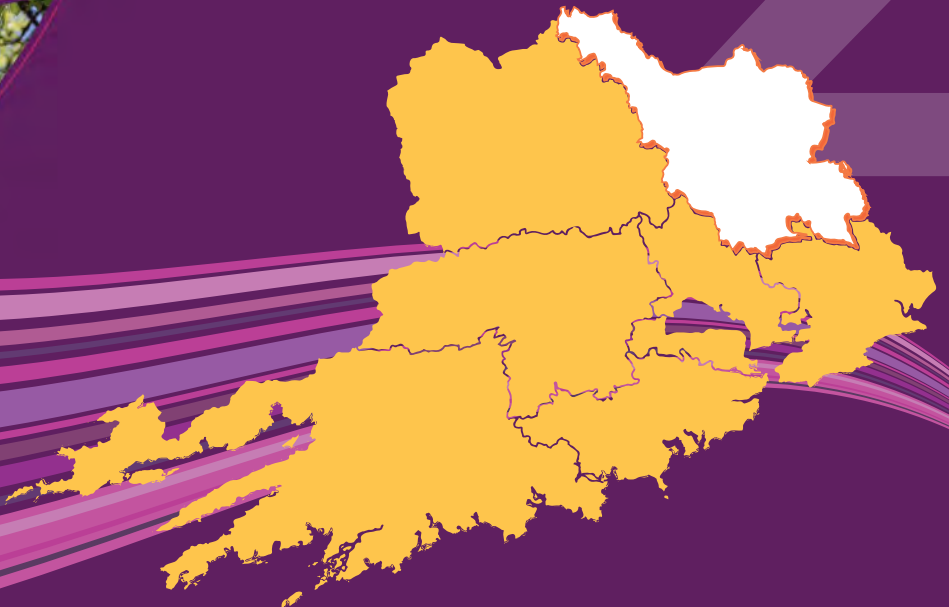




**Cork  
County Council**  
Comhairle Contae Chorcaí

**Draft  
Fermoy  
Municipal District  
Environmental Reports**



16<sup>th</sup> November 2016

**VOLUME TWO  
Environmental Reports**

**2**



## How to make a Submission

The Draft Municipal District Local Area Plan is available from the Council website at [www.corkcoco.ie](http://www.corkcoco.ie). If required, a hard copy of the document may be inspected between the hours of **9.30 a.m. and 4.00p.m.**, from **Wednesday 16<sup>th</sup> November 2016** to **Friday 06<sup>th</sup> January 2017** at the following locations:

- Planning Department, Floor 1, County Hall, Cork.
- Planning Department, Norton House, Skibbereen, Co. Cork.
- Cork County Council Offices, Mallow
- Public Libraries - Please check libraries regarding opening times and availability.

CD copies of the documents may be requested by phone (Tel: 021-4285900) or collected from the Planning Department, Floor 1, County Hall between the hours of **9.30am** and **4.00pm** during the above period.

Submissions or observations regarding the Draft Municipal District Local Area Plan document are hereby invited from members of the public, children, or groups or associations representing the interests of children and other interested parties during the period **Wednesday 16<sup>th</sup> November 2016** to **4.00pm** on **Friday 06<sup>th</sup> January 2017**.

Submissions may be made in either of the following two ways:

- On-line via [www.corkcoco.ie](http://www.corkcoco.ie) following the instructions provided

*OR*

- In written form to the Senior Planner, Planning Policy Unit, Cork County Council, Floor 13, County Hall, Cork. T12R2NC.

All such submissions lodged within the above period and prior to the close of business at **4.00pm on Friday 6<sup>th</sup> January 2017**, will be taken into consideration in the finalisation of the Municipal District Local Area Plan.



# Environmental Reports

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# Fermoy Municipal District

## 1 Strategic Environmental Assessment Environmental Report

### *Sub-Section*

1. Introduction
2. The Draft Fermoy Municipal District Local Area Plan
3. Environmental Baseline
4. Environmental Protection Objectives
5. Alternatives
6. Evaluation of the Draft Local Area Plan
7. Monitoring and Next Steps
8. Non Technical Summary

### **Appendices**

Appendix A: Sample Settlement Enhancement Measures

# Section 1: Introduction

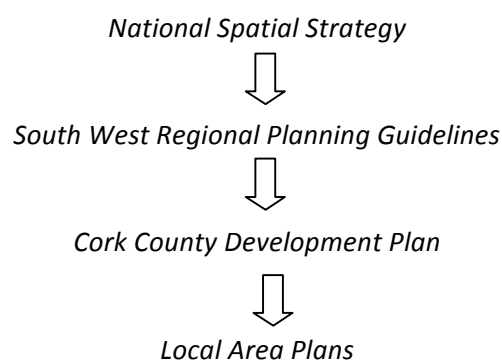
## *Sub-Section*

- 1.1 Introduction
- 1.2 Strategic Environmental Assessment
- 1.3 Stages of SEA
- 1.4 Habitats Directive Assessment
- 1.5 Strategic Flood Risk Assessment
- 1.6 Difficulties Encountered
- 1.7 Overall Approach-Key Policies

# 1 Introduction

## 1.1 Introduction

- 1.1.1 This is the Environmental Report on the strategic environment assessment of the Draft Fermoy Municipal District Local Area Plan 2016 and it describes the assessment of the likely significant effects on the environment of implementing the Draft Plan.
- 1.1.2 Cork County Council sets out its land use planning strategy for the development of the towns and villages of the county in a series of ten Electoral Area Local Area Plans.
- 1.1.3 Local Area Plans sit at the lower end of the planning policy hierarchy and must be consistent with the higher level plans like the County Development Plan and the Regional Planning Guidelines.



- 1.1.4 The most recent Local Area Plans were adopted in 2011. The Plans have a six year life and the Council is now commencing the process of preparing new plans which will be in place by August 2017. Following the re-organisation of local government in 2014, the electoral structure of the County is now based on eight Municipal Districts; see Table 1.1 and Figure 1.1. A new Local Area Plan will be prepared for each of the eight Municipal Districts in the County.
- 1.1.5 The Draft Local Area Plan for Fermoy Municipal District has been prepared, so that once finalised, it can replace the previous Electoral Area Local Area Plan adopted in 2011 and will incorporate and update where appropriate the land use zoning maps and associated policy objectives of the Fermoy Town Development Plan 2009, adopted by the former Fermoy Town Council.

**Table 1.1 : Municipal Districts in County Cork**

Municipal District		Population 2011	Main Towns	No of villages
1	Ballincollig - Carrigaline	71,946	Ballincollig, Carrigaline, Passage West/ Monkstown/ Glenbrook, Cork City South Environs, Ringaskiddy	5
2	Bandon - Kinsale	42,454	Bandon, Kinsale	34
3	Blarney - Macroom	43,398	Blarney, Macroom	54
4	Cobh	53,544	Carrigtwohill, Cobh, Glanmire, Little Island, Cork City North Environs. (Monard is proposed new town and a designated Strategic Development Zone)	24
5	East Cork	42,399	Midleton, Youghal	30
6	<b>Fermoy</b>	<b>42,226</b>	<b>Charleville, Fermoy, Mitchelstown</b>	<b>29</b>
7	Kanturk - Mallow	47,305	Buttevant, Kanturk, Mallow, Millstreet, Newmarket	46
8	West Cork	56,530	Bantry, Castletownbere, Clonakilty, Dunmanway, Schull, Skibbereen	67 & 7 Inhabited Islands



FigureError! No text of specified style in document. 1: Municipal Districts in the County

## 1.2 Strategic Environmental Assessment

- 1.2.1 From a legislative viewpoint, the concept of SEA was initially introduced by way of the Directive 2001/42/EC of the European Parliament and of the Council of 27th June 2001 on the assessment of the effects of certain plans and programmes on the environment (the SEA Directive) which was transposed into Irish legislation by the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations, 2004 (S.I. No. 435 of 2004) and Planning and Development (Strategic Environmental Assessment) Regulations, 2004 (S.I. No. 436 of 2004). Subsequently, these statutory instruments were amended by S.I. 200 of 2011 and S.I. No. 201 of 2011. This SEA is being undertaken under S.I. No. 436 of 2004 (as amended) in accordance with Article 8, insofar as this legislation relates to land-use planning.
- 1.2.2 Strategic Environment Assessment 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 on a par with economic and social considerations. The SEA process is undertaken using a methodical iterative approach. The methodology followed in this report is derived from a number of sources including the appropriate legislation and guidance documents prepared on a national and EU level. Legally, the SEA Directive (2001/42/EC) transposed Irish regulations and associated amendments to provide the legislative framework. The main sources of guidance include the documents detailed below:
- Implementation of SEA Directive (2001/42/EC): Assessment of the Effects of Certain Plans and Programmes on the Environment Guidelines for Regional Authorities and Planning Authorities, Department of Environment, Heritage and Local Government, 2004;
  - SEA Pack and Scoping Guidance Document, EPA.
  - SEA Process Checklist, EPA.

## 1.3 Stages of SEA

- 1.3.1 There are a number of stages involved in the SEA process which are listed as follows:
- (1) Screening
  - (2) Scoping
  - (3) **Collection of baseline data, assessment and compilation of the Environmental Report (current stage).**
  - (4) Consultation with designated environmental authorities on Environmental Report and Draft Plan.
  - (5) Evaluation of submissions received in response to the consultation and amendments to the plan as appropriate with designated environmental authorities.
  - (6) Issuing of the final SEA Statement identifying how environmental considerations have been integrated into the final adopted Plan.
  - (7) Monitoring of significant environmental effects following adoption and implementation of the Plan.
- 1.3.2 This report only deals with stages 1-3.



## Screening

- 1.3.3 The purpose of screening is to determine definitively if there is a necessity for a strategic environmental assessment to be undertaken. There is a mandatory requirement under the Planning and Development (Strategic Environmental Assessment) Regulations, 2004 (as amended) to undertake a strategic environmental assessment in respect of Local Area Plans for areas with a population of 5,000 or more, so in this instance, screening was not required and the SEA process proceeds to the next stage.

## Scoping

- 1.3.4 The process of scoping for SEA is defined as the procedure whereby the range of environmental issues and the level of detail to be included in the Environmental Report are decided upon, in consultation with the prescribed environmental authorities. Scoping is necessary in order to establish, with objectivity, the potential impacts of the implementation of the draft plan on a number of environmental elements from consultations with a range of environmental bodies and the incorporation of associated submissions into the draft plan by way of their inclusion in the Environmental Report.
- 1.3.5 Scoping for the current SEA was commenced with the circulation of a Draft Scoping Report to all the environmental authorities on the 22nd April 2016. A total of two (2) submissions were received from EPA and Irish Water respectively. The Scoping Report was finalised on the 31st May 2016 and issues raised were considered further in the preparation of this Draft Local Area Plan and SEA Environment Report.

## Collection of Baseline Data, Assessment and Environmental Report.

- 1.3.6 In order to assess the likely significant impacts of the Plan, baseline data on the current state of the environment has to be collected and evaluated and the potential effects of the plan predicted and considered. In accordance with legislation and guidance, the existing environment is described with respect to biodiversity, population, human health, fauna, flora, soil, water (surface freshwater, coastal, transitional, groundwater, bathing and water services (drinking water and waste water treatment), air, climatic factors, material assets (roads, transportation, energy etc), cultural heritage (including architectural and archaeological heritage), landscape and the interrelationships between these factors as appropriate. Any existing problems relevant to the new Plan are also identified at this baseline stage.
- 1.3.7 Identification of baseline environmental status provides for the identification of key resources and sensitivities within the Plan area and the identification of potential threats to the environment, thus allowing for the inclusion of mitigation measures that may need to be incorporated into the new Plan to ensure that it does not exacerbate existing problems. Assessment of the baseline environment also enables plan-makers to consider how the environment might evolve in the absence of the proposed plan.
- 1.3.8 As the data is compiled and plan policies evolve the likely significant effects of implementing the plan are identified, described and evaluated and this is described in the Environmental Report.
- 1.3.9 The information to be contained in the environmental report is set out in Annex 1 of the SEA Directive and reproduced in Schedule 2B of the Planning and Development Regulations 2001, as inserted by Article 12 of the Planning and Development (SEA) Regulations 2004). The structure of this report is summarised as follows:

**Table 1: Information to be contained in an Environmental Report**

<b>Item</b>	<b>Information to be contained in an Environmental Report</b>	<b>Relevant Section of Environmental Report</b>
A	Outline of the contents and main objectives of the draft plan and relationship with other relevant plans or programmes.	Section 2: Context of the Plan
B	Description of the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan.	Section 3: Baseline Environment
C	Description of the environmental characteristics of areas likely to be significantly affected.	Section 3: Baseline environment
D	Description of any existing environmental problems which are relevant to the plan including those relating to any areas of a particular environmental importance, such as Natura 2000 sites.	Section 3: Baseline environment
E	Description of environmental protection objectives (EPOs), established at international, EU or national level, which are relevant to the plan and the way those objectives and any environmental considerations have been taken into account during its preparation.	Section 4: EPOs
F	Description of the likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and interrelationships between these factors.	Section 6: Evaluation of Draft Plan
G	Description of the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan.	Section 6: Evaluation of Draft Plan
H	Outline of the reasons for selecting the alternatives considered, with a description of how the assessment was undertaken and including any difficulties encountered in compiling the information.	Section 5: Alternative Scenarios
I	Description of the measures envisaged concerning monitoring of the significant environmental effects of implementation of the plan.	Will be included in SEA Statement once plan finalised
J	A non-technical summary of the above information.	

## Documenting the SEA process

- 1.3.10 The SEA Process produces two documents – this environmental Report which is published with the Draft Municipal District Local Area Plan and an SEA statement which will be published at the end of the process, once the plan is adopted.
- 1.3.11 This Environmental Report will be submitted to the Elected Members with the Draft Municipal District Local Area Plan. The Members must take account of the Environmental Report before the Plan is adopted. When the Plan is adopted, an SEA Statement will be published, summarising, inter alia, how environmental considerations have been integrated into the Plan and the reasons for choosing the Plan as adopted over other alternatives considered in the Environmental Report.
- 1.3.12 Should alterations to the Draft Plan be proposed, there will be a further submission period of not less than four weeks during which time submissions and/or observations may be made on the proposed alterations. If material alterations are proposed they will need to undergo a screening process to determine if SEA is required. The proposed alterations, the screening document and SEA Environmental report, where relevant, will be sent to the Minister, the Board and the prescribed authorities and will be made available for public inspection.

## 1.4 Habitats Directive Assessment

- 1.4.1 Habitats Directive Assessment is an iterative process which runs parallel to and informs both the plan making process and the Strategic Environmental Assessment Process. It involves analysis and review of draft policies as they emerge during each stage of plan making, to ensure that their implementation will not impact on sites designated for nature conservation, nor on the habitats or species for which they are designated. Within this process, regard must also be had to the potential for 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.
- 1.4.2 The results of this analysis and review are presented in a Habitats Directive Screening Report which is contained in Section 3 of Volume Two ‘Environmental Reports’ of this plan. At the end of the plan making process, an Appropriate Assessment Conclusion Statement will be produced which contains a summary of how ecological considerations in relation to Natura 2000 sites have been integrated into the Plan. The final Natura Impact Report and a declaration in relation to the potential for the plan to affect the integrity of Natura 2000 sites within its potential impact zone will also be produced at this time.

## 1.5 Strategic Flood Risk Assessment

- 1.5.1 As part of the review of the Local Area Plan, 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 also undertook a Strategic Flood Risk Assessment (SFRA).
- 1.5.2 The assessment provides for an improved understanding of flood risk issues within the Municipal District and the spatial distribution of flood risk. The SFRA report sets out how the Flood Risk Assessment was undertaken, as well as how its findings were addressed and integrated into the Draft Plan. A copy of the SFRA is included in Volume Two ‘Environmental Reports’ of this Plan. It should be read in conjunction with the Draft Municipal District Local Area Plan.

## 1.6 Difficulties Encountered

- 1.6.1 As part of the LAP preparation process an ecological base line study for the non metropolitan towns was commissioned. The study was not complete in time to inform the review process. Recommendations will be considered at the amendment stage.
- 1.6.2 For the preparation of the Environmental Report no other new research was undertaken and information was gathered from existing sources of data. It should be noted that there are a number of areas where data was not readily available which include:
- No wetland inventory
  - Habitat Mapping for the Non Metropolitan Towns was not finalised in time to inform preparation of report.
  - Information is largely paper based with exceptions of designated areas in digitised format (GIS)
  - Lack of guiding legislation in some areas e.g. soils and their conservation.
  - Limited Air Quality monitoring data for the plan area. The frequency of this monitoring is also identified as an issue.
  - Lack of a data on compliance records for waste water treatment systems on settlements of less than 500 p.e.
  - Lack of information on the effectiveness of existing septic tank systems within the county.
  - The lack of centralised data source for environmental baseline data posed a difficulty to the SEA process.
- 1.6.3 In addition, the status of a number of Transitional and Coastal Water bodies was not available. Not only did this impede the preparation of the baseline assessment, it also highlights a potential problem with the implementation of the Water Framework Directive.

## Section 2: The Draft Fermoy Municipal District Local Area Plan

### *Sub-Section*

- 2.1 Introduction
- 2.2 County Development Plan Strategy
- 2.3 Local Area Plan Strategy
- 2.4 Growth Strategy
- 2.5 Contents of the Draft Plan
- 2.6 Relationship with Other Relevant Plans and Programmes

## 2 The Draft Fermoy Municipal District Local Area Plan

### 2.1 Introduction

- 2.1.1 In accordance with the Planning and Development Act, 2000, as amended, a planning authority may at any time, and for any particular area within its functional area, prepare a local area plan in respect of that area.
- 2.1.2 The current Fermoy Electoral Area Local Area Plan was adopted in 2011 and must be replaced by end of July 2017. On the 14<sup>th</sup> December 2015 the Council commenced a review by publishing a Preliminary Consultation Document for each of the 8 Municipal Districts and placing notices in the press to advise the public of the commencement of a 6 week period of public consultation. Submissions received were considered and included in a Chief Executive's Report to the Elected Members of the Council in April 2016. This was followed up by a series of briefing sessions to allow for consultation with members on issues raised and what needed to be addressed in the Draft Plan.

### 2.2 County Development Plan Strategy

- 2.2.1 A new Cork County Development Plan came into force in 2014. This plan, which has also been subject to Strategic Environmental Assessment and Habitats Directive Assessment, sets out the overall strategy for the proper planning and sustainable development of the County as a whole, including population targets for each Municipal District and each of the main towns. Within each Municipal District a combined population target is also given for the villages and rural areas. The County Development Plan 2014 has also identified the amount of new housing required in each Municipal District / Town /Village to meet the needs of the target population.
- 2.2.2 The County Development Plan has been prepared so that it is consistent with national population targets issued by the Department of the Environment, Community and Local Government and the Regional Planning Guidelines for the South West Region. The Plan also sets out county-wide objectives for issues such as housing, social and community facilities, economy and employment, town centres and retail, energy and digital economy, transportation and mobility, water services, heritage, green infrastructure and the environment and zoning and land use.
- 2.2.3 The new Local Area Plan must be consistent with the objectives of the Cork County Development Plan 2014 and comply with the Local Area Plan Guidelines for Planning Authorities prepared by the Department of Environment, Community and Local Government and various legislative and other policy documents issued by the Government.

### 2.3 Local Area Plan Strategy

#### Overview

- 2.3.1 The Fermoy Municipal District is located north of Cork City and in 2011 the population of the area stood at 42,226. This population is spread across a network of settlements including 3 Main Towns, 29 smaller settlements, and the open countryside, as detailed in Table 2.1. Outside the main towns the

district is largely rural / agricultural in character with almost 45% of the population of the Municipal District living in the open countryside i.e. not within a settlement.

- 2.3.2 Fermoy is the largest town within the Municipal District with a population of 6,489 in 2011. The other Main Towns populations are Mitchelstown (3,677) and Charleville (3,646).
- 2.3.3 At present planning policy for the settlements within the Fermoy Municipal District is spread across the Fermoy Electoral Area Local Area Plan adopted in 2011, the Fermoy Town Development Plan adopted in 2009, the Kanturk Electoral Area Local Area Plan adopted in 2011 and the Mallow Electoral Area Local Area Plan adopted in 2011. The intention is that local planning policy for all settlements within the Municipal District will be contained within the new Fermoy Municipal District Local Area Plan 2017.
- 2.3.4 It is anticipated than many of the provisions of the current local area plan adopted in 2011 will be continued into the new Local Area Plan unless there is a specific requirement for change arising from changes in national planning policy, legislation, government guidelines, changes in local circumstances, needs etc or to reflect the provisions of the new County Development Plan adopted in 2014.

**Table 2.1 Distribution of Population within the Fermoy Municipal District**

	Settlement	Population 2011	%
Towns	Fermoy (6,849), Charleville (3,646) , Mitchelstown (3,677)	13,812	33%
Key Villages	Doneraile, Newtownshandrum, Kilworth, Glanworth, Rathcormack, Castlelyons/Bridebridge, Castletownroche, Ballyhooly, Watergrasshill, Conna, Kildorrery	9,427	22%
Villages	Killavullen, Bartlemy, Ballynoe, Clondulane, Ballindangan, Glennahulla, Ballyhea, Shanballymore, Coolagown, Curraglass		
Village nuclei	Aghern, Grange, Ballygiblin, Araglin, Curraghalla, Kildinan (The Pound), Knockanevin Rockmills		
Rural Areas		18,987	45%
Total population		42,226	
* Village and rural area figures are estimated figures.			



Figure 2.1: Fermoy Municipal District Settlements

## 2.4 Growth Strategy

2.4.1 Within the Fermoy Municipal District the County Development Plan provides for growth in population of 4,678 persons. The number of households is expected to grow by 4,381 leading to a net requirement for 4,874 new houses within the Municipal District. The County Development Plan indicates that 149ha of land are required to meet this level of housing provision in the main towns, in addition to housing opportunities in the villages and rural areas.

	Population 2002	Population 2011	Population Target 2022
Total Main Towns	10,789	13,812	17,860
Total Villages & Rural Areas	12,271*	28,414	29,044
Total Population	23,060*	42,226	46,904

\* Note this figure is based on the Fermoy Electoral Area and not the current Municipal District.

2.4.2 Through its County Development Plan 2014, the Council has allocated the majority of this growth to the towns with 2,782 new houses proposed, Fermoy (938), Mitchelstown (1,040) and Charleville (804). Housing growth is also planned within the villages (1,533 units) and rural areas (559).



2.4.3 Table 2.3 below shows that the current provision of zoned lands within the main towns is sufficient to accommodate 4,018 new dwelling units providing headroom of 1236 units or 44% in excess of the net requirement within the towns of the Municipal District for 2,782 new units.

