objectives and any environmental considerations have been taken into account in preparing the Plan.**

#### **5.1.1 Introduction:**

The environmental protection objectives have been divided into three areas, water quality, bio-diversity and landscape and also archaeology and architectural heritage.

#### **5.1.2 Water Quality Protection Objectives:**

Relevant environmental protection documents, strategies and guideline objectives which apply at community level and national level and that apply to the plan in terms of protection of water resources are as follows:

- The Local Government Water Pollution Acts 1977 and 1990,
- The Fisheries Acts 1959 to 1990,
- The Water Framework Directive and associated statutory instruments,

- The Nitrates Directive,
- The Phosphorus Regulations,
- Drinking Water Regulations 2002.

Further protection objectives for water quality are set out in the following:

### **1. GSI Groundwater Protection Responses for On-site Wastewater Systems for Single Houses:**

This document provides guidance on the use of on site treatment systems based on the vulnerability and importance of the underlying aquifer. In areas of extreme vulnerability in the zone of contribution of a well (much of the area in question must be assumed to be in this category in the absence of specific source protection plans for individual wells) the recommendation includes the following statement:

*“The authority must be satisfied that, on the evidence of the groundwater quality of the source and the number of existing houses, the accumulation of significant nitrates and/or microbiological contamination is unlikely”*

The guidelines on Sustainable Rural Housing state the following:

*“The key to protecting water quality in the context of providing new dwellings in un-sewered rural areas is to ensure that new development is guided towards sites where acceptable wastewater treatment and disposal facilities can be provided, avoiding sites where it is inherently difficult to provide and maintain such facilities, for example sites prone to extremely high water tables and flooding or where groundwater is particularly vulnerable to contamination.”*

### **2. Limerick County Council’s County Development Plan 2010-2016.**

Updated environmental protection objectives have been included in the plan as has an updated listing of environmental legislation and guidance documents.

### **3. Circular Letter SP05/03**

This letter from the DEHLG recommends that:

*“When a groundwater protection scheme has been put in place in consultation with GSI, attention should turn to linking the scheme to the development plan”.*

Chapter 7, Environment and Heritage of the 2010 County Development Plan deals with the Protection of Water resources in the County as outlined above. The implications of the Water Framework Directive are acknowledged. The policies of the settlement strategy have been designed to cater as far as possible for the situation that applies in the area under strong urban influence. In addition, in tandem with the adoption of the plan the introduction of the EPA (2009) guidelines *Wastewater Treatment Systems for single Houses* has also taken place.

### 5.1.3 Bio-diversity and flora and fauna and landscape protection objectives:

Sources for protection objectives for bio-diversity flora and fauna are:

1. The EU Habitats Directive 97/77/EEC.
2. The EU Birds Directive 79/409/EEC.
3. The Wildlife Act 2000.
4. SEA Directive 2001/42/EC
5. Relevant provisions of the Sustainable Rural Housing Guidelines (April, 2005)
6. National Biodiversity plan.

**EU Habitats Directive (92/43/EEC)** transposed into Irish law by the EU (Natural Habitats) Regulations 1997 (S.I. No. 94 of 1997). The Directive lists certain habitats and species that must be given protection in Special Areas of Conservation (SACs). Irish habitats include raised bogs, active blanket bogs, turloughs, sand dunes, machair (flat sandy plains on the north and west coasts), heaths, lakes, rivers, woodlands, estuaries and sea inlets.

**EU Birds Directive (79/409/EEC)** The Directive, transposed into Irish law through the EU (Natural Habitats) Regulations 1997 (S.I. No. 94 of 1997), requires the designation of Special Protection Areas (SPAs) for: (a) listed rare and vulnerable species (such as whooper swan), (b) regularly occurring migratory species (such as ducks and geese), (c) wetlands, especially those of international importance, which attract large numbers of migratory birds each year. SACs and SPAs collectively form part of “Natura 2000,” a network of protected areas throughout the EU.

**Table 3 Scoping of the County Development Plan Policies.**

Issue	Criteria - Is there a policy or objective relating to the Topic?	Policy/Objective Ref / Absence	Comments
Non-Renewable Resources e.g. soils	Protection and conservation of productive land and prime agricultural land.	Chapter 3 – overall settlement policies and objectives	The move towards concentrated development patterns will have beneficial effects in conservation of agricultural land.
	Protection and conservation of local woodlands, particularly those that have both amenity and ecological value.	Objective EH 05 and EH06	EH 06 also deals with landscaping in developments
	Protection and conservation of water sources and supply networks.	Objective IN 024 and 25 and objectives EH 020 and EH 021.	Dealt with in Infrastructure and Environment Chapter .
Biodiversity	Protection, conservation and enhancement of wildlife habitats within designated sites and other important habitats and networks	Objective EH 02 and Objective EH 01.	Also included in policy CP10 in the Core Strategies which also mentions the bio-diversity plan. Mention of appropriate assessment in introduction to plan but also in Chapter 7. Areas of geological interest included in Objective EH 04.
	Protection and conservation of species of flora and fauna protected by law.	Flora protection order specific to EH02.	EH02 has been expanded since last plan.
Environmental Quality, landscape, built and natural environment, including material assets, air and climatic factors.	Encouragement of reuse and adaptation of existing buildings and structures.	EH031 and EH033, RS05, RS06	Encourages re-use of older buildings and protected structures. Similar policy present in Chapter 3 in relation to non –listed buildings.
	Encouragement of public transport use.	Objectives IN03 and INO4	Encourages the development of bus corridors and park and ride facilities.
	Promotion of renewable energy and Municipal Heating systems.	Objective IN O55 Objective EH024	Included in climate change section 7.4.4 in chapter 7 and section 8.5.4 in chapter 8. Objective EH024 supports the creation of a renewable energy strategy for all the renewable technologies.
	Ensure efficient use of local resources.	Reference to the Limerick Clare climate Change Strategy in S.7.4.4	See also reference to re-use of older buildings and new emphasis on consolidated settlement structures.
	Promotion of environmentally friendly design.	Sustainability statement and social infrastructure assessment.	Present in chapter 10, Development Management Guidelines. Present also in S.7.7.4 which stresses the need for ecologically friendly building materials.

