BLARNEY ELECTORAL AREA LOCAL AREA PLAN 2011



2

Volume 2

Habitats Directive Assessment, Natura Impact Report
Strategic Environmental Assessment Statement
Strategic Flood Risk Assessment

Cork County Council Planning Policy Unit

Blarney Electoral Area Local Area Plan

August 2011

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Blarney Electoral Area Local Area Plan

Natura Impact Report

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1 Introduction

1.1 Preamble

- 1.1.1 Cork County Council has recently prepared the Blarney Electoral Area Local Area Plan under the provisions of the Planning and Development Acts 2000-2010. The plan focuses on the local level implementation of the overall planning strategy for the County as set out in the County Development Plan 2009. The plan also adheres to the core strategies set down in higher level plans including the National Spatial Strategy (2002-2020) and the Regional Planning Guidelines (2010) for the South West Region.
- 1.1.2 In accordance with requirements under the EU Habitats Directive (43/92/EEC) and EU Birds Directive (79/409/EEC), the impacts of the policies and objectives of all statutory land use plans on certain sites that are designated for the protection of nature (Natura 2000 sites¹), must be assessed as an integral part of the process of drafting of the plan. This is to determine whether or not the implementation of plan policies could have negative consequences for the habitats or plant and animal species for which these sites are designated. This assessment process is called a **Habitats Directive Assessment** (HDA) and must be carried out for all stages of the plan making process.
- 1.1.3 The draft Blarney Electoral Area Local Area Plan was assessed to determine whether the plan or its policies could have significant impacts on any Natura 2000 sites. The results of that assessment are contained in the first Natura Impact Report, (Natura Impact Report (I) for the Blarney Electoral Area Local Area Plan), which was published in February 2011. The findings and recommendations of that process were presented to Council members as part of the Managers Report of 23rd February 2011. The Managers Report also contained recommendations relating to all amendments proposed to the plan arising from the public consultation process (Nov. 2010-Jan 2011). Council members voted to accept or reject the recommendations contained in the Managers Report of 30th and 31st March. In addition, they themselves proposed and voted to include other amendments to the plan at that time. The proposed amendments to the plan were published on 21st April 2011.
- 1.1.4 The proposed amendments to the draft Blarney Electoral Area Local Area Plan were also assessed to determine whether these could have significant impacts on any Natura 2000 sites. The results of that assessment are contained in the second Natura Impact Report, (Natura Impact Report (II) for the proposed amendments to the Blarney EA Local Area Plan) which was published on 21st April 2011. That report contained an examination of all amendments proposed to be made to the plan, which were approved by Council Members of 30th and 31st March, and a determination as to whether the amendments have the potential to have significant impacts on Natura 2000 sites. Where impacts could not be ruled out, recommendations were made for modifications to be made to the amendments, or for the

¹ Natura 2000 sites include Special Areas of Conservation designated under the Habitats Directive and Special Protection Areas designated under the Birds Directive. Special Areas of Conservation are sites that are protected because they support particular habitats and/or plant and animal species that have been identified to be threatened at EU community level. Special Protection Areas are sites that are protected for the conservation of species of birds that are in danger of extinction, or are rare or vulnerable. Special Protection Areas may also be sites that are particularly important for migratory birds. Such sites include internationally important wetlands.

removal of these. These recommendations were contained in the Managers Report of 15th June. Council members voted on the recommendations contained in the Managers Report on 25th July 2011. All of the recommendations made arising from the AA process were accepted by the Council at this meeting.

- 1.1.5 This is the final Natura Impact Report for the Blarney Electoral Area Local Area Plan, 2011. It summarises how all of the recommendations arising from the initial Natura Impact Reports, and how ecological considerations generally, have been integrated into the Local Area Plan. It also contains the details of the monitoring measures which will be implemented to ensure that the undertakings in relation to the protection of the Natura 2000 network, as set out in the Local Area Plan, are met. Finally the report contains the **AA Conclusion Statement** which finds that, subject to a number of changes to text, objectives, settlement boundaries and zonings, which have been accepted by Council and are contained in the final plan, there will be no significant impact on the network as a whole, nor to individual Natura 2000 sites or their dependant habitats and species. This report should be read in conjunction with the Blarney Electoral Area Local Area Plan.
- 1.1.6 The first and second Natura Impact Reports have been made available to statutory consultees and the general public. In addition, the National Parks and Wildlife Service was consulted and advised on the content of each of the Natura Impact Reports.
- 1.1.7 The full timetable for the making of the plan and the parallel Habitats Directive Assessment process is set out in **Appendix I** of this report.

1.2 Habitats Directive Assessment

- 1.2.1 Habitats Directive Assessment, also referred to as Appropriate Assessment, is a process which involves the evaluation of the potential impacts of plans and projects on Natura 2000 sites and the habitats and species that they support and, where necessary, the development of mitigation measures to avoid any such impacts. It is an iterative process which runs parallel to and informs the plan making process, involving analysis and review of draft policies, or amendments/variations, as they emerge during each stage of plan making. Within this process, regard must also be had to the potential for policies or amendments to policies, to contribute to impacts which on their own may be acceptable, but which could be significant when considered in combination with the impacts arising from the implementation of other plans or policies.
- 1.2.2 Articles 6(3) of the Directive sets out the requirement for the assessment of plans and projects affecting Natura 2000 sites as follows:
 - 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 and subject to the provision 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.
- 1.2.3 Article 6(4) of the Directive deals with derogation procedures, where it is considered necessary to proceed with a plan/project despite a finding that negative impacts are likely.

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 to the environment, or further to an opinion from the Commission, to other imperative reasons of overriding public interest.

- 1.2.4 In relation to plan making, the process of assessment may result in the modification or removal of policies proposed to the plan or in the adoption of new policies, or, if significant impacts arise which cannot be avoided, a recommendation not to proceed with the policy.
- 1.2.5 The European Union has provided guidance as to how to complete a Habitats Directive Assessment for land use plans which identifies four main stages in the process as follows:

Stage One: Screening

The process which identifies what might be likely impacts arising from a plan on Natura 2000 sites, either alone or in combination with other projects or plans, and considers whether these impacts are likely to be significant. If the effects are deemed to be significant, potentially significant, or uncertain, then the process must proceed to Stage Two.

Stage Two: Appropriate assessment

Where the possibility of significant impacts has not been discounted by the screening process, a more detailed assessment is required. This is called an appropriate assessment and involves the consideration of the impact of the plan on the integrity of the Natura 2000 site, either alone or in combination with other projects or plans, having regard to the site's ecological structure and function, and its conservation objectives. Additionally, where there are adverse impacts, it involves an assessment of the potential mitigation of those impacts.

Stage Three: Assessment of alternative solutions

Should the conclusion of the appropriate assessment be that there are likely to be impacts which will affect the overall integrity of Natura 2000 site, then it is required to examine alternative ways of achieving the objectives of the plan that avoids such adverse impacts. Stage three of a Habitats Directive Assessment involves the assessment of alternative solutions or options that could enable the plan or project to proceed without adverse effects on the integrity of a Natura 2000 sites. The process must return to stage two as alternatives will require appropriate assessment in order to proceed. Demonstrating that all reasonable alternatives have been considered and assessed, and that the least damaging option has been selected, is necessary to progress to Stage four. Alternatives must be compared with respect to the significance of their

likely effects on the integrity of the site/sites. Other assessment criteria, such as economic criteria cannot be seen as overruling ecological criteria.

Stage Four: Assessment where no alternative solutions exist and where adverse impacts remain.

This is the main derogation process of Article 6(4) which examines whether there are imperative reasons of overriding public interest (IROPI) for allowing a plan that will have adverse effects on the integrity of a Natura 2000 site to proceed in cases where it has been established that no less damaging alternative solution exists. Such a plan may only proceed if compensatory measures have been put in place to offset the impacts to be incurred and these compensatory measures must be assessed as part of the AA process. The EU Commission must be informed of the compensatory measures and these must be approved by the Minister. Compensatory measures are a last resort attempt to maintain the integrity of the Natura 2000 network and they must be practical, implementable, likely to succeed, proportionate and enforceable.

The Habitats Directive Assessment process may stop at any of the above stages if significant impacts on Natura 2000 sites can be ruled out.

1.2.6 Development plans including County Development Plans, Local Area Plans, Town Plans and variations to these may only be adopted if it has been demonstrated that impacts on the integrity of any Natura 2000 sites which could be affected by the plan have been ruled out. Where such impacts have not been ruled out, the plan may only proceed where it has been demonstrated that there are no reasonable alternative solutions, that there are imperative reasons of overriding public interest to proceed with the plan, and that compensatory measures have been designed, assessed, approved by the Minister, and have been put in place in advance of the adoption of the plan. In every case in which a local authority envisages approving or proceeding with a plan or project on the grounds of overriding public interest, the Minister must be consulted.

2 Methodology

2.1 Data Sources

2.1.1 The appropriate assessment of potential impacts on the integrity of Natura 2000 sites in this study is based on a desktop review of information relating to these sites and to the habitats and species that they support, and personal knowledge of many of the sites. References and data used are cited in the back of this report.

2.2 Consultation

2.2.1 Consultation was carried out with the NPWS in relation to the Appropriate Assessment of the draft Blarney Electoral Area Local Area Plan and on the proposed amendments to same. This process assisted the Planning Authority to identify the principle threats of concern for individual sites and to amend the plan accordingly. The draft plan and amendments as well as the Natura Impact Reports and Environmental Report for the plan were referred to statutory consultees and were made available to the general public for review at the various consultation stages of the plan making process.

2.3 Approach

2.3.1 The approach taken in the making of this assessment follows *European Communities*, Assessment of plans and projects significantly affecting Natura 2000 sites, Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, 2002, and on Local Government and Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities, 2009.

3 Habitats Directive Assessment of the draft Plan and Proposed Amendments

3.1 Description of the Plan

3.1.1 The draft plan consists of a written statement and maps. It takes cognisance of the County Development Plan (2009) and relevant aspects of the South West Regional Planning Guidelines (2010) in terms of its objectives relating to population targets, housing strategy, settlement strategies and boundaries, economic development, flood risk assessment, climate change and biodiversity strategies. It contains three sections as follows:

Section 1: Introduction to the Blarney Electoral Area Local Area Plan

This section summarises the content of the plan and its relationship to other plans. It contains information relating to the process that has been followed in the making of the plan including the approach to consultation and zoning etc. The main towns, villages and other settlements within the electoral area are identified in this section. Policies relating to assessment of flood risk and the protection of the green belt which apply to the entire electoral area are also included in this section.

Section 2: Local Area Strategy

The Blarney Electoral Area lies within the CASP area and is split between two of the Strategic Planning Areas defined in the County Development Plan 2009, the Metropolitan Strategic Planning Area, and CASP Ring Strategic Planning Area. This section of the plan sets out the overall strategy for Blarney Electoral Area as a whole. It presents a summary and analysis of the growth and population targets used in the plan and gives details of the main employment and economic considerations, education and infrastructure requirements and key environmental considerations. It sets out an overall vision for the electoral area as follows:

- The focus of growth will be along the suburban rail line at Monard, Blarney and Cork City North Environs.
- Deliver significant housing growth, in particular through the implementation of the Strategic Development Zone (SDZ) in Monard and the additional master plans at Stoneview and Ballyvolane.
- O Deliver jobs targets, in particular in the Strategic and Integrated Employment Centres of Monard, Blarney, Kilbarry and Little Island.
- Pursue the competition of key infrastructural projects; including the M20, N8 (Dunkettle), N25 (Little Island) and the Northern Ring Road.
- Pursue the implementation of key wastewater treatment facilities for Monard,
 Stoneview and Ballyvolane and other key villages;
- o Protect the character of the villages and smaller settlements;
- Offer a wider housing choice in sustainable settlements;
- Protect key heritage sites and exploit for tourism/ quality of life.

In order to deliver the population and housing targets identified in this plan, significant expenditure is required in water services infrastructure in practically all the settlements. This section also contains policy statements relating to the provision of a sustainable wastewater treatment system as well as environmental assessment requirements.

Section 3: Settlements and Other Locations.

This section of the document sets out more specific objectives relating to population targets, residential, commercial and industrial development, the provision of infrastructural, community and recreational facilities etc for each of the four main settlements of Blarney, Cork City North Environs, Monard and Glanmire, the three Major Employment Centres of Blarney/Monard, Kilbarry and Little Island, five Key Villages; Carrignavar, Glenville, Glounthaune, Grenagh and Tower; 7 villages and 9 village nucleii.

3.2 Habitats Directive Assessment of the draft Plan

3.2.1 The draft Plan was reviewed in January 2011 to determine whether the policies or zonings contained therein would be likely to have significant impacts on the Natura 2000 network. As part of this assessment all Natura 2000 sites within the boundary of the Local Area Plan Area, all Natura 2000 sites within 15km of the boundary and all downstream Natura 2000 sites designated for water dependant habitats and/or species were screened for potential impacts arising from the plan. Two Special Areas of Conservation and two Special Protection Areas were identified as part of the screening process. These are shown in **Table 3.1** below.

Table 3.1: Natura 2000 Sites Identified for Screening for Appropriate Assessment for the draft Blarney EA Local Area Plan

Natura 2000 sites	Habitats for which these are designated	Species for which these	Other species and habitats	Threats
		are	of note	
		designated	occurring	
			within the site	
Great Island Channel SAC	Mudflats and sandflats not covered by seawater at low tide; Atlantic salt meadows.	n/a	Habitats: Wet grassland. Species: Wintering waterfowl.	Habitats: Aquaculture, fishing, bait digging, land reclamation, coastal protection works, spread of invasive species; coastal development, water pollution: Species: Disturbance.
Blackwater River SAC	Mudflats and sandflats not covered by seawater at low tide; Perennial vegetation of stony banks; Salicornia and other annuals colonising mud and sand; Atlantic salt meadows; Mediterranean salt meadows; Water courses of plain to maintane levels with the Ranunculion fluitantis and Callitricho - batrachion vegetation; Alluvial forest with Alnus glutinosa and Fraxinus excelsior; Old sessile oak woodlands with Ilex and Blechnum; Taxus baccata woods.	Freshwater pearl mussel; White clawed crayfish; Sea lamprey; Brook lamprey; River lamprey; Twaite shad; Atlantic salmon; Otter.	Habitats: Wet woodland; Dry woodland; Freshwater marsh; Wet grassland; Shingle Spit. Species: Toothwort; Summer Snowflake; Flowering Rush; Common Calamint; Red Campion; Sand Leek; Wood Clubrush.	Aquaculture; Fishing; Coastal development; Activities which could cause water pollution including waste water discharges and water abstractions; Bait digging; Land reclamation; Coastal protection works; River bank protection works; Spread of invasive species; Infilling; Development pressure within the river catchment causing habitat loss; Woodland clearance; Invasive species encroachment; Sub- optimal grazing. Species: Fish and invertebrates: All activities which could impact on water quality; Otter:

Natura 2000	Habitats for which	Species for	Other species	Threats
sites	these are designated	which these are designated	and habitats of note occurring within the site	
				Disturbance to river banks.
Cork Harbour SPA	n/a	Cormorant; Shelduck; Oystercatcher; Golden plover; Lapwing; Dunlin; Black- tailed godwit; Curlew; Redshank; Common tern; 20,000 wintering waterbirds.	Species: Little grebe; Great crested grebe; Grey heron; Wigeon; Teal; Pintail; Shoveler; Redbreasted merganser; Grey plover; Black-headed gull; Common gull; Lesser black-backed gull; Wetland and Waterbirds.	Species: Activities which could cause disturbance to birds; Construction of paths or track etc; Land reclamation and habitat removal.
Mullaghanish to Musheramore SPA	n/a	Hen Harrier	Species: Merlin. Habitats: Upland habitats including Blanket Bog; Heath; Upland grassland; Rivers and Afforested	Species: Afforestation; Pressure for development of infrastructural projects including wind farms; power lines and hydroelectric stations; Any activities which

Natura 2000 sites	Habitats for which these are designated	Species for which these are designated	Other species and habitats of note occurring within the site	Threats
			Land.	could cause disturbance to breeding birds or removal of breeding or foraging habitat upon which they are dependant.

- 3.2.2 All of the draft plan objectives were reviewed as part of the Habitats Directive screening process. Consideration was given to direct and indirect impacts which may arise from development which could be encouraged by objectives contained in the draft plan. This could include new residential, commercial, infrastructural, recreational or other development which may give rise to direct impacts on habitats or species (loss of habitat, disturbance to species); as well as activities which could have indirect impacts (e.g. activities which could affect water quality or hydrology which could in turn affect the status/health of populations of water dependant habitats or species). Proposals which could give rise to impacts which were considered include:
 - policies promoting development which would give rise to habitat loss within Natura 2000 sites – ie proposed development zonings directly on lands designated for nature conservation.
 - policies promoting development in areas with inadequate provision for water and waste water infrastructure.
 - policies promoting development in areas which could give rise to pressure on water quality during the construction and operational phase, in particular proposals for development within flood zones of Natura 2000 sites with water dependant habitats and species.
 - policies promoting development which could give rise to disturbance to protected species, in particular proposals for paths and walkways within or adjacent to sensitive bird feeding and roosting sites.
- 3.2.3 These were considered both on their own as well as in relation to potential cumulative impacts when considered in combination with other plans and projects. Potentially significant impacts were identified in relation to Cork Harbour Special Protection Area and the Blackwater River Special Area of Conservation. These sites were brought forward for appropriate assessment and recommendations for alterations to policies, settlement boundaries and zonings were made to offset potential impacts on habitats or species for which this site was designated, and on the overall integrity of the site itself.
- 3.2.4 A number of proposed policies and zonings were identified which could have negative impacts on the Cork Harbour Special Protection Area and on the Blackwater River Special Area of Conservation. These included proposed zoning for development within and adjacent to the Blackwater Special Area of Conservation at Glenville and zoning adjacent to the Cork Harbour Special Protection Area at Dunkettle.

Table 3.2 Summary of potential impacts on Natura 2000 sites identified through screening of draft plan and consideration of cumulative impacts (See first Natura Impact Report for the Blarney EA Local Area Plan for full details).