Table 2.3 Fermoy Municipal District							
	Housing Requirement					Housing Supply	
	Census 2011	Population Target	Total New Households	New Units Required	Net Estimated Requirement (ha)	Est. Net Residential area zoned (ha)	Estimated Housing Yield (Units)
Fermoy	6,489	7,589	831	938	47	90.66	1,601
Charleville	3,646	4,925	741	804	45	72.50	1,124
Mitchelstown	3,677	5,346	905	1,040	58	74.79	1,293
<b>Total Main Towns</b>	<b>13,812</b>	<b>17,860</b>	<b>2,478</b>	<b>2,782</b>	<b>149</b>	<b>237.95</b>	<b>4,018</b>
Villages	9,427	11,529	1,417	1,533			1,003
Rural	18,987	17,514	486	559			
Total Villages and rural	28,414	29,044	1,903	2,092			1,003
<b>Total Municipal District</b>	<b>42,226</b>	<b>46,904</b>	<b>4,381</b>	<b>4,874</b>	<b>149</b>	<b>237.95</b>	<b>5,021</b>
Current Estimated Strategic Land Reserve (LAPs and TCPs) for this Municipal District is 89 Ha Source: Cork County Development Plan 2014- Appendix B, Table B 11							

2.4.4 The scale of growth for the individual main settlements of the Municipal District as provided for in this Local Area Plan is outlined in Table 2.3. For the towns, the 'Overall Scale of New Development' figure is the same target figure established by the Core Strategy of the County Development Plan and sufficient residential land has been zoned within the plan to cater for this level of growth and to provide for additional spare capacity in the form of headroom.

2.4.5 Based on estimated current and target population figures for the villages, the County Development Plan (Core Strategy) estimated the number of new houses that that may need to be accommodated within the villages (and rural area) of this Municipal District as 2092 units. This local area plan has retained the scale of growth figures for the villages at the 2011 figures which is at lower level of development at (1003 in villages excluding rural) units.

2.4.6 Within the village network it is suggested that the new local area plan should maintain the scale of growth established in the 2011 Local Areas Plans in order to respect the scale and character of the villages and because there are significant deficits in water services infrastructure. Ample land is available within the development boundaries of the villages to accommodate the expected level of growth and at this stage of the process it is not intended to make any significant changes to the development boundaries of any of the villages. The main factor constraining development in the villages is likely to be inadequate water services infrastructure. As outlined above, there is enough land available within the towns within the Municipal District to accommodate any development which cannot take place within the villages due to lack of infrastructure.

## 2.5 Contents of the Draft Plan

2.5.1 The Draft Local Area Plan provides a blueprint for the development of Fermoy Municipal District for the next 6 years. Set out below are details of the structure and broad chapter content of the Draft local Area Plan.

### Section 1 Introduction

2.5.2 This Section sets out the review process to date, the overall plan context and the overall approach/key policies that will influence the preparation of the Draft Plan namely;

Water Quality issues affecting the River Blackwater SAC

Role of the Cork County Development Plan 2014

Approach to deal with Town Council Development Plans

Settlement Network

Traffic and Transport

Water Services

Development Contributions

Regeneration Areas

Town Centres

Green Infrastructure

Quality in Urban Design

Flood Risk Assessment and Management

Green Belts around Towns

Environmental Considerations including

Strategic Environmental Assessment

Strategic Flood Risk Assessment

Habitats Directive Assessment

## Section 2 Local Area Strategy

2.5.3 This section set out the overall strategy for the Fermoy Municipal District. It sets out the housing requirements and zoned housing land supply for each of the 3 main towns, sets out the appropriate scale of growth within the village network and the current infrastructure position for all the main towns and smaller settlement within the settlement network. It assesses the current employment position in the Municipal District and the key Environment and Heritage assets within the area. The key message is that sufficient land has been provided to meet population targets but that infrastructure remains a key constraint to delivering on those targets.

## Section 3 Main Towns

2.5.4 The purpose of this section is to set out the policies and objectives including land use zoning maps for the 3 Main Towns of Fermoy, Mitchelstown and Charleville in the Fermoy Municipal District. Where appropriate, Regeneration Areas have also been identified.

	Housing Requirement					Housing Supply	
	Census 2011	Population Target	Total New Households	New Units Required	Net Estimated Requirement (ha)	Est. Net Residential area zoned in LAP / TCP (ha)	Estimated Housing Yield (Units)
Fermoy	6,489	7,589	831	938	47	90.66	1,601
Charleville	3,646	4,925	741	804	45	72.5	1,124
Mitchelstown	3,677	5,346	905	1,040	58	74.79	1,293

2.5.5 Fermoy is the largest town in the Municipal District and has the largest employment, service and retail base.

2.5.6 The vision for Fermoy is to increase the population of the town in line with targets established in the Cork County Development Plan 2014; optimise employment opportunities having regard to the location of the town adjacent to the M8; strengthen and rejuvenate the retail function of the town; ensure all new development respects the significant built heritage of the town and its setting on the river Blackwater, and to deliver an enhanced environment and range of facilities to make the town a more attractive place to live.

2.5.7 Both Charleville and Mitchelstown are smaller in terms of population and employment but offer services that support a significant rural hinterland.

2.5.8 The vision for Mitchelstown over the lifetime of this plan is to boost the town's population in line with prescribed targets; optimize employment opportunities at appropriate locations within the development boundary having regard to the town's proximity to the M8 corridor and its strategic location within Munster; provide an appropriate level of supporting community and recreation facilities to meet the needs of the population and ensure new development respects the significant historic and architectural fabric of the town.

2.5.9 The vision for Charleville is to expand its population and encourage the expansion and diversification of the employment and service base of Charleville, promoting its potential as an important node on the Atlantic Corridor between the 'gateway' cities of Cork and Limerick whilst providing employment, commercial and industrial services for its surrounding hinterland. It is important that the M20 motorway bypass, which is currently on hold, is implemented to relieve the town of through traffic and provide scope for environmental improvements within the town centre.

2.5.10 Agriculture is a key economic activity throughout the District both in direct farming of land and in food processing with significant dairy processing industries located in Charleville and Mitchelstown. Services and more traditional manufacturing are also significant employers in the area.

## Section 4 Key Villages

2.5.11 There are 11 Key Villages in the Fermoy Municipal District as follows; Doneraile, Newtownshandrum, Kilworth, Glanworth, Rathcormack, Castlelyons/Bridebridge, Castletownroche, Ballyhooly, Watergrasshill, Conna, Kildorrery.

2.5.12 It is a strategic aim of the Cork County Development Plan, 2014 to establish key villages as the primary focus for development in rural areas in the lower order settlement network and allow for the provision of local services, by encouraging and facilitating population growth at a scale, layout and design that reflects the character of each village, where water services and waste water infrastructure is available. Supporting the retention and improvement of key social and community facilities, and inter urban public transport.

**Table 2.5: Appropriate Scale of Development for Key Villages**

Name	Existing Number of Houses Q1 2015 (Geodirectory)	Growth 2005 to 2015 (Geodirectory)	Overall Scale of New Development (No. of houses)	Normal Recommended Scale of any Individual scheme
Ballyhooly	199	110	50	50
Castlelyons/Bridebridge	210	70	40	40
Castletownroche	217	46	54	54
Conna	170	82	30	30
Doneraile	411	68	180	30
Glanworth	257	106	50	50
Kildorrery	173	78	50	50
Kilworth	412	250	50	50
Newtownshandrum	137	49	125	20
Rathcormack	670	509	120	30
Watergrasshill	463	241	108	30
<b>Total Key Villages</b>	<b>3319</b>	<b>1609</b>	<b>857</b>	n/a

## Section 5 Villages, Village Nuclei and Other Locations

2.5.13 There are 10 **Villages** in the Fermoy Municipal District as follows; Killavullen, Bartlemy, Ballynoe, Clondulane, Ballindangan, Glennahulla, Ballyhea, Shanballymore, Coolagown, Curraglass.

2.5.14 It is a strategic aim of the Cork County Development Plan, 2014 to encourage and facilitate development at a scale, layout and design that reflects the character of each village, where water services and waste water infrastructure is available and support the retention and improvement of key social and community facilities within villages, including the improved provision of inter-urban public transport.

<b>Villages</b>	<b>Existing Number of Houses Q1 2015 (Geodirectory)</b>	<b>Growth 2005 to 2015 (Geodirectory)</b>	<b>Overall Scale of NewDevelopment (No. of houses)</b>	<b>Normal Recommended Scale of any Individual scheme.</b>
Ballindangan	10	-14	5	n/a
Ballyhea	45	-15	30	5
Ballynoe	70	28	20	10-12
Bartlemy	34	11	10	8-10
Clondulane	180	134	20	10-12
Coolagown	19	8	5	n/a
Curraglass	17	-1	3	n/a
Glennahulla	28	4	5	n/a
Killavullen	131	30	5	n/a
Shanballymore	67	23	10	10

2.5.15 There are 8 **Village Nuclei** in the West Cork Municipal District as follows; Aghern, Grange, Ballygiblin, Araglin, Curraghalla, Kildinan (The Pound), Knockanevin Rockmills.

2.5.16 It is a strategic aim of the Cork County Development Plan, 2014 to preserve the rural character of village nuclei and encourage small scale expansion at a scale, layout and design that reflects the character of each village, where water services and waste water infrastructure is available generally through low density individual housing, in tandem with the provision of services.

<b>Village Nuclei</b>	<b>Existing Number of Houses Q1 2015 (Geodirectory)</b>	<b>Growth 2005 to 2015 (Geodirectory)</b>	<b>Overall Scale of Development (No. of houses)</b>
Aghern	5	1	5
Araglin	7	3	3
Ballygiblin	2	2	4
Curraghalla	6	2	5
Grange	28	2	5
Kildinan (The Pound)	12	4	5
Knockanevin	1	0	3
Rockmills	14	2	3

## Section 6 Putting the Plan into Practice

2.5.17 This section assigns responsibility for the implementation of the Plan's policies to various agencies including the Local Authority. It also sets out the expected timeframes for the delivery of physical and social infrastructure, including the assignment of Plan priorities and funding streams necessary to secure key development objectives. It also outlines the approach to monitoring and how the Plan will inform other Plans within its functional area.

## 2.6 Relationship with Other Relevant Plans and Programmes

2.6.1 The Local Area Plan is part of a hierarchy of County, Regional and National plans. The Plan should be consistent with higher-level plans such as those of a county, regional or national nature. The following National, Regional and County Plans have influenced the policies contained in this Draft Local Area Plan.

### National Policy

2.6.2 **National Spatial Strategy:** The National Spatial Strategy (NSS) is a twenty year planning framework for the entire country which is designed to achieve a better balance of social, economic and physical development and population growth between regions. The main focus of the NSS is to bring people, jobs and services closer together, in order to achieve a better quality of life for people, a strong, competitive economic position for the country and to ensure environmental protection.

2.6.3 Cork is identified as a gateway, a nationally significant centre whose location, scale and service base supports the achievement of the type of critical mass necessary to sustain strong levels of growth. Cork will build on its substantial and established economic base to lever investment into the South West region, with the support of its scale of population, its third level institutions and the substantial capacity for growth identified in the Cork Area Strategic Plan (CASP). Implementation of CASP is important to secure the objectives of the NSS. Mallow is identified as a ‘hub’ and will perform an important role within the national structure at regional and County level. Improvements in regional accessibility through roads, advanced communications infrastructure and public transport links are key supporting factors. The NSS also seeks to develop the potential of other towns and villages. Large towns near Cork City need to be promoted as self-sustaining towns. Medium sized towns in coastal and peripheral areas have a critical role to play as service centres and in economic development. In the more rural parts of the County “a dynamic and nationally important tourism product has been developed which will require effective management and sustainable development of the natural and cultural heritage to sustain it for the future”.

2.6.4 **National Development Plan 2007 – 2013:** The National Development Plan (NDP) Transforming Ireland — A Better Quality of Life for All sets out our national investment priorities and has four basic objectives: to continue sustainable national economic and employment growth, to strengthen and improve Ireland’s international competitiveness, to foster balanced regional development and to promote social inclusion. In Cork, the NDP identifies the need to accelerate growth and development and identifies a number of investment priorities for Cork including motorways, integrated public transport systems, enhancement of tourism, leisure and recreational facilities, developing employment, research and development capacity etc.

2.6.5 **Food Harvest 2020– A Vision for Irish Agri-Food and Fisheries:** The agri-food and fisheries sector is Ireland’s most important indigenous industry and is recognised as having a key role to play in Ireland’s export-led economic recovery. With €7bn in exports the sector currently accounts for over half of manufacturing exports, by Irish owned firms. The geographical distribution of the sector ensures that any future wealth and employment generated will be of direct benefit to rural and coastal communities. The 2020 vision for the sector seeks to increase the value of primary output in the agriculture, fisheries and forestry sector by €1.5 billion by 2020 (an increase of 33% on 2007-2009 levels); increase value added in the agri-food, fisheries and wood products sector by €3 billion (+40%) and achieve an export target of €12 billion for the sector (+ 42%). Meeting these targets will have significant environmental challenges including reducing the carbon intensity of Irish agriculture and ensuring the sector plays its part in reducing our overall greenhouse gas (GHG) emissions. As a County with a strong agri-food and fisheries sector already, there is obvious scope of sustainable growth in this area which should bring many benefits to the County as a whole.

- 2.6.6 National Climate Change Strategy (2007 – 2012) / Climate Change Adaption Framework 2012:** The National Climate Change Strategy 2007 – 2012 sets out a range of measures, building on those already in place under the first National Climate Change Strategy (2000) to ensure Ireland reaches its target under the Kyoto Protocol. The Strategy provides a framework for action to reduce Ireland's greenhouse gas emissions.
- 2.6.7 The National Climate Change Adaptation Framework** introduces an integrated policy framework, involving all stakeholders on all institutional levels to ensure adaptation measures are taken across different sectors and levels of government to manage and reduce Ireland's vulnerability to the negative impacts of climate change. Under the Framework, the relevant Government Departments, Agencies and local authorities have been asked to commence the preparation of sectoral and local adaptation plans and to publish drafts of these plans by mid-2014
- 2.6.8 National Renewable Energy Action Plan:** The National Renewable Energy Action Plan (NREAP) sets out the Government's strategic approach and concrete measures to deliver on Ireland's 16% target under European Renewable Energy Directive 2009/28/EC. The development of renewable energy is central to overall energy policy in Ireland. Nationally, the Government's ambitions for renewable energy and the related national targets are fully commensurate with the European Union's energy policy objectives and the targets addressed to Ireland under the Renewable Energy Directive. Ireland's energy efficiency ambitions (20% of energy from renewable sources by 2020) as set out in the National Energy Efficiency Action Plan are duly reflected in the NREAP.
- 2.6.9 National Biodiversity Plan: Action for Biodiversity 2011 – 2016:** Ireland's second National Biodiversity Plan sets out a vision for the conservation and restoration of biodiversity and ecosystems in Ireland and includes the overarching target of "reducing biodiversity loss and degradation of ecosystems in Ireland by 2016, and achieving substantial recovery by 2020". The Plan sets out a number of strategic objectives and actions which are aimed at mainstreaming biodiversity in the decision making process across all sectors, strengthening the knowledge base and increasing awareness of biodiversity in order to support the achievement of the target.
- 2.6.10 Our Sustainable Future -A framework for Sustainable Development in Ireland (2012):** This framework recognises that the green economy and sustainable development agendas are a key element of Ireland's economic recovery strategy and sets out the range of environmental, economic and social measures required to move these agendas forward. The framework sets out 70 measures that will ensure we improve our quality of life for current and future generations and sets out clear measures, responsibilities and timelines in an implementation plan. These include areas such as the sustainability of public finances and economic resilience, natural resources, agriculture, climate change, transport, sustainable communities and spatial planning, public health, education, innovation and research, skills and training, and global poverty. The framework recognises that some aspects of the pattern of development that emerged in Ireland over the last decade present major challenges from a sustainable development perspective and spatial planning is one of the mechanisms, along with wider public policy coordination and fiscal policy, to effect change at national, regional and local level and deliver more sustainable communities.
- 2.6.11 Smarter Travel. A new transport Policy for Ireland 2009-2020:** Smarter Travel recognises that transport and travel trends in Ireland are unsustainable. Even with the investment in Transport 21, if we continue with present policies, congestion will get worse, transport emissions will continue to grow, economic competitiveness will suffer and quality of life will decline. Smarter travel is designed to show how we can reverse current unsustainable transport and travel patterns and reduce the health and environmental impacts of current trends and improve our quality of life. Actions are aimed at influencing overall travel demand and reducing emissions in both urban and rural areas. Key actions include the following:

- Actions to reduce distance travelled by private car and encourage smarter travel, including focusing population growth in areas of employment and to encourage people to live in close proximity to places of employment and the use of pricing mechanisms or fiscal measures to encourage behavioural change,
- Actions aimed at ensuring that alternatives to the car are more widely available, through improved public transport service and investment in cycling and walking,
- Actions aimed at improving the fuel efficiency of motorised transport, and
- Actions aimed at strengthening institutional arrangements to deliver the targets.

**2.6.12 National Action Plan for Social Inclusion 2007 – 2016:** This National Action Plan for Social inclusion, complemented by the social inclusion elements of the National Development Plan 2007-2013: Transforming Ireland– A Better Quality of Life for All, sets out how the social inclusion strategy will be achieved over the period 2007-2016. The overall goal of this Plan is to reduce the number of those experiencing consistent poverty to between 2% and 0% by 2012, with the aim of eliminating consistent poverty by 2016.

**2.6.13 National Heritage Plan 2002:** The National Heritage Plan sets out a clear and coherent strategy and framework for the protection and enhancement of Ireland’s national heritage. The core objective of the Plan is to protect the national heritage as well as promoting it as a resource to be enjoyed by all.

## Regional Policy

**2.6.14 South Western Regional Planning Guidelines:** Prepared by the South West Regional Authority to provide a broad canvas to steer the sustainable growth and prosperity of the region in line with the key principles of national strategy. Planning Authorities are required to have regard to the guidelines in the discharge of their functions.

**2.6.15 South West River Basin District Management Plan** has been prepared on foot of the EU Water Framework Directive to create an integrated approach to managing water quality on a river basin basis. It requires that management plans be prepared on a river basin basis in six year cycles and specifies a structured approach to developing those plans with the first plans to cover the period 2009 to 2015. The South West River Basin Management Plan is the mechanism for protecting and improving the County’s water resources and ensures that development permitted meets the requirements of the relevant River Basin Management Plan and does not contravene the objectives of the EU Water Framework Directive.

**2.6.16 Waste Management Plan:** A joint waste management strategy was prepared for the Cork City and county in 1995 by the both Local Authorities. Since then separate waste management plans have been prepared for each jurisdiction and the most recent plan for the County covers the period 2004-2009. Waste minimisation is a key element of the most recent Plan (2004) and includes a number of measures including waste prevention, reduction at source, reuse, recycling and recovery and is achieved through the use of bring sites, civic amenity sites, waste transfer stations, authorised transfer facilities and material recovery. All of these have a role to play in achieving national recycling targets.

## Local Policy

**2.6.17 Cork County Development Plan 2014:** The Cork County Development Plan, 2014 adopted on the 8th December 2014 sets out the blueprint for the development of the county, underpinned by the core principles of sustainability, social inclusion, quality of design and climate change adaptation. The County Development Plan includes over 200 objectives on a range of issues including:



- Housing,
- Rural, Coastal and Island Development;
- Social and Community facilities;
- Economy and Employment;
- Town Centres and Retail Development;
- Tourism;
- Energy and Digital Economy;
- Transport and Mobility;
- Water Services, Surface Water (including Flooding) and Waste;
- Heritage;
- Green Infrastructure and Environment;
- Zoning and Land use.

2.6.18 The objectives of the County Development Plan have not been repeated in the Local Area Plan and so the two documents must be read together when planning a development. All proposals for development, put forward in accordance with the provisions of this Local Area Plan, must demonstrate compliance with the objectives of the County Plan.

2.6.19 The County Development Plan is expected to remain in force (subject to any interim variations that the Council may make) until late 2020. It is a six year development plan for the County that attempts to set out, as concisely as possible, Cork County Council's current thinking on planning policy looking towards the horizon year of 2022. The plan also sets out the overall planning and sustainable development strategy for the county which must be consistent with the National Spatial Strategy 2002-2020 and the South West Regional Planning Guidelines 2010-2022.

2.6.20 The Plan is the county's principle strategic planning policy document. Detailed land-use zoning maps for the main settlements of the county are contained in the Municipal District Local Area Plans.

2.6.21 **Local Economic and Community Plans:** The Local Economic and Community Plan (LECP) was adopted in 2016. It is provided for in the statutory Local Government Reform Act 2014. This Act requires that a six-year plan be adopted by Cork County Council, setting out high level goals, objectives and actions required to promote and support local economic and community development within the county. The strategic aim of this Local Economic and Community Plan (LECP) is, ultimately, the "Removal of barriers to facilitate individuals and organisations in achieving their ambitions, within a long-term and sustainable framework"

2.6.22 This strategic aim seeks to absorb and reflect the breadth and complexity of modern life, where opportunities exist for individuals and organisations to fulfil their ambitions, whether personal, economic or social. Places and societies that best provide for those ambitions, within a sustainable framework, are the places where people want to live and work. In turn, places where people want to live are the places that become socially and economically relevant. Impediments – be they linked to issues around physical, organisational, environmental, economic, educational, equality, access, or related to any of the other aspects of our collective lives – are the barriers to our ambitions. This plan seeks to commence a process that will lead to removal of those barriers by those with the capacities to do so.

- 2.6.23 The legislation envisaged that the LECP will be consistent with its informing strategies, set at a European, National and Regional level, while also being consistent and integrated with complementary plans at its own level. In particular, the LECP must be consistent with the County Development Plan Core Strategy and the planned for Regional Spatial and Economic Strategy (RSES), currently the Regional Planning Guidelines.
- 2.6.24 This Local Area Plan will play a key role in implementing the LECP's aims and objectives as they apply to this Municipal District while at the same time the LECP will set out a pathway to address many of the social and economic issues facing the District identified in this Local Area Plan.
- 2.6.25 **County Biodiversity Action Plan 2009-2014:** This plan addressed how the wildlife resources of the County, including native plants, animals and the ecosystems that they combine to produce, will be managed and protected. Its implementation will contribute to achieving national and international targets for the conservation of biodiversity in the context of constantly accelerating rates of species extinction and habitat loss and deterioration globally.
- 2.6.26 **Cork County Heritage Plan 2005-2010:** The development of the County Heritage Plan had its origins in the National Heritage Plan published in 2002. The aim of the plan is to 'ensure the protection of our heritage and to promote its enjoyment by all'. This is underpinned by the core principle that heritage is communal and we all share a responsibility to protect it.
- 2.6.27 **Cork City Development Plan 2015-2021:** The city plan is of relevance because the city is the main economic and retail focus for the county as a whole and the focus of public transport services within the metropolitan area. The Plan includes a population target for the city of 150,000 by 2022 and re-emphasises the potential for the development of brownfield land in the City Centre, Docklands, Mahon and Blackpool to cater for the sustainable growth of the city.