Issue	Criteria - Is there a policy or objective relating to the Topic?	Policy/Objective Ref / Absence	Comments
	Preservation and Conservation of local character in built and natural environment, such as landscape features.	Objective SS01 and SS O2. Objective SS05 Objective EH032 and 34. and EHO36	Settlement strategy objectives encourage development that is in keeping with local character. Objectives EH O32 to EH O34 relates to ACAs and historic and designed landscapes.
	Promotion of urban agriculture.	Will be promoted within the series of LAPs which deal specifically with zoning.	No Polices in existence in the CDP.
Environmental Equity, population and human health.-see also previous heading.	Protection, management and improvement of access to resources to satisfy fundamental needs	COM036, CMO21 and CMO23	Open space requirements are listed in Development Management Guidelines. Chapter 6 also outlines requirements in relation to Community facilities
	Establishing of implementation group to ensure that the plan policies are prepared in an integrated fashion.	See Implementation Chapter of the plan.	Review and monitoring section of SEA will indicate targets which will show how the plan polices are being implemented. Monitoring also in the plan.
	Monitoring and review framework clearly articulated.		Present.

**Source:** adapted from *Heritage Appraisal of Development Plans* and Table 4B SEA Guidelines.

## **6.1 Likely Significant effects on the Environment of the plan:**

One of the key aspects of the plan that minimises environmental impact is that the development boundary strategy for smaller settlements has been replaced with a policy led approach that favours compact development.

This will have the effect of consolidating the existing urban structure.

It will ensure that “brown field land” within settlements will have a greater chance of re-use in line with the principle of giving preference to the re-use of brown field lands, rather than developing green field lands” (SEA guidelines, 2004, p.30).

It will minimise possible effects in the wider countryside by preventing sprawl from the settlements into the wider countryside which might have been subject to more sustained development pressure than would otherwise be the case. Objective *SS05 Prevention of Urban Sprawl* has been included to ensure a distinction in character between the urban and rural areas.

In line with the principles of Sustainable Urban drainage (SUDS) new policies have been included in order to take into account new guidance on the subject of flooding. Provision has been made for the updating of policy and objectives within the plan in the light of updated information or guidance on the issue of flooding.

Additional land has been zoned for industrial and enterprise purposes at Askeaton and Annacotty which reflect existing land uses. The changes in zoning have been designed to respond to the changing needs of the County and to provide a stock of zoned land for these purposes, which is a sustainable alternative to demands for such land in the wider countryside.

### **6.1.1 Cumulative effects:**

As indicated above the consolidation of the settlement patterns coupled with a range of policies to deal with issues such as flooding and renewable energy and resource use should minimise the emergence of cumulative adverse effects. The monitoring framework put forward later in the report should enable such effects to be detected in time for action to be taken if required.

The cumulative effect of persevering with some of the policies in the current plan would lead to further unsustainable expansion of these settlements, more dispersed settlement in the wider countryside and the failure to take fully into account new environmental guidance and practices. The continuation of these activities would mean a significant cost in servicing such dispersed development while incurring an environmental cost in addition.

### **6.1.2 Measures designed to prevent reduce and as fully as possible offset any significant adverse environmental effects.**

As indicated in previous sections the consolidation of the existing settlement patterns through the reliance on a policy led approach towards development which favours compact development patterns and the use of brown field sites will have significant beneficial environmental effects. This will prevent undue urban sprawl and encroachment into green field sites currently outside settlements and ensure green field sites are not subject to concentrated development pressure which would have been the case had there been an expansion of the settlement boundaries.

The inclusion of updated ecological related policies means that new statutory requirements such as Article 6 Assessment as required under the Habitats Directive will be incorporated. Updated policies and maps relating to newly designated Special Protection Areas are also incorporated.

Policies in relation to pollution and the provision of wastewater infrastructure are also included.

The inclusion of Sustainable Urban Drainage (SUDS) policies are designed to minimise the possible future effects of flooding.

Updating of policies in relation to the use of renewable energy and public transport and resource use as outlined in the previous section are designed to minimise the environmental effects of these activities and promote a switch towards more sustainable forms of activity.

### **6.1.3 Trade offs between differing aspects of policies:**

In all forms of development there are some unavoidable losses whether of environmental stock or indeed of cultural and built heritage. Development cannot be pursued at the price of unacceptable environmental loss while at the same time placing undue restrictions on development activity is unacceptable. The question exists as to whether or not these losses are acceptable or indeed prevent greater losses elsewhere within the functional area of the Local Authority. For instance residential zoning may result in the loss of some semi-natural habitat such as improved grassland. However concentration of development within the existing settlements within convenient travelling distance of both employment and amenities would result in reduced commuting times and less consumption of fossil fuels. The concentration of development also allows for the easier processing of waste from such areas and would play a part in reducing the possibilities of piecemeal contamination of groundwater in the County by septic tank discharges.