Site Name	Potential Impacts	Other Plans Which Could Give Rise to
	·	Potential Cumulative Impacts on
		Natura 2000 sites
Great Island Channel SAC	None identified	n/a
Blackwater River Special Area of Conservation	Some areas zoned as open space and for recreational walkways in Glenville are within or adjacent to the Blackwater River SAC. Development in these locations could give rise to loss and/or deterioration of certain habitats. Potential impacts on water quality in the SAC are possible arising from proposals for development in settlements with insufficient waste water capacity (Glenville).	Additional pressure on water quality and flow rates in this SAC arise from proposed urban and rural development provided for in the Cork County Development Plan 2009, the Kerry County Development Plan 2010, the Waterford County Development Plan 2010 (WWTPs at Cappoquin, Piltown and Tooraneena in Waterford have been identified to be causing a particular risk), the Lismore Local Area Plan 2007, as well as the in the Kanturk, Mallow and Fermoy Electoral Area Local Area Plans 2011, the Mallow Special Local Area Plan 2007; and the Mallow 2010, Fermoy 2010 and Youghal 2009 Town Plans.
Cork Harbour Special Protection Area	There is a Special Development Zone (X-01) adjacent to the Glashaboy River Estuary (part of the Cork Harbour Special Protection Area) in Glanmire. This zoning provides for residential development of a large scale, which has the potential to give rise to disturbance impacts and impacts on water quality as well as potential impacts relating to flooding within the Glashaboy River Estuary.	Additional disturbance pressures could be caused in this SPA by development provided for in the Cork County Development Plan 2009-2015, the Cork City Development Plan 2009-2015, the Midleton Electoral Area Local Area Plan 2011, the Midleton Town Plan 2011, Cobh Town Plan 2005, the development of recreational, tourism and other resources as identified in the, Marine Leisure Infrastructure Strategy for the Southern Division of Cork County 2010-2020 and the Cork Harbour Study, 2011 as well as expansion of Port activities as set out in the Port of Cork Strategic Development Plan.
Mullaghanish to Musheramore Special	None identified	n/a

Site Name	Potential Impacts	Other Plans Which Could Give Rise to Potential Cumulative Impacts on Natura 2000 sites
Area of Conservation		

- 3.2.5 All of the recommendations made for changes to policies, settlement boundaries and zonings arising out of the Appropriate Assessment process were put before Cork County Council in the *Report to Members, Blarney Electoral Area Local Area Plan, Public Consultation Draft, Managers Opinion on the Issues Raised by Submissions and Recommended Amendments* (February 2011), and these were accepted in full by the Council at their meeting of March 30th/31st. These were published as proposed amendments to the draft Local Area Plan on 21st April 2011, in addition to other amendments arising from the public consultation process or proposed by Council members.
- 3.2.6 The recommendations which arose from the AA of the draft plan are set out in **Table 3.3** below. The full assessment is available for review in *Natura Impact Report I for the draft Blarney EA Local Area Plan*, (February, 2011). The proposed amendments to the plan are set out in the *Blarney Electoral Area Local Area Plan*, *Proposed Amendment to the Draft Plan*, *Public Consultation Document (April, 2011)*.

Table 3.3 Summary Of Recommendations For Changes Arising From Appropriate Assessment Of Draft Plan (Proposed wording changes for policies are set out in **bold**).

Obj No.	Amen dmen t Ref	Original wording of obj. in draft plan	Recomme ndation from AA process	Proposed change arising from AA of draft plan and / or amendments to plan
LAS 2-1	BY 02.02. 02	In line with the principles set out in the County Development Plan 2009, development proposed in this plan will only take place where appropriate and sustainable water and waste water infrastructure, that will help secure the objectives of the relevant River Basin Management Plan, is already in a programme or is to be provided in tandem with the development	Modify wording of objective.	In line with the principles set out in the County Development Plan 2009 and the provisions of objectives INF 5-6, INF 5-7 and INF 5-8 of the County Development Plan, development proposed in this plan will only take place where appropriate and sustainable water and waste water infrastructure is in place which will secure the objectives of the relevant River Basin Management Plan and the protection of Natura 2000 sites with water dependant habitats or species. This must be provided and be operational in advance of the commencement of any discharges from development. Waste water infrastructure must be capable of treating discharges to ensure that water quality in the receiving river does not fall below legally required levels. Sustainable Urban Drainage Systems (SUDS) will be required for all developments discharging within or upstream from Natura 2000 sites with water dependent habitats or species.
LAS 2-2	BY 02.02. 03	This plan, and individual projects based on the plans proposals, will be subject (as appropriate) to Strategic Environmental Assessment Appropriate Assessment (Habitats Directive and Birds Directive) and Environmental Impact	Modify wording of objective.	This plan, and individual projects based on the plans proposals, will be subject (as appropriate) to Strategic Environmental Assessment, Habitats Directive Assessment Screening and/or Assessment (Habitats Directive and Birds Directive) and Environmental Impact Assessment to ensure the parallel development and implementation of a range of sustainable measures to protect the integrity of the biodiversity of the area.

Obj No.	Amen dmen t Ref	Original wording of obj. in draft plan	Recomme ndation from AA	Proposed change arising from AA of draft plan and / or amendments to plan
			process	
		Assessment.		
LAS 2-3	BY 02.02. 04	N/A	Insert new objective.	It is an objective to provide protection to all proposed and designated natural heritage sites and protected species within the Blarney Local Area in accordance with Env 1-5, 1-6, 1.7 and 1-8 of the County Development Plan, 2009. This includes Special Areas of Conservation, Special Protection Areas and Natural Heritage Areas.
LAS 2-4	BY 02.02. 05	N/A	Insert new objective.	It is an objective to maintain where possible important features of the landscape which function as ecological corridors and areas of local biodiversity value and features of geological value within the Blarney Electoral Area in accordance with Env 1-9, 1-10, 1-11 and 1-12 of the County Development Plan , 2009.
Glan mire X-01	BY 03.03. 03	(o) demonstrate how the protection and enhancement of biodiversity will be successfully achieved.	Modify wording of objective.	o) This zone is adjacent to Cork Harbour Special Protection Area and Dunkettle wood proposed Natural Heritage Area. Development planned for this area will be planned to ensure that favourable conservation status of these sites can be protected, and all new development shall be designed to ensure the protection and enhancement of biodiversity generally. Development proposals will require the provision of an ecological impact assessment report (Natura Impact Statement) in accordance with the requirements of the Habitats Directive and may only proceed where it can be shown that they will not significant negative impact on the SPA. Buffer zones are likely to be required between any development proposed for this area and the SPA. The size of the buffer zone will be determined at project level.
Glen ville U-01	BY 03.07. 03	Develop and maintain pedestrian walk linking new open space areas with the village.	Modify wording of objective.	U-01 Develop and maintain pedestrian walk linking new open space areas. The pedestrian walk is within the Blackwater River Special Area of Conservation. Development of the amenity walkway could have impacts on the Blackwater River Special Area of Conservation and will require the provision of an ecological impact

Obj No.	Amen dmen t Ref	Original wording of obj. in draft plan	Recomme ndation from AA process	Proposed change arising from AA of draft plan and / or amendments to plan
				assessment report (Natura Impact Statement) in accordance with the requirements of the Habitats Directive and may only proceed where it can be shown that they will not have significant negative impact on this site. In particular regard should be had to the protection of Otters their breeding sites and resting places along the proposed river walk.
Glen ville 0-02	BY 03.07. 02	Open space and amenity area. Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.	Modify developm ent boundary.	Amend Development Boundary to exclude lands within the Special Area of Conservation.

3.3 Habitats Directive Assessment of Proposed Amendments

3.3.1 In April 2011, proposed amendments to the draft plan were screened to determine whether these were likely to give rise to significant impacts on Natura 2000 sites (see **Table 3.4** below). Potentially significant impacts were identified for both Cork Harbour SPA and for the Blackwater River SAC. These related to proposed new zonings at Little Island adjacent to the Special Protection Area and relating to potential impacts on water quality in the Blackwater River SAC arising from proposed population increases in Glenville. Recommendations were made in the second Natura Impact report to modify these proposals as show in **Table 3.5** below.

Table 3.4 Assessment of potential for impact of proposed amendments to the Blarney EA Local Area Plan on Natura 2000 sites.

Issues Examined	y/n	Amendment Ref. No	Relevant Settlement	Natura 2000 site which may be impacted	Details of proposed amendment	Potential Impact
Population target increases for settlements giving rise to possible impacts on Natura 2000 sites.	Y	BY 01.06.01	Glenville	Blackwater River Special Area of Conservation	Provision for greater level of development than set out in draft plan. WWTP does not currently have capacity to deal with targeted population increase.	Potential impacts on water quality.
Areas of land which have Natura 2000 designation, to be	N	n/a	n/a	n/a	n/a	n/a
included New zonings adjacent to Natura 2000 sites.	Y	BY.03.04.07	Little Island	Cork Harbour SPA	New industrial zoning at Wallingstown adjacent to SPA	Site is adjacent to the Cork Harbour Special Protection Area. Potential impacts include impacts relating to water quality and disturbance to species.
Re- instatement of areas from 2005 plan into development	N	n/a	n/a	n/a	n/a	n/a

Issues Examined	y/n	Amendment Ref. No	Relevant Settlement	Natura 2000 site which may be impacted	Details of proposed amendment	Potential Impact
Other issues	N	n/a	n/a	n/a	n/a	n/a

- 3.3.2 Twenty one submissions were made in relation to these proposed amendments during the public consultation process on the proposed amendment. These submissions and any further changes to the plan which were considered by the Manager arising from same, were reviewed to determine whether changes arising from the submissions would have implications for the Natura 2000 network. No further impacts were identified, and therefore, no further recommendations for modifications to the plan which might give rise to impacts on Natura 2000 sites were made arising from the submissions received on the proposed amendments.
- 3.3.3 The list of recommendations arising from the AA of the proposed amendments are set out in **Table 3.5** below. The full assessment is available for review in *Natura Impact Report II for the proposed amendments to the draft Blarney EA Local Area Plan, April, 2011*.
- 3.3.3 All of the recommendations made for changes to proposed amendments arising from the AA process were put before Cork County Council in the *Report to Members Blarney Electoral Area Local Area Plan Public Consultation Draft, Manager's Opinion on the Issues Raised by Submissions on Proposed Amendments and Manager's Recommendations* (June 2011). These were accepted in full by the Council at their meeting of 25th July 2011.

Table 3.5: Summary Of Recommendations To Be Made To Plan Arising From Appropriate Assessment Of Proposed Amendments.

Little Island I-04 Industry - to facilitate the expansion of existing industrial uses on adjacent sites BY 03.04.06 I-04 Industry - to facilitate the expansion of existing industrial uses on adjacent sites I-04 Industry - to facilitate the expansion of existing industrial uses on adjacent sites I-04 Industry - to facilitate the expansion of existing industrial uses on adjacent sites I-04 Industry - to facilitate the expansion of existing industrial uses on adjacent sites I-04 Industry - to facilitate the expansion of existing industrial uses on adjacent sites I-04 Industry - to facilitate the expansion of existing industrial uses on adjacent sites I-04 Industry - to facilitate the expansion of existing industrial uses on adjacent sites I-04 Industry - to facilitate the expansion of existing industrial uses on adjacent sites I-04 Industry - to facilitate the expansion of existing industrial uses on adjacent sites I-04 Industry - to facilitate the expansion of existing industrial uses on adjacent sites I-04 Industry - to facilitate the expansion of existing industrial uses on adjacent sites I-04 Industry - to facilitate the expansion of existing industrial uses on adjacent sites I-04 Industry - to facilitate the expansion of existing industrial uses on adjacent sites I-04 Industry - to facilitate the expansion of existing industrial uses on adjacent sites I-04 Industry - to facilitate the expansion of existing industrial uses on adjacent sites I-04 Industry - to facilitate the expansion of existing industrial uses on adjacent sites I-04 Industry - to facilitate the expansion of existing industrial uses on adjacent sites I-04 Industry - to facilitate the expansion of existing industrial uses on adjacent sites I-04 Industry - to facilitate the expansion of existing industrial uses on adjacent sites I-04 Industry - to facilitate the expansion of existing industrial uses on adjacent sites I-04 Industry - I-04	Glenville DB-01 (c)	Amendment Ref	Proposed amendment (amendment to original objective is shown in bold.) N/A	Recommendation from appropriate assessment of proposed amendment Modify wording of objective.	Proposed change arising from AA of proposed amendment(recommendation from AA is highlighted in BOLD) In order to secure the population growth and supporting development proposed in DB -01 a, appropriate and sustainable water and waste water infrastructure that will secure the objectives of the relevant River Basin Management Plan and the protection of the Blackwater River Special Area of Conservation, must be provided and be operational in advance of
accordance with the requirements of the Habitats Directive are only proceed where	Island	BY 03.04.06	facilitate the expansion of existing industrial uses on	, -	residential and other development I-04 Industry - to facilitate the expansion of existing industrial uses on adjacent sites. This zone is adjacent to the Cork Harbour Special Protection Area. Development proposals may require the provision of an ecological impact assessment report (Natura Impact Statement) in accordance with the requirements of the Habitats Directive and may only proceed where it can be shown that they will

		with other projects on the
		SPA or on species for
		which it is designated.
		New industrial discharges
		emanating from this site
		will be subject to
		appropriate assessment. A
		buffer zone may be
		required to be maintained
		between the SPA and any
		proposed development.

4 Appropriate Assessment Conclusion – Finding of No Significant Effects Matrix

Information Re	Information Relating To The Plan And Natura Sites Within Potential Impact Zone					
Plan name	Blarney EA Local Area Plan, 2011					
Natura 2000 sites within potential impact zone of the plan	Special Areas of Conservation: Great Island Channel SAC 001058; Blackwater River (Cork/Waterford) SAC 002170 Special Protection Areas: Cork Harbour SPA 004030; Mullaghanish to Musheramore SPA 4162					
Description of the plan	The Blarney EA Local Area Plan sets out the approach for the local level implementation of the overall planning strategy for the County as set out in the County Development Plan 2009. It consists of a written statement with objectives relating to population targets, housing strategy, settlement strategies and boundaries, economic development, flood risk assessment, climate change and biodiversity strategies. It contains three main sections as follows: Section 1: Introduction to the Blarney Electoral Area Local Area Plan This section summarises the content of the plan and its relationship to other plans. It contains information relating to the process that has been followed in the making of the plan including the approach to consultation and zoning etc. The main towns, villages and other settlements within the electoral area are identified in this section. Policies relating to assessment of flood risk and the protection of the green belt which apply to the entire electoral area are also included in this section.					
	Section 2: Local Area Strategy					

This section of the plan sets out the overall strategy for Blarney Electoral Area as a whole. It presents a summary and analysis of the growth and population targets used in the plan and gives details of the main employment and economic considerations, education and infrastructure requirements and key environmental considerations. It sets out an overall vision for the electoral area and contains policy statements relating to the provision of a sustainable water supply and treatment system as well as environmental assessment requirements.

Section 3: Settlements and Other Locations.

This section of the document sets out more specific objectives and zonings relating to population targets, residential, commercial and industrial development, the provision of infrastructural, community and recreational facilities etc for each of the main towns, key villages, and other villages, village nuclei and small settlements within the electoral area.

Is the proposed plan directly connected with or necessary to the management of the Natura 2000 sites identified above

No

Assessment of Significant Effects

Describe how the plan (alone or in combination is likely to affect Natura 2000 sites) Two Natura 2000 sites were identified through the screening of the draft plan and proposed amendments which could be impacted by policy proposed in the draft plan and proposed amendments. These were the Blackwater Rive Special Area of Conservation and Cork Harbour Special Protection Area. The following are the key issues which are considered to be of importance in maintaining the integrity of these sites, which could be affected by this plan.

Potential Impacts

Activities which could give rise to these

Impacts on water quality and levels (Blackwater River SAC).

Targeted increases in population in Glenville without provision for adequate waste water treatment or sustainable water supply.

Direct impacts on habitats giving rise to habitat loss, deterioration or fragmentation (Blackwater River SAC).

Zoning of land within and adjacent to Blackwater River SAC at Glenville.

Disturbance to species.	Zoning for development within or close to Cork Harbour at Dunkettle and Little Island

Are there other projects or plans that together with the plan being assessed could affect these sites (provide details)

Other plans which could contribute to such impacts are:

Blackwater River Special Area of Conservation

Cork County Development Plan 2009. Development provided for by this plan (chap 4) could give rise to cumulative impacts on water quality in the Blackwater River Special Area of Conservation.

Kerry County Development Plan, 2009. Development provided for by this plan (chap 3) could give rise to additional pressure on water quality Blackwater River SAC.

Waterford County Development Plan, 2010. Development provided for in chapter 3 of this plan could give rise to additional pressure on water quality Blackwater River SAC.

Development provided for in the Lismore Local Area Plan (2007-2013), Kanturk Electoral Area Local Area Plan, 2011; Fermoy Electoral Area Local Area Plan, 2011; Kanturk Electoral Area Local Area Plan, 2011; Mallow Special Local Area Plan, 2007; Mallow Town Plan 2010-2016; Fermoy 2010; Midleton Town Plan (in draft) and the Youghal Town Plan (2009-2015), will give rise to additional pressures on water quality, increase potential for flood risk, and possibly cause direct impacts on habitats and species in the Blackwater River Special Area of Conservation.

Cork Harbour Special Protection Area

Development provided for in the Carrigaline, Blarney and Bandon Electoral Area Local Area Plans 2011 and the Cork City Development Plan 2009-2015 and the Midleton and Cobh Town Plans (both currently under review), will give rise to additional pressures on water quality, increase potential for flood risk, and possibly cause direct impacts on habitats and species in the Great Island Channel Special Area of Conservation and the Cork Harbour Special Protection Area.

Additional disturbance pressures and pressure on habitats used by feeding and/or roosting birds could be caused by increased levels of recreational activity along the shore (walking and cycling routes) and in the harbour (increased numbers of boats, moorings, piers and slipways) as identified in the Marine Leisure Infrastructure Strategy for the Southern Division of Cork County 2010-2020 and the Cork Harbour Study, 2011.

Expansion of port related activity as set out in the **Port of Cork Strategic Development Plan 2010** could also contribute to additional disturbance pressures on the species for which the Cork Harbour Special Protection Area is designated.

Evoluin why Impacts on water quality and levels				
Explain why these effects	· ·	s on water quality and levels.		
	1.	The second secon		
are not considered		that development here can only proceed when adequate provision has been made for the treatment of waste water.		
significant		been made for the treatment of waste water.		
Significant	2	Provision was made for the establishment of buffer zones between		
		development and watercourses susceptible to pollution for industrial		
		zones in Little Island.		
	Direct i	impacts on habitats.		
	3.	Modifications were made to open space zonings in Glenville which occur		
		within Special Areas of Conservation and to clarify that these spaces are		
		not suitable for development.		
	4.	Modifications were made to objectives, settlement boundaries and		
		zonings as set out under impacts on water quality above, will also provide		
		for the protection of water dependant habitats.		
	Species	nrotostion		
	-	s protection. Modifications made to objectives, settlement boundaries and zonings as		
]	set out under impacts on water quality above, will also provide for the		
		protection of water dependant species.		
Appropriate	On the	basis of the changes set out above, it is concluded that the Blarney EA		
Assessment Local A		rea Plan will not give rise to impacts on the integrity of the Natura 2000		
Conclusion	network.			
List of		tional Parks and Wildlife Service was consulted and advised at all stages of		
agencies		propriate assessment process for this plan. This was completed through		
consulted		gs which were held with local and regional staff of the NPWS. Natura		
		Reports were referred to statutory consultees and are available for review		
	and cor	nsultation through the CCC website.		
Response to	All of the	he recommendations made by the NPWS were integrated into the Natura		
consultation		Reports.		
Data Collected	l To Carr	y Out The Assessment		
Who carried out the		Planning Policy Unit, Cork County Council		
assessment				
Sources of data		National Parks and Wildlife Service Site Synopses and other data relating		
		to Natura 2000 sites.		
Laurel of the		Companies for impacts on all Nature 2000 days that the case of the		
Level of asse	essment	Screening for impacts on all Natura 2000 sites within the potential		
completed		impact zone of the plan. Appropriate assessment for those sites where		
		significant impacts could not be ruled out at screening stage.		
		1		

Where	can	the	full		
results	0	f	the		
assessm	nent	be			
accessed and viewed					

The full AA process may be tracked through Natura Impact Report I, prepared for draft plan, Natura Impact II , prepared for draft amendments and this final report.

5 Implementation of Mitigation and Monitoring Measures

The following table summarises the changes made to the plan to ensure the protection of the Natura 2000 network, and sets out how the implementation of these measures will be monitored over the lifetime of the plan.