## Legislative Context

2.6.28 The Directive 2001/42/EC of the European Parliament and of the Council on the assessment of the effects of certain plans and programmes on the environment (the SEA Directive) and its transposed Irish legislation, including amendments form the legislative framework for the SEA process, including its documentation in the form of an Environmental Report. The Planning and Development Act, 2000 (as amended) also forms an integral part of SEA and additional guidance from a European context and national context has been listed within this Section. Additional key pieces of legislation pertaining to environmental considerations include the following list which is regarded as not exhaustive:

- EU Birds Directive (79/409/EEC)
- EU Habitats Directive (92/43/EEC)
- The Wildlife Act, 1976 (as amended)
- The Flora (Protection) Order 1999
- UN Convention of Biological Diversity 1992 (ratified 1996)
- Convention on Wetlands of International Importance (Ramsar Convention 1971)
- European Communities (Birds and Natural Habitats) Regulations, 2011
- Urban Waste Water Treatment Regulations, 2001 and 2004 and Amendments (2010)
- Water Services Act, 2007
- Water Services (Amendment) Act, 2013
- European Communities Environmental Objectives (Surface Waters) Regulations, 2009

- European Communities Environmental Objectives (Freshwater Pearl Mussel) Regulations, 2009
- European Communities Environmental Objectives (Groundwater) Regulations, 2010
- EU Nitrates Directive (91/676/EEC)
- European Communities (Good Agricultural Practice for Protection of Waters) Regulations, 2010
- EU Bathing Water Directive (2006/7/EC)
- Bathing Water Quality Regulations, 2008
- Bathing Water Quality (Amendment) Regulations, 2011
- Shellfish Waters Directive (2006/113/EC)
- European Communities (Quality of Shellfish Waters) Regulations, 2006
- European Communities (Quality of Shellfish Waters) (Amendment) Regulations, 2009
- Waste Water Discharge (Authorisation) Regulations, 2007
- European Communities (Environmental Liability) Regulations, 2008
- Air Quality Standards Regulations, 2011
- Environmental Noise Regulations, 2006
- The European Landscape Convention, 2000



## Section 3: Environmental Baseline

### *Sub-Section*

- 3.1 Introduction
- 3.2 Population and Human Health
- 3.3 Biodiversity-Flora and Fauna
- 3.4 Soils
- 3.5 Water
- 3.6 Air and Climatic Factors
- 3.7 Material Assets
- 3.8 Cultural Heritage
- 3.9 Landscape

## 3 Environmental Baseline

### 3.1 Introduction

3.1.1 The environmental baseline of this Municipal District is described in this section. This baseline information outlines the environmental context within which the Draft Fermoy Municipal District Local Area Plan will operate. The purpose of this section is to provide enough environmental baseline data to:

- support the identification of environmental problems;
- support the process of assessing the environmental effects;
- provide a baseline against which future monitoring data can be compared.

3.1.2 A number of key environmental issues set the context for the collection of the baseline data and each section includes an overview of the current situation, the key environmental problems and an analysis of the likely evolution in the absence of the Draft Plan. The Environmental issues are listed below:

- Population and Human Health,
- Biodiversity – Flora and Fauna,
- Soil,
- Water,
- Air and Climatic factors,
- Material Assets,
- Cultural Heritage,
- Landscape.

3.1.3 A number of maps are included to illustrate the baseline environment of the Municipal District County, the majority of which indicate the existing situation for the environmental issues identified above. However in many cases the maps and information is only available at a County Level.

3.1.4 The Department of the Environment, Heritage and Local Government (DoEHLG) circular SEA 1/8 and NPWS 1/8 requires that under the Habitats Directive an Appropriate Assessment of the ecological implications of a plan is conducted. An appropriate assessment of the Draft Plan was conducted by Cork County Council and is provided as part of this Draft Plan.

### 3.2 Population and Human Health

3.2.1 In 2011 the population of the Fermoy MD stood at 42,226. In the period to 2022, the population target allocated by the Cork County Development Plan 2014 provides for the population to grow by 4,678 persons or 11% approximately. The majority of this growth is targeted at the 3 towns of the District; Fermoy, Mitchelstown and Charleville. Growth is also provided for across the network of smaller settlements within the District.

**Table 3.1 Fermoy Municipal District Housing Requirements and Supply**

	Housing Requirement				Housing Supply	
	Census 2011	Population Target	New Units Required	Net Estimated Requirement (ha)	Est. Net Residential area zoned in LAP / TCP (ha)	Estimated Housing Yield (LAPs and TCPs) (Units)
Fermoy	6,489	7,589	938	47	90.66	1,601
Charleville	3,646	4,925	804	45	72.50	1,124
Mitchelstown	3,677	5,346	1,040	58	74.79	1,293
Main Towns	<b>13,812</b>	<b>17,860</b>	<b>2,782</b>	<b>149</b>	<b>237.95</b>	<b>4,018</b>
Villages	9,427	11,529	1,533	--	--	1,003
Rural	18,987	17,514	559	--	--	--
Total Villages and Rural	28,414	29,044	2,092	--	--	1,003
Total for District	42,226	46,904	4,874	149	237.95	5,021

Current Estimated Strategic Land Reserve (LAPs and TCPs) for this Municipal District is 89 Ha  
Source: Cork County Development Plan 2014- Appendix B, Table B 11

3.2.2 With regard to Human Health, impacts relevant to SEA are those which arise as a result of interactions with environmental vectors such as air, water or soil through which contaminants or pollutants, which have the potential to cause harm, can be transported so they come in contact with human beings. These issues will be explored in the Environmental Report.

#### Existing Sensitivities in relation to Population and Human Health

3.2.3 The Draft Plan has made provision for the population of the MD to increase leading to increased demand for housing within the area and the provision of supporting social, community and employment/commercial services, facilities and opportunities. The timely delivery of such services is important to the quality of life of the population.

3.2.4 Enabling population growth and sustainable patterns of development in key settlements may be hindered by delays in the delivery of key infrastructure required to facilitate development leading to a housing shortage in some areas and development being shifted to other, potentially less sustainable locations, frustrating efforts to plan for having people, jobs and services located closer together.

3.2.5 Dispersed settlement patterns can lead to an over dependence on car based transport and long journeys to work which can have negative impacts on the health of the population and quality of life.

3.2.6 The economic decline of some settlements and/or the failure of others to realise the expected level of growth, can lead to reduced service provision, loss of job opportunities and reduced quality of life for the remaining residents of the area. A key challenge for the Draft Plan is to promote the sustainable growth of the economy of the three main towns of the Municipal District to support the balanced socio economic growth of the area.

3.2.7 Improved recreational/walking and cycling facilities are needed to support an increased uptake in physical exercise to help improve / maintain the health of the population.

### 3.3 Biodiversity-Flora and Fauna

3.3.1 European and National Legislation now protect the most valuable of our remaining wild places, through designation of sites as proposed Natural Heritage Area, Natural Heritage Areas, Special Areas of Conservation and Special Protection Areas. The designation of these sites at a national level is the responsibility of the Department of the Environment, Heritage and local Government but it is the responsibility of all of us to protect these sites. The process of designation of such sites is ongoing, with new sites being added, redesignated and boundaries of existing sites being adjusted. The key Natura sites in the Fermoy MD are illustrated in Figure 3.1.

3.3.2 There are 2 SPAs, 2 SACs, and 20 pNHAs dispersed throughout the Fermoy MD. The reasons for designation include ecological, botanical and ornithological.



Figure 3.1 Fermoy Ecological Map



**Table 3.2 Natural Heritage Sites in the Fermoy MD**

Name	Environmental Designation	Features of Interest
<b>Special Areas of Conservation</b>		
Carrigeenamronety Hill (cSAC 2037)	cSAC, Natura 2000 site	Trichomanes speciosum (Killarney Fern)
Blackwater River (cSAC 2170)	cSAC, Natura 2000 site	See below
<b>Special Protection Areas</b>		
Blackwater Callows (SPA 4094)	SPA, Natura 2000 site	Whooper Swan (Cygnus cygnus)  Wigeon (Anas penelope)  Teal (Anas crecca)  Black-tailed Godwit (Limosa limosa)  Wetland and Waterbirds
Ballyhoura Mountains (SPA 002036)	SPA, Natura 2000 site	Northern Atlantic wet heaths with Erica tetralix ]  European dry heaths  Blanket bogs (* if active bog)
<b>Natural Heritage Areas</b>		
Araglin Valley, Near Kilworth	pNHA 1029	
Awbeg Valley (Above Doneraile)	pNHA 0075	
Awbeg Valley (Below Doneraile)	pNHA 0074	
Awbeg Valley (Castletownroche)	pNHA 1561	
Ballinvoneer Pond	pNHA 0012	
Ballinaltig Bog Pond, Ballyhooly	pNHA 1829	
Ballyhooura Mountains	pNHA 2036	
Blackwater Valley (Ballincurrag Wood)	pNHA 1793	
Blackwater River Callows, Fermoy	pNHA 73	
Blackwater Valley (Cregg), Fermoy	pNHA1796	
Blackwater Valley (Kilcummer), Ballyhooly	pNHA 1794	
Blackwater Valley (Killathy Wood), Ballyhooly	pNHA 1795	
Blackwater Valley (Killavullen)	pNHA 1080	
Blackwater Valley (The Beech Wood), Fermoy	pNHA1797	
Bride/Bunaglanna Valley	pNHA 0079	
Browns Farm, Togher Cross Roads, Glanworth	pNHA 1169	
Carrigeenamronety Hill, Kildorrery	pNHA 2037	
Convamore, Ballyhooly	pNHA 2097	
Cregg Castle, Fermoy	pNHA 2050	
Kilcolman Bog	pNHA 0092	

3.3.3 In addition, the following Natura 2000 sites are within 15km of Fermoy Municipal District: Great Island Channel SPA (001058), Cork Harbour SPA (004030), Kilcolman Bog SPA (004095), Galtee Mountains (000646), Lower River Suir (002137).

### River Blackwater Special Area of Conservation

3.3.4 One of the key attributes of the Fermoy District is the River Blackwater which is designated as a Special Area of Conservation under the Habitats Directive as it is a significant site containing important rare plants and species one of which is the Freshwater Pearl Mussel.

3.3.5 Features of interest in this SAC are as follows:

- Estuaries, 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 (*Glauco-Puccinellietalia maritima*),
- Mediterranean salt meadows (*Juncetalia maritimi*),
- Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation,
- Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles,
- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*),
- *Margaritifera margaritifera* (Freshwater Pearl Mussel),
- *Austropotamobius pallipes* (White-clawed Crayfish),
- *Petromyzon marinus* (Sea Lamprey),
- *Lampetra planeri* (Brook Lamprey)
- *Lampetra fluviatilis* (River Lamprey)
- *Alosa fallax fallax* (Twaite Shad)
- *Salmo salar* (Salmon)
- *Lutra lutra* (Otter)
- *Trichomanes speciosum* (Killarney Fern)

3.3.6 In planning for the future development of the area the Council has a legally binding obligation to protect the favourable conservation status of the River Blackwater Special Area of Conservation, in line with the Conservation Objectives for site.

3.3.7 The County Development Plan 2014 proposes significant new development within the Blackwater Catchment, particularly at Mallow, Fermoy, Kanturk, Newmarket and Millstreet. The Habitats Directive Assessment process undertaken as part of the preparation of County Development Plan concluded that it was not possible to rule out adverse impacts on the Special Area of Conservation if the scale of development proposed within the catchment went ahead. The County Development Plan has put development within the catchment on hold pending the outcome of further investigations studies.

3.3.8 Following recent discussions between the Council and the Department of Environment, Community and Local Government, the Department of Arts Heritage and Gaeltacht and Irish Water, the Department of Arts, Heritage and the Gaeltacht has indicated its intention to amend the conservation objectives for the Blackwater SAC, so that there would no longer be the objective of maintaining or restoring fresh water pearl mussel populations in the main channel of the river, but to retain the conservation

objectives for the mussel in the Allow tributaries of the Blackwater, which are included in the SAC. When implemented, this change may necessitate a Variation of the County Development Plan to ensure that development in the catchment is no longer 'on hold' and to ensure that the Local Area Plan could continue to plan development within the catchment subject to normal requirements of proper planning and sustainable development and Habitats Directive Assessment.

- 3.3.9 Implementation, by the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs, of the proposed change to the Conservation Objective for the Blackwater SAC is awaited. The Council is proceeding on this basis.

### **Protected Species**

- 3.3.10 The River Blackwater is important for the following species listed on Annex II of the EU Habitats Directive - Sea Lamprey, River Lamprey, Brook Lamprey, Freshwater Pearl Mussel (see above), Crayfish, Twaité Shad, Atlantic Salmon, Otter and the plant, Killarney Fern. This site is of importance for its populations of wintering waterfowl, including an internationally important population of Whooper Swan and nationally important populations of Wigeon, Teal and Black-tailed Godwit. The presence of Whooper Swan, as well as Little Egret, is of particular note as these species are listed on Annex I of the E.U. Birds Directive. There is a concentration of bat colonies including Daubenton's bat along the river blackwater. This bat species is dependent on aquatic insects so the proximity of the river is of utmost importance to the colony.

### **Existing Sensitivities in relation to Biodiversity**

- 3.3.11 Fermoy town straddles the River Blackwater which is designated as a Special Area of Conservation under the Habitats Directive as it is a significant site for a number of species. See discussion regarding the River Blackwater above.

### **Ecological Baseline Study for Main Towns in Fermoy Municipal District**

- 3.3.12 Habitat Mapping for the Fermoy Municipal District Towns is ongoing however it was not completed in time to inform this Draft Plan. When completed the Draft Plan will be assessed against its findings and any changes required will be brought forward by way of Amendment to the Draft Plan.

## **3.4 Soils**

- 3.4.1 The SEA examined soil issues within the Municipal District, looking at the most common soil types within the plan area and how they might be affected by the development proposed in the Draft Plan. The SEA considered the challenges facing soil generally together with issues such as erosion, geology and quarrying as appropriate.
- 3.4.2 The dominate soil type in the area are acid brown soils and gleys which provide a mix of productive and moderately productive soils enabling grassland and crop production with the main agricultural use being grassland and cereal crops.

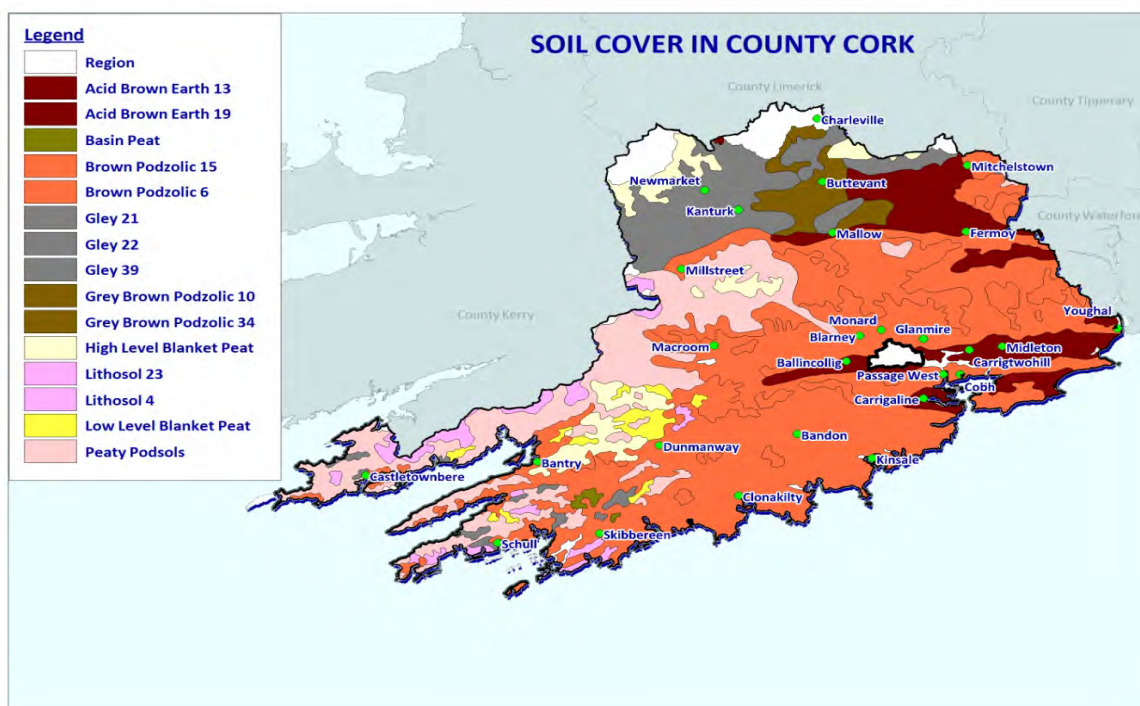


Figure 3.2 Soil Cover in County Cork

### Existing Sensitivities in relation to Soil

- 4.5.3 Additional development may lead to damage to or loss of the soil resource or impact on its functions.

## 3.5 Water

- 3.5.1 This section of the SEA will consider issues in relation surface water (rivers and lakes, estuarine and coastal waters) and groundwater in the Municipal District as appropriate looking at the status and quality of these waters. The section will also examine water services infrastructure (drinking water supply, wastewater treatment and storm water).
- 3.5.2 Consideration was given to current and future loading within key water catchments, the potential impacts of additional development on water quality, surface water management, climate change and the need for new infrastructure to serve anticipated demands.
- 3.5.3 Water services of the all the infrastructure requirements needed to facilitate new development is the most critical, as in the absence of it, no development can take place. Since January 2014 Irish Water is responsible for the operation of public water services (drinking water and wastewater) including management and maintenance of existing water services assets. Those intending to carry out development must now obtain consent to connect to Irish Water Infrastructure for new development. Irish Water also has responsibility for planning for future infrastructure needs and for the delivery of new infrastructure and future decisions in relation to investment in new water services infrastructure will be made by Irish Water. Developers must also satisfy themselves that Irish Water will make adequate services available in order to meet the needs of any development they propose.

3.5.4 The Cork County Development Plan, 2014 and the new Municipal District Local Area Plans are important documents that Irish Water should take into account in formulating its plans and programmes.

3.5.5 So far as the villages are concerned, in many cases (see Table 3.4) the water services infrastructure needed to deliver the 2011 housing requirements is often not in place. In general the Councils approach to this, which is summarised in Table 3.3, is that where Irish Water already have water services infrastructure in a town or village then Irish Water will need to upgrade that infrastructure as necessary to meet the demands of current and future customers in the settlement.

Normally Expected level of Water Services		Policy Approach
Towns	Public Drinking Water and Waste Water Treatment	Adequate water services infrastructure to be prioritised.
Key villages		
Villages	Public Drinking Water	Adequate drinking water services infrastructure to be prioritised
	Public Waste Water Treatment	Adequate waste water treatment facilities to be prioritised for villages which already have some element of public infrastructure.
		For smaller villages where services are not available or expected, development will be limited to a small number of individual houses with their own treatment plant.
Village Nuclei	Public Drinking Water	Where already present, adequate drinking water services to be maintained. In the absence of public drinking water, individual dwellings may be permitted on the basis of private wells subject to normal planning and public health criteria.
	Public Waste Water Treatment	In these smaller settlements within no public services, it is proposed to limit development to a small number of individual houses with their own treatment plant.

3.5.6 Across the County as a whole the water services infrastructure needed to deliver the scale of growth envisaged by the County Development 2014 is often not in place. In general the Councils approach to this is that where Irish Water already have water services infrastructure in a town or village then Irish Water will need to up upgrade that infrastructure as necessary to meet the demands of current and future customers in the settlement.

3.5.7 Therefore, while the current water services infrastructure may not immediately be able to deliver the overall scale of growth set out in the LAP, the proposal is to retain the target with the expectation that the infrastructure will be delivered over time by Irish Water.

Table 3.4 Overall Scale of New Development in the Fermoy Municipal District

Settlement Name	Existing Number of Houses 2015	Dinking Water Status	Waste Water Treatment Status	Overall Scale of New Development (houses)
<b>Towns</b>				
Fermoy				938
Charleville				804
Mitchelstwon				1,040
				<b>2,782</b>
<b>Key Villages</b>				
Castlelyons / Bridebridge	210			40
Kilworth*	412			50
Rathcormack	670			120
Watergrasshill	463			108
Ballyhooly*	199			50
Castletownroche*	217			54
Conna	170			30
Doneraile*	411			180
Glanworth*	257			50
Kildorrery*	173			50
Newtownshandrum	137			125
				<b>857</b>
<b>Villages</b>				
Ballynoe*	70			20
Bartlemy	34			10
Clondulane*	180			20
Killavullen*	131			5
Shanballymore*	67			10
Ballindangan*	10		None	5
Ballyhea*	45			30
Coolagown	19		None	5
Curraglass	17	Private	None	3

Table 3.4 Overall Scale of New Development in the Fermoy Municipal District				
Settlement Name	Existing Number of Houses 2015	Drinking Water Status	Waste Water Treatment Status	Overall Scale of New Development (houses)
		GWS		
Glennahulla*	28		None	5
				<b>113</b>
<b>Village Nuclei</b>				
Aghern	5	Private GWS	None	5
Araglin*	7		None	3
Ballygiblin*	2		None	4
Curraghalla*	6	Private GWS	None	5
Grange*	28		None	5
Kildinan (The Pound)	12		None	5
Knockanevin*	1		None	3
Rockmills*	14		None	3
				<b>33</b>
<b>Total</b>				<b>3785</b>
<b>Water Services Key</b>				
Irish Water Services in place with broadly adequate existing water services capacity.				
Irish Water Services in place with limited or no spare water services capacity.				
<b>None</b> : No existing Irish Water Services. In these settlements development will be limited to a small number of individual houses with their own wastewater treatment plant. In the absence of a public drinking water supply, individual dwellings may be permitted on the basis of private wells subject to normal planning and public health criteria.				

### Existing Sensitivities in relation to Water

3.5.8 As noted in relation to Biodiversity, the Department of Arts, Heritage and the Gaeltacht has indicated its intention to amend the conservation objectives for the Blackwater SAC, so that there would no longer be the objective of maintaining or restoring fresh water pearl mussel populations in the main channel of the river, but to retain the conservation objectives for the mussel in the Allow tributaries of the Blackwater, which are included in the SAC.