The concentration of development would also have the effect of reducing air quality in terms of exhaust emissions and the like. This is a better alternative than having more dispersed patterns of development, which while resulting in local reduction in air quality from time to time would be less sustainable in the long run due to greater consumption of fossil fuels. The encouragement of public transport within the plan will also help to ensure more efficient forms of transport.

It is considered that the policies suggested in the plan are the best balance to ensure that a coherent template exists to facilitate continued growth, while reducing damage from piecemeal development which, in the absence of the updating of the Plan would be the likely alternative- see the do” nothing scenario” above.

## **7.1 Outline of reasons for selecting alternatives and description of how the assessment was undertaken including any difficulties.**

### **7.1.1 Selection of Alternatives:**

Section 4.1.2 outlines one development alternative - the “do-nothing scenario”. The SEA (DEHLG 2004 p.28) guidelines state that “ *it is important to note that the do-nothing scenario is not one of the reasonable alternatives which are required to be considered under the SEA directive. Nor would it necessarily be in keeping with the practice of Sustainable development which is fundamental to the 2000 Act*”. This places a further onus on the Council to continue to update its policies in any plan review in order to ensure that they reflect current best practice.

**Note on selection of alternatives:** The first alternative was selected as it was a likely scenario following the use of the development boundaries in the last plan. While a likely scenario, it was not the selected one because of the need to ensure a compact settlement pattern. Compact settlements are easier and more cost effective to service and makes the best use of limited resources.

The second alternative, the preferred one takes into account the latest in planning guidance and current best practice in moving towards compact settlements. It also ensures that settlement policies and objectives in the wider countryside are closer to those put forward in the National Spatial Strategy and Sustainable Rural Housing Guidelines (2005).

The third alternative is the least preferred one as the opportunity to take into account changing planning practices such as compact settlements, rationalising the settlement strategy in the wider countryside and taking into account new environmental and ecological good practice would be missed.

**Alternative 1:** Proceed with existing plan, but with the expansion of the various development boundaries surrounding the smaller settlements. Such a course of action would not allow the plan to be updated to include aspects of current best practice in relation to environmental and planning issues, in particular those relating to compact settlement patterns.

This is the second most preferred alternative for the planning authority.

**Alternative 2:** Proceed with the plan as presented. The plan, as presented, outlines policies and objectives which consolidates development within existing settlements and has incorporated new policies which reflect the emergence of new guidance on planning and environmental matters. It also has enhanced measures for the protection of the designated sites within the County. In addition the number of policy areas relating to rural area types

for has been reduced to three, Areas under Strong Urban Influence, Areas of Strong Agricultural Base and Structurally Weak Areas. This is in accordance with the Sustainable Rural Housing Guidelines (2005). The settlement hierarchy has been updated to reflect both the services and population contained in each settlement, an approach that reflects current planning practice ensuring that development is guided towards settlements that are best able to support it in terms of infrastructural provision. It considered “ *that the number of services within the settlements generally related to the population of each settlement and it was therefore considered that the population of each settlement should influence its location within the settlement hierarchy*” (Plan Chapter 3 Section 3.3).

This is the **most preferred alternative** for the planning authority.

**Alternative 3:** Expand the development boundaries of the existing plan, while removing other guidance templates such as those relating to landscape. Such a course of action would run counter to current planning and environmental advice which focuses on consolidation of existing development patterns and zoning only in response to need. The Development Plan Guidelines (June 2007) are particularly strong in this regard.

It would also mean that the review of the rural areas that took place in the plan would not proceed which would further undermine the settlement strategy that has been updated to reflect changing economic conditions. This is the least preferred alternative for the Planning Authority.

#### **Table 4 Effects on the Environment of Differing Scenarios.**

Scenario 1: Proceed with existing 2005 plan with expansion of development boundaries.

Scenario 2: Proceed with the plan as presented.

Scenario 3: Expanding development boundaries, remove planning guidance on landscape.

Scenario	Human Health	Bio-diversity	Water Quality	Population	Air/Climate	Soil	Material Assets	Cultural Heritage	Landscape
1	=	+	-	=	=	+	?	-	-
2	+	+	+	=	=	-	+	+	+
3	-	-	=	=	=	-	-	-	-

**Explanatory Note:** Bio-diversity includes flora and fauna. Cultural Heritage includes Archaeology and Architecture.

? Unknown Effect

=Neutral effect

+ Positive effect

- Negative effect

**Option 2 is the most preferred option**

### 8.1 Proposed monitoring measures.

These are presented in tabular form below.

**Table 8 Measures envisaged concerning monitoring in accordance with Article 10 of the directive.**

Environmental Category	Potential impact	Indicators	Comments
Bio diversity, flora and fauna	Fragmentation, loss of habitats, species.	Known losses, reports, surveys by relevant bodies, NPWS Fisheries	Requires cooperation liaison with other bodies.
Population and Human Health	Ground surface/ water pollution. Traffic accidents. Noise.	Pollution incidents, Traffic reports	Could be obtained through Traffic impact assessments produced as part of planning applications.
Soil	Contamination	Reports/Surveys	Local contamination may occur as a result of pollution.
Water	Pollution of ground and surface waters, estuary waters. Excessive abstraction	Water pollution surveys, incidents as brought to light as a result of complaints, sampling	Cooperation with other bodies such as Fisheries NPWS and Health Board required.
Air and Climate factors	Local air pollution. Green house gas emissions	Traffic volumes. Comments in individual EISs submitted.	Contents of EIS submitted to the Planning Authority in the monitoring time frame may be indirect sources of data
Material assets	Use of brown field sites	Planning applications.	Nil
Cultural heritage.	Development in or close to protected sites, habitats or structures.	Known loss of sites or structures.	Increased liaison with other bodies required.