Table 5.1 Mitigation and Monitoring Measures for the Blarney EA Local Area Plan, 2011

Mitigation measure	How will mitigation measures reduce adverse impacts on integrity of Natura 2000 sites.	How will measures be implemented and by whom	When will measures be implemented	How will mitigation be monitored
Commitment to ensure protection of Natura 2000 sites within green belts for lifetime of plan (GB 1-1 b).	Natura 2000 sites also overlap with green belts in certain cases. The wording of the green belt policy has been modified to ensure that it is clear in the plan that the priority for such lands is the maintenance of its nature conservation values.	Implementation will be achieved by CCC. Development in these zones is not encouraged, but where planned should only proceed where full assessment of potential impacts on Natura 2000 sites has been completed.	For lifetime of the plan	Establish current level of development and ecological status of designated areas within green belts in identified areas by end of 2011. Examine status of these areas at plan review stage to determine if any development or has taken place.
Commitment in plan to prevent commencement of discharge from new developments in certain settlements until sufficient capacity for treatment of waste water is in place to ensure that legal water quality standards are met; and to ensure the	The aim of this measure is to protect water quality and minimise flood risk. Its implementation will ensure that there will be no additional	Implementation will be achieved through the planning process by CCC. Permissions can only be granted for developments within LAP	For lifetime of plan.	Review progress with planned upgrades for treatment plants. Review planning permissions granted/population increases in specified settlements during

Mitigation massure	How will	How will	When will	How will
Mitigation measure	mitigation	measures be	measures be	mitigation be
	measures	implemented	implemented	monitored
	reduce adverse	and by whom	implemented	illollitoreu
	impacts on	and by whom		
	integrity of			
	Natura 2000			
	sites.			
integration of SUDS and	nutrient input	settlements		lifetime of plan and
stormwater attenuation	to designated	where there is		cross check against
into planned developments	waterbodies	sufficient		individual waste
in specified zones (LAS 2-1	arising from	capacity to		water treatment
and development	development	treat waste		plant capacity at
objectives for a number of	provided for by	water to		plant capacity at plan review stage.
specified settlements.	this plan. It will	required		Review conditions
specified settlements.	help to prevent	standards and		of grant for
	siltation of the	where		developments
	freshwater	adequate		permitted in
	system, and will	provision has		accordance with
	provide for the	been made for		plan policy within
	attenuation of	SUDS and		specified zones to
	surface / flood	stormwater		establish numbers
	waters for any	attenuation in		of these that have
	development	specified zones.		incorporated
	provided for by	- Specimen 2011601		required measures
	this plan with	Development		at plan review
	specified zones,	of stormwater		stage.
	thereby	and waste		31480.
	protecting	water plan to		
	freshwater	be agreed with		
	systems from	National Parks		
	storm surges.	and Wildlife		
	Storm surges.	Service and		
		EPA.		
Commitment in plan to	The aim of	This measure	Throughout	To be determined.
ensure that all	these measures	will be	the lifetime	
development facilitated	is to commit	implemented	of this plan.	
through this plan is subject	CCC to	through the		
to the appropriate level of	protecting sites	planning		
environmental assessment	designated for	process.		
in accordance with the	nature			
Habitats, Birds, EIA and SEA	conservation			
Directives; to provide	and biodiversity			
protection to sites	generally. This			
(proposed and designated)	will be achieved			
for nature conservation;	by assessing all			
and to maintain where	development			

Mitigation measure	How will	How will	When will	How will
Wittigation measure			measures be	mitigation be
	mitigation measures	measures be		monitored
	reduce adverse	implemented and by whom	implemented	monitorea
		and by whom		
	impacts on			
	integrity of Natura 2000			
	sites.			
possible features of the	proposals			
landscape of biodiversity	provided for by			
value outside designated	this plan in			
sites (LAS 2-2, 2-3 and 2-4	accordance			
and development	with the			
objectives for a number of	provisions of			
specified settlements).	the relevant			
	legislation. This			
	measure will			
	reduce the risk			
	of the Council			
	authorising any			
	activity which			
	could have a			
	negative impact			
	on the Natura			
	2000 network,			
	or on ecological			
	features of the			
	landscape			
	which connect			
	the network.			
Commitment to protect	Some Natura	Implementation	Lifetime of	Establish current
open space zones primarily	2000 sites	will be achieved	plan.	level of
for nature conservation	where they	by CCC.	piani.	development and
where these overlap with	occur within	Development in		ecological status of
designated areas.	settlement	these zones		identified areas by
. 55.0	boundaries	should not be		end of 2011.
	have been	encouraged,		-
	zoned for open	but where		Review status of
	space in this	planned should		these areas at plan
	plan. In these	only proceed		review stage to
	cases, the	where full		determine if any
	wording of the	assessment of		development or
	policy linked to	potential		alteration has
	particular zones	impacts on		taken place.
	where this has	Natura 2000		
	occurred has	sites has been		
	been modified	completed.		

Mitigation measure	How will	How will	When will	How will
Willigation measure	mitigation	measures be	measures be	mitigation be
	measures	implemented	implemented	monitored
	reduce adverse	and by whom	implemented	illollitorea
		and by whom		
	impacts on			
	integrity of			
	Natura 2000			
	sites.	This is likely to		
	to clarify that	This is likely to		
	such areas are	apply to		
	not generally	planning		
	suitable for	permissions		
	development.	and to projects		
	The purpose of	proposed by		
	this modification is	CCC itself.		
	to avoid direct			
	loss of habitat			
	or potential for disturbance to			
	species within			
	Natura 2000			
	sites arising			
	from zonings			
	set out in this			
	plan.			
Provision for maintenance	This measure	Implementation	Lifetime of	Establish current
of buffer zones between	has been	will be achieved	plan.	level of
Natura 2000 sites and	specified for	through the	pian.	development and
proposed development.	zones or areas	planning		ecological status of
proposed development.	adjacent to	process by CCC.		identified areas by
	Natura 2000	Development		end of 2011.
	sites, where it	proposals		Chu di 2011.
	is considered	within certain		Examine these
	that	zones or		areas during
	development	settlement		review of LAP to
	could give rise	areas adjacent		determine if
	to impacts on	to Natura 2000		buffers have been
	habitats or	sites must		provided for
	disturbance to	provide for the		developments that
	species for	maintenance of		have been
	which the	a buffer zone		permitted and/or
	Natura 2000	between the		built within the
	sites are	development		relevant zones.
	designated.	site and the		Televant Zones.
	Developments	Natura 2000		
	in such	site.		
	III SUCII	אונכ.		

Mitigation measure	How will	How will	When will	How will
Witigation measure	mitigation	measures be	measures be	mitigation be
	measures			monitored
		implemented	implemented	monitorea
	reduce adverse	and by whom		
	impacts on			
	integrity of			
	Natura 2000			
	sites.			
	locations will			
	require the			
	provision of			
	Natura Impacts			
	Statements			
	where			
	significant			
	impacts on			
	designated			
	sites cannot be			
	ruled out.			
Requirement for provision	This measure	Implementation	Lifetime of	Establish current
of Natura Impact	has been	will be achieved	plan.	level of
Statements to be prepared	incorporated	through the	•	development and
for developments proposed	for particular	planning		ecological status in
in areas close to and/or	zones adjacent	process by CCC.		identified areas by
within floodplains of	to Natura 2000	Development		end of 2011.
Natura 2000 sites.	sites, where it	proposals		
	is considered	within certain		Examine status of
	that	zones or		these areas at plan
	development	settlement		review stage to
	within the zone	areas adjacent		determine if any
	could give rise	to Natura 2000		development or
	_	sites can only		·
	to impacts on habitats or	proceed where		alteration has
	disturbance to	it shown that		taken place.
		such		
	species for			
	which the	development		
	adjacent	will not have a		
	Natura 2000	significant		
	site is	impact on		
	designated. Of	Natura 2000		
	particular	sites within the		
	concern in this	potential		
	regard are	impact zone.		
	zoned areas			
	within Natura			
	2000			
	catchments			

Mitigation measure	How will mitigation measures reduce adverse impacts on integrity of Natura 2000 sites.	How will measures be implemented and by whom	When will measures be implemented	How will mitigation be monitored
	which have been identified as being susceptible to flooding. It makes it a requirement that proposals for development in these zones will be subject to appropriate assessment.			

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Appendix I: Timetable For The Making Of The Blarney Electoral Area Local Area Plan

Date	Plan Making Stage	Habitats Directive	Comment
		Assessment Stage	
22 nd Nov 2010	Publication of draft plan.		
22 nd Nov 2010– 12 th Jan 2011	Public consultation on draft plan.	Preparation of first Natura Impact Report on draft plan. Consultation with National Parks and Wildlife Service.	
23 rd Feb 2011	Publication of Managers Report summarising consultation submissions and containing recommendations of manager on same. This report incorporated the recommendations of the first Natura Impact Report on the draft plan.	Issue of first Natura Impact Report on draft plan.	All recommendations contained in first Natura Impact Report were subsumed into the Managers Report to Council.
30 th /31 st Mar 2011	Council members vote to propose amendments to plan.		All recommendations in Managers Report arising from the AA process were accepted by Council and were therefore proposed as amendments to the plan. In addition, a number of new amendments were proposed by Councillors which required
31 st Mar – 20 th Apr 2011	Preparation of proposed amendments to draft plan for publication.	Preparation of second Natura Impact Report on proposed	screening for AA.

Date	Plan Making Stage	Habitats Directive Assessment Stage	Comment
		amendments to plan. Consultation with National Parks and Wildlife Service.	
21 st Apr 2011	Proposed amendments to draft plan published.	Publication of second Natura Impact Report on proposed amendments to plan.	
21 st April – 18 th May	Public consultation on proposed amendments.	Public consultation on second Natura Impact Report (proposed amendments to plan).	
19 th May – 10 th June.	Review of consultation submissions and preparation of 2 nd Managers Report	Review of consultation submissions and managers opinion on same to identify issues which might give rise to impacts on Natura 2000 sites.	11 submissions received in relation to proposed amendments to plan. No modifications were recommended by the Manager to be made to amendments on foot of these submissions which might give rise to impacts on Natura 2000 sites.
15 th June	Publication of 2 nd Managers Report summarising consultation submissions on proposed amendments to plan and containing recommendations of manager on same. This report incorporated the recommendations of the second Natura Impact Report.	Preparation of final Natura Impact Report for Blarney Electoral Area Local Area Plan.	
19 th July	Council meeting to review Managers Report and consider		

Date	Plan Making Stage	Habitats Directive Assessment Stage	Comment
	recommendations in relation to proposed amendments.		
26 th July	Council members vote to make or modify Local Area Plan.		All amendments arising from AA process were accepted by Council members.

Colour pages to be agreed with printer

Colour pages to be agreed with printer

Blarney Electoral Area Local Area Plan

Environmental Statement

Section 1 - Introduction

Terms of Reference

This is the SEA Statement of the **Blarney Electoral Area Local Area Plan** and forms the final part of the requirements for the Strategic Environmental Assessment (SEA) of the Plan.

SEA Definition

SEA is a systematic process of predicting and evaluating the likely environmental effects of implementing a plan, or other strategic action, in order to ensure that these effects are appropriately addressed at the earliest stage of decision-making.

Legislative Context

Directive 2001/42/EC of the European Parliament and of the Council, of 27 June 2001, on the assessment of the effects of certain plans and programmes on the environment, referred to hereafter as the SEA Directive, introduced the requirement that SEA be carried out on plans and programmes, which are prepared for a number of sectors, including land use planning. The SEA Directive was transposed into Irish Law through the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (SI No. 435 of 2004), and, the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004). Both sets of regulations became operational on the 21st of July 2004. The SEA Directive and the instruments transposing it into Irish Law require that after the adoption of a plan or programme, the plan or programme making authority is required to make a Statement available to the public, the competent environmental authorities and, where relevant, neighbouring countries. This Statement is referred to as an SEA Statement.

Content of the SEA Statement

The SEA Statement is required to include information summarising:

- (a) how environmental considerations have been integrated into the plan
- (b) how
 - the environmental report,
 - any submission or observation to the planning authority in response to a notice under section 20(3) of the Act, and
 - any consultations under article 14 F

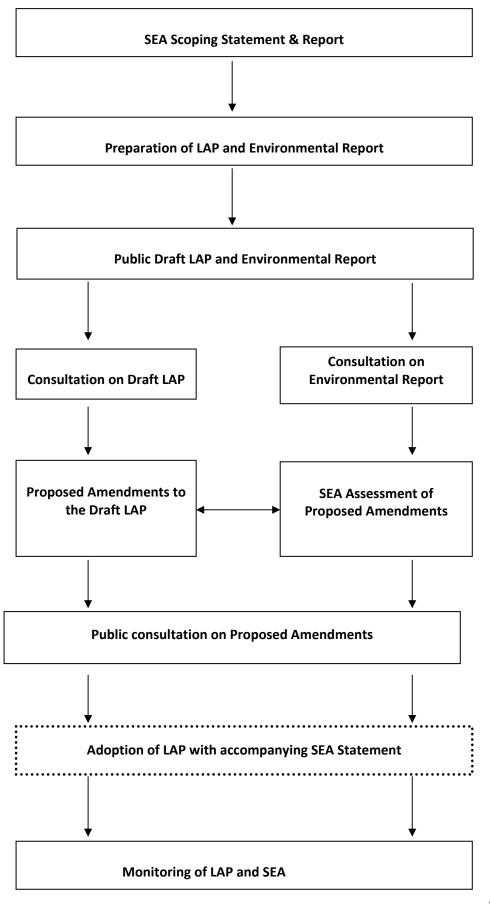
have been taken into account during the preparation of the plan,

- (c) the reasons for choosing the plan, as adopted, in light of the other reasonable alternatives dealt with, and
- (d) the measures decided upon to monitor, in accordance with Article 14J, the significant environmental effects of implementation of the plan.

The Guidelines on the implementation of the SEA Directive state that the SEA statement should summarise the issues and concisely address them. Each of the above points have been addressed and are included in the various sections of the SEA statement which follow. The influence of the SEA on the LAP making process is outlined in the following flow chart (Figure 1).

The SEA statement tracks the progression of the plan as presented in the diagram, highlights how environmental considerations have been taken into account and sets out the detailed monitoring for the plan in the final section which it is intended will be reviewed over the lifetime of the plan.

Influence of SEA on the LAP Review Process: (Figure 1)



Section 2 - How Environmental Considerations and the Environmental Report were factored into the plan:

This Local Area Plan as well as the other nine Electoral Area Local Area Plans are considered to be middle order plans fitting between the County Development Plan and small scale plans and local area plans for example for an individual settlement. Because of this the approach taken needed to look at the overall issues of the Local Area Plan while also relating to individual settlements and objectives. While environmental issues related to individual sites/ settlements and objectives it is considered that the environmental process' most effective input was on the broader/wider scale. This is also reflected in the methodology for the provision of mitigation measures outlined in Chapter 10 of the Environmental Report which addressed the strategic level through assessment of the scenario/alternatives while the second approach addressed the common issues repeated throughout the Local Area Plan.

These middle order plans cover an entire electoral area with the broad distribution of population of main towns, villages and rural areas coming from the County Development Plan 2009. In some cases there may have been some minor changes made to the figures in the Local Area Plan but in general the figures used were in line with those of the Strategic Planning Areas set out in the County Development Plan and were consistent with the figures outlined in the Regional Planning Guidelines 2010.

Consultation:

In terms of the SEA and AA, there have been a number of consultations over the course of the preparation of the Blarney Electoral Area Local Area Plan 2011-2017 which was prepared at the same time as the remaining nine electoral areas in the county. An Outline Strategy was prepared for the Blarney LAP and included a broad checklist of the main environmental indicators within the electoral Area. The Strategy was on public display during January and February 2010.

Following this a scoping report was prepared and sent to the statutory consultees including the Environmental Protection Agency, the Department of Environment Heritage and Local Government and the Department of Communications, Marine & Natural Resources. Five submissions on the Scoping Report were received which in some cases were also applicable to the other Electoral Area Local Area Plans being prepared simultaneously. The comments made at this stage of the process by the statutory consultees related to the scope and level of detail to be included in the SEA and were brought forward into the Environmental Report.

The next period of consultation included public display of the Draft Blarney Electoral Area Local Area Plan alongside the SEA Environmental Report during the period of 22nd November 2010 to 12th January 2011. A total of 91 submissions were received on this suite of documents, including submissions from the EPA and DoEHLG.

It was agreed that some of the comments in the submissions made be incorporated as non material changes in the final document while other changes were put forward as proposed changes to the text and objectives to the Draft Plan.

The final stage of consultation took place between 21st April and 18th May 2011 when amendments to the Draft Plan and a SEA Screening Report and Natura Impact Report (II) were on public display. 21 submissions were received at this stage of public consultation including submissions from the EPA and DOEHLG.

Section 3 of this Statement deals specifically with the Submissions and Observations received and the issues raised in these submissions.

Strategic Environmental Assessment

A number of distinct stages of the process during which environmental issues have been highlighted and the SEA methodology applied are outlined in this section. These are as follows:

Stage 1 – Preparation of the Draft LAP (Scoping and Environmental Report)

Stage 2 – Screening Matrix and Evaluation of the Draft LAP Objectives

Stage 3 – The Amendment Stage (SEA of the Proposed Material Amendment to the Draft Plan)

Stage 1 – Preparation of the Draft LAP (Scoping and Environmental Report)

Scoping:

Chapter 4 of the Environmental Report outlines the methodology of the preparation of the LAP and Environmental Report.

Initially, the Planning Authority engaged in a scoping exercise to determine the range of environmental issues and the level of detail to be included in the Environmental Report, which were decided upon, in consultation with the prescribed environmental authorities as a requirement of the SEA Regulations and Guidelines. The scoping and information gathering stage allowed for the collection of existing environmental baseline information in order to describe the current state of the environment in the Electoral Area. This is outlined in the Scoping Statement. The comments made at this stage of the process by the statutory consultees related to the scope and level of detail to be included in the SEA and were brought forward into the Environmental Report.

The Environmental Report:

Having established in the Scoping Report the environmental baseline the key aspect of the SEA was the collection of relevant environmental baseline data for the Blarney Electoral Area. The collection of this information has informed the identification of key environmental sensitivities, sensitive areas and areas of pressure within the electoral area.

The SEA used a system of Environmental Protection Objectives (EPOs) with targets and indicators in the assessment of the Draft Local Area Plan. Baseline data collection and the preparation of sensitivity mapping has focussed the EPOs at the plan level and at issues relevant to the Blarney Electoral Area.

Where it was demonstrated that conflict with environmental objectives arose, measures were proposed which sought to mitigate against any potential negative environmental effects. This has occurred throughout the preparation of the LAP and the Amendments.

Alternative frameworks:

The Environmental Report is required by the SEA Directive to consider reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme and the significant environmental effects of the alternatives selected. Alternatives were formulated having regard to the objectives of the LAP. The alternatives are explored in Chapter 8 of the Environmental Report and a further expansion on these alternatives is outlined in **Section 4** of this SEA Statement.

Stage 2 – Matrix and Evaluation of the Draft LAP Objectives:

Before the publication of the Draft LAP, the objectives contained in the Draft Local Area plan were evaluated against the Environmental Protection Objectives (EPO's) which were created for the LAP SEA within a series of matrices. These completed matrices are outlined in **Chapter 9** of the Environmental Report.