- 3.5.9 Implementation, by the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs, of the proposed change to the Conservation Objective for the Blackwater SAC is awaited. The Council is proceeding on this basis. When implemented the Local Area Plan could continue to plan development within the catchment subject to normal requirements of proper planning and sustainable development and Habitats Directive Assessment.
- 3.5.10 See separate discussion in relation to the Blackwater above.
- 3.5.11 In terms of water services infrastructure within the Municipal District Table 3.6 in section 3 of this document details the current status of the water services infrastructure within the Fermoy Municipal District. Additional investment will be required in some settlements in order to facilitate development in line with Core Strategy provisions of the County Development Plan 2014.
- Flooding**
- 3.5.12 The assessment and management of flood risks in relation to planned future development is an important element of the local area plan. The majority of towns, villages and smaller settlements 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.
- 3.5.13 As part of the preparation of this Local Area Plan the Council has updated the flood zone mapping used in the 2011 Local Area Plans to take account of the information that has become available from the National CFRAM programme (Catchment Flood Risk Assessment and Management), and other Flood Schemes undertaken by the OPW. In addition, flood risk mapping for rural areas, outside of settlements boundaries, is also now available and is being published simultaneously with this Draft Local Area Plan.
- 3.5.14 The Council's overall approach to Flood Risk Management is set out in Chapter 11 of the County Development Plan 2014 and intending developers should familiarise themselves with its provisions. The Council's approach to flood risk is to:
- a) Avoid development in areas at risk of flooding; and
  - b) Where development in floodplains cannot be avoided, to take a sequential approach to flood risk management based on avoidance, reduction and mitigation of risk.
- 3.5.15 A Strategic Flood Risk Assessment (SFRA) has been undertaken as part of the preparation of this plan, and all zoned lands in areas at risk of flooding have been reviewed. The Strategic Flood Risk Assessment (SFRA) is included in Volume 2 of this Plan and explains in detail the overall approach to flood risk management that has been followed. It is important to read this document in conjunction with Volume 1 of the plan.
- 3.5.16 Where development is proposed within an area at risk of flooding, either on land that is subject to a specific zoning objective, lands within the "existing built up area" of a town, within a development boundary of a village, or in the open countryside, then intending applicants need to comply with the provisions of Chapter 11 of the Cork County Development Plan 2014 and Objectives WS 6-1 and WS 6-2, as appropriate, and with the provisions of the Ministerial Guidelines – 'The Planning System and Flood Risk Management'.
- 3.5.17 Flood Zone Mapping for the rural parts of the Municipal District (i.e. outside of a settlement boundary) is also now available to view online, for information purposes, as part of the Local Area Plan Map Browser at [www.corkcoco.ie](http://www.corkcoco.ie).



## 3.6 Air and Climatic Factors

- 3.6.1 The SEA for this Plan considered Air and Climatic Factors potentially affecting the plan area including air quality, noise, greenhouse gases etc.
- 3.6.2 Air quality is generally good in the County and Cork is located in an area with a relatively mild climate and has an almost continuous movement of clean air. Nationally, it is now evident that, due mainly to the very significant increase of vehicles on the public roads, the biggest threat now facing air quality in urban areas is emissions from road traffic. As the population grows and more development takes place emissions will rise.
- 3.6.3 Cork County and City Councils have prepared a joint Noise Action Plan which deals with the mitigation of noise within the Cork conurbation as well as along all national and some regional roads within the county. Common sources of noise within the County include road vehicles, aircraft, railways, industry, construction, commercial premises and entertainment venues, sports and recreation venues and windfarms.
- 3.6.4 Development Plans and Local Area Plans have an important role to play in the prevention and limitation of adverse noise effects and can ensure that conflicts do not occur between noise-generating and noise sensitive uses such as housing, hospitals, schools, places of worship etc., by guiding development to the right locations and where necessary, specifying design and layout solutions, planning authorities can limit the overall number of people exposed to potential noise effects.

### Existing Sensitivities in relation to Air and Climate

- 3.6.1 One of the key manifestations of climate change is flooding. A Strategic Flood Risk Assessment (SFRA) has been undertaken as part of the preparation of this plan, and all zoned lands in areas at risk of flooding have been reviewed. The Strategic Flood Risk Assessment (SFRA) is included in Volume 2 of this Plan and explains in detail the overall approach to flood risk management that has been followed. It is important to read this document in conjunction with Volume 1 of the plan.
- 3.6.2 The dispersed nature of the settlement patterns throughout the county results in high levels of car based commuting which contributes to the overall transport emissions which impacts on air quality.

## 3.7 Material Assets

- 3.7.1 The EPA SEA Process Draft Checklist (2008) defines material assets as the critical infrastructure essential for the functioning of society such as: electricity generation and distribution, water supply, wastewater treatment, transportation, etc. Water Supplies and Waste Water Treatment infrastructure will be dealt with under Water in Section 3.5. This section of the SEA will deal with other essential infrastructure within the plan area i.e. Transport (Road, Rail, Public Transport, airports, ports/ harbours) etc as appropriate and Waste.

### Existing Sensitivities in relation to Material Assets

- 3.7.2 Additional population and economic growth in the area is dependent on the provision of appropriate and sustainable water services and transport infrastructure to underpin sustainable growth. The Draft Plan has identified areas where additional investment is required in order to meet population growth targets.

### 3.8 Cultural Heritage

3.8.1 The SEA will consider Archaeological and Architectural Heritage. Cork County has a vast resource of archaeological heritage with over 19,000 monuments registered throughout the County. Figure 4.2 indicates the distribution of recorded monuments within the county. The County has the highest concentration of National Monuments (58 in total). County Cork has a wealth of industrial archaeology and this is protected through the archaeological record. Underwater Archaeology is now recognised as an important element of our cultural heritage.

3.8.2 Within the network of settlements designated for growth, a number of towns are subject to zones of archaeological potential including Bandon, Buttevant, Clonakilty, Cobh, Fermoy, Kinsale, Macroom, Mallow, Midleton, Skibbereen and Youghal. Some of these towns are also walled towns and subject to recently released national policy and guidelines regarding “walled towns” (Youghal, Bandon, Kinsale & Buttevant).

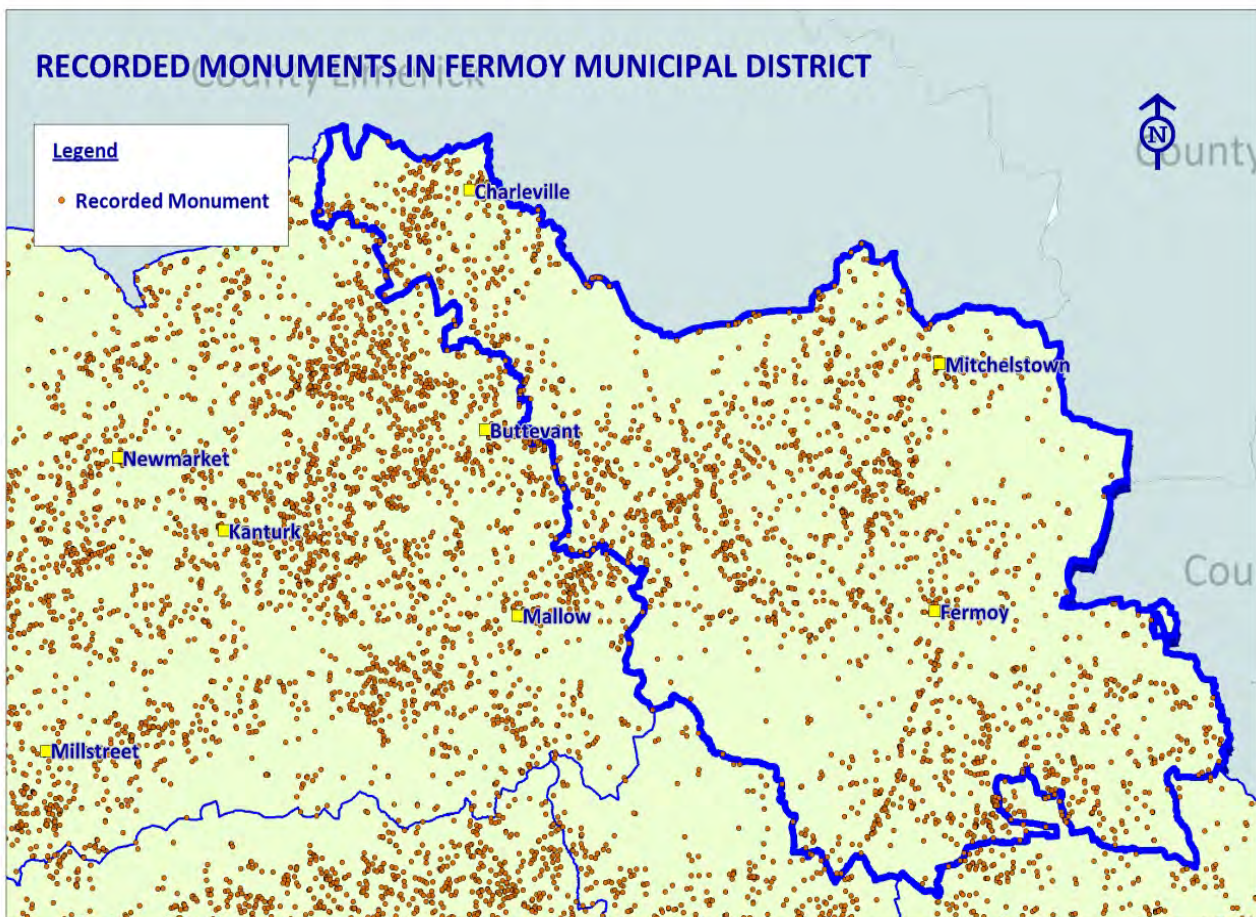


Figure 3.3: Recorded Monuments

3.8.3 In terms of Architectural Heritage, the Planning and Development Act sets out the requirements for County Development Plans to protect structures of “architectural, historical, archaeological, artistic, cultural, scientific and technical interest” by including a Record of Protected Structures (RPS) or the designation of Architectural Conservation Areas (ACAs) to protect areas of townscape value. There are currently in excess of 1,400 structures on the RPS as part of the County Development Plan 2014 and a further 210 structures currently designated in the Fermoy Town Development Plan 2009. Figure 3.4 illustrates the distribution of protected structures in the Fermoy MD while Table 4.5 provides information at main town level.

3.8.4 There are 6 Architectural Conservation Areas in the Municipal District designated within the County Development Plan 2014, and in addition much of Fermoy town is designated as an ACA in the Fermoy Town Development Plan 2009. Under the Planning Act it is an objective to protect the special character of an area which generally comprises of a collection of buildings and their setting and in many cases may include a historic demense or park. Some of these are within settlements designated for growth.

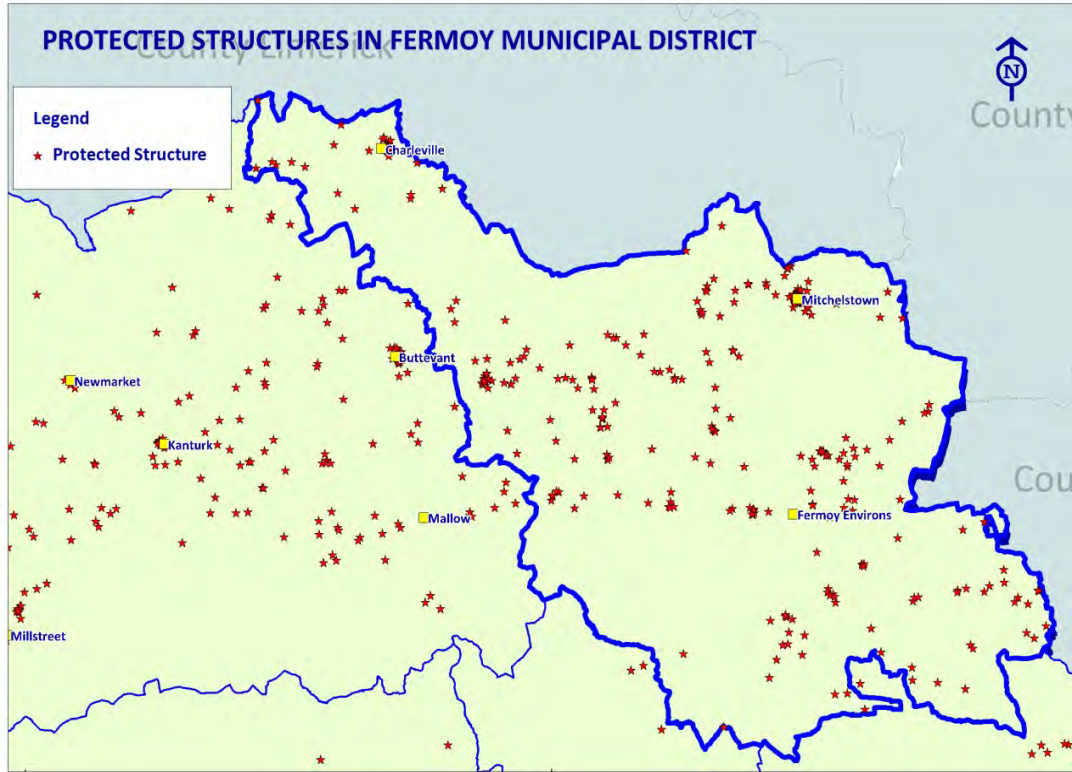


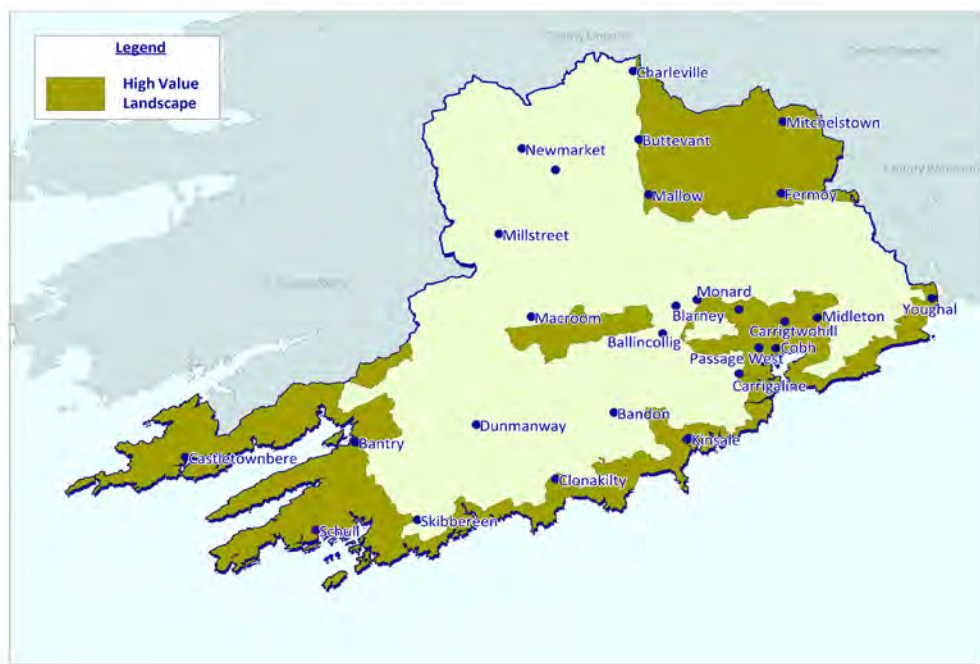
Figure 3.4: Protected Structures

Table 3.5 Fermoy Built Heritage Designations				
Settlement Name	ACA	RPS	NIAH (Buildings & Gardens)	Archaeology (*as per Urban Archaeology Survey)
Fermoy	1 (most of the town centre)	210	221 (1 of National Importance)	4 sites (including historic town*)
Mitchelstown	1	82	146	18 (including Historic town*)
Charleville	1	58	87	9 sites
Fermoy MD	7			

### 3.9 Landscape

3.9.1 The landscape sensitivity of the Fermoy MD has been classified in accordance with Figure 4.5. The SEA explores landscape issue as they relate to the Local Area Plan process in accordance with the policy set out in the County Development Plan. As illustrated by the Map below, the Fermoy Municipal District is within an area of high value landscape.

Figure 3.5 Landscape Value



Landscape Character Types	Main Settlements located within LCT	LCT Value	LCT Sensitivity	LCT Importance
Fertile Plain with Moorland Ridge (5)	Fermoy, Mitchelstown and Charleville	Very High	Very High	County Importance
Broad Fertile Lowland Valleys (6c)		Medium	Medium	Local Importance
Fissured Fertile Middleground (10b)		Medium	High	County Importance
Valleyed Marginal Middleground (13b)		Medium	Medium	Local Importance





## Section 4: Environmental Protection Objectives

### *Sub-Section*

- 4.1 Introduction
- 4.2 Population and Public Health
- 4.3 Biodiversity-Flora and Fauna
- 4.4 Soils
- 4.5 Water
- 4.6 Air Quality and Climatic Factors
- 4.7 Cultural Heritage
- 4.9 Landscape
- 4.8 Material Assets
- 4.9 Flooding

## 4 Environmental Protection Objectives

### 4.1 Introduction

- 4.1.1 This section identifies the Strategic Environmental Protection Objectives used in the assessment of the Draft Plan. Environmental Protection Objectives (EPOs) are methodological measures against which the environmental effects of the Plan can be tested. If complied with in full, EPOs would result in an environmentally neutral impact from the implementation of the Plan. The EPOs are set out under a range of topics and are used as standards against which the provisions of the Plan can be evaluated in order to help identify areas in which significant adverse impacts are likely to occur, unless mitigated.
- 4.1.2 The SEA Directive requires that the evaluation of plans and programmes be focused upon the relevant aspects of the environmental characteristics of areas likely to be significantly affected. EPOs are developed from international, national and regional policies including various European Directives which have been transposed into Irish law and which are intended to be implemented within the County. The EPOs selected have also been informed by Table 4B of the SEA Guidelines (DEHLG, 2004), those used in the preparation of the current County Development Plan and the issues arising from the baseline assessment. The use of EPOs, although not a statutory requirement, does fulfil obligations set out in Schedule 2B of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004).
- 4.1.3 The EPOs are linked to indicators which can facilitate monitoring the environmental effects of implementing the Plan when adopted, as well as to targets which the Plan can help work towards.

### 4.2 Population and Human Health

- 4.2.1 The impact of the Plan on the population and human health is potentially multifaceted as the plan interacts with all the environmental receptors. The plan guides physical land use and seeks to promote sustainable development, guiding the spatial distribution of population across the county. Key directives and policy documents relevant to population have been referenced earlier in this document and include the National Spatial Strategy, Regional Planning Guidelines, National Development Plan, Our Sustainable Future – A Framework for Sustainable Development in Ireland 2011-2016, Smarter Travel, Guidelines for Sustainable Residential Development in Urban Areas, Sustainable Rural Housing, Guidelines for Planning Authorities 2005 etc.
- 4.2.2 The impact of the plan on human health will be influenced by nature, location and design of new development permitted under the plan and its impact on environmental factors like water quality, air quality, noise, landscape and in the long term on climatic factors. The EPOs, Indicators and Targets in Table 4.1 have been identified having regard to the policy context and the environmental baseline described in Section 3.

### 4.3 Biodiversity-Flora and Fauna

- 4.3.1 County Cork has a rich and diverse natural heritage which is described in the baseline section of this report (Chapter 3). Key directives and policy documents relevant to biodiversity, flora and fauna have been referenced earlier in this document and include the EU Habitats Directive (92/43/EEC), the EU Birds Directive (79/409/EEC), UN Convention on Biological Diversity, the National Biodiversity Plan – Action for Biodiversity 2011-2016 and the County Biodiversity Action Plan 2009-2014. The EPOs,



Indicators and Targets set out in Table 4.1 have been identified having regard to the policy context and the environmental baseline described in Section 3.

## 4.4 Soils

4.4.1 There is currently no legislation specific to protecting soil resources. Successive development plans have sought to protect and sustainably manage the soil resource of the county. The EPOs, Indicators and Targets in Table 4.1 have been identified having regard to the environmental baseline described in Section 3.

## 4.5 Water

4.5.1 Water Quality is governed by a large body of legislation and is subject to regular monitoring. As discussed in Chapter 3, the Water Framework Directive has introduced a new approach to water protection. The current baseline status of waters in Cork is varied (see Chapter 3) and the improvement of less than good water quality status is a priority for the future. Key directives and policy documents relevant to water have been referenced earlier in this document and include the Water Framework Directive (2000/60/EC) and Groundwater Quality Directive 2006/118/EC. The EPO, Indicators and Targets in Table 4.1 have been identified having regard to the policy context and the environmental baseline described in Section 3.

## 4.6 Air Quality and Climate Factors

4.6.1 The main impacts on air quality are likely to arise from traffic emissions and noise from traffic and other sources. The land use policies of the plan affect the journeys people make every day to work, school, shopping or for leisure purposes etc. At present approximately 90% of journeys to work within the county are made by the private car. The transport sector is also a significant contributor to greenhouse gas emissions. Key directives and policy documents relevant to Air/ Climate change include Directive 96/62/EC – Air Quality Framework Directive, the Kyoto Protocol and the National Climate Change Strategy (2007-2012) and Climate Change Adaption Framework 2012. The EPO, Indicators and Targets in Table 4.1 have been identified having regard to the policy context and the environmental baseline described in Section 3.

## 4.7 Cultural Heritage

4.7.1 Cork has a rich architectural, archaeological and cultural heritage. Key directives, legislation and policy documents relevant to cultural heritage include the Planning and Development Acts 2000 – 2013, National Monuments Acts, National Heritage Plan 2000 and the Framework & Principles for the Protection of Archaeological Heritage (DAHGI 1999). The EPO, Indicators and Targets in Table 4.1 have been identified having regard to the policy context and the environmental baseline described in Section 3.

## 4.8 Landscape

- 4.8.1 The European Landscape Convention was signed in 2000 and came into force in Ireland in 2004. The European Landscape Convention aims to promote the protection, management and planning of European landscapes and to organise European co-operation on landscape issues. The Convention highlights the importance and need for public involvement in the development of landscapes. It encourages a joined up approach through policy and planning in all areas of land-use, development and management, including the recognition of landscape in law and is the first international treaty to be exclusively concerned with the protection, management and enhancement of the European landscape. The Convention covers natural, rural, urban and peri-urban areas. It deals with ordinary and degraded landscapes as well as those of outstanding beauty.
- 4.8.2 The preparation of a National Landscape Strategy is underway since 2011 but has yet to be completed. A Draft Landscape Strategy for County Cork was prepared in 2008 and identifies landscapes in the county in terms of their Character, Value, Sensitivity and Importance and includes recommendations on balancing development and change with landscape protection. Once the National Landscape Strategy is finalised the County Strategy will need to be reviewed and completed.
- 4.8.3 The EPOs, Indicators and Targets in Table 4.1 have been identified having regard to the policy context and the environmental baseline described in Section 3.

## 4.9 Material Assets

- 4.9.1 Material Assets, for the purposes of SEA, comprises the infrastructure the population needs for the functioning of society and includes roads, transport, water services, energy and telecommunications infrastructure, the building stock of the county, production facilities (factories etc), green infrastructure (parks open spaces, recreational facilities etc.). Large infrastructural installations have the potential to have significant effects on the environment, both during its construction/ development stage and during its use and operation. Such projects will generally require EIA as part of the planning process which would evaluate such impacts and introduce mitigation measures where necessary to minimise any negative environmental effects. The EPO, Indicators and Targets in Table 4.1 have been identified having regard to the policy context and the environmental baseline described in Section 3.

## 4.10 Flooding

- 4.10.1 In order to meet the needs of the Strategic Environmental Assessment process and the requirements of the Department Guidelines "The Planning System and Flood Risk Management" the Draft Local Area Plan has been subject to flood risk assessment procedures. Government Guidelines require, and it is an objective of this plan, that future development is avoided in areas indicated as being at risk of flooding. More detailed information on the approach to flooding and how development proposals in areas at risk of flooding have been assessed is given in the Strategic Flood Risk Assessment Report contained in Volume 2 Environmental Report, of the Draft Plan.