**Explanatory note:** much information of relevance may be available in Environmental Impact Statements or reports produced as part of planning applications. The first step towards collating this information would be the establishment of a library of such documents. In addition it is proposed to increase contacts with other statutory agencies who might have relevant information which hitherto has not been readily available to the Local Authority.

## 9.1 Non-Technical Summary:

**Introduction:** The SEA process is a series of techniques that allows appraisal of the likely significant effects on the environment of implementing a plan. All County Development Plans are subject to this process.

The main purpose of the assessment is to identify the likely environmental effects of development policy and to suggest mitigation measures where these effects are judged detrimental to the environment.

This involved the examination of differing development alternatives and the selection of the one which proves to be the best compromise in securing development at least environmental cost.

**Issues in the Environmental Report:** The major environmental issues that were raised in the SEA were ground and surface water quality and associated health issues. The sustainability of dispersed settlement patterns and their possible effects on future development were also examined. In the future, energy and communication networks will require the provision of both concentrated and linear network development. These networks will link together nodes for production or distribution of the resources and energy. The current settlement strategy is a step towards this with its tiers of settlements combined with the different settlement categories of rural area. The identification of Limerick as a gateway will increase pressure on rural areas and the settlement strategy in its current format is an attempt to cater for this.

Effects of dispersed development on landscape and ecology and the implications and environmental cost for future development in the County were examined. As a result of this three possible courses of action or scenarios are presented in the main document and are listed below.

**Note on selection of alternatives:** The first alternative was selected as it was a likely scenario following the use of the development boundaries in the last plan. While a likely scenario it was not the selected one because of the need to ensure a compact settlement pattern. Compact settlements are easier and more cost effective to service and makes the best use of limited resources.

The second alternative, the preferred one takes into account the latest in planning guidance and current best practice in moving towards compact settlements. It also ensures that settlement policies and objectives in the wider countryside are closer to those put forward in the national spatial strategy and Sustainable Rural Housing Guidelines (2005).

The third alternative is the least preferred one as the opportunity to take into account changing planning practices such as compact settlements, rationalising the settlement strategy in the wider countryside and taking into account new environmental and ecological good practice would be missed.

**Alternative 1:** Proceed with existing plan, but with the expansion of the various development boundaries surrounding the smaller settlements. Such a course of action would not allow the plan to be updated to include aspects of current best practice in relation to environmental and planning issues.

This is the second most preferred alternative for the planning authority.

**Alternative 2:** Proceed with the plan as presented. The plan, as presented, consolidated development within existing settlements and has incorporated new policies which reflect the emergence of new guidance on planning and environmental matters. It also has enhanced measures for the protection of the designated sites within the County.

This is the **most preferred alternative** for the planning authority.

**Alternative 3:** Expand the development boundaries of the existing plan, while removing other guidance templates such as those relating to landscape. Such a course of action would run counter to current planning and environmental advice which focuses on consolidation of existing development patterns and zoning only in response to need. The Development Plan Guidelines (June 2007) are particularly strong in this regard.

This is the least preferred alternative for the Planning Authority

Having taken into account the criteria in Schedule 2A of the 2001 Planning Regulations it is considered that the plan as presented is the most sustainable development alternative.

### **10.1 Environmental statement as required by Article 91(b) of the SEA directive.**

#### **How Environmental Considerations and the Environmental Report were factored into the Plan:**

The main changes to the plan over the 2005 plan have been the simplification of the rural settlement strategy with three rural areas rather than four. In addition the variation to the previous plan i.e. the 2005 plan that saw the introduction of extended structurally weak areas has been reversed. There are now three areas, Areas Under Strong urban Influence, areas of Strong Agricultural Base and structurally weak areas. In addition the new urban settlement strategy has placed a greater emphasis on more compact settlement that has been the removal of extended settlement boundaries and a move towards centre out development. These have been in line with established good practice and are the subject of various planning guidance documents. One change that has environmental implications has been the re-designation of the Slieve Felim Landscape Character area as being open for consideration for wind energy which will potentially allow for wind energy developments. The development of wind turbines and associated development such as access roads is likely to impact on the landscape character. Where such developments might have an impact on the environment they would require Environmental Impact Assessment and Appropriate Assessment to further determine potential impacts. Measures envisaged to

prevent, reduce and as fully as possible offset any significant adverse environmental effects of implementing the plan:

- Siting and design
- Turbine layout and colour
- Use of landscape forms to assist screening, particularly of sub-stations and lower level components of wind farms
- As outlined above each individual application will be required to undergo an Article 6 Assessment in order to determine its ecological effects.

### **Summary of how submissions and consultations were taken into account:**

As outlined above the key revisions to the settlement strategy were in line with recommendations of the DEHLG and the Environmental Authorities placing emphasis as they do on consolidated settlement structures. New emphasis has been placed on Article 6 assessment in line with DEHLG recommendations. Updated flooding objectives have been included and reference to the latest flooding guidelines have also been inserted in the plan. The Managers Reports prepared following the various public display periods during the plan preparation process are a record of responses to the submissions received during the plan preparation process.

### **Reasons for choosing the plan as adopted in the light of other reasonable alternatives considered.**

Below are the three alternatives considered, the second one is selected as it is considered to be the alternative which incorporates the most up to date environmental guidance and best planning practices.