This stage identified whether the Draft LAP objectives would be likely to have either:

- No likely interaction with EPOs (they are likely to have no interaction with the status of the environment);
- A positive interaction with EPOs (they are likely to improve the status of the environment);
- A potentially conflicting interaction with EPOs
- An uncertain interaction with EPOs (the interaction with the status of the environment is uncertain)

Arising from this analysis and where a negative assessment was recorded, the SEA provided /suggested mitigation measures in the form of:

- → Changing the wording of an existing objective
- → Deleting the objective
- → Addition of a new objective

The matrix in Chapter 9 of the Environmental Report includes a 'tick' where the Environmental Report's recommendation was accepted in full and changes made appropriately in the Local Area Plan document. A 'dash' was entered where the Environmental Report's recommendation was partly accepted. A 'cross' was entered where the Environmental Report's recommendation was rejected and not entered into the Local Area Plan document.

This process was carried out simultaneously on the other nine other Electoral Area Local Area Plans throughout the county and the environmental impacts of these plans were considered as part of the overall assessment of this plan.

Mitigation Measures were detailed in Chapter 10 of the Environmental Report which related to wastewater infrastructure, impacts on biodiversity, provision for individual housing within settlements, serving of developments by private schemes or private group water schemes, the need to screen for SEA and AA masterplan, studies and other landuse plans referred to in the Draft Local Area Plan, references to walkways and roadways, waste management, flooding objectives, water quality tables, inclusion of definition of sustainable, and tourism. One of the main environmental issue was the correlation between the population targets and growth of settlements and the waste water infrastructure of these settlements within the electoral area. A number of mitigation measures had been incorporated into the the

local area plan and it was stated in the Environmental Report that there was an opportunity for the outstanding mitigation measures be incorporated at the amendment stage.

Stage 3: The Amendment Stage (SEA of the Proposed Material Amendment to the Draft Plan)

The amendments as outlined in the Managers Report (February 2011) in line with Section 20(3) of the Planning and Development Acts were examined in order to assess the significant effects on the environment that were likely to occur as a result of the recommended amendments to the Draft LAP. The same methodology was used in the Environmental Report thus a matrix was prepared and all the proposed amendments were assessed. The matrix was used as a screening process where new and modified policies, objectives and text were formally assessed by identifying whether the change(s) would be likely to have significant environmental effects. Generally it was found that the amendments fitted into the following broad categories:

- 1) Changes to text which have minor significance
- 2) Changes to text which have major significance
- 3) Changes to objective which have minor significance
- 4) Changes to objective which have major significance
- 5) New designation of GB 1-2 within the greenbelt
- 6) Extension to development boundary
- 7) New Settlement

After screening (using the matrix approach) a proposed amendment was either 'screened out' or was concluded as 'possible environmental effects identified'. In relation to the latter it was necessary to provide mitigation measures where potential conflict were found with the EPOs. The assessment was carried out having regard also to the parallel process of Appropriate Assessment where relevant mitigation measures from the AA were carried through into the SEA (See Appendix One).

Mitigation measures took the form of:

- → Changing the wording of an amendment
- → Deleting the amendment
- → Addition of a new amendment

EU Habitats Directive- Appropriate Assessment

Another key aspect of the assessment process was the undertaking of an Appropriate Assessment of the plan. This parallel process ensured that environmental considerations, specifically focused on Natura 2000 sites, were integrated into the plan as it was developed. The Natura Impact Report III includes details of all the changes made to the Draft LAP as a result of Appropriate Assessment.

One of the main influences of the Environmental Assessment on the Local Area Plan was the introduction of an approach to protect water quality of water bodies identified in the Water Framework Plan. This was incorporated into the Local Area Plan with an overall aim to provide a fail safe mechanism to prevent development in the plan which would result in the degradation of water quality. Having assessed the carrying capacity of settlements changes have been made to the population distribution in some cases from smaller and rural areas to

the main towns based on sustainable environmental capacity while the overall population target for the electoral area remains the same. This is further supported by the revision of the wording of general objectives relating to settlements contained in Section 2 of the plan e.g. LAS 2-1 (in Section 2) and in the DB (Development Boundary) objectives in Section 3 relating to specific settlements. Connected to population distribution was the matter of demographic pressure in rural hinterlands for individual housing. In order to meet this pressure, the approach taken by the local area plan was to provide lands in more sustainable locations i.e. the towns, with the effect of keeping the population targets in the villages lowered.

In relation to Flood Risk Assessment at Draft Stage of the plan the environmental assessment sought clarification and some changes to development in areas at risk of flooding. In the Draft Plan, if land was located within a flood risk area it was generally not included within the development boundary. Where such land was included then objectives relating to that land included a requirement for a more detailed flood risk assessment to be carried out. At the amendment stage of the process, and following public consultation on the proposed amendments, the approach of the plan to zoning land in areas of flood risk was modified in recognition of lands already been zoned in an earlier development plan or planning permission had already been granted for their development, or there were some local ambiguities in the flood risk mapping. Where such zonings were included in the plan, precautionary text was included in the specific objective to highlight the need for a flood risk assessment as part of the development management process. In the smaller settlements which do not have specific zoning objectives, the flood risk areas are protected by the more general development boundary objectives and by objectives in Section One of the Plan.

In the SEA Screening of the Proposed Amendments document the SEA response was to exclude these sites from development boundaries. Although this was the preferred approach of the SEA it is recognised however, that the development in flood risk areas objectives (which have been modified as part of the process and included in site specific objectives) provide an adequate mitigation measure in relation to flooding concerns of these sites.

In relation to biodiversity in general and Natura 2000 sites a number of changes to objectives have been made recognising the importance of the biodiversity of the Local Area Plan as a whole with the inclusion of a number of new objectives LAS 2-2 to 2-4 which firstly ensure the parallel development and implementation of a range of sustainable measures to protect the integrity of the biodiversity of the area while also linking the objectives relating to biodiversity in the County Development Plan 2009 to the Local Area Plan. The SEA process also highlights issues in relation to some settlement specific objectives within or in close proximity to Natura 2000 sites as well as NHAs. With the integration of the SEA and AA process a number of changes have been made to specific objectives relating to settlements while the majority of zonings or development boundaries located within Natura 2000 sites have been removed with the only exception being where a site was zoned for open space and it was considered that retaining this type of zoning was the best means of protecting the biodiversity of the site.

Table 2.1 Sites removed from settlements due to their Natura 2000 designation

Change No.	Settlement Name	Zoning Ref. If applicable
BY.03.07.02	Glenville	Lands within SAC not
		included within

	development boundary of
	Glenville

Table 2.2 Summary Of Recommendations For Changes Arising From SEA

Amendment/Objective No.	Amendment Ref	Issue	Recommendation from SEA process	Change made to plan arising from SEA process
Paragraph 1.6.4	BY 01.06.01	Change introduced at Amendment Stage	Screened Out at Proposed Amendment Stage	Screened Out
New Objective	BY 01.06.02	Change introduced at Amendment Stage	Screened Out at Proposed Amendment Stage	Screened Out
Paragraph 1.7.9	BY 01.07.01	Change introduced at Amendment Stage	Screened Out at Proposed Amendment Stage	Screened Out
Replace Paragraph 1.7.10 with new text	BY.01.07.02	Issue Nine in the Environmental Report*	SEA raised concerns in relation to zoning/inclusion of sites within development boundaries.	The inclusion of paragraph 1.7.10 partially addresses the concerns of SEA in the Final Plan.
Replace Paragraph 1.7.12 with new text	BY.01.07.03	Change introduced at Amendment Stage	Screened Out at Proposed Amendment Stage	Screened Out
Amend Paragraph 1.7.13	BY.01.07.04	Change introduced at Amendment Stage	Screened Out at Proposed Amendment Stage	Screened Out
Replace Objective FD 1-4	BY.01.07.05	Change introduced at Amendment Stage. Previous amendment made at Draft Stage.	Screened Out at Proposed Amendment Stage	Screened Out
Additional text paragraph 2.2.32	BY.02.02.01	Change introduced at Amendment Stage	Screened Out at Proposed Amendment Stage	Screened Out
LAS 2-1	BY 02.02.02	Issue raised at pre draft stage and Issue One in	Included objective in Draft Plan Modify wording of	Inclusion of Objective LAS 2-1 in Draft Plan which was further

Amendment/Objective	Amendment	Issue	Recommendation	Change made to
No.	Ref		from SEA process	plan arising from
				SEA process
		Environmental	objective.	modified and
		Report		incorporated HDA
				recommendations
				in the Final Plan
LAS 2-2	BY.02.02.03	Issue raised at	Include wording	Objective LAS 2-2
		pre draft	to acknowledge	included in Draft
		stage	that future	Plan and wording
			projects will be	amended in Final
			subject to SEA, HDA and EIA	Plan.
LAS 2-3	BY.02.02.04	Issue Two	TIDIT UIIG EIIT	New objective
				LAS 2-3 included
				in Final Plan
LAS 2-4	BY.02.02.05	Issue Two		New objective
				LAS 2-4 included
Oldination B O4 Bloom	DV 02 04 04	Classic	6	in Final Plan
Objective B-01 Blarney	BY.03.01.01	Change introduced at	Screened Out at	Screened Out
and Paragraph 1.4.13		Amendment	Proposed Amendment	
		Stage	Stage	
X-02 Blarney	BY.03.01.02	Change	Screened Out at	Screened Out
A 02 Blarriey	31.03.01.02	introduced at	Proposed	Sercemed Suc
		Amendment	Amendment	
		Stage	Stage	
Paragraph 1.2.35	BY.03.01.03	Change	Screened Out at	Screened Out
		introduced at	Proposed	
		Amendment	Amendment	
DD 07 Dl	DV 02 04 04	Stage	Stage	6
DB-07 Blarney and	BY.03.01.04	Change introduced at	Screened Out at	Screened Out
Paragraphs 1.4.5 and 1.4.6		Amendment	Proposed Amendment	
1.4.0		Stage	Stage	
DB-01 (Blarney)	BY.03.01.05	Insert word	Amend wording	SEA
		'sustainable'	to objective at	recommendation
		in objective.	proposed	was included in
			Amendment	Final Plan
_			Stage	
X-01 Ballyvolane	BY.03.02.01	Amendment	Omit extension	SEA
		to the Draft	and change to	recommendation
		Plan	objective X-01	was not
				incorporated in Final Plan
X-01 Ballyvolane	BY.03.02.02	Change	Screened Out at	Screened Out
		introduced at	Proposed	
		Amendment	Amendment	
V 04 0 1 00 00 00	DV 00 05 55	Stage	Stage	654
X-01 Cork City North	BY.03.02.03	Amendment	Omit extension	SEA
Environs		to the Draft	and change to	recommendation

Amendment/Objective No.	Amendment Ref	Issue	Recommendation from SEA process	Change made to plan arising from
		Plan	objective X-01	was not incorporated in Final Plan
O-01 Cork City North Environs	BY.03.02.04	Change introduced at Amendment Stage	Screened Out at Proposed Amendment Stage	Screened Out
Paragraph 2.4.28 and Objective B-02 Cork City North Environs	BY.03.02.05		Change to objective	SEA recommendation was not incorporated in Final Plan
DB-01 Cork City North Environs	BY.03.02.06	Change introduced at Amendment Stage	Screened Out at Proposed Amendment Stage	Screened Out
X-01 Glanmire	BY.03.03.03	Issue Two	Amend wording to objective at Amendment Stage	Partially meets with the recommendations while also incorporates HDA recommendations
DB-01 Cork City North Environs	BY.03.02.06	Insert word 'sustainable' in objective recommended at proposed Amendment Stage.	Amend wording to objective at proposed Amendment Stage	SEA recommendation was included in Final Plan
Textual change to objective X-01 Cork City North Environs	BY.03.02.07	Change introduced at Amendment Stage	Screened Out at Proposed Amendment Stage	Screened Out
X-01 Cork City North Environs	BY.03.02.08	Amend boundary of X-01 to exclude lands to be zoned for residential use.	Omit change to zoning of X-01	SEA recommendation was not incorporated in Final Plan
C-02 Glanmire	BY.03.03.01	Change introduced at Amendment Stage	Screened Out at Proposed Amendment Stage	Screened Out
R-03 Glanmire	BY.03.03.02	Change introduced at Amendment Stage	Screened Out at Proposed Amendment Stage	Screened Out

Amendment	Issue	Recommendation	Change made to
Ref		from SEA process	plan arising from
			SEA process
BY.03.03.03	_		Screened Out
		•	
DV 02 02 04	-		
BY.03.03.04	•		Screened Out
		-	
BV 03 03 05		-	SEA
B1.03.03.03		_	recommendation
		-	was included in
	-		Final Plan
	Amendment		
	Stage.		
BY.03.04.01	Change	Screened Out at	Screened Out
	introduced at	Proposed	
	Amendment	Amendment	
	Stage	Stage	
BY.03.04.02	Change	Screened Out at	Screened Out
		Proposed	
BY.03.04.03	_		Screened Out
		•	
BA U3 U4 U4	_		Screened Out
B1.03.04.04	_		Screened Out
		•	
BY.03.04.05			Screened Out
	introduced at	Proposed	
	Amendment	Amendment	
	Stage	Stage	
BY.03.04.06	Change	Screened Out at	Screened Out
		Proposed	
BY.03.04.07		Omit amendment	SEA
			recommendation
	_		to omit new zoning was not
			incorporated into
	•		Final Plan.
	- Souridary		However, the
			inclusion of the
			new zoning does
	BY.03.03.04 BY.03.04.01 BY.03.04.02 BY.03.04.03 BY.03.04.04 BY.03.04.05	BY.03.03.03 Change introduced at Amendment Stage BY.03.03.04 Change introduced at Amendment Stage BY.03.03.05 Insert word 'sustainable' in objective recommended at proposed Amendment Stage. BY.03.04.01 Change introduced at Amendment Stage BY.03.04.02 Change introduced at Amendment Stage BY.03.04.03 Change introduced at Amendment Stage BY.03.04.04 Change introduced at Amendment Stage BY.03.04.05 Change introduced at Amendment Stage BY.03.04.06 Change introduced at Amendment Stage BY.03.04.06 Change introduced at Amendment Stage BY.03.04.06 Change introduced at Amendment Stage	BY.03.03.03 Change introduced at Amendment Stage Screened Out at Proposed Amendment Stage Screened Out at introduced at Amendment Stage Screened Out at Proposed Amendment Stage Stage BY.03.03.04 Change introduced at Amendment Stage Stage BY.03.03.05 Insert word 'sustainable' in objective recommended at proposed Amendment Stage. Stage BY.03.04.01 Change introduced at Amendment Stage Screened Out at Proposed Amendment Stag

Amendment/Objective	Amendment	Issue	Recommendation	Change made to
No.	Ref		from SEA process	plan arising from
				SEA process
				incorporate HDA
				recommendations
				in the wording of
				the objective.
DB-02 Little Island	BY.03.04.08	Change	Screened Out at	Screened Out
		introduced at	Proposed	
		Amendment	Amendment	
		Stage	Stage	
Paragraph 5.3.1	BY.03.05.01	Change	Screened Out at	Screened Out
Monard		introduced at	Proposed	
		Amendment	Amendment	
		Stage	Stage	
Paragraph 5.3.2	BY.03.05.02	Change	Screened Out at	Screened Out
Monard		introduced at	Proposed	
		Amendment	Amendment	
		Stage	Stage	
Paragraph 5.3.4	BY.03.05.03	Change	Screened Out at	Screened Out
Monard		introduced at	Proposed	
		Amendment	Amendment	
		Stage	Stage	
Paragraph 5.3.6	BY.03.05.04	Change	Screened Out at	Screened Out
Monard		introduced at	Proposed	
		Amendment	Amendment	
		Stage	Stage	
Paragraph 5.3.7	BY.03.05.05	Change	Screened Out at	Screened Out
Monard		introduced at	Proposed	
		Amendment	Amendment	
		Stage	Stage	
DB-01 Monard	BY.03.05.06	Issue Five	Inclusion of	SEA
			additional text	recommendation
			5.3.19	was included in
	DV 02 06 04		0 11 1	Final Plan
Carrignavar	BY.03.06.01	Change	Omit change to	SEA
		introduced at	development	recommendation
		Amendment	boundary.	was not
		Stage to		incorporated in
		include land		Final Plan
		within		
		development		
DP 01 Carrianavar	BY.03.06.02	boundary. Issue One	Amond wording	SEA
DB-01 Carrignavar	טו.טט.טט.טע	issue One	Amend wording to objective at	recommendation
			Amendment	was included in
			Stage	Final Plan
T-01 Glenville	BY.03.07.01	Change	Screened Out at	Screened Out
1-01 CICIIAIIIE	וט./ט.נט.וט	introduced at	Proposed	Screened Out
		Amendment	Amendment	
		Stage	Stage	

Amendment/Objective No.	Amendment Ref	Issue	Recommendation from SEA process	Change made to plan arising from SEA process
Glenville	BY.03.07.02	Issue Two	Omit lands within SAC from development boundary of Glenville	Lands within SAC not included within development boundary of Glenville.
U-01 Glenville	BY.03.07.03	Issue Six	Amend wording to objective at Amendment Stage	recommendation was included in Final Plan and also incorporates HDA recommendation
Tower	BY.03.10.01	Change introduced at Amendment Stage	Screened Out at Proposed Amendment Stage	Screened Out
Paragraph 10.4.5 and Objective DB-01(i) Tower	BY.03.10.02	Change introduced at Amendment Stage	Screened Out at Proposed Amendment Stage	Screened Out
Dripsey	BY.03.11.01	Change introduced at Amendment Stage	Screened Out at Proposed Amendment Stage	Screened Out
O-01 Dripsey	BY.03.11.02	Change introduced at Amendment Stage	Screened Out at Proposed Amendment Stage	Screened Out
Killeens	BY.03.13.01	Change introduced at Amendment Stage	Screened Out at Proposed Amendment Stage	Screened Out
Stuake/Donoghmore	BY.03.14.01	Change introduced at Amendment Stage to include land within development boundary.	Omit change to development boundary.	SEA recommendation was not incorporated in Final Plan
Berrings	BY.03.17.01	Change introduced at Amendment Stage to include land within development	Omit change to development boundary.	SEA recommendation was not incorporated in Final Plan

Amendment/Objective No.	Amendment Ref	Issue	Recommendation from SEA process	Change made to plan arising from SEA process
		boundary.		
DB-01(a) and Paragraph 19.4.1 Courtbrack	BY.03.19.01	Change introduced at Amendment Stage	Screened Out at Proposed Amendment Stage	Screened Out
Paragraph 25.1.3 Bottlehill	BY.03.25.01	Change introduced at Amendment Stage	Screened Out at Proposed Amendment Stage	Screened Out
DB-01 Iniscarra	BY.03.28.01	Change introduced at Amendment Stage	Screened Out at Proposed Amendment Stage	Screened Out
Caherlag	BY.03.33.01	Add Caherlag as a new Village Nucleus	Omit change	SEA recommendation was not incorporated in Final Plan
Leemount Cross	BY.03.34.01	Include Leemount as a Village Nucleus at Draft Plan Stage	Omit proposal to include Leemount Cross as a Village Nucleus	Leemount Cross was not included as a Village Nucleus

*Issues identified in the Environmental Report Issue One —The Correlation between Population Targets for the Main Towns and Infrastructure Issue Two- impacts on Biodiversity Issue Three- Provision for individual dwellings in settlements or small scale development in areas without public infrastructure to provide individual treatment systems. Issue Four- References to development being served by private schemes or private group water schemes. Issue Five- Inclusion of requirement for screening for SEA and AA as part of preparation of Masterplans, Traffic/Transportation Studies, Other Studies and Land use Plans in the specific objective. Issue six- References are made to specific roadways and walkways provision which have not been clarified whether have been subject to SEA or AA assessment. Issue seven-References made in open space objectives to landscaping and provision of walkways without any wording relation to protection biodiversity etc. Issue eight-Waste Management Issue nine- Flooding Objectives Issue ten-Water Quality tables Issue Eleven- Inclusion of Definition of Sustainable Issue Twelve-Tourism

Section 3 - Summary of how submissions and consultations were taken into account:

Introduction

This section details how the submissions and observations made on the Environmental Report and SEA process have been taken into account during the preparation of the plan.