Table 4.1: List of Environmental Protection Objectives, Targets and Indicators

Environmental Protection Objective	Targets	Indicators
<p><b>Population (P)</b></p> <p><b>EPO 1:</b> To ensure the sustainable development of area so people have the opportunity to live in communities with high quality residential, working and recreational environments with sustainable travel patterns.</p>	<p>Deliver on the population target for the Municipal District, especially in the main towns.</p> <p>Promote the economic development of the area.</p> <p>Co-ordinate new housing development and the delivery of social and community infrastructure</p> <p>Decrease journey time and distance travelled to work during the lifetime of the plan.</p> <p>All large scale housing development to be accompanied by a Design Statement.</p>	<p>Significant increase in the population of the main towns.</p> <p>Distance and mode of transport to work/ school.</p>
<p><b>Human Health (HH)</b></p> <p><b>EPO 2:</b> To protect and enhance human health and manage hazards or nuisances arising from traffic &amp; incompatible land uses.</p>	<p>Avoid incompatible development nears SEVESO sites or IPPC licensed sites</p> <p>Ensure new development is well served with community facilities and facilitates including walking and cycling routes.</p>	<p>No of planning permissions granted within the consultation distance of Seveso sites/IPPC facilities.</p> <p>No of new primary health care/schools/creches/ community facilities provided.</p> <p>Amount of (Km) new cycleways provided.</p>
<p><b>Biodiversity, Flora and Fauna (BFF)</b></p> <p><b>EPO 3:</b> Throughout the county, conserve and restore ecosystems, habitats and species in their natural surroundings, and ensure their sustainable management, including the ecological corridors between them.</p>	<ul style="list-style-type: none"> <li>• Maintain the favourable conservation status of all habitats and species, especially those protected under national and international legislation.</li> <li>• Implement the actions of the Cork County Biodiversity Action Plan.</li> <li>• Establishment of a Green Infrastructure Strategy for the County</li> <li>• Protect habitats from</li> </ul>	<ul style="list-style-type: none"> <li>• Number of developments receiving planning permission within designated sites or within the consultation distance of designated sites where the HDA process identified potential for impacts.</li> <li>• Reduction in the quantum of greenfield land in the county as measured by the increase in the amount of brownfield land associated</li> </ul>

Table 4.1: List of Environmental Protection Objectives, Targets and Indicators

Environmental Protection Objective	Targets	Indicators
	invasive species	with each settlement and the no. of one off houses being built in the countryside. <ul style="list-style-type: none"> <li>• Number of actions achieved in Biodiversity Action Plan</li> <li>• Progress on Green Infrastructure strategy</li> </ul>
<b>Soil (S)</b>  <b>EPO 4:</b> Protect the function and quality of the soil resource in the Fermoy Municipal District	Reduce the use of greenfield land by encouraging the reuse of brownfield sites. Encourage sustainable extraction of non-renewable sand, gravel and rock deposits and the reuse and recycling of construction and demolition waste.	No of brownfield sites that have been redeveloped. Volume of construction and demolition waste recycled. Reduction in number of vacant and derelict buildings.
<b>Water (W)</b>  <b>EPO 5:</b> Maintain and improve the quality of water resources and improve the management and sustainable use of these resources to comply with the requirements of the WFD.	To achieve 'good' status in all bodies of surface waters (lakes rivers, transitional and coastal waters). Achieve compliance with Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC (protection of groundwater). Not to permit development where it would result in a WWTP exceeding the terms of its discharge license. Encourage future population growth in areas served by urban waste water treatment plants and public water supplies.	Trends in classification of overall status of surface water under Surface Water Regulations 2009 (SI No 272 of 2009) Trends in Classification of Bathing Waters as set by Directive 2006/7/EC. Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC. No of households served by urban waste water treatment plants/ septic tanks/ individual WWTP or other systems. No of households served by public water supplies. % of water unaccounted for.
<b>Air Quality and Climate Factors (AQ/C)</b>  <b>EPO 6:</b> Protect and improve air quality.	Ensure air quality monitoring results are maintained within appropriate emission limits. Increase modal shift in favour of public transport, walking and cycling.	Trends in Air Quality monitoring data. Percentage of population travelling to work by public transport, walking or cycling.

Table 4.1: List of Environmental Protection Objectives, Targets and Indicators

Environmental Protection Objective	Targets	Indicators
<p><b>EPO 7:</b> Contribute to mitigation of, and adaptation to, climate change.</p>	<p>Encourage production and use of renewal energy. Encourage energy efficiency in building design and construction. Provide flood protection measures where appropriate. Avoid inappropriate development in areas of flood risk.</p>	<p>No of wind turbines permitted. No of developments permitted within areas at risk of flooding.</p>
<p><b>Cultural Heritage (CH)</b></p> <p><b>EPO 8:</b> Protect and, where appropriate, enhance the character, diversity and special qualities of architectural, archaeological and cultural heritage (including Gaeltachtaí) in County Cork.</p>	<p>No loss of or adverse impact on the fabric or setting of monuments on the Record of Monuments (RMP). No loss of or adverse impact on the architectural heritage value or setting of protected structures. No loss of or adverse impact on structures recorded on the National Inventory of Architectural Heritage. Implement the Cork County Heritage Plan</p>	<p>Loss of or adverse impact on monuments on the Record of Monuments (RMP). Loss of or adverse impact on protected structures included on the RPS or structures included on the NIAH.</p>
<p><b>Landscape (L)</b></p> <p><b>EPO 9:</b> Protect and, where appropriate, enhance the character, diversity and special qualities of landscapes in County Cork.</p>	<p>No large scale development permitted in areas of high landscape value.</p>	<p>Number of large scale developments permitted in areas of high landscape value.</p>
<p><b>Material Assets (MA)</b></p> <p><b>EPO 10:</b> Make best use of the material assets of the area and promote the sustainable development of new infrastructure to provide for the current and future needs of the population.</p>	<p>Develop the road, rail and public transport infrastructure of the county to facilitate sustainable growth and travel patterns. Ensure appropriate water services infrastructure is delivered in areas targeted for population growth. Protect and optimise the use</p>	<p>New critical infrastructural projects completed (projects identified by the CDP).</p>

Table 4.1: List of Environmental Protection Objectives, Targets and Indicators

Environmental Protection Objective	Targets	Indicators
	<p>of the existing building stock.</p> <p>Facilitate the sustainable expansion of production facilities to enable economic growth and create new employment opportunities.</p> <p>Protect and enhance green infrastructure.</p> <p>Protect existing recreational facilities and green infrastructure.</p>	
<p><b>Flooding (F)</b></p> <p><b>EPO 11:</b> Protect flood plains and areas at risk of flooding from inappropriate development.</p>	<p>No inappropriate development permitted in areas at risk of flooding.</p> <p>All applications in areas at risk to be accompanied by detailed a flood risk assessment.</p>	<p>Number and nature of developments permitted in areas at risk</p>

## Section 5: Alternatives

### *Sub-Section*

- 5.1 Introduction
- 5.2 SEMPRe
- 5.3 Description of Alternative Plan Scenarios
- 5.4 Evaluation of Alternative Scenarios
- 5.5 The Preferred Scenario

## 5 Alternatives

### 5.1 Introduction

5.1.1 The SEA Directive and Regulations require the Environmental Report to consider 'reasonable alternatives taking into account the objectives and geographical scope of the plan or programme' and the significant environmental effects of the alternatives selected. The alternatives must be reasonable and capable of implementation within the statutory and operational requirements of the Plan.

5.1.2 Three alternative scenarios have been considered during the drafting process for the preparation of the Draft Municipal District Local Area Plan. Each scenario was prepared having regard to Ministerial Guidelines, the National Spatial Strategy and the Regional Planning Guidelines for the South West Region, including its population targets, and the key aims of the County Development Plan 2014. Any scenario that runs counter to these higher level plans would not be reasonable and has not been considered as part of the Environmental Assessment process.

### 5.2 SEMPRe

5.2.1 The SEMPRe Settlement Sustainability project for Cork was completed in 2013. The study involved a detailed analysis of the sustainability of the 26 main towns in County Cork using Sustainability Evaluation Metric for Policy Evaluation (SEMPRe) which is an indicator based method of sustainability measurement. The study identified the relative sustainability of the 26 main towns using a series of 25 sustainable indicators, (Table 5-2) of which 5 were identified as key performance indicators (measure significant aspects of sustainability). Each settlement was assessed and awarded a score out of 100, enabling settlements to be ranked in terms of relative sustainability. The Sustainable Development Index (SDI) scores for the 26 main settlements in Cork are detailed in Table 5-1 and are organised into 3 categories. It can be observed that in general, larger settlements are more sustainable and as distance from Cork city increases, settlement sustainability decreases:

- Category 1 settlements have the highest SDI results,
- Category 2 have intermediate SDI results, and
- Category 3 has the lowest SDI results.



**Table 5.1: Settlement Sustainable Development Indicators**

<b>Infrastructure and location</b>
Infrastructural capacity for settlement expansion**
Connected to gas distribution network
Index of recycling facilities
Proportion of households with broadband internet
Presence of farmers markets
<b>Water and wastewater</b>
Water quality of water bodies
Wastewater treatment spare capacity
Unaccounted for water
Populated area at risk of flooding**
Urban wastewater treatment status
<b>Population and urban form</b>
Planned population density **
Proportion of population unemployed
Proportion of population with 3 <sup>rd</sup> level education
Housing vacancy rate
Distance to nearest largest retail centre
<b>Transport and energy</b>
Average transport CO <sub>2</sub>
Settlement walkability
Number of public transport services/1000 population**
Average household heating CO <sub>2</sub>
Proportion of population travelling to work by private car
<b>Livability</b>
Distance to nearest acute hospital**
Tidy Towns points score
SAC, SPA, HA within 5km of settlement
Distance to nearest park, nature reserve or wildlife park
Presence of 24 hour Garda station
<b>** key performance indicators</b>

**Table 5.2: Main Towns Sustainable Settlement Ranking**

<b>Settlement</b>	<b>SDI Score 2013</b>	<b>Category</b>	<b>Population 2011</b>
Ballincollig	62.8	1	17,368
Blarney	61.5	1	2,437
Carrigaline	57.2	1	14,775
Carrigtwohill	56.8	1	4,551
Midleton	54.9	1	12,001
Cobh	54.8	1	12,347
Bandon	54.5	1	6,640
Mallow	53.6	1	11,605
Glanmire	53.5	1	8,924
Bantry	53.1	1	3,348
Clonakilty	50.3	2	4,721
Kinsale	50.3	2	4,893
Fermoy	49.6	2	6,489
Passage West	48.6	2	5,709
Macroom	46.7	2	3,879
Buttevant	46.1	2	945
Schull	43.8	2	658
Mitchelstown	42.8	2	3,677
Charleville	41.1	3	3,646
Newmarket	41.0	3	988
Skibbereen	39.2	3	2,670
Youghal	38.2	3	7,794
Dunmanaway	37.8	3	1,585
Castletownbere	37.7	3	912
Millstreet	36.7	3	1,574
Kanturk	35.3	3	2,263

5.2.2 In general Category 1 settlements are relatively large in terms of population size and are located in relatively close proximity to Cork city. Category 1 settlements benefit from economies of scale in terms of infrastructure and services. All settlements in the County Metropolitan Strategic Planning Area are Category 1 settlements with the exception of Passage West which falls into Category 2. Category 1 settlements outside of the Metropolitan SPA are: Mallow, Bandon and Bantry.

5.2.3 Category 2 settlements generally have smaller population sizes and are more peripheral relative to Cork City. Certain settlements such as Schull and Buttevant have population sizes of less than 1,000 persons and peripheral locations yet fall into the intermediate sustainability category.

- 5.2.4 Category 3 settlements are the least sustainable (with an average SDI of 38.4) and range in population size from Castletownbere (912 persons) to Youghal (7,794 persons) with an average of 2,682 persons. In general category 3 settlements are smaller settlements sited in more peripheral locations relative to Cork city, and are mainly located in the North and West Strategic Planning areas.
- 5.2.5 The score each town receives is determined by how the town measures up in relation to the indicators used in the study which were arrived at following consultation with a range of stakeholders. Indicators chosen were limited by data availability and applicability at the spatial scale of individual towns and it is acknowledged that the use of different indicators may yield different results. The lack of public transport provision and the high reliance on the private car as a means of travelling to work means that most settlements score poorly in terms of transportation while those with an older housing stock score poorly in terms of energy due to higher household heating CO2 emissions. Proximity to the city influenced two indicators (proximity to large retail centre and an acute hospital) so for some towns their sustainability automatically decreases with distance from the city. A sample of potential measures for enhancing the sustainability of these settlements is set out in Appendix A. The study has informed the consideration of alternative scenarios for development in the formulation of the Draft Plan.

## 5.3 Description of Alternative Plan Scenarios

- 5.3.1 Fermoy MD has an extensive urban structure comprising towns and villages. The Draft Fermoy Municipal District Local Area Plan provide for the development of 3 main towns and 29 villages. Table 3.7 show the network of settlements provided for within the current Draft Fermoy Municipal District Local Area Plan.
- 5.3.2 Successive County Development Plan strategies have sought to encourage balanced growth across the county to sustain the economies and service levels of the main towns and villages and the key aims of the Draft Plan support the continuation of this approach, seeking sustainable patterns of growth in urban and rural areas.
- 5.3.3 The Regional Planning Guidelines support this balanced approach to development in order to maintain vibrant rural communities with an equal level of urban and rural growth. The population targets set out in Regional Planning Guidelines distribute the population growth target for the SW Region to the Cork Gateway (including Metropolitan Cork), the Greater Cork Area, equivalent to the CASP Ring, the Northern Area which includes North Cork and parts of North and East Kerry, and the Western Area which includes West Cork and South and West Kerry. Targets for the North and West Areas have been allocated between Cork and Kerry in their respective County Development Plan strategies.
- 5.3.4 The scenarios considered in preparing this Draft Plan have therefore been prepared in this context. The overall level of growth allocated to each Municipal District is the same for each scenario, in line with targets of the Core Strategy in the County Development Plan and the Regional Planning Guidelines. The scenarios look at options for development within each MD. Scenarios which would be inconsistent with this approach, by focusing more growth on one MD over another for example, have not been considered.

## Scenario 1: Public Transport

- 5.3.5 This scenario seeks to focus a greater proportion of development in a smaller number of settlements to enhance the viability of bus based inter-urban public transport services and the rail link from Charleville. Under this scenario the potential for growth is still dispersed over the entire settlement network but a greater proportion of the growth is focused on a smaller number of locations.
- 5.3.6 Very little growth has been allocated to the rural area under this scenario. It is anticipated that the reduced growth targets for the rural areas combined with a revised approach to managing rural housing, would serve to further consolidate growth in those areas along the preferred public transport corridors.
- 5.3.7 In the Fermoy Municipal District, this scenario concentrates growth in fewer settlements, with most of the growth is directed towards Fermoy, Mitchelstown and Charleville with the aim of delivering a sufficient critical mass of population in these towns so as to justify further investments in primarily bus based public transport around the county and growth in rural areas is curtailed. Charleville is allocated a higher proportion of this growth than Fermoy and Mitchelstown with the aim of optimizing rail based transport.

### Environmental Impacts of Scenario 1

- 5.3.8 Scenario One allocates some growth to every settlement in the network and to villages and rural areas, while seeking to concentrate a greater proportion of the growth in a smaller number of settlements. Many of these settlements have inadequate drinking water supply and/or waste water treatment infrastructure, and significant public investment in infrastructure will be required to enable such development to take place. Such investment is essential to accommodate the growth and mitigate impacts on water quality, human health etc. This dispersed pattern of growth will generally give rise to some cumulative impacts on ground and surface water quality, heritage, landscape and biodiversity and will lead to increased levels of environmental effects associated with additional commuting such as increased energy consumption, emissions to air, road traffic noise etc.
- 5.3.9 In those areas where more intense levels of growth are promoted, there is greater potential for negative environmental impacts on soil, air quality, biodiversity and landscape. Such impacts can however be managed by adherence to good practice guidance and procedures in development management. Intense development in some areas would also be balanced with lower development pressures in other areas, particularly the villages and rural areas which will lead to less pressure on biodiversity, groundwater resources, flora and fauna etc. and the general rural amenities of the county.
- 5.3.10 Investment in infrastructure in the main growth centres can be more targeted, potentially leading to better quality provision/ design solutions/ economies of scale.
- 5.3.11 Within the main growth areas, the correlation between population growth and public transport infrastructure will have a neutral to positive environmental impact particularly on air quality, climatic factors and human health due to the reduction in the need to travel and road traffic emissions. The concentration of population within the built up area of the towns might also encourage a greater proportion of people to consider a move to other modes of transport such as walking and cycling with positive benefits on human health, air quality etc.

### Planning Effects of Scenario One

- 5.3.12 While the settlement pattern for the county remains dispersed, overall commuting should decrease as a greater proportion of population growth is accommodated in the main settlements where public transport is available, reducing commuting distances and car dependency with associated positive benefits for the population.

5.3.13 The concentration of growth in the manner proposed by this strategy may lead to reduced levels of investment in the other areas which may have negative impacts on quality of life and the quality of the urban environment if there are higher levels of vacancy. The reduced growth level in Fermoy and Mitchelstown may have implications for the viability of future water services investment. The increased population targets for Charleville will require a greater level of investment in a range of services.

5.3.14 Dispersed settlement pattern means limited resources for infrastructural investment have to be spread over a large number of settlements, leading to deficiencies in the level of service provided with potential for negative impacts on the environment (most likely in the area of waste water treatment and water quality).

**Table 5.3: Scenario 1 Population Targets**

	Census Population 2011	CDP 2014 2022 Target Population	Scenario 1 Population Target 2022	Scenario 1 Population Growth 2011 - 2022
<b>Fermoy MD</b>				
Fermoy	6,489	7,589	7,489	1,000
Mitchelstown	3,677	5,346	5,246	1,569
Charleville	3,646	4,925	5,525	1,879
<b>Total Main Towns</b>	<b>13,812</b>	<b>17,860</b>	<b>18,260</b>	<b>4,448</b>
<b>Villages and Rural</b>	<b>28,414</b>	<b>29,044</b>	<b>28,644</b>	<b>230</b>
<b>Total Fermoy MD</b>	<b>42,226</b>	<b>46,904</b>	<b>46,904</b>	<b>4,678</b>

## Scenario 2: Employment Towns.

5.3.15 This Scenario looks at employment-led growth which focuses development in key locations where employment growth is more likely to be delivered and differs from previous Plan strategies which spread growth more evenly across all the Main Settlements.

5.3.16 Within the Fermoy MD this scenario focuses a greater level of growth in Fermoy and Charleville and a slightly lesser level of growth in Mitchelstown. This approach reflects the similar roles of the three towns within the Cork County Development Plan Employment Hierarchy but also takes into account the existing higher employment base in Fermoy and proximity to the city and relatively high employment base in Charleville combined with significant quantum of suitable employment land in the town .

## Environmental Impacts Scenario Two

5.3.17 Scenario Two allocates growth across the full settlement network, while seeking to concentrate a greater proportion of the growth in a smaller number of settlements where economic/employment growth may be more easily achieved. Many of these settlements have inadequate drinking water supply and/or waste water treatment infrastructure, and significant public investment in infrastructure will be required to enable such development to take place. Such investment is essential to accommodate the growth and mitigate impacts on water quality, human health etc. This dispersed pattern of growth will generally give rise to some cumulative impacts on ground and surface water quality, heritage, landscape and biodiversity and will lead to increased levels of environmental effects associated with additional commuting such as increased energy consumption, emissions to air, road traffic noise etc.

5.3.18 This scenario concentrates economic growth and employment growth in a smaller number of settlements, making them more self sufficient. This could potentially have negative impacts on soil, air quality, biodiversity and landscape but these impacts can be mitigated by implementing good practice in development management and would be balanced with lower development pressures in other areas, particularly the villages and rural areas with less pressure on the water quality, biodiversity, landscape etc. in these areas. In addition more people will have the opportunity to work locally and possible switch to walking or cycling modes, thus reducing travel distances, traffic volumes and traffic emissions within positive benefits to air quality, climatic factors and human health.

5.3.19 The concentration of growth in the manner proposed by this strategy may lead to reduced levels of investment in the other areas which may have negative impacts on quality of life and the quality of the urban environment if there are higher levels of vacancy and reduced employment opportunities at these locations. The reduced population targets for towns outside the designated employment nodes may also hinder their ability to secure investment in waste water infrastructure in the future if there are lower levels of population and employment growth.

### Planning Impacts

5.3.20 The concentration of growth in the manner proposed by this strategy will strengthen the economic position of these towns chosen as the main growth centres, underpinning further investment and making them more attractive places to live. The strategy may also lead to reduced levels of investment in the other areas which may have negative impacts on quality of life and the quality of the urban environment of those areas if there are higher levels of vacancy and reduced employment opportunities at these locations. The reduced population targets for some towns may also hinder their ability to secure investment in waste water infrastructure in the future if there are lower levels of population and employment growth.

5.3.21 Lower levels of development in the rural areas will help conserve the landscape and amenity of those areas, potentially making it more attractive for visitors.

<b>Table.5.4: Scenario 2 Population Targets</b>				
	<b>Census Population 2011</b>	<b>CDP 2014 2022 Target Population</b>	<b>Scenario 2 Population Target 2022</b>	<b>Scenario 2 Population Growth 2011 - 2022</b>
<b>Fermoy Cork MD</b>				
Fermoy	6,489	7,589	7889	1,400
Mitchelstown	3,677	5,346	5,046	1,369
Charleville	3,646	4,925	5,225	1,579
<b>Total Main Towns</b>	<b>13,812</b>	<b>17,860</b>	<b>18,160</b>	<b>4,348</b>
<b>Villages and Rural</b>	<b>28,414</b>	<b>29,044</b>	<b>28,744</b>	<b>330</b>
<b>Total Fermoy MD</b>	<b>42,226</b>	<b>46,904</b>	<b>46,904</b>	<b>4,678</b>

### Scenario 3: Balanced Growth

5.3.22 In this scenario, significant growth is allocated across the main settlements with lower levels of growth in the villages and rural areas. The principle strength of this scenario lies in the balanced approach allowing for the majority of growth to take place in the main settlements but at the same time allowing for continued, more modest growth in the villages and rural areas, continuing to support the

economies of these areas to underpin local services and quality of life. The pattern of population distribution in this scenario is more dispersed than in the other scenarios as it seeks to support all the main towns. However this is balanced with an employment strategy which seeks to bring people and jobs closer together either in the same settlement or by high quality transport links connecting settlements together.

5.3.23 In the Fermoy MD, the majority of the growth is assigned to the three main towns with more modest growth in the villages and rural areas.

### **Environmental Impacts**

5.3.24 The concentration of both population and employment growth in the main urban areas of the County would serve to reduce commuting patterns as more people would be afforded greater opportunities to live closer to their places of employment and/or travel using high quality public transport links. Such an approach would have a positive environmental effect by serving to reduce CO2 emissions and would enhance people's quality of life.