**Alternative 1:** Proceed with existing plan, but with the expansion of the various development boundaries surrounding the smaller settlements. Such a course of action would not allow the plan to be updated to include aspects of current best practice in relation to environmental and planning issues.

This is the second most preferred alternative for the planning authority.

**Alternative 2:** Proceed with the plan as presented. The plan, as presented, consolidated development within existing settlements and has incorporated new policies which reflect the emergence of new guidance on planning and environmental matters. It also has enhanced measures for the protection of the designated sites within the County.

This is the **most preferred alternative** for the planning authority.

**Alternative 3:** Expand the development boundaries of the existing plan, while removing other guidance templates such as those relating to landscape. Such a course of action would run counter to current planning and environmental advice which focuses on consolidation of existing development patterns and zoning only in response to need. The Development Plan Guidelines (June 2007) are particularly strong in this regard.

This is the least preferred alternative for the Planning Authority

**Monitoring measures:** see Table 8 above. In addition the mid term review of the plan in 2012 will provide an opportunity to monitor the effects of the plan.

## 11.1 Conclusions

While at the outset of the Development Plan period it is difficult to estimate the effects of the policies of the plan, the preparation of the assessment ensures that at least the policies at their initiation follow good environmental practice. One of the first steps in establishing this is ascertaining if the policies are in accordance with national and EU legislation. This approach has been consistent throughout the plan in that the policies have sought to take into account national and EU guidelines and legislation. (See also section 2.2 in Chapter 2, Core Strategy).

The rationale behind the policies was that the cumulative effect of the development or other plan proposals on the area should maintain the balance of or improve the overall environmental stock of the area. Some losses to the natural environment may be inevitable but these are outweighed by such factors as concentration of development that is more easily serviced. In short the plan has created a backdrop for the coherent development of the County for the next six years and beyond.



**Part 2: Appropriate Assessment Screening Report  
November 2010**



## 1.1 Introduction to Appropriate Assessment

**Note:** This Appropriate Assessment (AA) Screening Report should be read with the County Development Plan and the Environmental Report that precedes this screening report. This screening report relates to the final part of the plan process and has been updated to reflect submissions received and material alterations made during the plan preparation process. At different stages in the plan preparation process both separate AA screening reports and full Appropriate Assessments had been prepared for policy variations to the plan. This screening document is the final part of the process.

The Habitats Directive (Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora) formed the basis for the designation of Special Areas of Conservation (SACs). Similarly, Special Protection Areas (SPAs) are legislated for under the Birds Directive (Council Directive 79/409/EEC for the Conservation of Wild Birds). Collectively, SACs and SPAs are referred to as European sites in Irish legislation and Natura 2000 sites. They are considered to be of European importance for the conservation of rare, endangered or vulnerable habitats and species within the European Community. Under Article 6(3) of the Habitats Directive an Appropriate Assessment must be undertaken for any plan or project that is likely to have a significant effect on the conservation objectives of a Natura 2000 site. An Appropriate Assessment is an evaluation of the potential impacts of a plan on the conservation objectives of a Natura 2000 site, and the development, where necessary, of mitigation or avoidance measures to preclude negative effects. Principally the purpose of an Appropriate Assessment (AA) is to identify the possible effects of policies on the integrity of designated sites.

Article 6(4) of the Habitats Directive sets out the decision-making tests to be applied to plans or projects that may impact on a Natura 2000 site. Article 6(4) states that amelioration measures must be put in place which will compensate for direct risk or damage likely to occur so as to ensure that the integrity of Natura 2000 sites are not compromised. Article 3 of the Habitats Directive states that the Natura 2000 network shall include SPAs from the Birds Directive.

This Appropriate Assessment Screening Report does not remove the need for future surveys and assessments that may be required as part of any planning application or any other information that may be made available by the National Parks and Wildlife Service (NPWS) or others. This is particularly important in the case of assessing cumulative assessment of projects. In terms of future planning applications the level of detail that would be available in terms of site layout and the fine detail of that would be present in an individual application would mean that a more detailed assessment could be made of the effects of each individual project.

Appropriate assessments had been carried out at various stages in the plan preparation process and have guided the evolution of the plan policies through out the plan preparation process. One of the key changes to the plan has been the expansion of areas open to consideration for wind energy development. These areas had been expanded in two locations, in the south east where the area open for consideration has been extended into the Slieve Reagh/Galtee Landscape Character area and in the East where the Slieve Felim landscape Character area has been open for consideration. Individual assessments had been

prepared for each. In the case of the south east an AA screening was carried out and due to distance from designated sites (the Ballyhoura mountain and Galtee Mountain special area of conservation sites) it was deemed that a full Appropriate Assessment was not required. The DEHLG agreed with this assessment. In the case of the Slieve Felims an appropriate assessment carried out by the Council concluded that there could be significant effects in allowing the expansion of the area open to consideration as disablement effects were likely. However the NPWS advised that these issues could be dealt with at project AA level and to ensure consistency with SPAs in West Limerick Kerry and North Cork that the expansion of the area open to consideration could occur. Objective IN056 of the draft plan was amended to include the mitigation measures proposed by the NPWS, i.e. each application carries out a site by site and cumulative effects appraisal to ascertain suitability of the development proposal.

In relation to the effects of dispersed settlement, there has been re-designation of areas that have been previously listed as being structurally weak and are now designated as being of strong agricultural base. In essence meaning the requirement to qualify to build in the open countryside is set at a higher level than would have been the case under the previous designation.