SEA Scoping Consultations

Public Consultation regarding the local area plans commenced in January 2010 with the publication of the Outline Strategies and public meetings to facilitate consultation. 152 submissions were received on this pre-draft document mainly relating to zoning issues.

A Scoping Report was then prepared by the Planning Policy Unit in August 2010 which identified the key environmental issues that would be addressed appropriately in the Environmental Report and was sent to the statutory Environmental Authorities.

Five submissions on the Scoping Report were received from the Environmental Protection Agency, Shannon River Basin District, Cork City Council, Development Applications Unit, Department of the Environment, Heritage and Local Government, and Department of Communications, Energy and Natural Resources that related to a number of issues and were taken into account in the preparation of the Environmental Report.

Submissions and Observations on the Environmental Report and Draft Plan

The Blarney Electoral Area Local Area Plan, Public Consultation Draft, was published on the 22nd November 2010 and was made available to the public until the 12th January 2011. 91 submissions were made during the Draft Plan stage. Most of the submissions received were related to specific issues included in the plan itself rather than on the content of the SEA Environmental Report. The submissions received from the Environmental Protection Agency and the Department of the Environment, Heritage and Local Government related to the Environmental Report and on the SEA process. These submissions related to a number of issues and any changes necessitated as a result of the submissions received were reviewed by the SEA team and recommendations were made accordingly.

The following table outlines submissions which related to matters raised in the Environmental Report and the general environmental assessment received from Statutory Bodies. The Manager's Report on the Draft Plan includes a summary of all submissions received.

Table 3.1 Summary of Submissions on the Draft Local Area Plan received from Statutory Bodies

Name of	Summary of Submission	How this was taken on board
Submitter		
EPA	A comprehensive submission	The EPA recommendation informed the
	was received from the EPA	SEA Team's recommendations for
	relating to a) Integration_of	changes to the Draft Plan which in
	environmental considerations in	many cases were incorporated into the

the landuse plans, b)General comments on the EALAP Environmental Report c)General comments on the EALAP and d) Specific comments on the EALAP. The EPA include a number of key recommendations to be included in the local area plan in the form of policy/objectives. These relate to water quality, drinking water, waste water, fisheries, flooding, biodiversity, groundwater, landscape and master plans. The overall comment relates to the lack of integration of the environmental considerations and recommendations that have been set out in the EALAP Environmental Report and the need to better address and incorporate in the Draft EALAP the implications of infrastructural deficiencies and further development, and associated potential implications of cumulative development on environmental sensitivities and vulnerabilities identified.

Final Plan. Table 2.2 outlines the changes made from the Draft to Final Plan stage

DoEHLG

Submission complements the Council on its approach to setting housing targets in villages, revised zoning categories and definitions, introduction of a clear policy guidance on flooding, incorporating clear guidance on appropriate scale of new residential development and inclusion of the islands into the settlement network.

Emphasises the importance of adopting the Core Strategy into CDP by September 2011 and ensuring that LAP's policies (in particular Phasing of development, towns/village growth balance, growth in CASP Ring) are aligned with it.

Many of the recommendations made have been incorporated through amendments to overall and site specific objectives of the plan. Note that Appropriate Assessment should be undertaken at the draft LAP stage.

Need further clarification of how housing and population targets were arrived at. If there is an excessive amount of residentially zoned land then a clear phasing regime or dezoning is required. Need to indicate clearly how the significant turnaround in the growth balance between rural areas and main towns is to be achieved.

Guidance is given on what constitutes Archaeological heritage and it is suggested that Recorded and National Monuments should be shown on settlement maps including lines of medieval town walls. Suggest that specific policies and objectives on archaeological heritage should be included in LAP's. Specific comments are made about Architectural Heritage in some LAP's expressing the need for grater clarity. Changes/additions relating to objectives relating to nature Conservation in some LAP's are proposed.

OPW

The submission welcomes the approach taken to flooding and recommends a number of changes:

Section 1.7.7 – broaden the list of information to include, where applicable, reports or flood maps from localised flood studies.

Section 1.7.9 -references to the Draft Indicative Flood Extent Maps should include reference to "three areas of flood risk", including Zone C (low probability of flooding) and that text describing Flood Zone B should

The recommendations of OPW are incorporated into the Flood Risk Assessment of the electoral area and into the revised wording of site specific objectives.

reference, where applicable, the implementation of the Justification Test, similar to the text on Zone A. Objective FD1-4 - amend to include reference to the planning principles and the sequential approach and to the avoidance of flood-prone areas when designing the layout of development. Zoning Objectives - amend plans to ensure the planning principles, sequential approach and the justification test is included with each objective. Strengthen wording so that development proposals shall / should be accompanied by an FRA.

All settlements - Plan should note than "possible local flood issues should be considered with respect to all sites, with a detailed site-specific flood risk assessment undertaken as appropriate. Submission continues to highlight the need for a consistent approach to the use of the Sequential Approach and the Justification Test (in some areas lands are zoned even through they are almost entirely within both Flood Zones A and B). Justification Test be fully applied to confirm the suitability of such zoned sites.

The submissions received at Draft Plan stage in relation to or relevant to the SEA process were reviewed and discussed and which informed the SEA recommendations of changes to be made to the Draft Plan. Following on from the assessment of submissions received the SEA Team prepared a series of recommendations which were generally in the form of new objectives or additions to wording of existing objectives or deletions of objectives. Some of the matters raised in the submissions received related to issues which were dealt with through the Appropriate Assessment process. Many of the SEA recommendations were incorporated into the Final Plan.

In relation to draft plan stage of the LAP, the Manager's Report 20(3) outlines how the submissions were taken into consideration and make recommendations in relation to proposed changes to the draft plan. It was also referred to in this report that some changes as a result of considerations of submissions required 'non material' changes which did not

require to be part of the proposed amendment for public consultation. A copy of the Manager's Report is published separately.

Submissions and Observations for the Proposed Amendments

21 submissions were received during the public consultation period of the proposed amendments to the Draft Blarney Electoral Area Local Area Plan including two from the Environmental Protection Agency and the Department of the Environment, Heritage and Local Government.

The following table outlines submissions which related to matters raised in the Environmental Report and the general environmental assessment received from Statutory Bodies. The Manager's Report on the Draft Plan includes a summary of all submissions received.

Table 3.2 Summary of Submissions on the Proposed Amendments to the Draft Local Area Plan received from Statutory Bodies

Name of	Summary of Submission	How this was taken on board
Submitter		
EPA	The submission notes that a number of amendments have potential to conflict with the status of the Environmental Protection Objectives and recommends that the mitigation measures set out in the SEA screening be implemented.	Many of the recommendations from the EPA and the SEA process were incorporated into the Final Plan and are outlined in Table 2.2
OPW	With respect to the consideration of flood risk in the proposed amendments to the Draft LAPs, the OPW notes that areas which, based on the best-available information are indicated as being prone to flood risk, are being proposed (under the amendments) for zoning for development. The OPW does not consider this desirable, noting that it is the intent of the Guidelines on the Planning System and Flood Risk Management (November 2009) to address flood risk within the planning system at the forward planning stage, rather than at the development management stage, and the precautionary approach advocated within the Guidelines would suggest that such sites should not be zoned for development. The OPW does however recognise that there may be localised inaccuracies	The recommendations of OPW are incorporated into the Flood Risk Assessment of the electoral area and into the revised wording of site specific objectives.

within the flood maps currently available, and welcome the clear requirement for a flood risk assessment to be undertaken for all sites where the flood maps indicate that the site may be prone to flooding. The OPW strongly urges the council to apply this requirement rigorously, and to ensure that flood risk assessments submitted are carefully audited to ensure that all relevant and available information has been captured, collated and considered, and that the assessment has been undertaken accurately using best-practice methodologies and techniques.

In relation to proposed amendments stage of the LAP, the Manager's Report 20(K) outlines how the submissions were taken into consideration and make recommendations in relation to the proposed amendments. Some of the Manager's Report Recommendations incorporate SEA considerations while others recommend to proceed with the change. A copy of the Manager's Report is published separately.

Section 4 - Reasons for choosing the plan as adopted, in light of other reasonable alternatives considered.

Introduction

This Section details the alternatives, which were identified and evaluated for likely environmental and planning effects as part of the SEA process for the LAP.

Selecting the Alternative Plan Options

The alternative scenarios that were proposed in the Local Area Plan for the electoral area were provided in the Environmental Report and the preferred strategy from an environmental perspective was provided. Mitigation measures which attempt to prevent, reduce and as fully as possible offset any significant adverse effects of the environment of implementing the preferred alternative were identified where applicable.

During the preparation process of the draft LAP, 3 Scenarios were proposed. These are outlined in detail in Chapter 8 of the Environmental Report and the LAP's preferred Scenario (i.e. the Scenario that forms the basis of the draft LAP) has been presented.

The Scenarios

The Scenarios considered were set at the electoral area level rather than having Scenarios for every settlement. In this way the cumulative impact of development and population distribution across the electoral area could be assessed. The SEA scenario assessment was based on these alternative growth scenarios and each of the proposed development options were assessed against the EPO's, types of cumulative effects, the cumulative environmental sensitivity map and individual environmental issues that were identified in the environmental baseline (see table 4.1 below).

For the Blarney Electoral Area, 3 alternative scenarios have been identified that could achieve the objectives set out above and manage the level of growth targeted for the Blarney Electoral Area, as set out in the Cork County Development Plan 2009. The scenarios that were considered in the preparation of the Local Area Plan are as follows;

- High Urban and Modest Rural Growth this is the scenario wherein a significant
 proportion of the target growth is concentrated within the principle urban areas
 within the electoral area with provision included for relatively modest growth in the
 smaller settlements.
- Low Urban and High Rural Growth- this alternative is to focus growth in the key villages, villages and village nuclei, while limiting the level of growth in the urban areas.
- Amend settlement hierarchy and revise growth in fewer areas in line with infrastructural provision – this alternative is to amend the number of settlements within the electoral area, reducing the number of smaller settlements, and targeting growth in a fewer number of locations where appropriate infrastructure is in place.

Findings of Scenario Evaluation

It was considered that Scenario 2 is the least preferred Scenario from an environmental perspective. Scenario 1 and 3 are quite similar in that they proposed significant population growth in the main urban settlements but both require a substantial amount of funding and

infrastructure to reach their targets. Overall the scenario assessment has found that Scenario 3 is the preferred Scenario from an environmental perspective but there remain serious concerns over the provision of infrastructure in a timely manner to accommodate the proposed population targets. However, Scenarios 1 was the preferred scenario in the LAP thus mitigation measures were outlined in Chapter 8 and 10 of the Environmental Report and as stated in Section 2 of this document a number of changes have been made to address these concerns.

Table 4.1 below outlines the assessment of the Scenarios.

Types of Cumulative Effects Cumulative Effects Affected Receptor Causes									
Cumulative Effects				Affected Receptor		Use of land for flood management,			ment,
Н	abitat fragmenta	tion		Biodiversity			nsport astructure ar	nd industrial	
						dev	velopment. Zo	oning of Gree	
	Climate Change	2		Air and Climate				emissions fro d increases in	
						vol	umes		
	Loss of tranquilli	tv	Popula	tion and Human	Health	Ind tra		pment and in	icreases in
							umes		
Deteriora	tion in drinking w	ater quality	/ Popula	tion and Human	Health			astewater tre inking water t	
	rioration in water			Water		Ina	ppropriate wa	astewater tre	
Los	ss of agricultural	lands	9	Soils and Geolog	У		ning of Green	field lands field lands. Ro	nad
Loss of	natural landscap			Landscape		infr	astructure	neia ianas. Ne	, u u
		Compa	rison of A	lternatives -	Cumula	tive	Effects		
LAP Obj				Possible Cumu	lative Effe	cts			
	Habitat fragmentation	Climate Change	Loss of tranguillity	Deterioration	Deteriorat	ion	Loss of	Loss of	
Option			tranquinty	in drinking water quality	in water quality	r	agricultural lands	natural landscape features	COMMENT
1	-	+	-			r	agricultural	landscape	COMMENT
	-	+	- -			r	agricultural lands	landscape features	Most likely to have significant cumulativ e effects

Key:
+ likely to have no significant effect - likely to have a negative effect 0 neutral ? uncertain

Section 5 - Monitoring Measures:

Introduction

The SEA Directive requires that the significant environmental effects of the implementation of plans are monitored in order to identify, at an early stage, unforeseen adverse effects and to be able to undertake appropriate remedial action. Monitoring can also be used to analyse whether the LAP is achieving its Environmental Protection Objectives and targets, whether such objectives need to be reexamined and whether the proposed mitigation measures are being implemented.

Cork County Council is thus required to monitor the significant environmental effects arising from the implementation of the LAP. This SEA statement identifies the final proposals for monitoring the LAP (see tables on EPOs & monitoring targets and indicators below). These EPOs, monitoring targets and indicators have been revised/updated based on submissions received, issues raised in AA and from consultation with internal sections of the Council. The primary purpose of monitoring is to cross check significant environmental impacts which arise during the implementation stage against those predicted during the preparation stage of the plan.

Monitoring Methodology:

Indicators and Targets

The monitoring proposals are based around the indicators which were chosen earlier in the process but which now have been refined. These indicators allow quantitative measures of trends and progress over time relating to the Environmental Protection Objectives used in the evaluation. Focus will be given to indicators that are relevant to the likely significant environmental effects of implementing the LAP and existing monitoring arrangements will be used in order to monitor the selected indicators. Each indicator to be monitored is accompanied by targets derived from the relevant legislation and from the advice of bodies consulted.

Monitoring Process:

The monitoring process assesses the progress of environmental components of the Plan and environmental targets through monitoring indicators.

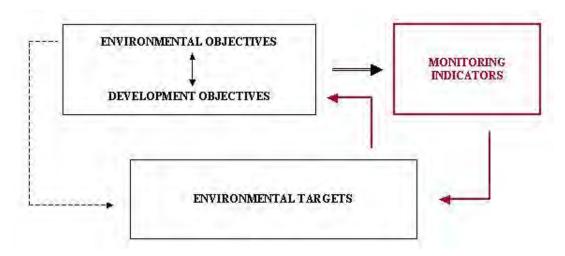


Figure 2

The emphasis in the monitoring of objectives and targets is on those monitoring indicators which are available within Cork County Council.

A dependence on external information may be required in certain areas, however it is difficult to ascertain if this information will become frequently and readily available during the monitoring period. This reality is reflected in the matrix that follows relating to the monitoring indicators.

The monitoring process system can be split into several following stages:

- Collection of data (acquisition)
- Processing the data (analysis of collected data)
- Evaluation and interpretation
- Consideration of consequences (review of Plan policies)

A Geographical Information System (GIS) based monitoring system could be used to monitor and assess the implementation of the plan.

Table 5.1 EPO's, MONITORING TARGETS AND INDICATORS

EPO	ENVIRONMENTAL OBJECTIVE	TARGET	MONITORING INDICATORS	DATA SOURCE	ACCESSIBILITY
B1	Avoid significant adverse impacts (direct, cumulative and indirect) arising from the implementation of this Plan and also protecting the integrity of Protected Sites.	No significant adverse impacts, (direct, cumulative and indirect impacts), to relevant habitats, species or their sustaining resources arising from the implementation of this plan and a provision of adequate and appropriate buffer zones.	Buffer zones provided in relation to development proposed as per Objective: Glanmire X-01 and Little Island I-04 Refer to the monitoring protocols of the AA process.	PPU, National Parks and Wildlife Service.	Potentially available within Cork County Council
B2	Protect habitats and species of biodiversity value where these occur outside designated sites.	No net loss of biodiversity through the implementation of this plan.	Number of new developments arising from the implementation of this plan which include SUDS and discharge within, adjacent to or upstream from Natura 2000 sites with water dependant habitats or species. Number of new water abstractions and increases in water abstractions within or upstream from Natura 2000 sites with water dependant habitats or species. Number of wastewater treatments plants which are operating at over capacity and discharge within or upstream from Natura 2000 sites with water dependant habitats or species.	PPU which will be dependent on the development of a monitoring system and the establishment of existing baselines, National Parks and Wildlife Service.	Potentially available within Cork County Council
S1	To maximise the sustainable re-use of Brownfield lands and the existing built environment, rather than developing Greenfield lands while	The ratio of urban		Cork County Council	Potentially available within Cork County Council

EPO	ENVIRONMENTAL OBJECTIVE	TARGET	MONITORING INDICATORS	DATA SOURCE	ACCESSIBILITY
	also protecting agriculturally productive lands.	housing should not be less than rural housing. Identification of Brownfield lands within the electoral area and the preparation of planning briefs for these lands during the lifetime of the plan	Ratio of urban housing to rural housing during the Plan lifetime (i.e. Ratio of dwellings permitted inside the development boundaries of settlements to dwellings permitted outside the development boundary). Ratio of dwellings permitted inside the development boundaries of Main Towns to dwellings permitted in the Greenbelts of the Main Towns. Number of planning briefs for Brownfield lands prepared during the LAP lifetime		
W1	Improve water quality to comply with the standards of the Water Framework Directive	Improvement or at least no deterioration in water quality in rivers, lakes and groundwater.	Achievement of the Status Objectives of the River Basin Management Plans; % increase or decrease in numbers of water bodies at good status compared with the baselines of 2011. % of municipal wastewater discharges achieving secondary and tertiary treatment in the electoral area. Q values recorded downstream from existing wastewater treatment plants.	Water Framework Directive: RBD's, EPA, Cork County Council	Dependent on external information. Some information potentially available within Cork County Council

EPO	ENVIRONMENTAL OBJECTIVE	TARGET	MONITORING INDICATORS	DATA SOURCE	ACCESSIBILITY
	To manage zones vulnerable to flooding in a sustainable manner	Avoid development in areas at risk of flooding, particularly floodplains identified in the Local Area Plan, unless there are proven wider sustainability grounds that justify appropriate development and where the flood risk can be reduced or managed to an acceptable level without increasing flood risk elsewhere	Amount of new developments permitted within flood plains; Annual costs of damage related to flood events.	OPW, Cork County Council	Dependent on external information. Some information potentially available within Cork County Council
A1	Maintain and where possible improve air quality standards through the reduction of emissions through the promotion of sustainable commuting	To remain within good air quality standards	Air quality monitoring standards within the County.	ЕРА	Dependent on external information
		To increase the number of sustainable cycle friendly measures in the electoral area within the lifetime of the Plan.	Number of cycle friendly measures provided in the electoral area within the lifetime of the Plan.	Cork County Council	Potentially available within Cork County Council
		To increase the number of sustainable walking routes within settlements in the electoral area within the lifetime of the Plan.	Number of walking route provided and constructed within settlements in the electoral area within the lifetime of the Plan.	Cork County Council	Potentially available within Cork County Council
A2	Improve people's quality of life based on high-quality residential, working and recreational environments and on sustainable travel patterns;	Increase modal shift to public transport and Reduction in journey to work (time/distance)	Journey to work times; % of commuters using public transport; % of commuters cycling to work; % of commuters	cso	Dependent on external information