5.3.25 Focusing population growth across the settlement network will necessitate significant investment in water services infrastructure.

5.3.26 While allowing for growth in rural areas, this scenario will result in some negative impacts on the environment. It is unlikely that developments in rural area will be connected to public wastewater treatment networks. While not as significant on their own, the cumulative impact of rural development could have significant negative impacts both on biodiversity and particularly on water quality.

5.3.27 This scenario would still give rise to the growth of rural housing outside the settlement network which would contribute to further unsustainable commuting patterns and increased car dependency.

### **Planning Impacts**

5.3.28 In common with the other scenarios, this scenario has a strong urban influence. It sets out population targets for the main settlements that, while ambitious, will ultimately help them perform their function as the primary growth centres in the county.

5.3.29 The scenario also recognises that there is a demand for growth in rural areas and provides for some additional growth in the key villages and lower order settlements in rural areas. Facilitating population growth in these areas would in turn encourage the retention of services in these locations. The scale of growth envisaged however is not of a scale that would serve to undermine the growth of the main urban centres in the county.

**Table 5.5: Scenario 3 Population Targets**

	Census Population 2011	CDP 2014 2022 Target Population	Scenario 3 Population Target 2022	Scenario 3 Population Growth 2011 - 2022
<b>West Cork MD</b>				
Fermoy	6,489	7,589	7,589	1,100
Mitchelstown	3,677	5,346	5,346	1,669
Charleville	3,646	4,925	4,925	1,279
<b>Total Main Towns</b>	<b>13,812</b>	<b>17,860</b>	<b>17,860</b>	<b>4,048</b>
<b>Villages and Rural</b>	<b>28,414</b>	<b>29,044</b>	<b>29,044</b>	<b>630</b>
<b>Total Fermoy MD</b>	<b>42,226</b>	<b>46,904</b>	<b>46,904</b>	<b>4,678</b>

## 5.4 Evaluation of Alternative Scenarios

5.4.1 The evaluation of the three proposed alternative scenarios for their respective impacts on the environment was undertaken utilising the Environmental Protection Objectives (EPOs) specifically developed to protect, maintain, conserve or restore environmental elements within the Municipal District. Each scenario was assessed as to whether it was likely to have a positive, negative, uncertain or neutral impact on the EPO's. The EPO's against which the three scenarios were assessed are set out in Section 4, Table 4.1 and are outlined below together with a matrix assessment of each scenario.

5.4.2 All scenarios are assessed on the basis **that appropriate water services infrastructure will be available to cater for growth and development will not be permitted in the absence of this critical infrastructure.**

EPO Reference number	Table 5.6: Environmental Objectives
EPO 1	To ensure the sustainable development of Cork County so the people of Cork have the opportunity to live in communities with high quality residential, working and recreational environments with sustainable travel patterns.
EPO 2	To protect and enhance human health and manage hazards or nuisances arising from traffic and incompatible land uses.
EPO 3	Throughout the county, conserve and restore ecosystems, habitats and species in their natural surroundings, and ensure their sustainable management, including the ecological corridors between them.
EPO 4	Protect the function and quality of the soil resource in County Cork
EPO 5	Maintain and improve the quality of water resources and improve the management and sustainable use of these resources to comply with the requirements of the WFD.
EPO 6	Protect and improve air quality.
EPO 7	Contribute to mitigation of, and adaptation to, climate change
EPO 8	Protect and, where appropriate, enhance the character, diversity and special qualities of architectural, archaeological and cultural heritage (including Gaeltachtaí) in County Cork.
EPO 9	Protect and, where appropriate, enhance the character, diversity and special qualities of landscapes in County Cork.
EPO 10	Make best use of the material assets of the county and promote the sustainable development of new infrastructure to provide for the current and future needs of the population.
EPO 11	Protect flood plains and areas at risk of flooding from inappropriate development.



## 5.5 The Preferred Scenario

- 5.5.1 The Planning Acts require that a Local Area Plan must be consistent with the objectives of the development plan, its core strategy and any regional spatial and economic strategy that applies to the area. This makes the consideration of alternative scenarios more difficult and the key parameters have already been determined. The provisions of the core strategy imply that higher level plans are the ones where the strategic alternative scenarios need to be considered and subjected to rigorous environmental assessment.
- 5.5.2 Given the parameters established by the Regional Planning Guidelines and the extensive nature of the designated settlement network within the county, the alternatives considered in preparing the draft plan are all rather similar in promoting balanced development across the county and have relatively similar impacts.
- 5.5.3 Scenario 3 is the one that places the most emphasis on building on what has already been achieved within the county in terms of supporting the network of settlements, the established employment areas while continuing to support the development of villages and rural areas and it is therefore the preferred scenario, giving the most positive interaction for most of the population with EPO 1. Scenarios 1 and 2 in promoting a more focused development pattern would inevitably lead to the decline and contraction of some of the other towns, villages and rural areas resulting in the loss of economic opportunities in those areas, reduced investment and an overall reduction in the quality of life for the people living in those areas.

**Table 5.7: Alternative Scenarios interaction with Environmental Protection Objectives**

	Positive Interaction with status of EPOs	Negative Interaction with status of EPOs	Uncertain Interaction with status of EPOs	Neutral Interaction with status of EPOs
<b>Scenario 1</b>	EPO 2, 6, 7, 10	EPO1 3, 5		EPO 4, 8, 9
<b>Scenario 2</b>	EPO 2, 6, 7, 10	EPO 1, 3, 5		EPO 4, 8, 9
<b>Scenario 3</b>	EPO 1, 2, 6, 7, 10	EPO 3, 5		EPO 4, 8, 9



## Section 6: Evaluation of the Draft Local Area Plan

### *Sub-Section*

- 6.1 Introduction
- 6.2 Evaluation
- 6.3 Mitigation/Recommended Changes

## 6 Evaluation of the Draft Local Area Plan

### 6.1 Introduction

6.1.1 SEA legislation requires the Environmental Report to include the likely significant effects on the environment of implementing the Plan. This includes secondary, cumulative, synergistic, short, medium and long-term, permanent and temporary, positive and negative effects. The effects should be shown on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above.

### 6.2 Evaluation

6.2.1 The following section identifies the effects on the environment of implementing the Draft Fermoy Municipal District Local Area Plan. The assessment is done on a Section by Section basis, looking at the key provisions and individual objectives of each Section the expected outcome of implementing the Section and the implications for the environment. The Section is then assessed for its likely interaction with the Environmental Protection Objectives and the assessment concludes with recommendations for changes to the Draft Plan. Interactions are assessed on the basis of being:

- Positive (+)
- Negative (-)
- Uncertain (?), or
- Neutral (Ne)

6.2.2 This exercise will set out any environmental problems that are likely to arise from the implementation of the Draft Local Area Plan. Arising from this analysis, the Environmental Report provides recommendations on what mitigation measures will be taken. Mitigation measures can take the form of:

- Amend the wording of an existing objective
- Delete the objective
- Addition of a new objective

6.2.3 A column has been provided to show the Environmental Report's recommendations and another has been provided to display the resulting Local Area Plan's action or response to these recommendations. The Local Area Plan's action could be to reject, accept or to partly accept the Environmental Reports recommendation. In the event that a recommendation is rejected or partly accepted, the onus was on the Local Area Plan to provide reasons for this course of action. A 'tick' was entered in the Local Area Plan's action column when 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.

6.2.4 In the event that a recommendation is rejected or partly accepted, the onus was on the Local Area Plan to provide reasons for this course of action. A 'tick' was entered in the Local Area Plan's action column when the Environmental Report's recommendation was accepted in full and changes made

appropriately in the Local Area Plan document. This report has not resulted in any recommendations that have not been fully accepted by the Local Area Plan.

- 6.2.5 The Draft Fermoy Municipal District Local Area Plan 2016 document has been prepared by undertaking a review of the existing statutory plans for the area including the Fermoy Electoral Area Local Area Plan 2011, the Fermoy Town Development Plan 2009 and updating the provisions of those plans as necessary to take account of any changes in national planning policy, legislation, government guidelines etc which has taken place in the interim and by changes in local circumstances, needs etc. It is important to recognise that the current statutory plans for the area i.e. the Fermoy Electoral Area Local Area Plan 2011 and the Fermoy Town Development Plan 2009, were themselves subject to Strategic Environmental Assessment and Habitats Directive Assessment prior to adoption, and many of the provisions of these plans have been carried forward, unchanged, into the new Draft Plan 2016. Therefore there are few new issues arising that need to be assessed *de novo*.
- 6.2.6 In addition, given the current body of planning knowledge gathered from previous planning work for the area, policy and objectives likely to give rise to significant environmental effect are simply not put forward in the first instance. In this way many of the possible environmental impacts of objectives were avoided or had previously been anticipated and mitigated for through the inclusion of objectives in the current statutory plans.
- 6.2.7 The County Development Plan 2014 includes many protective objectives in relation to issues such as Development Management and Protection of Amenities, Sustainable Residential Development, Natural, Built and Cultural Heritage, Biodiversity, Landscape, Water Quality, Pollution Control, protecting Air Quality, managing Noise and Light emissions, flood risk management, sustainable energy etc. All proposals for development under the Local Area Plan, must comply in the first instance, with the all the provisions of the County Development Plan.
- 6.2.8 All of the objectives of the Draft Plan were assessed for possible impacts within the context of these existing mitigation measures. As these mitigation measures negate or mitigate any significant negative impacts that could otherwise have been expected, there were few recommendations arising from the SEA process in relation to the Draft Local Area Plan.
- 6.2.9 Key mitigation measures included in previous plans, and carried forward in the current Draft Local Area Plan relate to issues such as timely delivery of key infrastructure needed to cater for new development. In relation to water quality for example the plan recognises that in some areas the water services infrastructure needed to facilitate planned growth is not currently in place. In response to this the Draft Plan includes strong objectives requiring that appropriate and sustainable water and waste water infrastructure is provided and operational in advance of the commencement of any discharges from the development. In addition the objectives provide that such infrastructure must be capable of treating discharges to ensure that water quality in the receiving water does not fall below legally required levels, while also meeting the objectives of the relevant River Basin Management Plan, and the requirements of any Natura sites in the area.
- 6.2.10 In relation to Traffic and Transportation the plan requires the submission of traffic impact assessments for key sites to ensure that these impacts are fully assessed and mitigated as appropriate, at the project stage.

### **Ecological Baseline Study for Main Towns in Fermoy Municipal District**

- 6.2.11 Habitat Mapping for the Fermoy Municipal District Towns is currently being prepared but was not complete in time to fully inform the preparation of the Draft Plan. Once complete any recommendations arising from the work will be considered at the amendment stage of the plan making process and can be integrated it to the plan, as appropriate, at that stage.

## Evaluation of the Objectives of the Draft Local Area Plan

Table 6.1: Evaluation of Draft Fermoy Municipal District Local Area Plan Objectives						
Objectives	Positive (+)	Negative (-)	Uncertain (?)	Neutral (Ne)	SEA Recommendation	LAP Response
<b>Section 1 Introduction</b>						
<b>IN-01</b>	EPO 1, EPO 2, EPO 3, EPO 4, EPO 5, EPO 7, EPO 9, EPO 10, EPO 11			EPO 6, EPO 8,	No change required	
<b>GB1-1</b>	EPO 1, EPO 2, EPO 3, EPO 4, EPO 5, EPO 7, EPO 9, EPO 10, EPO 11			EPO 4, EPO 6, EPO 8	No change required	
<b>GB1-2</b>	EPO 1, EPO 9, EPO 10, EPO 11			EPO 2, EPO 3, EPO 4, EPO 5, EPO 6, EPO 7, EPO 8	No change required	
<b>Section 2 Local Area Strategy</b>						
<b>LAS-01</b>	EPO 1, EPO 3, EPO 5, EPO 10,			EPO 2, EPO 4, EPO 6, EPO 8, EPO 7, EPO 9, EPO 11	No change required	
<b>Section 3 Main Towns</b>						
<b>Fermoy, Mitchelstown and Charleville General Objectives</b>						

**Table 6.1: Evaluation of Draft Fermoy Municipal District Local Area Plan Objectives**

Objectives	Positive (+)	Negative (-)	Uncertain (?)	Neutral (Ne)	SEA Recommendation	LAP Response
FY GO-01, MH GO-01, CV GO-01	EPO 01, EPO 7, EPO 8, EPO 10, EPO 11			EPO 2, EPO 3, EPO4, EPO 5, EPO 6, EPO 9	No change required	
FY GO-02 FY GO-03 MH GO-02 CV GO-02	EPO 1, EPO 5, EPO 10			EPO 2, EPO 3, EPO 4, EPO 6, EPO 7, EPO 8, EPO 9, EPO 11	No change required	
FY GO -04 MH GO-03 CV GO -03	EPO 1, EPO2, EPO 9, EPO 10			EPO 3, EPO 4, EPO 5, EPO 6, EPO 7, EPO 8, EPO 11	No change required	
FY GO-05 MH GO-04 CV GO-04	EPO 1, EPO 8, EPO 10			EPO 2, EPO 3, EPO 4, EPO 5, EPO 6, EPO 7, EPO 9, EPO 11	No change required	
FY GO-06 FY GO-07 MH GO -05 MH GO-06 CV GO-05 CV GO-06	EPO 1, EPO 2, EPO 6, EPO 7, EPO 10			EPO 3, EPO 4, EPO 5, EPO 8, EPO 9, EPO 11	No change required	
FY GO-08 MH GO-07	EPO 1, EPO 8, EPO 9, EPO 10			EPO 2, EPO 3, EPO 4, EPO 5,	No change required	

Table 6.1: Evaluation of Draft Fermoy Municipal District Local Area Plan Objectives						
Objectives	Positive (+)	Negative (-)	Uncertain (?)	Neutral (Ne)	SEA Recommendation	LAP Response
CV GO-07				EPO 6, EPO 7, EPO 11		
FY GO-09 MH GO-08 CV GO-08	EPO 1, EPO 3, EPO 4, EPO 8, EPO 9, EPO 11			EPO 2, EPO 5, EPO 6, EPO 7, EPO 10	No change required	
FY GO-10 MH GO 09 CV GO-09	EPO 1, EPO 2, EPO 5, EPO 7, EPO 8, EPO 9, EPO 10, EPO 11			EPO 3, EPO 4, EPO 6,	No change required	
<b>Fermoy</b>						
FY R-01, FY R-02, FY R-03, FY R-04, FY R-05, FY R-06, FY R-07, FY R-08, FY R-09, FY R-10, FY R-11, FY R-12, FY R-13, FY B-01, FY B-02, FY B-03, FY B-04, FY I-01, FY I-02, FY I-03	EPO 1, EPO 2, EPO 10			EPO 3, EPO 4, EPO 5, EPO 6, EPO 7, EPO 8, EPO 9, EPO 11	No change required	
FYT-01	EPO-1, EPO 2, EPO 8, EPO 9, EPO-10			EPO-3, EPO-4, EPO-5, EPO-6, EPO-7, EPO-11	No change required	
FY T-02, FY T-03	EPO-1, EPO-10			EPO-2, EPO-3, EPO-4, EPO-5, EPO-6, EPO-7,	No change required	



Table 6.1: Evaluation of Draft Fermoy Municipal District Local Area Plan Objectives						
Objectives	Positive (+)	Negative (-)	Uncertain (?)	Neutral (Ne)	SEA Recommendation	LAP Response
				EPO-8, EPO-9, EPO-11		
FY T-04	EPO 10			EPO 1-9, EPO 11	No change recommended.	
FY C-01	EPO-1, EPO-2, EPO-3, EPO-4, EPO-10			EPO-5, EPO-6, EPO-7, EPO-8, EPO-9, EPO-11	No change recommended.	
FY O-01, FY O-02, FY O-03, FY O-04, FY O-05, FY O-07, FY O-08, FY O-09, FY O-10, FY O-11, FY O-12, FY O-13, FY O-14	EPO-1, EPO-4, EPO-10, EPO-11			EPO-2, EPO-3, EPO-5, EPO-6, EPO-7, EPO-8, EPO-9	No change recommended.	
FY O-06	EPO-1, EPO-10, EPO-11			EPO-2, EPO-3, EPO-4, EPO-5, EPO-6, EPO-7, EPO-8, EPO-9	No change recommended.	
Mitchelstown						
MH R-01, MH R-02, MH R-03, MH R-04, MH R-05, MH R-06, MH R-07, MH R-08, MH R-09, MH R-10, MH R-11, MH B-01, MH B-02, MH I-01, MH I-02, MH I-03, MH I-04, MH C-01, MH C-02, MH C-03	EPO 1, EPO 2, EPO 10			EPO 3, EPO 4, EPO 5, EPO 6, EPO 7, EPO 8, EPO 9, EPO 11	No change required	
MH T-01	EPO-1, EPO 2,			EPO-3, EPO-4,	No change required	

Table 6.1: Evaluation of Draft Fermoy Municipal District Local Area Plan Objectives						
Objectives	Positive (+)	Negative (-)	Uncertain (?)	Neutral (Ne)	SEA Recommendation	LAP Response
	EPO 8, EPO 9, EPO-10			EPO-5, EPO-6, EPO-7, EPO-11		
MH T-02	EPO-1, EPO-10			EPO-2, EPO-3, EPO-4, EPO-5, EPO-6, EPO-7, EPO-8, EPO-9, EPO-11	No change required	
MH C-04, MH U-01	EPO-1			EPO-2, EPO-3, EPO-4, EPO-5, EPO-6, EPO-7, EPO-8, EPO-9, EPO-10, EPO-11	No change required	
MH U-02	EPO-1, EPO-10			EPO-2, EPO-3, EPO-4, EPO-5, EPO-6, EPO-7, EPO-8, EPO-9, EPO-11	No change required	
MH U-04	EPO-1, EPO-9			EPO-3, EPO-4, EPO-5, EPO-6, EPO-7, EPO-8, EPO-9, EPO-11	No change required	
MH O-01, MH O-03, MH O-04	EPO-1, EPO-4, EPO-			EPO-2, EPO-3, EPO-5,	No change required	

Table 6.1: Evaluation of Draft Fermoy Municipal District Local Area Plan Objectives						
Objectives	Positive (+)	Negative (-)	Uncertain (?)	Neutral (Ne)	SEA Recommendation	LAP Response
	10, EPO-11			EPO-6, EPO-7, EPO-8, EPO-9		
MH O-05	EPO-1, EPO-10, EPO-11			EPO-2, EPO-3, EPO-04, EPO-5, EPO-6, EPO-7, EPO-8, EPO-9	No change required	
<b>Charleville</b>						
CV R-01, CV R-02, CV R-03,  CV R-04, CV R-05, CV R-07, CV R-08, CV R-09, CV R-10, CV B-01, CV B-06	EPO 1, EPO 2, EPO 10			EPO 3, EPO 4, EPO 5, EPO 6, EPO 7, EPO 8, EPO 9, EPO 11	No change required	
CV R-06		EPO 1, EPO 2, EPO 10 EPO 11		EPO 3, EPO 4, EPO 5, EPO 6, EPO 7, EPO 8, EPO 9	While the provisions of the Draft Plan require a site specific flood risk assessment to be carried out at the project stage, given the availability of alternative land for residential development it would be preferable to omit this zoning. It is recommended that the zoning objective for these lands be reconsidered at the amendment stage of the plan with a view to reclassifying the land as part of the	Change Proposed arising from SEA ✓

**Table 6.1: Evaluation of Draft Fermoy Municipal District Local Area Plan Objectives**

Objectives	Positive (+)	Negative (-)	Uncertain (?)	Neutral (Ne)	SEA Recommendation	LAP Response
					built up area.	
CV B-02, CV B-03, CV B-04, CV B-05, CV I-01	EPO-1, EPO-10			EPO 2 EPO 3, EPO 4, EPO 5, EPO 6, EPO 7, EPO 8, EPO 9 EPO 11	No change required	
CV T-01	EPO-1, EPO 2, EPO 8, EPO 9, EPO-10			EPO-3, EPO-4, EPO-5, EPO-6, EPO-7, EPO-11	No change required	
CV T-02				EPO-1 to EPO 11	No change required	
CV C-01, CV-U-03	EPO 1, EPO 2, EPO 10			EPO 3, EPO 4, EPO 5, EPO 6, EPO 7, EPO 8, EPO 9, EPO 11	No change required	
CV U-01, CV U-02, CV U-04, CV U-05	EPO 1, EPO 2, EPO 6, EPO 7, EPO 10			EPO 3, EPO 4, EPO 5, EPO 8, EPO 9, EPO 11	No change required	
CV O-01, CV O-02, CV O-03, CV O-04, CV O-05, CV O-06, CV O-07, CV O-08, CV O-09	EPO 1, EPO 4, EPO 10			EPO 2, EPO 3, EPO 5, EPO 6, EPO 7, EPO 8, EPO 9, EPO 11	No change required	

Table 6.1: Evaluation of Draft Fermoy Municipal District Local Area Plan Objectives						
Objectives	Positive (+)	Negative (-)	Uncertain (?)	Neutral (Ne)	SEA Recommendation	LAP Response
<b>Section 4 Key Villages</b>						
General Objective for Key Villages	EPO 1, EPO 2, EPO 8, EPO 10, EPO 11			EPO 3, EPO 4, EPO 5, EPO 6, EPO 7, EPO 9	No change required	
<b>Ballyhooly</b>						
Ballyhooly DB-01	EPO 1			EPO 2 – EPO 11	No change required	
Ballyhooly DB-02, Ballyhooly DB-03				EPO 1 – EPO 11	No change required	
Ballyhooly B-01, Ballyhooly C-01	EPO 1			EPO 2 – EPO 11	No change required	
Ballyhooly O-01	EPO 1, EPO 2, EPO 4, EPO 9, EPO 10			EPO 3, EPO 5, EPO 6, EPO 7, EPO 8, EPO 11	No change required	
<b>Castlelyons / Bridebridge</b>						
Castlelyons / Bridebridge DB-01	EPO 1			EPO 2 – EPO 11	No change required	
Castlelyons / Bridebridge DB-02, Castlelyons / Bridebridge DB-03				EPO 1 – EPO 11	No change required	
Castlelyons / Bridebridge DB-04	EPO 11			EPO 1 – EPO 10	No change required	
Castlelyons / Bridebridge X-01	EPO 1, EPO 8,			EPO 2, EPO 3, EPO 4,	No change required	

Table 6.1: Evaluation of Draft Fermoy Municipal District Local Area Plan Objectives						
Objectives	Positive (+)	Negative (-)	Uncertain (?)	Neutral (Ne)	SEA Recommendation	LAP Response
	EPO 9			EPO 5, EPO 6, EPO 7, EPO 10, EPO 11		
Castlelyons / Bridebridge O-01, Castlelyons / Bridebridge O-02	EPO 1, EPO 2, EPO 4, EPO 9, EPO 10			EPO 3, EPO 5, EPO 6, EPO 7, EPO 8, EPO 11	No change required	
Castlelyons / Bridebridge U-01	EPO 1, EPO 7, EPO 10			EPO 2, EPO3, EPO 4, EPO 5, EPO 6, EPO 8, EPO 9, EPO 11		
Castletownroche						
Castletownroche DB-01	EPO 1			EPO 2 – EPO 11	No change required	
Castletownroche DB-02, Castletownroche DB-03				EPO 1 – EPO 11	No change required	
Castletownroche DB-04	EPO 11			EPO 1 – EPO 10	No change required	
Castletownroche C- 01	EPO 1			EPO 2- EPO 11		
Castletownroche O-01	EPO 1, EPO 2, EPO 4, EPO 9, EPO 10			EPO 3, EPO 5, EPO 6, EPO 7, EPO 8, EPO 11	No change required	