## **1.2 Stages in Appropriate Assessment**

The following are the stages in the Appropriate Assessment procedure:

- 1** Determining whether or not the plan will have significant effects on a Natura 2000 site either alone or in combination with other plans or projects- the screening stage.
- 2** Following from this Appropriate Assessment is carried out if necessary, which determines the effects on the integrity of the site. As outlined above Appropriate Assessments and Appropriate Assessment screenings had been carried out during the plan preparation process and had been placed on display during the relevant public display periods.
- 3** Mitigation or alternative solutions –where there is a risk of the plan having adverse effects on the integrity of the site there should be an examination of mitigation measures and alternative solutions.

## **1.3 The Legislative Background**

The preparation of the Limerick County Development Plan 2010-2016 was undertaken in accordance with the provisions of the Planning and Development Acts 2000-2010. It sets out an overall strategy for the functional area of Limerick County Council. It should also be noted that below this level there exists Local Area Plans for 18 settlements in Limerick. These have more specific policies and objectives for their particular areas.

Together with the preparation of the Plan a Strategic Environmental Assessment (SEA) was also be carried out. The Habitats Directive required the procedure of Appropriate

Assessment screening to be carried out for amendments to the Limerick County Development Plan. This Directive requires competent local authorities to carry out an “Appropriate Assessment” of plans and projects that, either individually or in combination with other plans and projects are likely to have a significant effect on European designated sites (Natura 2000 sites). The legislative requirements therefore places onus on the Local Authority to ensure that any plan or project will not give rise to any negative significant effects upon a Natura 2000 Site.

The Strategic Environmental Assessment and the Appropriate Assessment may be combined to avoid excessive duplication but the procedural steps for both assessments must be followed separately and cannot be integrated fully. For this Plan, the Appropriate Assessment Screening will be presented together with the Environmental report which is set out in Part 1.

#### **1.4 Principles of Appropriate Assessment**

The principles of Appropriate Assessment require that land-use plans ensure the protection of European designated sites form part of the planning process at national, regional and local level which will be achieved through the European Directive 92/43/EEC *on the Conservation of Natural Habitats and Wild Fauna and Flora* (The Habitats Directive). The competent Authority cannot adopt plans unless it determines that the provisions of the plan are not likely to have a significant effect on any European Site. In the absence of such a determination, the competent Authority will have to carry out an ‘Appropriate Assessment’ in respect of the plans in line with the requirements of Article 6(3) and 6(4) of the Habitats Directive.

There are 24 Articles contained within the European Habitats Directive 92/43/EEC. Article 6 is viewed to be one of the most important of the 24 as it determines the link between land use and conservation. Article 6 of the European Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora (the Habitats Directive) contains 3 main sets of provisions. In summary, Article 6(1) sets out measurements that are necessary for conservation with a focus on both positive and practical interventions. Article 6(2) places emphasis on prevention, setting out that habitat deterioration and species disturbance should be avoided. Articles 6(3) and (4) set out a series of procedural safeguards presiding over plans and projects that are likely to have a significant effect on an identified Natura 2000 site (European Communities 2000).

In determining whether or not a plan is “*likely to have a significant effect*”, the process of Appropriate Assessment screening attempts to investigate the type of effect that will occur as a result of a policy or an objective that will be carried out once the plan is adopted, and then to ascertain the types of causes that are liable to create such effects (either individually or cumulatively). If a plan is likely to have a significant effect on a Natura 2000 site, then the subsequent steps of Articles 6(3) and (4) should be carried out. Article 6(3) and (4) of the European Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora (the Habitats Directive) sets out the following:

*6(3) 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 (European Habitats Directive 1992).*

*6(4) If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.*

*Where the site concerned hosts a priority natural habitat type and/or a priority species the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest' (European Habitats Directive 1992).*

The Habitat Directive was transposed into Irish law by S.I. 94 of 1997 – The European Communities (Natural Habitats) Regulations 1997. It was subsequently amended by the Wildlife Act 2000.

### **1.5 Natura 2000 Sites in Co. Limerick**

Within County Limerick there are 15 Natura 2000 sites. These are both Special Protection Areas and also Special Areas of Conservation.

#### **Special Areas of Conservation:**

000174 Curraghchase Woods.  
00432 Barrigone  
00439 Tory Hill  
00646 Galtee Mountains  
000930 Clare Glen  
001430 Glen Bog  
001432 Glenstal Wood.  
002036 Ballyhoura Mountains  
002937 Carrigeenamronety Hill.  
002165 Lower River Shannon.  
002170 Blackwater River.  
002279 Askeaton Fen Complex.

### **Special Protection Areas.**

004077 River Shannon and River Fergus Estuaries.

004161 Stacks to Mullaghareirk Mountains, West Limerick.

004165 Sleivefelim to Silvermines.

Special Protection Areas were designated under the provisions of the Birds Directive and the Special Areas of Conservation were designated under the Habitats Directive.

All designated sites are mapped in Volume 2 of the County Development Plan, Map Series 7.1, 7.2, 7.3 and 7.7.