EPO	ENVIRONMENTAL OBJECTIVE	TARGET	MONITORING INDICATORS	DATA SOURCE	ACCESSIBILITY
			walking to work;		
PH1	Ensure that adequate wastewater infrastructure is in place and promote the sustainable development of new infrastructure	Settlements especially main towns, key villages and villages to be adequately served by a public waste water treatment plant over the lifetime of the LAP.	Number of Wastewater Discharge Licences and Certs granted by EPA for wastewater treatment plants. Number of wastewater treatment plants which are in compliance or are in breach of Wastewater Discharge Licences and Certs. % of settlements in electoral area which have an appropriate and sustainable municipal wastewater treatment system that is operating in a sustainable manner and is not operating at capacity or over capacity.	EPA, Engineering Section of Cork County Council	Dependent on external information. Some information available within Cork County Council
PH2	To maintain and improve the quality of drinking water supplies to comply with regulations and to reduce leakages in existing drinking water infrastructure.	To maintain and improve drinking water quality in the LAP to comply with the requirements of the European Communities (Drinking Water) Regulations and to reduce leakage in existing infrastructure.	Number of occurrences in the EPA's Remedial Action List (RALs) over the lifetime of the LAP. % leakage in existing drinking water infrastructure.	EPA, Environmental Section of Cork County Council	Dependent on external information. Some information available within Cork County Council

EPO	ENVIRONMENTAL OBJECTIVE	TARGET	MONITORING INDICATORS	DATA SOURCE	ACCESSIBILITY
CH1	Promote the protection and conservation of the cultural heritage including Gaeltachtaí, architectural and archaeological heritage;	To maintain the number of Architectural Conservation Areas (ACAs) and structures under the Record of Protected Structures (RPS). To maintain and/or increase the extent of existing Architectural Conservation Areas (ACAs) To increase the number of Architectural Conservation Areas (ACAs) in the electoral area and to extend the Record of Protected Structures (RPS). To maintain the archaeological monuments and their setting of identified in the Sites and Monuments Record (SMR) and the Record of Monuments (RMP).	Number of ACAs and Protected Structures added to the County Development Plan or LAPs. Area and extent of existing Architectural Conservation Areas (ACAs). % of villages that have design statements in the Electoral Area The number of monuments on the Sites and Monuments Record (SMR) and the Record of Monuments (RMP) and their Zones of Archaeological Potentials impacted by development granted planning permission.	Heritage Department of Cork County Council The Archaeological Survey of Ireland's data base; Heritage Unit Cork County Council	Potentially available within Cork County Council
L1	Protect natural and historic landscapes and features within them in a sustainable manner	Maintain clear urban/rural distinctions To achieve a higher ratio of residential development in settlements compared to residential development in areas outside settlement development boundaries	Ratio of urban housing to rural housing during the Plan lifetime (i.e. Ratio of dwellings permitted inside the development boundaries of settlements to dwellings permitted outside the development boundary).	Cork County Council	Potentially available within Cork County Council

EPO	ENVIRONMENTAL OBJECTIVE	TARGET	MONITORING INDICATORS	DATA SOURCE	ACCESSIBILITY
		Enhance provision of, and access to, green space within the development boundary of Main Towns in the Electoral Area.	Number of passive and active recreational uses (including sporting facilities) that have been provided and made available to public within the development boundary of Main Towns in the Electoral Area over the lifetime of the Plan.	Cork County Council	Potentially available within Cork County Council
M1	To minimise waste production and reduce the volume of waste to landfill and to operate sustainable waste management practices	To promote sustainable waste management infrastructure and practices by increasing the number of bring banks, civic amenity facilities and other recycling and waste reduction facilities provided in the electoral area during the lifetime of the Plan.	The number of bring banks, civic amenity facilities and other recycling and waste reduction facilities provided in the electoral area during the lifetime of the Plan. % landfill waste % of waste recycled % diversion of biodegradable waste from landfill	Environmental Section of Cork County Council	Potentially available within Cork County Council

Appendix One

SEA Screening of the Proposed Amendments

Proposed	No likely interaction with	Likely to improve	Potential Conflict with	Uncertain interaction	
Amendme	status of EPOs	status of	status of EPOs	with status	Conclusion
nt		EPOs		of EPOs	
ВУ	B1 B2 S1 W1 W2				
01.06.01	PH1 PH2 A1 A2				Screened Out
01.00.01	CH1 L1 M1				
ВУ	B1 B2 S1 W1 W2				
01.06.02	PH1 PH2 A1 A2				Screened Out
01.00.02	CH1 L1 M1				
ВҮ	B1 B2 S1 W1 W2				
01.07.01	PH1 PH2 A1 A2				Screened Out
	CH1 L1 M1				
ВҮ	B1 B2 S1 W1 W2				
01.07.02	PH1 PH2 A1 A2				Screened Out
	CH1 L1 M1				
ВҮ	B1 B2 S1 W1 W2				
01.07.03	PH1 PH2 A1 A2				Screened Out
	CH1 L1 M1				
ВУ	B1 B2 S1 W1 W2				
01.07.04	PH1 PH2 A1 A2				Screened Out
02.07.04	CH1 L1 M1				
ВУ	B1 B2 S1 W1 W2				
01.07.05	PH1 PH2 A1 A2				Screened Out
	CH1 L1 M1				
BY.02.02.0	B1 B2 S1 W1 W2				
1	PH1 PH2 A1 A2				Screened Out
	CH1 L1 M1				
BY.02.02.0	B1 B2 S1 W1 W2				
2	PH1 PH2 A1 A2				Screened Out
	CH1 L1 M1				
BY.02.02.0	B1 B2 S1 W1 W2				
3	PH1 PH2 A1 A2				Screened Out
	CH1 L1 M1				
BY.02.02.0	B1 B2 S1 W1 W2				6
4	PH1 PH2 A1 A2				Screened Out
	CH1 L1 M1				
BY.02.02.0	B1 B2 S1 W1 W2				0
5	PH1 PH2 A1 A2				Screened Out
	CH1 L1 M1				
BY.03.01.0	B1 B2 S1 W1 W2				Companyation
1	PH1 PH2 A1 A2				Screened Out
	CH1 L1 M1				
BY.03.01.0	B1 B2 S1 W1 W2				Company
2	PH1 PH2 A1 A2				Screened Out
	CH1 L1 M1				

	A. 191 1	T	Ta	T	
Proposed	No likely	Likely to	Potential	Uncertain	
Amendme	interaction with	improve	Conflict with	interaction	Conclusion
nt	status of EPOs	status of	status of EPOs	with status	Conclusion
110		EPOs		of EPOs	
BY.03.01.0	B1 B2 S1 W1 W2				
3	PH1 PH2 A1 A2				Screened Out
	CH1 L1 M1				
	B1 B2 S1 W1 W2				
BY.03.01.0	PH1 PH2 A1 A2				Screened Out
4	CH1 L1 M1				
	24 22 24 114 114				
BY.03.01.0	B1 B2 S1 W1 W2				
5	PH1 PH2 A1 A2				Screened Out
	CH1 L1 M1				
			B1 W1 PH1	B2 A1 A2 L1	Possible
BY.03.02.0			PH2	M1 CH1	environmental
1					effects
	D1 D2 C1 W/1 W/2				identified
BY.03.02.0	B1 B2 S1 W1 W2 PH1 PH2 A1 A2				Screened Out
2	CH1 L1 M1				Screened Out
	B2		B1 S1 W1 W2		Possible
BY.03.02.0	BZ		PH1 PH2 A1 A2		environmental
					environmental
3			CH1 L1 M1		
	B1 B2 S1 W1 W2				identified
BY.03.02.0	PH1 PH2 A1 A2				Screened Out
4	CH1 L1 M1				Screened Out
	CHILINI		B1 W1 PH1	B2 A1 A2 L1	Possible
ВҮ			PH2	M1 CH1	environmental
03.02.05			1112	IVII CITI	effects
03.02.03					identified
	B1 B2 S1 W1 W2				Screened Out
BY.03.02.0	PH1 PH2 A1 A2				
6	CH1 L1 M1				
	B1 B2 S1 W1 W2				
BY.03.02.0	PH1 PH2 A1 A2				Screened Out
7	CH1 L1 M1				
			B1 W1 PH1	B2 A1 A2 L1	Possible
BY.03.02.0			PH2	M1 CH1	environmental
8					effects
				<u> </u>	identified
BY.03.03.0	B1 B2 S1 W1 W2				Screened Out
_	PH1 PH2 A1 A2				
1	CH1 L1 M1				
BY.03.03.0	B1 B2 S1 W1 W2				
2	PH1 PH2 A1 A2				Screened Out
	CH1 L1 M1				
BY.03.03.0	B1 B2 S1 W1 W2				
3	PH1 PH2 A1 A2				Screened Out
3	CH1 L1 M1				

	No likely	Likely to	Potential	Uncertain	
Proposed	interaction with	improve	Conflict with	interaction	
Amendme	status of EPOs	status of	status of EPOs	with status	Conclusion
nt		EPOs		of EPOs	
BY.03.03.0	B1 B2 S1 W1 W2				
4	PH1 PH2 A1 A2				Screened Out
-	CH1 L1 M1				
BY.03.03.0	B1 B2 S1 W1 W2				
5	PH1 PH2 A1 A2				Screened Out
	CH1 L1 M1 B1 B2 S1 W1 W2				
BY.03.04.0	PH1 PH2 A1 A2				Screened Out
1	CH1 L1 M1				Screened Out
	B1 B2 S1 W1 W2				
BY.03.04.0	PH1 PH2 A1 A2				Screened Out
2	CH1 L1 M1				Screened out
	B1 B2 S1 W1 W2				
BY.03.04.0	PH1 PH2 A1 A2				Screened Out
3	CH1 L1 M1				
DV 03 04 0	B1 B2 S1 W1 W2				
BY.03.04.0 3	PH1 PH2 A1 A2				Screened Out
3	CH1 L1 M1				
BY.03.04.0	B1 B2 S1 W1 W2				
4	PH1 PH2 A1 A2				Screened Out
-	CH1 L1 M1				
BY.03.04.0	B1 B2 S1 W1 W2				
5	PH1 PH2 A1 A2				Screened Out
	CH1 L1 M1				
BY.03.04.0	B1 B2 S1 W1 W2				Screened Out
6	PH1 PH2 A1 A2 CH1 L1 M1				Screened Out
	B2		B1 S1 W1 W2		Possible
BY.03.04.0	DZ		PH1 PH2 A1 A2		environmental
7			CH1 L1 M1		effects
			CHILINI		identified
DV 03 05 0	B1 B2 S1 W1 W2				Screened Out
BY.03.05.0	PH1 PH2 A1 A2				
1	CH1 L1 M1				
BY.03.05.0	B1 B2 S1 W1 W2				Screened Out
2	PH1 PH2 A1 A2				
	CH1 L1 M1				
BY.03.05.0	B1 B2 S1 W1 W2				Screened Out
3	PH1 PH2 A1 A2				
	CH1 L1 M1				
BY.03.05.0	B1 B2 S1 W1 W2				Carrage 10
4	PH1 PH2 A1 A2				Screened Out
	CH1 L1 M1 B1 B2 S1 W1 W2				
BY.03.05.0	PH1 PH2 A1 A2				Screened Out
5	CH1 L1 M1				Screened Out
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Proposed Amendme nt	No likely interaction with status of EPOs	Likely to improve status of EPOs	Potential Conflict with status of EPOs	Uncertain interaction with status of EPOs	Conclusion
BY.03.33.0			B1 B2 S1 W1		Possible
1			W2 PH1 PH2		environmental
_			A1 A2 CH1 L1		effects
			M1		identified
BY.03.34.0			B1 B2 S1 W1		Possible
1			W2 PH1 PH2		environmental
_			A1 A2 CH1 L1		effects
			M1		identified
BY.03.25.0	B1 B2 S1 W1 W2				
D1.03.23.0	PH1 PH2 A1 A2				Screened Out
1	CH1 L1 M1				
BY.03.28.0	B1 B2 S1 W1 W2				
1	PH1 PH2 A1 A2				Screened Out
1	CH1 L1 M1				

Mitigation Measures

There are a number of concerns regarding the following amendment reference numbers: BY 03.33.01 and BY 03.34.01.

It is considered that these proposals to include new settlements in the settlement network would lead to

- a) further urban generated housing,
- b) result in unsustainable travelling patterns,
- c) proliferation of one off housing and individual treatment systems and consequential impacts on water quality
- d) reduction in agricultural productive soil,
- e) reduction in greenbelt area.

Mitigation Measure: omit amendments BY 03.33.01, and BY 03.34.01.

There are concerns regarding amendment reference number: **BY 03.02.01, BY 03.02.05 and BY 03.04.01** due to the change in zonings.

Mitigation Measure: omit amendment BY 03.02.01, BY 03.02.05 and BY 03.04.01

There are a number of concerns regarding the following amendment reference numbers: BY 03.02.03, BY 03.04.07, BY 03.06.01, BY 03.10.02 and BY 03.14.01.

Significant environmental impacts are likely due to:

- a) Concerns over wastewater facilities to deal with additional discharges arising from any future development of these areas
- b) possible negative impacts on water quality resulting from additional wastewater discharges,
- c) may lead to urban sprawl rather than consolidation of the settlement
- d) reduction in agricultural productive soil.

Mitigation Measure: omit amendments BY 03.02.03, BY 03.04.07, BY 03.06.01, BY 03.10.02 and BY 03.14.01.

There are concerns regarding amendment reference number: BY 03.02.08

Significant environmental impacts are likely due to:

- a) Concerns over wastewater facilities to deal with additional discharges arising from any future development of these areas
- b) possible negative impacts on water quality resulting from additional wastewater discharges,
- c) may lead to urban sprawl rather than consolidation of the settlement
- d)reduction in agricultural productive soil.
- e) located within Banduff wetland

Mitigation Measure: omit amendment BY 03.02.08

Colour pages to be agreed with printer

Colour pages to be agreed with printer

Blarney Electoral Area Local Area Plan

Strategic Flood Risk Assessment

August 2011

Document Verification Page 1 of 1

Job Title: B	larney El	ectoral Are	a Local Area F	Plan Strateg	ric Flood Risk A	ssessment
Document '	Title:					
Blarney Ele	ctoral Ar	ea Local A	rea Plan			
Strategic Fl	ood Risk	Assessme	nt.			
Document	Ref:					
Strategic Fl	ood Risk	Assessme	nt.			
Revision	Date	Filename	: :			
1.2		Description:				
		This report sets out the process involved in assessing the				
lands zoned within the Blarney Electoral Area for potential						
		flood risk.				
			Prepared	Drawn	Checked by	Approved
			by	by		by
1.2	Δυσ	Name	PK	N/A	ΔН	ΔН

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Section 1 Introduction

1.1 Scope and Objectives

- 1.1.1 As part of the review of its Electoral Area Local Area Plans and in order to meet the needs of the Strategic Environmental Assessment process and the requirements of the Department of the Environment, Heritage and Local Government / Office of Public Works Guidelines, "The Planning System and Flood Risk Management" (2009), Cork County Council undertook a county wide Strategic Flood Risk Assessment. This assessment provides a broad assessment of flood risk within the county and has informed strategic land-use planning decisions within the local area plan process.
- 1.1.2 The assessment provides for an improved understanding of flood risk issues within the County and includes a series of flood extent maps covering the main settlements. The maps identify the extent of floodplains that should be safeguarded from development and will support the application of the sequential approach, and the justification test as appropriate, in areas where development is proposed.
- 1.1.3 This report sets out how the Flood Risk Assessment was undertaken, as well as how its findings were addressed and integrated into the Blarney Local Area Plan. The report should be read in conjunction with the Blarney Local Area Plan and the associated maps. The Electoral Area Map, on page iii of the Local Area Plan, identifies the specific areas covered by the Flood Risk Assessment.

1.2 Report Structure

- 1.2.1 Section 2 of this report provides a brief introduction to the Blarney Electoral Area, identifying the settlement hierarchy and the key population and household growth targets for the respective categories of settlement with the settlement hierarchy.
- 1.2.2 Section 3 examines the main sources of flood risk within the electoral area and recent flood events.
- 1.2.3 Section 4 will examine how the issue of managing flood risk was addressed in the review of the Blarney Local Area Plan and outlines the main provisions of the adopted strategy.
- 1.2.4 Section 5 will set out what this assessment has achieved in terms of managing the adverse effects of flooding within the Blarney Electoral Area. It will also identify how the flood risk management strategy identified in the local area plan should be reviewed and monitored over the lifetime of the plan.

1.3 The Planning System and Flood Risk

1.3.1 The Planning System and Flood Risk Management: Guidelines for Planning Authorities, published in November 2009, describe flooding as a natural process that can occur at any time and in a wide variety of locations. Flooding can often be beneficial, and many habitats rely on periodic inundation. However, when flooding interacts with human development, it can threaten people, their property and the environment. Flooding may be from rivers, the sea, groundwater, sewers or

- overland flow caused by intense or prolonged periods of rainfall. The frequency and severity of flooding is likely to increase in the future, due to the effects of climate change.
- 1.3.2 The Guidelines describe good flood risk practice in planning and development management and seek to integrate flood risk management into the planning process, thereby assisting in the delivery of sustainable development. Planning authorities are directed to have regard to the guidelines in the preparation of Development Plans and Local Area Plans, and for development control purposes. For this to be achieved, flood risk must be assessed as early as possible in the planning process.
- 1.3.3 Paragraph 1.6 of the Guidelines states that the core objectives are to:
 - "avoid inappropriate development in areas at risk of flooding;
 - avoid new developments increasing flood risk elsewhere, including that which may arise from surface run-off;
 - ensure effective management of residual risks for development permitted in floodplains;
 - avoid unnecessary restriction of national, regional or local economic and social growth;
 - improve the understanding of flood risk among relevant stakeholders; and
 - ensure that the requirements of EU and national law in relation to the natural environment and nature conservation are complied with at all stages of flood risk management".
- 1.3.4 The guidelines aim to facilitate 'the transparent consideration of flood risk at all levels of the planning process, ensuring a consistency of approach throughout the country. The 'Planning System and Flood Risk Management' works on a number of key principles, including:
 - Adopting a staged and hierarchical approach to the assessment of flood risk;
 - Adopting a sequential approach to the management of flood risk, based on the frequency of flooding (identified through Flood Zones) and the vulnerability of the proposed land use.