<b>Table 6.1: Evaluation of Draft Fermoy Municipal District Local Area Plan Objectives</b>						
<b>Objectives</b>	<b>Positive (+)</b>	<b>Negative (-)</b>	<b>Uncertain (?)</b>	<b>Neutral (Ne)</b>	<b>SEA Recommendation</b>	<b>LAP Response</b>
<b>Conna</b>						
Conna DB-01	EPO 1			EPO 2 – EPO 11	No change required	
Conna DB-02, Conna DB-03				EPO 1 – EPO 11	No change required	
Conna O-01, Conna O-02,	EPO 1, EPO 2, EPO 4, EPO 9, EPO 10			EPO 3, EPO 5, EPO 6, EPO 7, EPO 8, EPO 11	No change required	
Conna X-01	EPO 1, EPO 8, EPO 9			EPO 2, EPO 3, EPO 4, EPO 5, EPO 6, EPO 7, EPO 10, EPO 11	No change required	
<b>Doneraile</b>						
Doneraile DB-01	EPO 1			EPO 2 – EPO 11	No change required	
Doneraile DB-02 Doneraile DB-03				EPO 1 – EPO 11	No change required	
Doneraile DB-04	EPO 11			EPO 1 – EPO 10	No change required	
Doneraile O-01, Doneraile O-02, Doneraile O-03, Doneraile O-04	EPO 1, EPO 2, EPO 4, EPO 9, EPO 10			EPO 3, EPO 5, EPO 6, EPO 7, EPO 8, EPO 11	No change required	
Doneraile C-01,	EPO 1, EPO 10			EPO 2- EPO 9, EPO 11	No change required	
Doneraile X-01, Doneraile X-02, Doneraile B-01	EPO 1			EPO 2- 11	No change required	

Table 6.1: Evaluation of Draft Fermoy Municipal District Local Area Plan Objectives						
Objectives	Positive (+)	Negative (-)	Uncertain (?)	Neutral (Ne)	SEA Recommendation	LAP Response
Glanworth DB-01	EPO 1			EPO 2 – EPO 11	No change required	
Glanworth DB-02 Glanworth DB-03				EPO 1 – EPO 11	No change required	
Glanworth X-01, Glanworth B-01, Glanworth C-01, Glanworth C-01, Glanworth U-01	EPO 1			EPO 2-11	No change required	
<b>Kildorrery</b>						
Kildorrery DB-01	EPO 1			EPO 2 – EPO 11	No change required	
Kildorrery DB-02				EPO 1 – EPO 11	No change required	
Kildorrery B-01, Kildorrery C-01, Kildorrery U-01	EPO 1			EPO 2-11	No change required	
Kildorrery O-01	EPO 1, EPO 2, EPO 4, EPO 9, EPO 10			EPO 3, EPO 5, EPO 6, EPO 7, EPO 8, EPO 11	No change required	
<b>Kilworth</b>						
Kilworth DB-01	EPO 1			EPO 2 – EPO 11	No change required	
Kilworth DB-02, Kilworth DB-03				EPO 1 – EPO 11	No change required	
Kilworth C-01, Kilworth C-02	EPO 1			EPO 2-11	No change required	
Kilworth O-01	EPO 1, EPO 2, EPO 4, EPO 9, EPO 10			EPO 3, EPO 5, EPO 6, EPO 7, EPO 8, EPO 11	No change required	



<b>Table 6.1: Evaluation of Draft Fermoy Municipal District Local Area Plan Objectives</b>						
<b>Objectives</b>	<b>Positive (+)</b>	<b>Negative (-)</b>	<b>Uncertain (?)</b>	<b>Neutral (Ne)</b>	<b>SEA Recommendation</b>	<b>LAP Response</b>
<b>Newtownshandrum</b>						
Newtownshandrum DB-01	EPO 1			EPO 2 – EPO 11	No change required	
Newtownshandrum X-01	EPO 1			EPO 2-11	No change required	
Newtownshandrum O-01	EPO 1, EPO 2, EPO 4, EPO 9, EPO 10			EPO 3, EPO 5, EPO 6, EPO 7, EPO 8, EPO 11	No change required	
<b>Rathcormack</b>						
Rathcormack DB-01	EPO 1			EPO 2 – EPO 11	No change required	
Rathcormack DB-02 Rathcormack DB-03				EPO 1 – EPO 11	No change required	
Rathcormack DB-04	EPO 11			EPO 1 – EPO 10	No change required	
Rathcormack B-01 Rathcormack C-01 Rathcormack C-02 Rathcormack C-03 Rathcormack U-01	EPO 1			EPO 2-11	No change required	
Rathcormack O-01 Rathcormack O-02 Rathcormack O-03	EPO 1, EPO 4, EPO 9, EPO 10			EPO 2, EPO 3, EPO 5, EPO 6, EPO 7, EPO 8, EPO 11	No change required	
<b>Watergrasshill</b>						
Watergrasshill DB-01	EPO 1			EPO 2 – EPO 11	No change required	
Watergrasshill DB-02				EPO 1 – EPO 11	No change required	

Table 6.1: Evaluation of Draft Fermoy Municipal District Local Area Plan Objectives						
Objectives	Positive (+)	Negative (-)	Uncertain (?)	Neutral (Ne)	SEA Recommendation	LAP Response
Watergrasshill X-01 Watergrasshill B-01 Watergrasshill B-02 Watergrasshill C-01	EPO 1			EPO 2 – EPO 11	No change required	
Watergrasshill O-01 Watergrasshill O-02	EPO 1, EPO 4, EPO 9, EPO 10			EPO 2, EPO 3, EPO 5, EPO 6, EPO 7, EPO 8, EPO 11	No change required	
Watergrasshill O-03	EPO 1, EPO 9, EPO 10			EPO 2, EPO 3, EPO 4, EPO 5, EPO 6, EPO 7, EPO 8, EPO 11	No change required	
<b>Villages</b>						
General Objective for Villages	EPO 1, EPO 2, EPO 8, EPO 10, EPO 11			EPO 3, EPO 4, EPO 5, EPO 6, EPO 7, EPO 9	No change required	
<b>Ballindangan</b>						
Ballindangan DB-01	EPO 1			EPO 2 – EPO 11	No change required	
Ballindangan DB-02 Ballindangan C-01				EPO 1 – EPO 11	No change required	
<b>Ballyhea</b>						
Ballyhea DB-01	EPO 1			EPO 2 – EPO 11	No change required	
Ballyhea DB-02				EPO 1 – EPO 11	No change required	
Ballyhea DB-03	EPO 11			EPO 1 –	No change required	

Table 6.1: Evaluation of Draft Fermoy Municipal District Local Area Plan Objectives						
Objectives	Positive (+)	Negative (-)	Uncertain (?)	Neutral (Ne)	SEA Recommendation	LAP Response
				EPO 10		
Ballyhea C-01	EPO 1			EPO 2 – EPO -11	No change required	
<b>Ballynoe</b>						
Ballynoe DB-01	EPO 1			EPO 2 – EPO 11	No change required	
Ballynoe DB-02				EPO 1 – EPO 11	No change required	
Ballynoe O-01	EPO 1, EPO 9, EPO 10			EPO 2, EPO 3, EPO 4, EPO 5, EPO 6, EPO 7, EPO 8, EPO 11	No change required	
<b>Bartlemy</b>						
Bartlemy DB-01	EPO 1			EPO 2 – EPO 11	No change required	
Bartlemy DB-02				EPO 1 – EPO 11	No change required	
Clondulane DB-01	EPO 1			EPO 2 – EPO 11	No change required	
Clondulane DB-02 Clondulane DB-03				EPO 1 – EPO 11	No change required	
Clondulane DB-04	EPO 11			EPO 1 – EPO 10	No change required	
Clondulane B-01 Clondulane C-01	EPO 1			EPO 2 – EPO 11	No change required	
<b>Coolagown</b>						
Coolagown DB-01	EPO 1			EPO 2 – EPO 11	No change required	
<b>Curraglass</b>						
Curraglass DB-01	EPO 1			EPO 2 –	No change required	

Table 6.1: Evaluation of Draft Fermoy Municipal District Local Area Plan Objectives						
Objectives	Positive (+)	Negative (-)	Uncertain (?)	Neutral (Ne)	SEA Recommendation	LAP Response
				EPO 11		
Curraglass DB-02				EPO 1 – EPO 11	No change required	
Curraglass O-01 Curraglass C-01	EPO 1			EPO 2 – EPO 11	No change required	
<b>Glenahulla</b>						
Glenahulla DB-01	EPO 1			EPO 2 – EPO 11	No change required	
Glenahulla DB-02				EPO 1 – EPO 11	No change required	
Glenahulla C-01	EPO 1			EPO 2 – EPO 11	No change required	
<b>Killavullen</b>						
Killavullen DB-01	EPO 1			EPO 2 – EPO 11	No change required	
Killavullen DB-02 Killavullen DB-03				EPO 1 – EPO 11	No change required	
Killavullen DB-04	EPO 11			EPO 1 – EPO 10	No change required	
Killavullen O-01 Killavullen O-02	EPO 1, EPO 9, EPO 10			EPO 2, EPO 3, EPO 4, EPO 5, EPO 6, EPO 7, EPO 8, EPO 11	No change required	
<b>Shanballymore</b>						
Shanballymore DB-01 Shanballymore O-01	EPO 1			EPO 2 – EPO 11	No change required	
Shanballymore DB-02				EPO 1 – EPO 11	No change required	
<b>Village Nuclei</b>						

Table 6.1: Evaluation of Draft Fermoy Municipal District Local Area Plan Objectives						
Objectives	Positive (+)	Negative (-)	Uncertain (?)	Neutral (Ne)	SEA Recommendation	LAP Response
General Objective for Village Nuclei	EPO 1, EPO 2, EPO 8, EPO 10, EPO 11			EPO 3, EPO 4, EPO 5, EPO 6, EPO 7, EPO 9	No change required	
<b>Aghern</b>						
Aghern DB-01	EPO 1			EPO 2 – EPO 11	No change required	
Aghern DB-02 Aghern DB-03				EPO 1 – EPO 11	No change required	
<b>Araglin</b>						
Araglin DB-01	EPO 1			EPO 2 – EPO 11	No change required	
Araglin DB-02				EPO 1 – EPO 11	No change required	
<b>Ballygiblin</b>						
Ballygiblin DB-01	EPO 1			EPO 2 – EPO 11	No change required	
<b>Curraghagalla</b>						
Curraghagalla DB-01	EPO 1			EPO 2 – EPO 11	No change required	
<b>Grange</b>						
Grange DB-01	EPO 1			EPO 2 – EPO 11	No change required	
<b>Kildinan</b>						
Kildinan GB-01	EPO 1			EPO 2 – EPO 11	No change required	
Kildinan GB-02				EPO 1 – EPO 11	No change required	
<b>Knockanevin</b>						
Knockanevin DB-01	EPO 1			EPO 2 – EPO 11	No change required	

Table 6.1: Evaluation of Draft Fermoy Municipal District Local Area Plan Objectives						
Objectives	Positive (+)	Negative (-)	Uncertain (?)	Neutral (Ne)	SEA Recommendation	LAP Response
Knockanevin DB-02				EPO 1 – EPO 11	No change required	
<b>Rockmills</b>						
Rockmills DB-01	EPO 1			EPO 2 – EPO 11	No change required	
Rockmills DB-02				EPO 1 – EPO 11	No change required	

## 6.3 Mitigation/Recommended Changes

6.3.1 This purpose of this section is to outline the mitigation measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of the Municipal District arising from the implementation of the LAP, thereby consolidating the SEA process. Environmental issues have been identified in Section 3 and the environmental impact of the plan has been analysed in section 6.

6.3.2 As outlined above, as this plan is a review of previous plans for the area which have already been through the SEA process, many of the possible environmental impacts of objectives were avoided or had previously been anticipated and mitigated for through the inclusion of objectives in the current statutory plans for the area. Protective mitigation measures are also contained in the County Development Plan 2014. All of the objectives of the Draft Plan were assessed for possible impacts within the context of these existing mitigation measures. As these mitigation measures negate or mitigate any negative impacts that could otherwise have been expected there were few recommendations arising from the SEA process.

6.3.3 Habitat Mapping for the Fermoy Municipal District Towns is ongoing however it was not completed in time to inform this Draft Plan. When completed the Draft Plan will be assessed against its findings and any changes required will be brought forward by way of Amendment to the Draft Plan.

6.3.4 One issue that did come to light is identified below along with recommended mitigation measures.

### R-06 zoning in Charleville

6.3.5 This site was previously zoned residential in the Kanturk Electoral Area Local Area Plan 2011. The lands were not identified as being at risk of flooding during the preparation of the 2011 LAP. The more recent CFRAM assessment shows that part of the land is at risk is flooding.

### Mitigation Measures – Recommendations

6.3.6 While the provisions of the Draft Plan require a site specific flood risk assessment to be carried out at the project stage, given the availability of alternative land for residential development it would be preferable to omit this zoning.

It is recommended that the zoning objective for these lands be reconsidered at the amendment stage of the plan with a view to reclassifying the land as part of the built up area.

## Section 7: Monitoring and Next Steps

### *Sub-Section*

- 7.1 Introduction
- 7.2 Next Steps
- 7.3 How to make a Submission

## 7 Monitoring and Next Steps

### 7.1 Introduction

7.1.1 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 Local Area Plan is achieving its environmental protection objectives and targets, whether such objectives need to be re-examined and whether the proposed mitigation measures are being implemented.

7.1.2 Section 4 identifies the Strategic Environmental Protection Objectives used in the assessment of the Draft Plan. The Section also identifies a number of indicators that will be used to assess the environmental Impact of implementing the plan. In addition to the indicators set out in this Section, the evaluation of the plan also sets out additional indicators that can be used to monitor the impacts of the plan. A completed list of indicators that will be used to monitor the predicted environmental impacts of implementing the plan will be set out in the Environmental Statement that will be prepared in the final stages of the SEA process.

### 7.2 Next Steps

7.2.1 This Environmental Report forms a key element of the Strategic Environmental Assessment (SEA). However, the preparation of the environmental report does not bring the SEA process to an end. The SEA process should continue from the time the environmental report is completed through to the time Cork County Council monitors the implementation of the Municipal District Local Area Plan and will act as an important reference point for the continuing SEA of all policies, plans, strategies and programmes carried out by the Council.

<b>Table 6.1: General Overview of the Process after the Environmental Report</b>
A - Preparing the Environmental Report
B - Consulting on the Environmental Report and Draft Local Area Plan
C - Response of Consultation Authorities and the Public
D - Taking Account of Consultation Opinion
E - Adopting Local Area Plan
F - Providing Information
G - Monitoring plan

#### Preparing the Environmental Report

7.2.2 This Environmental Report has been produced to comply with the requirements of the Guidance for Regional Authorities and Planning Authorities on the Implementation of the SEA Directive (2001/42/EC). The Baseline analysis outlined the current state of the environment and was prepared using the most up to date information from a wide variety of state agencies. The evaluation of the plan as set out in Section 6, identifies a number of concerns with policies as they are presented in the draft plan and has suggested a number of changes that should be incorporated into the Draft Local Area Plan before publication.



## Consulting on the Environmental Report and the Draft Plan

7.2.3 Consultation is an important element of the SEA process. The Environmental Report will be part of the consultation exercise for the Draft Municipal District Local Area Plan. Consultation will be carried out with a range of statutory bodies, including the Environmental Protection Agency and the National Parks and Wildlife Service and the public. As well as having an opportunity to comment on the Draft Plan, these bodies will have an opportunity to comment on the content of the environmental report and the overall SEA process.

### Taking account of the consultation opinion

7.2.4 It is recognised that the opinion expressed through the public consultation exercise can be very useful in improving the quality of the plan being prepared. In order to track these changes, the consultation exercise will aim to include documentation of all the comments and the changes made.

### Adopting Plan

7.2.5 The overriding aim of the SEA process is to improve the quality of the Draft Municipal District Local Area Plan and to ensure that it protects the environment; it is important that the relevant findings in the environmental report and any outcomes from the consultation process are incorporated into the plan before its adoption.

### Providing information

7.2.6 Once the Draft Municipal District Local Area Plan is adopted a number of post-adoption steps are required to conclude the SEA process. The essence of this stage is to provide information regarding the difference the SEA process has made to the plan. This will involve the publication of an Environmental Statement which will specify: -

- How environmental considerations have been integrated into the plan;
- How the environmental report has been taken into account;
- How opinions expressed during various consultations have been taken into account;
- The reasons for choosing the plan as adopted in the light of other reasonable alternatives; and
- Measures to monitor significant environmental effects.

### Monitor Plan

7.2.7 Once the plan is adopted and the necessary information is provided, the County Council will seek to monitor the significant environmental effects identified through the SEA process. The detail of the monitoring process will be included in the environmental statement. The framework for monitoring used in the environmental report /statement will be used to identify unforeseen adverse effects at an early stage so that, if necessary, the appropriate remedial action can be undertaken.

## 7.3 How to make a Submission

7.3.1 The Draft Fermoy Municipal District Local Area Plan is available from the Council website at [www.corkcoco.ie](http://www.corkcoco.ie). If required, a hard copy of the document may be inspected between the hours of 9.30 a.m. and 4.00p.m, from Wednesday 16th November 2016 to Friday 06th January 2017at the following locations:

- Planning Department, Floor 1, County Hall, and Cork.
- Planning Department, Norton House, Skibbereen, Co. Cork.
- Cork County Council Offices, Mallow
- Public Libraries – Please check libraries regarding opening times and availability.

7.3.2 CD copies of the documents may be requested by phone (Tel: 021-4285900) or collected from the Planning Department, Floor 1, County Hall between the hours of 9.30am and 4.00pm during the above period.

7.3.3 Submissions or observations regarding the Draft Fermoy Municipal District Local Area Plan document are hereby invited from members of the public, children, or groups or associations representing the interests of children and other interested parties during the period **Wednesday 16th November 2016 to 4pm on Friday 06th January 2017.**

7.3.4 Submissions may be made in either of the following two ways:

- On-line via [www.corkcoco.ie](http://www.corkcoco.ie) following the instructions provided
- OR
- In written form to the Senior Planner, Planning Policy Unit, Cork County Council, Floor 13, County Hall, Cork. T12R2NC.

7.3.5 All such submissions lodged within the above period and prior to the close of business at **4.00pm on Friday 06th January 2017,** will be taken into consideration in the finalisation of the East Cork Municipal District Local Area Plan.

## Section 8: Non Technical Summary

### *Sub-Section*

- 8.1 Introduction
- 8.2 The Draft Fermoy Municipal District Local Area Plan
- 8.3 Environmental Baseline
- 8.4 Environmental Protection Objectives
- 8.5 Alternatives
- 8.6 Evaluation of the Draft Local Area Plan
- 8.7 Monitoring
- 8.8 Sub-title

## 8 Non Technical Summary

### 8.1 Introduction

- 8.1.1 This is the Environmental Report on the Strategic Environment Assessment of the Draft Fermoy Municipal District Local Area Plan 2016 and it describes the assessment of the likely significant effects on the environment of implementing the Draft Plan.
- 8.1.2 The most recent Local Area Plans were adopted in 2011. The Plans have a six year life and the Council is now commencing the process of preparing new plans which will be in place by August 2017. Following the re-organisation of local government in 2014, the electoral structure of the County is now based on eight Municipal Districts. A new Local Area Plan will be prepared for each of the eight Municipal Districts in the County.
- 8.1.3 Currently the Town Development Plans adopted by the nine former Town Councils of Cobh, Clonakilty, Fermoy, Kinsale, Macroom, Mallow, Middleton, Skibbereen and Youghal remain in force pending the making of the next Cork County Development Plan in 2020. It is intended to replace the land use zoning provisions of the Town Plans with the new Local Area Plans and on this basis it is proposed to include the former Town Council administrative areas within the Local Area Plan review.

#### Scoping

- 8.1.4 The process of scoping for SEA is defined as the procedure whereby the range of environmental issues and the level of detail to be included in the Environmental Report are decided upon, in consultation with the prescribed environmental authorities. Scoping is necessary in order to establish, with objectivity, the potential impacts of the implementation of the draft plan on a number of environmental elements from consultations with a range of environmental bodies and the incorporation of associated submissions into the draft plan by way of their inclusion in the Environmental Report.
- 8.1.5 Scoping for the current SEA was commenced with the circulation of a Draft Scoping Report to all the environmental authorities on the 22nd April 2016. A total of two (2) submissions were received from EPA and Irish Water respectively. The Scoping Report was finalised on the 31st May 2016 and issues raised were considered further in the preparation of this Draft Local Area Plan and SEA.

#### Collection of Baseline Data, Assessment and Environmental Report

- 8.1.6 In order to assess the likely significant impacts of the Plan, baseline data on the current state of the environment has to be collected and evaluated and the potential effects of the plan predicted and considered. In accordance with legislation and guidance, the existing environment is described with respect to biodiversity, population, human health, fauna, flora, soil, water (surface freshwater, coastal, transitional, groundwater, bathing and water services (drinking water and waste water treatment), air, climatic factors, material assets (roads, transportation, energy etc), cultural heritage (including architectural and archaeological heritage), landscape and the interrelationships between these factors as appropriate. Any existing problems relevant to the new Plan are also identified at this baseline stage.

#### Documenting the SEA process

- 8.1.7 The SEA Process produces two documents – this environmental Report which is published with the Draft Municipal District Local Area Plan and an SEA statement which will be published at the end of the process, once the plan is adopted.
- 8.1.8 This Environmental Report will be submitted to the Elected Members with the Draft Municipal District Local Area Plan. The Members must take account of the Environmental Report before the Plan is

adopted. When the Plan is adopted, an SEA Statement will be published, summarising, inter alia, how environmental considerations have been integrated into the Plan and the reasons for choosing the Plan as adopted over other alternatives considered in the Environmental Report.

8.1.9 Should alterations to the Draft Plan be proposed, there will be a further submission period of not less than four weeks during which time submissions and/or observations may be made on the proposed alterations. If material alterations are proposed they will need to undergo a screening process to determine if SEA is required. The proposed alterations, the screening document and SEA Environmental report, where relevant, will be sent to the Minister, the Board and the prescribed authorities and will be made available for public inspection.