### **Objectives of Special Areas of Conservation and Special Protection Areas:**

Article 4 of the Habitats Directive states that each state shall comprise a list of sites of natural habitats set out in Annex 1 of the Habitats Directive. Once a site has been designated, the Member state shall “*designate that site as a special area of conservation as soon as possible and within six years at most establishing priorities in the light of importance of the sites for the maintenance or restoration at a favourable conservation status of natural habitats type...and for the coherence of Natura 2000 in the light of threats of degradation or destruction to which those sites are exposed.*”

The Birds Directive states in Article 4 that “*Member states shall take appropriate steps to avoid pollution or deterioration of habitats or any disturbances affecting the birds, in so far as these would be significant having regards to the objectives of this Article*”

Put briefly each member state has to maintain sites and species in a state of favourable conservation status i.e. ensuring that species or sites either do not decrease in terms of numbers of or quality and if possible show improvements from the time sites or species were designated.

### **2.1 Appropriate Assessment in the policy context of the Plan.**

What is of particular importance is that a separate section has been included in the Plan on article 6 Assessment. The question of appropriate assessment in relation to individual planning applications has been raised in Chapter Seven in Section 7.2.2 where the importance of this from of ecological assessment as required for designated sites by the Habitats Directive is outlined. This is reinforced in Objective EH O1 (b) where if it appears that a development might have an effect on designated site such an assessment may be required.

In the introduction to the plan (Section 1.5) the importance of Appropriate Assessments is further stressed at plan or policy level rather than at project level.

### **3.1 Methodology**

#### **3.1.1 Data Sources, Gaps and Limitations**

Data sources for the screening process were contents of past planning applications as they related to individual sites, Natura 2000 site synopsis, some site management plans, the Birds and Habitats Directives themselves, and consultations with NPWS personnel.

#### **Data Gaps and Limitations**

There are some issues that relate to data that could be solved at local level with more regular consultation between NPWS staff and the Council. However other issues could be dealt with at policy level or guidance document level. One suggested approach would be to include guidance on Appropriate Assessment in any future revision of the SEA guidelines, this would provide a template which would assist in the drawing up of appropriate assessment but would also help with ensuring better integration between the SEA and AA processes.

Lack of information on management plans for Natura 2000 sites is another issue that makes the process more difficult. More guidance on the integration of ecological issues and appropriate assessment into the plan –making process would be very useful, a publication along the lines of the recently published Green City Guidelines (UCD, 2008) would be welcomed.

#### **3.1.2 Screening for Appropriate Assessment**

The key indicator is whether or not a plan or process would have significant effects on the site. As the plan is already the subject of the SEA it was decided that this in itself meant the plan would have to be subject to Appropriate Assessment screening.

### **4.1 Appropriate Assessment Screening of the effects of the Plan on the Natura 2000 Sites**

The approach taken towards appropriate assessment screening in this situation was to divide the sites into the different categories depending on what aspects of the Plan and its policies and objectives might affect them most. For instance the Special Protection Areas were grouped together as issues had arisen with possible wind energy development in all three Special Protection Areas.

#### **Special Protection Areas and the Plan**

There are three Special Protection Areas in the Plan; the River Shannon and River Fergus Estuaries SPA (004077), the Stacks to Mullaghareirks, West Limerick Hills and Mount Eagle SPA (004161) and the Slievefelim to Silvermines (004165) SPA. The first is located on the Shannon and is primarily to protect wild fowl while the other two are upland and are intended specifically for the protection of the hen harrier.

## Plan responses

In the Plan in map 8.4 (chapter 8) parts of the Shannon coastal zone which were previously shown as preferred areas for wind energy developments are now indicated as open for consideration. This is to indicate that there are ecological issues to be considered prior to lodging any potential applications. Other areas in the west of the County that had been shown as preferred areas are also now shown as open for consideration for the same reasons.

One of the main issues affecting these SPAs is the development of wind farms. In response to a submission made by the National Parks and Wildlife Service an addition has been made to Objective EH O3 (9) in the plan, which now states that *“It is the objective of the council to co-operate with NPWS and other interested parties in order to develop a high level wind farm deployment zone map based on appropriately detailed ecological site assessment of the upland blanket bog and heath areas within the county.”* Such upland peat land is of importance to the harrier for foraging and breeding and this objective attempts to safeguard this habitat.

As outlined above the Slieve Felim area, itself an SPA for the protection of the hen harrier has been designated as being open for consideration for wind energy development. The DEHLG considers that applications can be dealt with on a project level basis through the Appropriate Assessment mechanism as it relates to individual planning applications.

## Sites dependant on good water quality

**Lower River Shannon SAC 002165 site:** This is a large site stretching along the northern boundary of the County and also containing much of the drainage pattern of the County as a whole. It is an internationally important estuarine complex hosting important concentrations of wildfowl. Amongst the range of habitats found are lagoons and alluvial wet woodlands. There are three tributaries of the Shannon with their own sub estuaries, these being the Maigne, Dell and Mulcair.

**Askeaton Fen Complex 002279:** Fens are wetlands fed by surface or ground water. Differing types of fens are characterised by differing plant communities. The Askeaton fen complex has a number of differing kinds of fens which makes it of particular importance.

**Blackwater River (Cork/Waterford) 002170:** Though only part of this site flows through Limerick it is also one of the SAC sites of the County. It is important for its alluvial woodlands.

**Clare Glen SAC site:** The site is made up of a wooded river valley of mixed composition but with high proportion of native species. The shaded conditions favour the growth of mosses and the site is also host to the Killarney fern.

## Plan responses

Objective EH01 states that it “ *is the objective of the council to maintain the conservation value of those sites as defined in the Planning and Development Acts 2000-2010 (SPAs, SACs) or lands proposed for inclusion by the DEHLG as well as any other site that may be so designated during the lifetime of this plan* ” . This policy is intended to protect designated sites. Objectives relating to water quality in the plan will also prove to be useful in terms of protecting the site. Objective IN O24 states that it is the objective of the council “*to ensure the integrity of surface water bodies is maintained....The council will give particular priority to the need to protect human health , designated habitats*”... , (County Development Plan S. 8.3.5).