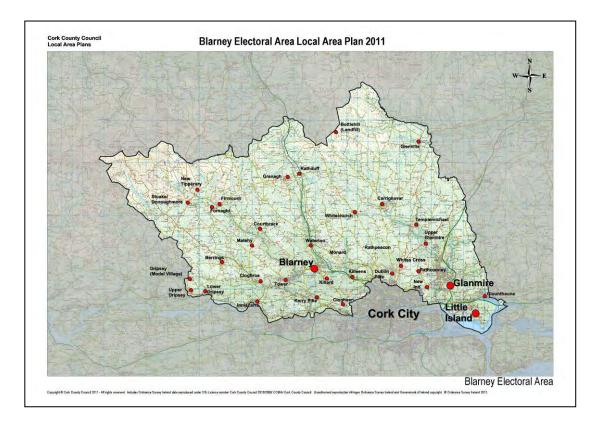
1.4 Definition of Flood Risk

- 1.4.1 Prior to discussing the management of flood risk, it is helpful to understand what is meant by the term. It is also important to define the components of flood risk in order to apply the principles of the Planning System and Flood Risk Management in a consistent manner.
- 1.4.2 Flood risk is generally accepted to be a combination of the likelihood of flooding and the potential consequences arising, and is normally expressed in terms of the following relationship:

Flood risk = Probability of flooding x Consequences of flooding

- 1.4.3 Likelihood of flooding is normally defined as the percentage probability of a flood of a given severity occurring in any given year. For example, a 1% probability indicates the severity of a flood that is expected to be exceeded on average once in 100 years, i.e. it has a 1 in 100 chance of occurring in any given year.
- 1.4.4 In the Local Area Plan, flood risks are defined in relation to the following zones;
 - **Flood Zone A:** where the probability of flooding from rivers and the sea is highest (greater than 1% or 1 in 100 for river flooding or 0.5% or 1 in 200 for coastal flooding);
 - Flood Zone B: where the probability of flooding from rivers and the sea is moderate (between 0.1% or 1 in 1000 and 1% or 1 in 100 for river flooding or between 0.1% or 1 in 1000 and 0.5% or 1 in 200 for coastal flooding);
 - Elsewhere, sometimes referred to as Zone C, the probability of flooding from rivers and the sea is low (less than 0.1% or 1 in 1000 for both river and coastal flooding). This zone covers all areas of the plan which are not in zones A or B.
- 1.4.5 Consequences of flooding depend on the hazards caused by flooding (depth of water, speed of flow, rate of onset, duration, wave-action effects, water quality) and the vulnerability of receptors (type of development, nature, e.g. age-structure, of the population, presence and reliability of mitigation measures etc).
- 1.4.6 The 'Planning System and Flood Risk Management' provides three vulnerability categories, based on the type of development, which are detailed in table 3.1 of the Guidelines, and are summarised as:
 - Highly vulnerable, including residential properties, essential infrastructure and emergency service facilities;
 - Less vulnerable, such as retail and commercial and local transport infrastructure
 - Water compatible, including open space, outdoor recreation and essential facilities, such as changing rooms.

Section 2 Local Study Area



2.1 Introduction: The Blarney Electoral Area

- 2.1.1 The Blarney Electoral Area lies within the CASP area and is split between two of the Strategic Planning Areas defined in the County Development Plan 2009, the Metropolitan Strategic Planning Area, and CASP Ring Strategic Planning Area. There is an extensive network of settlements in the electoral area that includes the:
 - Four main towns comprising of Blarney, Cork City North Environs, Monard and Glanmire;
 - three Major Employment Centres comprising of Blarney/Monard, Kilbarry and Little Island;
 - **five Key Villages** comprising of Carrignavar, Glenville, Glounthaune, Grenagh and Tower;
 - seven Villages comprising of Dripsey (including Model Village, Upper and Lower Dripsey), Kerry Pike, Killeens, Stuake/Donoughmore, Upper Glanmire, Whitechurch;
 - nine Village Nuclei comprising of Berrings, Caherlag, Cloghroe, Courtbrack, Firmount, Fornaght, Matehy, New Tipperary and Rathduff and
 - eight Other Locations comprising of Bottlehill, Clogheen, Killard, Inniscarra, Rathcooney, Templemichael, Waterloo and Whites Cross

2.2 Population and Household Growth

2.2.1 The table below summarises the population targets for the Blarney Electoral Area up to 2020, set out in the Cork County Development Plan 2009. The 2020 population target for this electoral area is 64,934 persons, a 51% increase over 14 years. To make the best use of public investment in infrastructure and to maintain a good standard of environment, 92 % of this growth will be concentrated in the main urban areas, reflecting the strategic aim of both the CASP Update and the Cork County development Plan 2009 to accelerate the rate of growth in the main towns while still maintaining growth in the rural areas.

Table 2.1 Population Target in Blarney Electoral Area 2006-2020			
Settlement Hierarchy	Population		
Blarney Electoral Area	2006	Growth	2020
		2006-2020	Target
Blarney	2,400	5,133	7,533
Cork North Environs	4,732	4,299	9,031
Glanmire	8,385	2,403	10,788
Monard	0	7,788	7,788
Tower	3,102	558	3,660
		_	
Villages and Rural	27489	1,747	26,134
Total Population	43,006	21,928	64,934

2.2.2 The following table outlines the corresponding households based on the above population targets to 2020. It gives an indication as to the overall requirement of new dwellings in the electoral area as a whole. It is assumed that average household size will continue to fall in line with EU trends and a generous allowance has been made for vacancies in order to accommodate the target population, up to 16,414 new dwellings could be required for the period 2006-2020.

Table 2.2 Households Target in Blarney Electoral Area 2006-2020			
Settlement Hierarchy	Households		
Blarney Electoral Area	2006	Growth	2020
	2006	2006-2020	Target
Blarney	797	2,377	3,174
Cork North Environs	1,572	2,217	3,789
Glanmire	2,786	1,724	4,510
Monard	0	3,279	3,279
Tower	1,030	555	1,585
Villages and Rural	7,316	2,474	9,790
Total Households	13,501	12,626	26,127
New Dwellings		16 414	
Required		16,414	

- 2.2.3 The focus of growth will be along the suburban rail line at Monard, Blarney and Cork City North Environs with over 62% of all new households located along this corridor.
- 2.2.4 In reviewing the Blarney Local Area Plan a detailed assessment of villages was completed which indicated that many villages and smaller settlements could not, for a variety of reasons, accommodate large numbers of dwellings. The Strategy

adopted therefore makes provision for relatively modest growth in the village network. To compensate, increased provision has been made for additional growth in the towns, where infrastructure is more readily available or can more be provided in a more sustainable manner and the extra housing can be more readily assimilated.

2.3 Environment and Heritage

2.3.1 European and National legislation now protect the most valuable of our remaining wild places, through designation of sites as proposed Natural Heritage Areas, candidate Special Areas of Conservation and Special Protection Areas. The current list of protected sites is contained in the County Development Plan 2009 and is shown on the Heritage and Scenic Amenity Maps in Volume 3 in that Plan. Designated sites in the Blarney Electoral Area are detailed in the table below.

Table 2.7 Designated Sites in the Blarney Electoral Area			
Code	Description	Natura 2000 Site	
pNHA 103	Shournagh Valley	No	
pNHA 1799	Ardamadane Wood	No	
pNHA 1857	Blarney Bog	No	
pNHA 1039	Blarney Castle Woods	No	
pNHA 1798	Blarney Lake	No	
pNHA 1054	Glanmire Woods	No	
pNHA 1082	Dunkettle Shore	No	
pNHA 1074	Rock Farm Quarry	No	
pNHA 94	Lee Valley	No	
pNHA 79	Bride/Bunaglanna Valley	No	
SAC 1058	Great Island Channel	Yes	
SAC 2170	Blackwater River	Yes	
SPA 4030	Cork Harbour	Yes	

- 2.3.2 To date, sites of geological interest have not been comprehensively covered by the existing nature conservation designations. Cork County Council recognises the importance of geological heritage and to this end has listed in the County Development Plan 2009 the important geological features within the County with the intention of maintaining their possible conservation value.
- 2.3.3 In terms of built heritage, there are numerous recorded monuments and protected structures throughout the electoral area and these are detailed in the County Development Plan 2009.

2.4 Infrastructure

2.4.1 There are significant infrastructural deficiencies within the electoral area in terms of waste water treatment and water supply services that will need to be addressed over the lifetime of the local area plan if the growth targets for the electoral area are to be achieved. Particular infrastructural improvements will include upgrading of waste water treatment plant facilities and the rolling out of water conservation measures across the Electoral Area.

Section 3 Flood Risk in Blarney

3.1 Flooding Data

- 3.1.1 In order to provide information about possible flood risks, the County Council, in close association with the OPW, compiled a series of indicative maps showing areas that could be at risk from flooding. To facilitate the preparation of the Blarney Local Area Plan, the maps concentrated on the areas close to recognised settlements. The information about flood risks that has been used in the preparation of this plan has been collated from a number of sources including:
 - Draft River Lee Catchment Flood Risk Assessment and Management Study (Lee CFRAMS) commissioned and published by the Office of Public Works. The CFRAM Study for the River Lee Catchment is one of three such studies being carried out as 'pilots' for a national programme of similar studies to be implemented over the coming years. The methodology of the CFRAM Study is based on 'best international practice' for the assessment and management of flood risks and includes data for the fluvial and tidal flood risks in the catchment. It is anticipated that this study will be finalised during early 2011 and that the final outputs of the study can be included in this plan before it is finalised.
 - 'Floodmaps.ie' The national flood hazard mapping website operated by the Office of Public Works, where information about past flood events is recorded and made available to the public. 'Flood point' information available on this site has not been included for technical reasons.
 - 'Flood Hazard Mapping' for fluvial and tidal areas commissioned by Cork County Council from JBA Consulting. These indicative flood extent maps provide flood extent information for river catchments where a more detailed CFRAMS study is not currently available.
- 3.1.2 In line with advice from the OPW, the County Council has amalgamated the information from these sources into a single 'Indicative Flood Extent Map' for the settlements of this electoral area. The map has been used as the basis for the flood risk assessment of this plan and extracts from it appear on the various maps prepared for the settlements of this electoral area.

3.2 Sources of Flooding

- 3.2.1 This SFRA has primarily reviewed flood risk from fluvial and coastal sources. Flood risks from pluvial and groundwater sources or from drainage systems, reservoirs and canals and other artificial or man-made systems have not been considered in detail in this study and risks must be individually assessed at the project stage.
- 3.2.2 This approach has been adopted for two main reasons. Firstly, the review of flooding in the Blarney Electoral Area shows rivers and coastal flooding to be the most common source of damage. It is these sources of flooding that have been taken account of in the Local Area Plan process. Other sources of flooding are considered to present a lesser risk in this Electoral Area but should be considered at the planning application stage. Secondly, Flood Zones in the 'Planning System and Flood Risk Management' are defined on the basis of fluvial, and where appropriate, tidal flood risk. In addition, the SFRA should be based on readily derivable information,

and records and indicators for fluvial flood risk are generally more abundant than for other sources of flooding.

3.3 Fluvial Flooding

- 3.3.1 Flooding of watercourses is associated with exceeding channel capacity during higher flows. The process of flooding on watercourses depends on a number of characteristics associated with the catchment including; geographical location and variation in rainfall, steepness of the channel and surrounding floodplain and infiltration and rate of runoff associated with urban and rural catchments. Generally there are two main types of catchments; large and relatively flat or small and steep, the two giving two very different responses during large rainfall events.
- 3.3.2 In a large, relatively flat catchment, flood levels will rise slowly and natural floodplains may remain flooded for several days, acting as the natural regulator of the flow. In small, steep catchments, local intense rainfall can result in the rapid onset of deep and fast-flowing flooding with little warning. Such "flash" flooding, which may only last a few hours, can cause considerable damage and possible threat to life.
- 3.3.3 The form of the floodplain, either natural or urbanised, can influence flooding along watercourses. The location of buildings and roads can significantly influence flood depths and velocities by altering flow directions and reducing the volume of storage within the floodplain. Critical structures such as bridge and culverts can also significantly reduce capacity creating pinch points within the floodplain. These structures are also vulnerable to blockage by natural debris within the channel or by fly tipping and waste.
- 3.3.4 Rivers are the primary cause of flooding in the Blarney Electoral Area; with flood events attributed to fluvial sources ranging from the major rivers, including the River Lee, the Dripsey River and the Shournagh River, to the smaller tributaries, drains and natural lakes.

Rivers in the Blarney Electoral Area.

- 3.3.5 The total length of rivers within the study area is 572.3km; of which 519.3km are less then 10m in width and 53km are greater than 10m in width. The Lower River Lee system runs west-east through Cork City and demarcates the southern boundary of the Blarney Area. The inflow of the Dripsey River to the Inniscarra Reservoir, demarcates the south-western corner of the electoral area. The Dripsey in turn flows north-south along the boundary of Electoral Area. The Dripsey River is dammed into a small lake habitat in its upper reaches in the townland of Deshart; downstream of this it takes a very natural stream profile.
- 3.3.6 The Lower Lee system runs between Inniscarra Dam and the City boundary before entering Lough Mahon where extensive areas of mudflat define the shallows of the inner harbour between Dunkettle, Fota Island and Glounthaune. The Lower River Lee is joined by its largest tributary the Shournagh River at Leemount Bridge; the Shournagh joins the River Lee from the north at a point approximately 4km south of Blarney. The Shournagh is in turn fed by three large tributaries; the Martin, Blarney and Owenagearagh Rivers. The Shournagh is also fed by a very small low order tributary known as Fiddler's Brook that runs north-south entering the Shournagh directly south of the townland of Courtbrack.

- 3.3.7 A small river known as the 'North Bride' rises directly south of Whitechurch village and ultimately drains into the Lee at Pope's Quay in the city centre. Its upper reaches contain trout but the stream is impacted by urban encroachment in Blackpool and becomes extensively culverted before it joins with the River Lee in the city centre. The North Bride is also joined by the Glenamought River, which supports a healthy population of Brown Trout.
- 3.3.8 The rivers north of the Lee follow a typical north-south drainage pattern and all ultimately drain into Cork Harbour with the exception of a number of rivers located in the northwest and northeast of the electoral area. The Ahadallane River, Leopard Stream and Pestingah Stream, run adjacent to the north western boundaries of the electoral area and are tributaries of the Clyda River which itself forms part of the larger River Blackwater catchment.
- 3.3.9 The northeastern boundary of the Blarney electoral district is bordered by the River Bride and its adjoining eastward flowing tributaries, the Toor, Coom, Owenbawn and Glashanabrack Rivers. The Bride itself is a significant tributary of the River Blackwater.
- 3.3.10 The Glashaboy catchment (which includes the Butlerstown River) located immediately east of Cork City, drains the majority of the eastern proportion of the Blarney electoral area.

3.4 Coastal Flooding

- 3.4.1 Coastal flooding, which is caused by higher sea level than normal, largely as a result of storm surge, resulting in the sea overflowing onto the land. Coastal flooding is influenced by the following three factors;
 - High tide level
 - Storm surges caused by high winds
 - Wave action, which is dependant upon wind speed and direction, local topography and exposure
- 3.4.2 In the Blarney Electoral Area, the areas of Glanmire, little Island and Glounthaune are susceptible to tidal flooding. The areas at risk were included as part of the Draft River Lee Catchment Flood Risk Assessment and Management Study.

3.5 Other Sources of Flooding

- 3.5.1 Other sources of flooding including pluvial, ground water, drainage systems and reservoirs are detailed below. Risks from these sources have not specifically addressed in the Flood Risk Assessment undertaken for the Blarney Electoral Area and need to be assessed at the planning application stage.
 - **Pluvial Flooding** of land from surface water runoff is usually caused by intense rainfall that may only last a few hours. The resulting water follows natural valley lines, creating flow paths along roads and through and around developments and ponding in low spots, which often coincide with fluvial floodplains in low lying areas.
 - Groundwater Flooding is caused by the emergence of water originating from underground, and is particularly common in karstic landscapes. This can emerge from either point or diffuse locations. The occurrence of

groundwater flooding is usually very local and unlike flooding from rivers and the sea, does not generally pose a significant risk to life due to the slow rate at which the water level rises. However, groundwater flooding can cause significant damage to property, especial in urban areas and pose further risks to the environment and ground stability. Flooding of this type is not considered a potential risk in the Blarney Electoral Area.

- Flooding from Drainage Systems occurs when flow entering a system, such as an urban storm water drainage system, exceeds its discharge capacity, it becomes blocked or it cannot discharge due to a high water level in the receiving watercourse. Flooding in certain urban areas can also be attributed to sewers. Sewers have a finite capacity which, during certain load conditions, will be exceeded. Sewer flooding problems will often be associated with regularly occurring storm events during which sewers and associated infrastructure can become blocked or fail. This problem is exacerbated in areas with under-capacity systems. In the larger events that are less frequent but have a higher consequence, surface water will exceed the sewer system and flow across the surface of the land, often following the same flow paths and ponding in the same areas as overland flow.
- Foul sewers and surface water drainage systems are spread extensively across the urban areas with various interconnected systems discharging to treatment works and into local watercourses. There are limited records of flooding from drainage systems in the Blarney Electoral Area. An independent study by White Young and Green Ireland did identify a potential floor risk in Cork City North Environs as a result of inadequacies in this infrastructure. This affects the Glen Stream which forms part of River Bride Catchment. The stream drains part of Cork City Suburbs and flows on an east west axis, joining the River bride in the Blackpool Valley. Problems have been identified with the Ballyhooley Road Culvert, which consists of an arch and a 1650mm diameter concrete pipe. Should the flood levels predicted by Lee Cframs materialise, the culvert under the Ballyhooley road would have a restricting influence on the flows in the stream and could result in flooding further upstream.
- Flooding from Reservoirs, Lakes and other Artificial Sources can be a major source of flood risk, as demonstrated in the 2009 flooding, when waters released from the Inniscarra dam flooded significant sections of Cork City and some part of the Blarney Electoral Area. Inniscarra reservoir is a very large body of water stretching from Inniscarra village to Carrigadrohid. The probability of a dam failure or breach occurring is very small, and the consequences of such an event were not considered as part of this process. Dripsey Reservoir is an artificial lake created when the Dripsey River was dammed. It is located immediately west of the Model Village on the western perimeter of the Blarney Electoral Area. Blarney Lake is located in the grounds of Blarney Castle; at ca. 25 acres in area is one of the largest natural lake habitats in the Blarney Electoral Area. The lake is surrounded by extensive area of wet woodland.

Section 4 Addressing Flood Risk in the Blarney LAP

4.1 Introduction

4.1.1 This section details the approach to Flood Risk Management adopted in the Blarney Electoral Area Local Area Plan.

4.2 Flood Risk Management Strategy

- 4.2.1 In preparing its Local Area Plan strategy for the management of flood risks, the Council has had regard to its obligations under the Guidelines and has conferred with officials of the OPW, the lead agency for flood risk management in Ireland, in completing the county wide assessment of flood risks and in formulating the strategy which has informed the preparation the Local Area Plan.
- 4.2.2 The majority of towns, villages and smaller settlements within the electoral area have a river or stream either running through the built-up area or close by and are inevitably exposed to some degree of flood risk when those rivers or streams overflow their normal course. Similarly, in coastal areas, flooding can periodically occur following unusual weather or tidal events.
- 4.2.3 The approach adopted has generally been to:
 - Include 'Indicative Flood Extent Maps' to Identify the areas within settlements which are at risk of flooding;
 - Avoid development in areas at risk of flooding; and
 - Where development in floodplains cannot be avoided, to take a sequential approach to flood risk management based on avoidance, reduction and mitigation of risk.
- 4.2.4 In response to local circumstances, particularly where there may be some uncertainties in relation to flood risk data or where land has been zoned in a previous plan or planning permission has already been granted, the approach has been modified and lands have been zoned for development with a requirement that a detailed site specific flood risk assessment be carried out at the project stage. This is explained in more detail below.

4.3 Indicative Flood Extent Maps / Flood Zones A & B

- 4.3.1 Completion of the county wide flood risk assessment has provided information in relation to the areas at risk of flooding within the settlements and this has been included within the Local Area Plan in the form of 'Indicative Flood Extent Maps' which provide information on three main areas of flood risk:
 - Zone A High probability of flooding. Most areas of the County that are subject to flood risks fall into this category. Here, most types of development would be considered inappropriate. Development in this zone should be avoided and/or only considered in exceptional circumstances, such as in major urban or town centres, or in the case of essential infrastructure that cannot be located elsewhere. A Justification Test set out in Ministerial Guidelines applies to proposals in this zone. Only water-compatible development, such as docks

- and marinas, dockside activities that require a waterside location, amenity open space, outdoor sports and recreation, would be considered appropriate in this zone.
- Zone B Moderate probability of flooding. In most parts of the County this designation applies only to limited areas of land. In only a few locations do significant sites fall into this category. Here, highly vulnerable development, such as hospitals, residential care homes, Garda, fire and ambulance stations, dwelling houses and primary strategic transport and utilities infrastructure, would generally be considered inappropriate. Less vulnerable development, such as retail, commercial and industrial uses, sites used for short-let for caravans and camping and secondary strategic transport and utilities infrastructure, and water-compatible development might be considered appropriate in this zone.
- Elsewhere (referred to in the Guidelines as Flood Zone C) Localised flooding from sources other than rivers and the coast can still occur and may need to be taken into account at the planning application stage.
- 4.3.2 The inclusion of Indicative Flood Extent maps for the settlements of the electoral area is the first step in managing flood risk in the future. The maps are indicative in nature and are intended to primarily function as a screening tool. The areas at risk may be more or less extensive in practice than indicated in the flood mapping. The mapping will be refined where possible over time as more detailed flood risk assessments are completed by the OPW. The maps do not take into account flood defences or manmade structures such as bridges, weirs or culverts. This is accordance with the requirements of the Guidelines which specify an undefended assessment of risk.
- 4.3.3 Flood risk to each settlement has been appraised based on the Flood Zones which cross the settlement boundary, and is summarised in Table 4.1. Where settlements are identified as being wholly outside flood zone A or B, no further review of fluvial flood risk is required. Where some of the settlement is within either Flood Zone A or B, the need for a further review of flood risk, and the specific zoning objectives, is required.

Table 4.1: Flood Risk by Settlement					
Settlement	Fluvial/Coastal Flood Risk within Development Boundary	Comment			
Main Settlements	Main Settlements				
Blarney	Yes	All development proposals within the			
Cork City North Environs	Yes	Indicative Flood Risk Areas must satisfy the 'Development Plan' justification test for projects in Flood Zone A/B either as part of			
Glanmire	Yes	the preparation of this LAP (see table 4.2) or at the planning application stage. Where			
Little Island	Yes	the 'Development Plan' justification test is satisfied, site specific Flood Risk			
Monard	Yes	Assessment is necessary.			

Table 4.1: Flood Risk by Settlement			
Settlement	Fluvial/Coastal Flood Risk within Development Boundary	Comment	
Key Villages			
Carrignavar	Yes	All development proposals within the Indicative Flood Risk Areas must satisfy the	
Glenville	Yes	'Development Plan' justification test for projects in Flood Zone A/B either as part of	
Glounthaune	Yes	the preparation of this LAP (see table 4.2) or at the planning application stage. Where the 'Development Plan' justification test is satisfied, site specific Flood Risk Assessment is necessary.	
Grenagh	No	Proceed as zoned in the Local Area Plan	
Tower	Yes	All development proposals within the Indicative Flood Risk Areas must satisfy the 'Development Plan' justification test for projects in Flood Zone A/B either as part of the preparation of this LAP (see table 4.2) or at the planning application stage. Where the 'Development Plan' justification test is satisfied, site specific Flood Risk Assessment is necessary.	
Villages			
Dripsey Model Village	Yes	All development proposals within the Indicative Flood Risk Areas must satisfy the 'Development Plan' justification test for	
Upper Dripsey	Yes	projects in Flood Zone A/B either as part of the preparation of this LAP (see table 4.2) or at the planning application stage. Where the 'Development Plan' justification test is satisfied, site specific Flood Risk Assessment is necessary.	
Kerry Pike	No	Proceed as zoned in the Local Area Plan	
Killeens	Yes	All development proposals within the Indicative Flood Risk Areas must satisfy the 'Development Plan' justification test for projects in Flood Zone A/B either as part of the preparation of this LAP (see table 4.2) or at the planning application stage. Where the 'Development Plan' justification test is satisfied, site specific Flood Risk Assessment is necessary.	
Stuake/ Donoughmore	No	Proceed as zoned in the Local Area Plan	

Table 4.1: Flood Risk by Settlement			
Settlement	Fluvial/Coastal Flood Risk within Development Boundary	Comment	
Upper Glanmire	No	Proceed as zoned in the Local Area Plan	
Whitechurch	No	Proceed as zoned in the Local Area Plan	
Village Nuclei			
Berrings	No	Proceed as zoned in the Local Area Plan	
Caherlag	No	Proceed as zoned in the Local Area Plan	
Cloghroe	Yes	All development proposals within the	
Courtbrack	Yes	Indicative Flood Risk Areas must satisfy the 'Development Plan' justification test for	
Firmount	Yes	projects in Flood Zone A/B either as part of the preparation of this LAP (see table 4.2) or at the planning application stage. Where the 'Development Plan' justification test is satisfied, site specific Flood Risk Assessment is necessary.	
Fornaght	No	Proceed as zoned in the Local Area Plan	
Matehy	No	Proceed as zoned in the Local Area Plan	
New Tipperary	Yes	All development proposals within the Indicative Flood Risk Areas must satisfy the 'Development Plan' justification test for projects in Flood Zone A/B either as part of the preparation of this LAP (see table 4.2) or at the planning application stage. Where the 'Development Plan' justification test is satisfied, site specific Flood Risk Assessment is necessary.	
Rathduff	No	Proceed as zoned in the Local Area Plan	

4.4 The Approach to Zoning in the Local Area Plan in Areas at Risk of Flooding

- 4.4.1 Within the areas identified as being at risk (Zone A or B), all proposals for development will need to comply with the Ministerial Guidelines 'The Planning System and Flood Risk Management. In this LAP, proposals for development within the Indicative Flood Risk Areas have been included in the plan where either:
 - The proposal has satisfied the 'Development Plan Justification Test' set out in the Ministerial Guidelines;
 - The proposals stemmed from a similar proposal in a previous plan and has been included in this plan in order to facilitate the local verification of the

Indicative Flood Risk Maps at the project planning/planning application stage; or

- In a limited number of cases, for another reason
- 4.4.2 Generally, the purpose of zoning is to indicate to property owners and members of the public the types of development which the Planning Authority considers most appropriate in each land use category. Zoning is designed to reduce conflicting uses within areas, to protect resources and, in association with phasing, to ensure that land suitable for development is used to the best advantage of the community as a whole.
- 4.4.3 In the preparation of the Blarney LAP, proposed zonings were generally assessed relative to the provisions of the Guidelines and the Justification Test for Development Plans as detailed in the Guidelines. The Justification Test is required in situations where the planning authority needs to consider future development in areas at a high or moderate risk of flooding, for uses or development vulnerable to flooding that would otherwise be inappropriate. In such circumstances, all of the following criteria must be satisfied:
 - the urban settlement is targeted for growth in the NSS, RPGs, or statutory plans defined under the provisions of the Planning and Development Act, 200, as amended.
 - the zoning is required to achieve the proper planning and sustainable development of an urban settlement and is
 - 1. Essential to facilitate the regeneration and/or expansion of the centre of the urban settlement;
 - 2. Comprises significant previously developed and/or under-utilised lands:
 - 3. Is within or adjoining the core of an established or designated urban settlement;
 - 4. Will be essential to achieving compact and sustainable urban growth; and
 - 5. There are no suitable alternative lands for the particular use in areas at lower risk of flooding within or adjoining the core of the urban settlement
 - A flood Assessment to the appropriate level of detail has been carried out as part of the SEA, which demonstrates that flood risk to the development can be adequately managed and the development will not cause adverse impacts elsewhere.
- 4.4.4 In the preparation of the Blarney Local Areas Plans the final element of the justification test, which requires a site specific flood risk assessment to be carried out, was not undertaken. Instead, precautionary text has been included in the specific objective recognising the need for a Site Specific Flood Risk Assessment at the project stage.
- 4.4.5 In some cases, certain zonings were included in areas at risk of flooding, even when such zoning did not pass the Justification Test as a response to a desire to retain those zonings where planning permission had been granted or where the zoning had already been made in a previous plan. This approach also allows for local

ambiguities in the flood risk mapping to be tested at the project stage. Transitional measures have also been included in the Local Area Plan to deal with outstanding planning permissions. Where such zonings are included in the Plan, precautionary text was included in the specific objective to highlight the need for a flood risk assessment at the project stage. Development proposals on zonings within areas at risk of flooding will also be subject to the Development Management Justification Test, details of which are set out in the Guidelines.

4.4.6 The table below lists the specific zoned sites within the Blarney Electoral Area that are located within either Flood Zone A or B and the circumstances of their inclusion.

Table 4.2: Specific land Use Zonings located within Flood Zone A or B				
Settlement	Zoning Objective	Development Plan Justification Test and Other Assessment Criteria	Reason for Inclusion in the LAP	Comment
Blarney	T-01	Justification Test	✓	Only a small part of this site is subject to flood risk. Precautionary text has been included in the specific objective recognising the need for a Site Specific Flood Risk Assessment at the project stage.
		Historic Zoning	n/a	-
		Other	n/a	-
Blarney X-02		Justification Test	✓	Only a small part of this site is subject to flood risk. Precautionary text has been included in the specific objective recognising the need for a Site Specific Flood Risk Assessment at the project stage.
		Historic Zoning	n/a	-
		Other	n/a	-
Cork City North Environs	T-01	Justification Test	√	Precautionary text has been included in the specific objective recognising the need for a Site Specific Flood Risk Assessment at the project stage.

Table 4.2: Specific land Use Zonings located within Flood Zone A or B				
Settlement	Zoning Objective	Development Plan Justification Test and Other Assessment Criteria	Reason for Inclusion in the LAP	Comment
		Historic Zoning	n/a	-
		Other	n/a	-
Glanmire T-02		Justification Test	√	Only a small part of this site is subject to flood risk. Precautionary text has been included in the specific objective recognising the need for a Site Specific Flood Risk Assessment at the project stage.
		Historic Zoning	n/a	-
		Other	n/a	-
Glanmire	C-01	Justification Test	✓	Only a small part of this site is subject to flood risk. Precautionary text has been included in the specific objective recognising the need for a Site Specific Flood Risk Assessment at the project stage.
		Historic Zoning	n/a	-
		Other	n/a	-
Little Island	I-04	Justification Test	√ Not applied	Precautionary text has been included in the specific objective recognising the need for a Site Specific Flood Risk Assessment at the project stage
		Historic Zoning	n/a	-
		Other	n/a ✔	Only a limited part of this site is subject to flooding. The layout of any future development proposals will need to avoid

Table 4.2: Specific land Use Zonings located within Flood Zone A or B				
Settlement	Zoning Objective	Development Plan Justification Test and Other Assessment Criteria	Reason for Inclusion in the LAP	Comment
				inappropriate development in the part of the site at risk of flooding. A site specific flood risk assessment should be undertaken.
Little Island	C-01	Justification Test	√	Only a small part of this site is subject to flood risk. Precautionary text has been included in the specific objective recognising the need for a Site Specific Flood Risk Assessment at the project stage.
		Historic Zoning	n/a	-
		Other	n/a	-

Note:

Proposals for 'open space or outdoor recreation development have not been included in table 4.2 because these are normally water compatible forms of development and, therefore, do not need to be subjected to the 'Development Plan' justification test. However, an appropriate flood risk assessment will be necessary at the project planning/ planning application stage.

4.5 Requirements for Site Specific Flood Risk Assessments

- 4.5.1 Within Indicative Flood Risk Areas, only development proposals that are consistent with a specific zoning objective that satisfied the 'Development Plan Justification Test' as part of this LAP (see table 4.2) may proceed to site specific flood risk assessment at the planning application stage. All other proposals on land that does not benefit from a specific objective (such as land within a development boundary), where the specific objective was brought forward from a previous plan or where the proposal was included in this LAP for another reason must satisfy the 'Development Plan Justification Test' at the planning application stage. Table 4.2 provides detailed guidance.
- 4.5.2 In order to reflect the possibility that the 'Indicative Flood Extent Maps' may inevitably include some localised uncertainties, the site-specific flood risk assessment process is divided into two stages. The initial stage in the process has been provided in order to allow the Indicative Flood Risk Map to be locally verified in

cases of uncertainty. This stage is intended to be carried out relatively quickly and at modest expense.

- 4.5.3 The first stage in the assessment process will include:
 - An examination of all sources of flooding that may affect a particular location, in addition to the fluvial and tidal risk represented in the indicative flood risk maps.
 - A review of all available flood related information, including the flood zone
 maps and historical flood records (from www.floodmaps.ie, and through wider
 internet / newspaper / library search/ local knowledge of flooding in the
 area).
 - An appraisal of the relevance and likely accuracy / adequacy of the existing
 information. For example, if the outline is from CFRAM or other detailed study
 they can be relied on to a greater extent than if they are from other sources.
 - Site cross sections or spot levels, including the river and surrounding lands.
 - Description of the site and surrounding area, including ground conditions, levels and land use.
 - Commentary on any localised uncertainty in the existing flood mapping and other sources of flood risk information and the site area.
 - Proposal as to the appropriate course of action which could be either:
 - further study;
 - revision of proposals to avoid area shown at risk of flooding; or
 - continue with development as proposed (if the site is clearly demonstrated to be outside flood zones A or B and has been shown to be not at flood risk).
- 4.5.4 It is recommended that intending applicants for planning permission should carry out this first stage of the site-specific flood risk assessment process well in advance of the submission of their application for planning permission and that its recommendations should be brought to the attention of Council staff as part of a pre-planning meeting.
- 4.5.5 Where the first stage of the site-specific flood risk assessment indicates further study is required then, if the 'Development Plan Justification Test' was satisfied as part of the making of this LAP (see table 4.2) the normal course of action will be to carry out a detailed site specific flood risk assessment in line with Chapter 5 of the Ministerial Guidelines before an application for planning permission can be considered. If the 'Development Plan Justification Test' was not satisfied as part of this LAP, then it will normally be considered inappropriate to take the proposal to a further stage of assessment unless the County Council has indicated in writing that the proposal is considered to satisfy that test.
- 4.5.6 Where the County Council have indicated in writing that they are in agreement with any proposals for avoidance or that the initial study shows satisfactorily that the site is not at risk of flooding then, subject to other proper planning considerations, an application for planning permission may be favourably considered.

- 4.5.7 Where it can be satisfactorily shown in the detailed site-specific flood risk assessment that the proposed development, and its infrastructure, will avoid significant risks of flooding in line with the principles set out in the Ministerial Guidelines, then, subject to other relevant proper planning considerations, permission may be granted for the development.
- 4.5.8 However, where the site does <u>not</u> benefit from a specific zoning objective and there are significant residual flood risks to the proposed development or its occupiers, conflicting with the approach recommended in the Ministerial Guidelines, it is unlikely that permission will be granted unless all of the following are satisfied:
 - The proposal is within an urban settlement, targeted for growth under the National Spatial Strategy, regional planning guidelines, and statutory plans (including this local area plan).
 - The development of the lands for the particular use or development type is required to achieve the proper planning and sustainable development of the urban settlement and, in particular:
 - Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement;
 - Comprises significant previously developed and/or under-utilised lands;
 - Is within or adjoining the core of an established or designated urban settlement;
 - Will be essential in achieving compact and sustainable urban growth; and
 - There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.

Section 5 Flood Risk in the Future

5.1 What has the LAP Achieved

5.1.1 The inclusion of Indicative Flood Extent maps for the settlements of the electoral area is the first step in managing flood risk in the future. The maps are primarily intended to function as a screening tool. They are not a substitute for detailed hydraulic modelling, such as may be required to assess the level of flood risk for a specific development. The flood maps should be used to guide decision making when determining whether a detailed Flood Risk Assessment is required for any given site. The maps are intended for guidance, and cannot provide details for individual properties.

5.2 Flood Risk and Development Management

- 5.2.1 The following key requirements for the management of development in areas at risk of flooding shall be adhered to:
 - a) All development proposals within, or incorporating, areas at risk of flooding are required to undertake a flood risk assessment. This can be carried out in two stages as outlined in section 4.5 of this document.
 - b) Where the first stage of the site-specific flood risk assessment indicates further study is required then the normal course of action will be to proceed to a Stage Two Strategic Flood Risk Assessment. The findings of this assessment will need to demonstrate that the proposed development satisfies all the provisions of the Development Management Justification Test, as detailed in the Guidelines.
 - c) Thereafter, where development has to take place in areas at risk of flooding, the risks should be mitigated and managed through the location, layout and design of the development to reduce such risks to an acceptable level.
 - d) Minor proposals for development, for example small extensions to existing houses or changes of use, in areas at moderate to high risk of flooding should be assessed in accordance with Planning Guidelines: The Planning System and Flood Risk Management.
 - e) Where flood risk constitutes a significant environmental effect of a development proposal, a sub-threshold EIS may be triggered. Screening for EIA should be an integral part of all planning applications in areas at risk of flooding.
 - f) Any proposal in an area at risk of flooding that is considered acceptable in principle must demonstrate that appropriate mitigation measures can be put in place and that residual risks can be managed to acceptable levels. Addressing flood risk in the design of new development should consider the following:
 - Locating development away from areas at risk of flooding, where possible.
 - Substituting more vulnerable land uses with less vulnerable ones.
 - Identifying and protecting land required for current and future flood risk management, such as conveyance routes, flood storage areas and flood protection schemes etc.

- Addressing the need for effective emergency response planning for flood events in areas of new development.
- g) Site layout, landscape planning and drainage of new development must be closely integrated to play an effective role in flood-reduction. As such, proposals should clearly indicate:
 - The use of Sustainable Drainage Systems (SuDS) to manage surface water run-off.
 - Water conveyancing routes free of barriers such as walls or buildings.
 - The signing of floodplain areas to indicate the shared use of the land and to identify safe access routes.
- h) To ensure that adequate measures are put in place to deal with residual risks, proposals should demonstrate the use of flood-resistant construction measures that are aimed at preventing water from entering a building and that mitigate the damage floodwater causes to buildings. Alternatively, designs for flood resilient construction may be adopted where it can be demonstrated that entry of floodwater into buildings is preferable to limit damage caused by floodwater and allow relatively quick recovery. Such measures include the design and specification of internal building services and finishes. Further detail on flood resilience and flood resistance are included in the Technical Appendices of the Planning Guidelines, The Planning System and Flood Risk Management.

5.3 Monitoring and Review

5.3.1 Information in relation to flood risk will be monitored and reviewed by the Council and the Flood Risk Assessment will be updated as appropriate as new information becomes available. There are a number of key outputs from possible future studies and datasets which could inform any update of the FRA as availability allows. A list of potential sources of information which will inform an FRA review is provided in the table below.

Potential Sources of information on Flood Risk				
Data	Source	Timeframe		
Preliminary flood risk maps - including pluvial and groundwater	OPW under the Floods Directive	2013		
CFRAM Studies a) Preliminary Flood Risk Assessment	OPW	a) End 2011		
b) production of the flood mapsc) production of Flood Risk management		b) 2013 c) 2015		
County Development Plan Updates	Cork County Council	2012		
Flood maps of other sources, such as canal breach and drainage networks	Various	Unknown		
Significant flood events	Various	Unknown		
Changes to Planning and / or Flood Management Policy	DoEHLG / OPW / Cork County Council	Unknown		
SFRAs for Electoral Area Local Area Plans	Cork County Council	Upon LAP review		
SFRAs for Town Plans	Cork County Council / Town Councils	Upon Plan review		
Detailed FRAs	Various	Unknown		
Flood Defence Feasibility / Design Reports	OPW primarily	Unknown		