The emphasis on compact settlements put forward in section 3.4 of the Plan where it says “*development will be encouraged to locate within the development envelope of towns and villages*” (Chapter 3, S. 3.4) will in the long run help to ensure that development will become more concentrated and hence more easily serviced with consequent improvements in surface and ground water quality. The rationalisation of the Settlement Strategy with three rural areas rather than four and the re-designation of areas that had been previously designated as structurally weak i.e. suffering from population decline, to areas that are now Strong Agricultural Base has as outlined previously should have the effects of reducing the amounts of individual developments in these areas. By reducing the possible amounts of individual treatment systems in the open countryside the effects of diffuse pollution from this source are reduced. In addition the requirements of the new EPA 2009 manual for individual wastewater treatment systems have been incorporated into the plan that would further ensure that such systems comply with current best practice.

### Upland sites and peat land sites:

**Tory Hill 00439:** Isolated limestone hill west of Croom, includes a small lake with wetland vegetation. Supports Scrub and Woodland and Calcareous Grassland.

**Galtee Mountains 00646:** Heath is the main habitat type within the designated portion of the site and heather dominates the vegetation. Areas of dry and alpine heath are found. At higher altitudes blanket bog is found.

**Carrigeenamronety Hill 002037:** An outlying part of the Ballyhouras important for heath habitat. Areas of unimproved Molinia grassland (purple moor grass exists on site).

**Ballyhoura Mountains 002036:** The most important habitats in this site is peat and bog. Specific site details are lacking. Also present are some relict oak woodlands. Though the site is designated as an SAC site and not specifically for the protection of birds, Hen harriers breed and forage here.

## Plan responses

Forestry though largely outside the control of planning is the main threat to the open moorland habitats on these sites. It is only forestry applications over 50ha that are subject to EIS and hence planning but in the analysis of such applications should they be received the ecological implications of forestry will be taken into account.

For Tory Hill Landscape Character Area there is a presumption against development as stated in Objective EH O15 ( Plan p. 7-14). This should afford sufficient protection to the site.

All the above are in areas that are identified as unsuitable for wind energy (Map 8.4, Chapter 8), which affords further protection to them and removes the chances of peat disturbance from development of this type.

Objective EH01 states that it “ *is the objective of the council to maintain the conservation value of those sites as defined in the Planning and Development acts 2000-2010 (SPAs, SACs) or lands proposed for inclusion by the DEHLG as well as any other site that may be so designated during the lifetime of this plan* ” . This policy is intended to protect designated sites.

## Woodland sites:

**Curraghchase woodlands 00174:** Main interest is the presence of a colony of lesser horseshoe bats. The woodland portion of the site consists of beech, oak, ash and sycamore all of which contribute to the sheltered foraging conditions required for the bats.

**Glenstall Woodlands (001432):** Important for the conservation of remnant oak woodland . The Killarney fern and rare lichens are also present.

**Glen Bog SAC 001430 site:** This is a wet woodland rather than bog. It is a low canopy wood dominated by alder and woodlands and also supports a variety of wetland flora.

## Plan responses

Objective EH01 states that it “ *is the objective of the council to protect species whether plant animal or bird or sites that have been designated as being of conservation interest by the National parks and Wildlife Service of the DEHLG* ” . This policy is intended to protect designated sites. The wet woodland is also vulnerable to nutrient enrichment and objectives relating to water quality in the plan would prove to be useful in terms of responding to protecting the site. Objective IN O22 states that it is the objective of the council “*to ensure the integrity of surface water bodies is maintained....The council will give particular priority to the need to protect human health , designated habitats*” , ....( Plan p. 8-20).

### Grassland sites:

**Barrigone:** The site comprises an area of dry species rich calcareous grassland. The orchid flora of the site is well developed. A range of scrub types are also present including stands of hazel. The main threat to this site is quarrying.

### Plan responses

Objective ED 020 states that “ *it is the objective of the council to minimise environmental and other impacts of mineral extraction through rigorous application of development management and enforcement requirements for quarry and other developments*”.. In addition Objective EH01 states that it “ *is the objective of the council to protect species whether plant animal or bird or sites that have been designated as being of conservation interest by the National parks and Wildlife Service of the DEHLG*”. This policy is intended to protect designated sites.

In relation to quarrying additional policy protection is present in Objective ED 026 Mineral Extraction and Environmental impacts which seeks to “*minimise environmental and other impacts of mineral extraction...* “

### 5.0 Sites outside Limerick:

It is unlikely that any of the policies and objectives in the plan would have effects on the designated sites that would lie up to 15km outside the County boundary. These would include the Silvermines part of the Slieve Felim to Silvermines SPA, the Stacks Mountains part of the Mullaghsrierks SPA and would have implications for sites dependant on good water quality such as the Lower River Shannon SAC site.

The assessment of individual planning applications under project based AA, with particular emphasis on cumulative impacts would provide an early warning of possible significant cross border ecological effects. Work is on going in relation to the assessment of the effects of wind energy and forestry in the upland sites.

**6.0 Conclusions:** As a result of the screening process it has been concluded that the Limerick County Development Plan –either acting alone or in combination with other plans -would not have a significant effect on a Natura 2000 site. There is no requirement to proceed to stage 2 of the **process as there is no need to subject the plan and the amendments to the plan to an Appropriate Assessment.**