## 8.2 The Draft Fermoy Municipal District Local Area Plan

8.2.1 The Fermoy Municipal District is located north of Cork City and in 2011 the population of the area stood at 42,226. This population is spread across a network of settlements including 3 Main Towns, 29 smaller settlements, and the open countryside, as detailed in Table 2.1. Outside the main towns the district is largely rural / agricultural in character with almost 45% of the population of the Municipal District living in the open countryside i.e. not within a settlement.

8.2.2 Fermoy is the largest town within the Municipal District with a population of 6,489 in 2011. The other Main Towns populations are Mitchelstown (3,677) and Charleville (3,646).

### Population Trends

8.2.3 Within the Fermoy Municipal District the County Development Plan provides for growth in population of 4,678 persons. The number of households is expected to grow by 4,381 leading to a net requirement for 4,874 new houses within the Municipal District. The County Development Plan indicates that 149ha of residentially zoned land is required.

8.2.4 Of the required provision of 4,874 new housing units, at least 2,782 units are allocated to the 3 Main Towns. Housing growth of 2,092 units is also planned for the villages and rural areas.

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8.2.6 Of the required provision of 4,874 new housing units, at least 2,782 units are allocated to the 3 Main Towns. Housing growth of 2,092 units is also planned for the villages and rural areas.

8.2.7 At present planning policy for the settlements within the Fermoy Municipal District is spread across the Fermoy Electoral Area Local Area Plan 2011, the Kanturk Electoral Area Local Area Plan 2011, the Mallow Electoral Area Local Area Plan 2011, and the Fermoy Town Development Plan 2009. The intention is that local planning policy for all settlements within the Municipal District will be contained within the new Fermoy Municipal District Local Area Plan 2017.

8.2.8 It is anticipated that many of the provisions of the current Local Area Plans adopted in 2011 will be continued into the new Local Area Plan unless there is a specific requirement for change arising from changes in national planning policy, legislation, government guidelines, changes in local circumstances, needs etc or to reflect the provisions of the new County Development Plan adopted in 2014.

8.2.9 Through its County Development Plan 2014, the Council has allocated the majority of this growth to the towns with 2782 new houses required, the majority of which are planned for Fermoy, Mitchelstown and Charleville. Housing growth is also planned within the villages.

8.2.10 This section also outlines the relationship that this plan has to other Relevant Plans and Programmes at a National and Regional level.

## 8.3 Environmental Baseline

8.3.1 The environmental baseline of this Municipal District is described in this section. This baseline information outlines the environmental context within which the Draft Fermoy Municipal District Local Area Plan will operate. The purpose of this section is to provide enough environmental baseline data to:

- support the identification of environmental problems;
- support the process of assessing the environmental effects;
- provide a baseline against which future monitoring data can be compared.

8.3.2 A number of key environmental issues set the context for the collection of the baseline data and each section includes an overview of the current situation, the key environmental problems and an analysis of the likely evolution in the absence of the Draft Plan. The Environmental issues are listed below:

- Population and Human Health,
- Biodiversity – Flora and Fauna,
- Soil,
- Water,
- Air and Climatic factors,
- Material Assets,
- Cultural Heritage,
- Landscape.

8.3.3 This section outlines the different environmental issues concerned above and highlights the most pertinent environmental issues within the Fermoy Municipal District.

## 8.4 Environmental Protection Objectives

8.4.1 This section identifies the Strategic Environmental Protection Objectives used in the assessment of the Draft Plan. Environmental Protection Objectives (EPOs) are methodological measures against which the environmental effects of the Plan can be tested. If complied with in full, EPOs would result in an environmentally neutral impact from the implementation of the Plan. The EPOs are set out under a range of topics and are used as standards against which the provisions of the Plan can be evaluated in order to help identify areas in which significant adverse impacts are likely to occur, unless mitigated.

- 8.4.2 The SEA Directive requires that the evaluation of plans and programmes be focused upon the relevant aspects of the environmental characteristics of areas likely to be significantly affected. EPOs are developed from international, national and regional policies including various European Directives which have been transposed into Irish law and which are intended to be implemented within the County. The EPOs selected have also been informed by Table 4B of the SEA Guidelines (DEHLG, 2004), those used in the preparation of the current County Development Plan and the issues arising from the baseline assessment. The use of EPOs, although not a statutory requirement, does fulfil obligations set out in Schedule 2B of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004).
- 8.4.3 The EPOs are linked to indicators which can facilitate monitoring the environmental effects of implementing the Plan when adopted, as well as to targets which the Plan can help work towards.

## 8.5 Alternatives

- 8.5.1 The SEA Directive and Regulations require the Environmental Report to consider 'reasonable alternatives taking into account the objectives and geographical scope of the plan or programme' and the significant environmental effects of the alternatives selected. The alternatives must be reasonable and capable of implementation within the statutory and operational requirements of the Plan.
- 8.5.2 Three alternative scenarios have been considered during the drafting process for the preparation of the Draft Municipal District Local Area Plan. Each scenario was prepared having regard to Ministerial Guidelines, the National Spatial Strategy and the Regional Planning Guidelines for the South West Region, including its population targets, and the key aims of the County Development Plan 2014. Any scenario that runs counter to these higher level plans would not be reasonable and has not been considered as part of the Environmental Assessment process.

### Scenario 1: Public Transport

- 8.5.3 This scenario seeks to focus a greater proportion of development in a smaller number of settlements to enhance the viability of bus based inter-urban public transport services and the rail link from Charleville. Under this scenario the potential for growth is still dispersed over the entire settlement network but a greater proportion of the growth is focused on a smaller number of locations.
- 8.5.4 Very little growth has been allocated to the rural area under this scenario. It is anticipated that the reduced growth targets for the rural areas combined with a revised approach to managing rural housing, would serve to further consolidate growth in those areas along the preferred public transport corridors.
- 8.5.5 In the Fermoy Municipal District, this scenario concentrates growth in fewer settlements, with most of the growth is directed towards Fermoy, Mitchelstown and Charleville with the aim of delivering a sufficient critical mass of population in these towns so as to justify further investments in primarily bus based public transport around the county and growth in rural areas is curtailed. Charleville is allocated a higher proportion of this growth than Fermoy and Mitchelstown with the aim of optimizing rail based transport.

### Scenario 2: Employment Towns

- 8.5.6 This Scenario looks at employment-led growth which focuses development in key locations where employment growth is more likely to be delivered and differs from previous Plan strategies which spread growth more evenly across all the Main Settlements.

8.5.7 Within the Fermoy MD this scenario focuses a greater level of growth in Fermoy and Charleville and a slightly lesser level of growth in Mitchelstown. This approach reflects the similar roles of the three towns within the Cork County Development Plan Employment Hierarchy but also takes into account the existing higher employment base in Fermoy and proximity to the city and relatively high employment base in Charleville combined with significant quantum of suitable employment land in the town .

### **Scenario 3: Balanced Growth**

8.5.8 In this scenario, significant growth is allocated across the main settlements with lower levels of growth in the villages and rural areas. The principle strength of this scenario lies in the balanced approach allowing for the majority of growth to take place in the main settlements but at the same time allowing for continued, more modest growth in the villages and rural areas, continuing to support the economies of these areas to underpin local services and quality of life. The pattern of population distribution in this scenario is more dispersed than in the other scenarios as it seeks to support all the main towns. However this is balanced with an employment strategy which seeks to bring people and jobs closer together either in the same settlement or by high quality transport links connecting settlements together.

8.5.9 In the Fermoy MD, the majority of the growth is assigned to the three main towns with more modest growth in the villages and rural areas.

### **The Preferred Scenario**

8.5.10 The Planning Acts require that a Local Area Plan must be consistent with the objectives of the development plan, its core strategy and any regional spatial and economic strategy that applies to the area. This makes the consideration of alternative scenarios more difficult and the key parameters have already been determined. The provisions of the core strategy imply that higher level plans are the ones where the strategic alternative scenarios need to be considered and subjected to rigorous environmental assessment.

8.5.11 Given the parameters established by the Regional Planning Guidelines and the extensive nature of the designated settlement network within the county, the alternatives considered in preparing the draft plan are all rather similar in promoting balanced development across the county and have relatively similar impacts.

8.5.12 Scenario 3 is the one that places the most emphasis on building on what has already been achieved within the county in terms of supporting the network of settlements, the established employment areas while continuing to support the development of villages and rural areas and it is therefore the preferred scenario, giving the most positive interaction for most of the population with EPO 1. Scenarios 1 and 2 in promoting a more focused development pattern would inevitably lead to the decline and contraction of some of the other towns, villages and rural areas resulting in the loss of economic opportunities in those areas, reduced investment and an overall reduction in the quality of life for the people living in those areas.

## **8.6 Evaluation of the Draft Local Area Plan**

8.6.1 SEA legislation requires the Environmental Report to include the likely significant effects on the environment of implementing the Plan. This includes secondary, cumulative, synergistic, short, medium and long-term, permanent and temporary, positive and negative effects. The effects should be shown on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above.



8.6.2 This section identifies the effects on the environment of implementing the Draft Fermoy Municipal District Local Area Plan. The assessment is done on a Section by Section basis, looking at the key provisions and individual objectives of each Section the expected outcome of implementing the Section and the implications for the environment. The Section is then assessed for its likely interaction with the Environmental Protection Objectives and the assessment concludes with recommendations for changes to the Draft Plan. Interactions are assessed on the basis of being:

- Positive (+)
- Negative (-)
- Uncertain (?), or
- Neutral (Ne)

8.6.3 A column has been provided to show the Environmental Report's recommendations and another has been provided to display the resulting Local Area Plan's action or response to these recommendations. The Local Area Plan's action could be to reject, accept or to partly accept the Environmental Reports recommendation.

### **Recommended Changes**

8.6.4 This section outlines the mitigation measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of the Municipal District arising from the implementation of the LAP. This section seeks to tie together the SEA process. Environmental issues have been identified in Section 3 and the impact of the plan is outlined in Section 6, as a result of this analysis and in light of the SEA process, certain mitigation measures have been identified.

8.6.5 In relation to most of the objectives it is noted that adequate protective mitigation measures are included in both the draft local area plan, and in addition, in the County Development Plan 2014.

8.6.6 The following issue was identified and recommended mitigation measures were proposed:

#### **R-06 zoning in Charleville**

8.6.7 This site was previously zoned residential in the Kanturk Electoral Area Local Area Plan 2011. The lands were not identified as being at risk of flooding during the preparation of the 2011 LAP. The more recent CFRAM assessment shows that part of the land is at risk is flooding.

#### **Mitigation Measures - Recommendations**

8.6.8 While the provisions of the Draft Plan require a site specific flood risk assessment to be carried out at the project stage, given the availability of alternative land for residential development it would be preferable to omit this zoning.

8.6.9 It is recommended that the zoning objective for these lands be reconsidered at the amendment stage of the plan with a view to reclassifying the land as part of the built up area.

## **8.7 Monitoring**

8.7.1 Once the plan is adopted and the necessary information is provided, the County Council will seek to monitor the significant environmental effects identified through the SEA process. The detail of the monitoring process will be included in the environmental statement. The framework for monitoring used in the environmental report /statement will be used to identify unforeseen adverse effects at an early stage so that, if necessary, the appropriate remedial action can be undertaken.

## **Consulting on the Environmental Report and the Draft Plan**

8.7.2 Consultation is an important element of the SEA process. The Environmental Report will be part of the consultation exercise for the Draft Municipal District Local Area Plan. Consultation will be carried out with a range of statutory bodies, including the Environmental Protection Agency and the National Parks and Wildlife Service and the public. As well as having an opportunity to comment on the Draft Plan, these bodies will have an opportunity to comment on the content of the environmental report and the overall SEA process.

### **Taking account of the consultation opinion**

8.7.3 It is recognised that the opinion expressed through the public consultation exercise can be very useful in improving the quality of the plan being prepared. In order to track these changes, the consultation exercise will aim to include documentation of all the comments and the changes made.

### **Adopting the Plan**

8.7.4 The overriding aim of the SEA process is to improve the quality of the Draft Municipal District Local Area Plan and to ensure that it protects the environment; it is important that the relevant findings in the environmental report and any outcomes from the consultation process are incorporated into the plan before its adoption.

### **Preparing the Environmental Report**

8.7.5 This Environmental Report has been produced to comply with the requirements of the Guidance for Regional Authorities and Planning Authorities on the Implementation of the SEA Directive (2001/42/EC). The Baseline analysis outlined the current state of the environment and was prepared using the most up to date information from a wide variety of state agencies. The evaluation of the plan is set out in Section 6.

# Appendices

Appendix A: Sample Settlement Enhancement Measures

## Settlement Enhancement Measures

A sample of potential measures for enhancing the sustainability of these settlements is set out in Table D1 below. The key areas where the Plan can deliver enhanced sustainability outcomes are in the areas of transportation and Water and wastewater. The Plan's transportation policies now place a strong emphasis on modal shift targets to sustainable forms of movement especially prioritising walking and cycling for shorter trips and better access to public transport within the towns. A number of towns scored poorly in terms of settlement walkability and recommendations are made to undertake a movement audit at these locations. The audit of the pedestrian and cycling environment of the town should focus on improving the quality, safety, connectivity and attractiveness of the movement network within the town together with a complementary set of traffic calming and parking measures.

The provision of good quality public transport provision is inherently linked to density within the service catchment of an operator. Most of the County is starting from a low public transport base but a revised approach to density in the Plan should make the delivery of a more extensive high frequency bus service viable within the Metropolitan area where the largest proportion of the target growth is allocated. The integration of public transport services is also a key consideration at some locations to encourage modal shift together with the provision of stops at convenient locations. The delivery of these enhancement measures will help increase a modal shift to green travel modes and should consequently reduce car based commuting and associated CO2 emissions.

The Plan has identified the infrastructure status of all the main settlements allocated growth within the County. Where deficiencies have been identified the Plan has specified that development may only proceed where appropriate infrastructure is available which satisfies the environmental regulations and complies with EPA licensing. Water conservation is also identified as a key priority area of investment in the Plan and a number of Category 3 settlements in North Cork have been identified with significant water leakage issues. While investment in these deficiencies will be outside the scope of the Council, the Plan will not exacerbate the existing situation.

Table D1: Sample Sustainability Enhancement Measures

Town	SDI score	Livability		Infrastructure & Location		Water & Wastewater			Population & Urban Form		Transport & Energy	
		Provide public park	Local employment opportunities	Improve infrastructure Capacity	Provision recycling facilities	Improve water quality	Compliance with Urban wastewater treatment	Water conservation measures	Address Housing Vacancy	Increase pop density	Improve walking & cycling network	Improve public transport
Ballincollig	1											X
Blarney	1										X	
Carrigaline	1			X								X
Carrigtwohill	1					X	X				X	X
Midleton	1			X	X	X			X		X	
Cobh	1		X	X	X				X		X	X
Bandon	1	X	X								X	X
Mallow	1		X					X		X	X	X
Glanmire	1				X			X			X	X
Bantry	1	X		X								X
Clonakilty	2		X	X				X				X
Kinsale	2				X						X	X
Fermoy	2					X						X
Passage West	2			X	X						X	X
Macroom	2			X					X	X		
Buttevant	2		X	X					X	X		
Schull	2			X					X	X		
Mitchelstown	2		X	X				X				
Charleville	3		X						X	X	X	X
Newmarket	3			X								X
Skibbereen	3			X						X		
Youghal	3		X									X
Dunmanway	3			X			X	X	X	X		X
Castletownbere	3	X		X			X			X		
Millstreet	3	X		X				X				
Kanturk	3		X	X			X	X	X	X		



# **Fermoy Municipal District Draft Local Area Plan**

## Strategic Flood Risk Assessment

November 2016





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## Section 1 Introduction

### 1.1 Scope

- 1.1.1 This Strategic Flood Risk Assessment of the Draft Fermoy Municipal District Local Area Plan 2016 has been prepared in accordance, in so far as is practicable, with 'The Planning System and Flood Risk Management: Guidelines for Planning Authorities', published in November 2009 by the DEHLG and the OPW, and having specific regard to the areas, within the settlements of this Municipal District, that have been identified as being at risk of flooding.
- 1.1.2 This report sets out how the Flood Risk Assessment was undertaken, as well as how its findings were addressed and integrated into the Draft Local Area Plan. The report should be read in conjunction with the Fermoy Municipal District Draft Local Area Plan, and the associated maps.

### 1.2 Report Structure

- 1.2.1 Section 2 of this report provides a brief introduction to the Fermoy Municipal District, 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 Municipal District and recent flood events.
- 1.2.3 Section 4 examines how the issue of managing flood risk was addressed in the review of the Local Area Plan and outlines the main provisions of the flood risk management strategy.
- 1.2.4 Section 5 sets out what this assessment has achieved in terms of managing the adverse effects of flooding within the Fermoy Municipal District. It also identifies how information on flood risk will 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. Climate change effects suggest that the frequency and severity of flooding is likely to increase in the future.
- 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 management 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 Guidelines work 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 Guidelines 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:

$$\text{Flood risk} = \text{Probability of flooding} \times \text{Consequences of flooding}$$

- 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: Guidelines for Planning Authorities', provides three vulnerability categories, based on the type of development, 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 associated essential facilities, such as changing rooms.

## Section 2 Local Study Area

### 2.1 Introduction: The Fermoy Municipal District

2.1.1 The Fermoy Municipal District straddles two Strategic Planning Areas for which the CDP 2014 sets out differing objectives. Fermoy, its hinterland and the area to the south of Fermoy are located within the Greater Cork Ring Strategic Planning Area. Mitchelstown, Charleville, and the northern part of the Municipal District are located within the North Cork Strategic Planning Area.

- **Three Main Settlements** comprising Fermoy, Mitchelstown and Charleville.
- **Eleven Key Villages** comprising Doneraile, Newtownshandrum, Kilworth, Glanworth, Rathcormack, Castletownroche, Ballyhooly, Watergrasshill, Conna and Kildorrery
- **Ten Villages** comprising Killavullen, Bartlemy, Ballynoe, Clondulane, Ballindangan, Glennahulla, Ballyhea, Shanballymore, Coolagown and Curraglass.
- **Eight Village Nuclei** comprising Aghern, Grange, Ballygiblin, Araglin, Curraghalla, Kildinan (The Pound), Knockanevin and Rockmills.



## 2.2 Population and Household Growth -

- 2.2.1 Within the Fermoy Municipal District the County Development Plan provides for growth in population of 4,678 persons. The number of households is expected to grow by 4,381 leading to a net requirement for 4,874 new houses. The County Development Plan indicates that 149ha of zoned land are required to meet this level of housing provision in the main towns, in addition to housing opportunities in the villages and rural areas.
- 2.2.2 The majority of the growth is allocated to the towns, with 2,782 new houses proposed. Housing growth is also planned within the villages (1,533 units).
- 2.2.3 Arising from the County Development Plan 2014, Table 2.2 shows that there is a net requirement within the towns of the Municipal District for 2,782 new dwelling units and capacity, in terms of the current provision of zoned lands within the towns, to accommodate 4,018.

	Housing Requirement					Housing Supply	
	Census 2011	Population Target	Total New Households	New Units Required	Net Estimated Requirement (ha)	Est. Net Residential area zoned (ha)	Estimated Housing Yield (Units)
Fermoy	6,489	7,589	831	938	47	90.66	1,601
Charleville	3,646	4,925	741	804	45	72.50	1,124
Mitchelstown	3,677	5,346	905	1,040	58	74.79	1,293
<b>Total Main Towns</b>	<b>13,812</b>	<b>17,860</b>	<b>2,478</b>	<b>2,782</b>	<b>149</b>	<b>237.95</b>	<b>4,018</b>
Villages	9,427	11,529	1,417	1,533	---	---	1,003
Rural	18,987	17,514	486	559	---	---	
Total Villages and rural	28,414	29,044	1,903	2,092	---	---	1,003
<b>Total Municipal District</b>	<b>42,226</b>	<b>46,904</b>	<b>4,381</b>	<b>4,874</b>	<b>149</b>	<b>237.95</b>	<b>5,021</b>

Current Estimated Strategic Land Reserve (LAPs and TCPs) for this Municipal District is 89 Ha  
Source: Cork County Development Plan 2014- Appendix B, Table B 11

## 2.3 Environment and Heritage

- 2.3.1 European and National legislation now protects the most valuable of our remaining wild places, through designation of sites as proposed Natural Heritage Areas, Special Areas of Conservation and Special Protection Areas. The current list of protected sites is contained in the County Development Plan 2014 and is shown on the Map Browser in Volume 4 of that Plan. Designated sites in the Fermoy Municipal District are detailed in the table below.

Designated Sites in the Fermoy Municipal District		
Code	Description	Natura 2000 Site
SAC 2037	Carrigeenamronety Hill	Yes
SAC 2170	Blackwater River	Yes
SPA 4094	Blackwater Callows	Yes
SPA 002036	Ballyhoura Mountains	Yes
NHA 2449	Mount Eagle Bogs	No
pNHA 1036	Banteer Ponds	No
pNHA 1072	Priory Wood	No
pNHA 1029	Araglin Valley, Near Kilworth	No
pNHA 0075	Awbeg Valley (Above Doneraile)	No
pNHA 0074	Awbeg Valley (Below Doneraile)	No
pNHA 1561	Awbeg Valley (Castletownroche)	No
pNHA 0012	Ballinvoneer Pond	No
pNHA 1829	Ballinaltig Bog Pond, Ballyhooly	No
pNHA 2036	Ballyhooura Mountains	No
pNHA 1793	Blackwater Valley (Ballincurrag Wood)	No
pNHA 73	Blackwater River Callows, Fermoy	No
pNHA1796	Blackwater Valley (Cregg), Fermoy	No
pNHA 1794	Blackwater Valley (Kilcummer), Ballyhooly	No
pNHA 1795	Blackwater Valley (Killathy Wood), Ballyhooly	No
pNHA 1080	Blackwater Valley (Killavullen)	No
pNHA1797	Blackwater Valley (The Beech Wood), Fermoy	No
pNHA 0079	Bride/Bunaglanna Valley	No
pNHA 1169	Browns Farm, Togher Cross Roads, Glanworth	No
pNHA 2037	Carrigeenamronety Hill, Kildorrery	No
pNHA 2097	Convamore, Ballyhooly	No
pNHA 2050	Cregg Castle, Fermoy	No
pNHA 0092	Kilcolman Bog	No

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 the important geological features within the County, in the County Development Plan 2014, with the intention of maintaining their possible conservation value. Geological features of interest in the Fermoy Municipal District include the Blackwater Valley and a Victorian Pumping Station/Springs at Kilworth.



- 2.3.3 In terms of built heritage, there are numerous recorded monuments and protected structures throughout the Municipal District and these are also detailed in the County Development Plan 2014.

**2.4 Infrastructure**

- 2.4.1 There are significant infrastructural deficiencies within the Municipal District 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 Municipal District are to be achieved, including for example the upgrading of waste water treatment plant facilities and the implementation of water conservation measures.
- 2.4.2 In Fermoy, further investment in roads infrastructure is also needed to create capacity in the road network to accommodate planned future development.
- 2.4.3 In Charleville delivery of the M20 motorway bypass is needed to relieve the town of through traffic.

## Section 3 Flood Risk in the Fermoy Municipal District

### 3.1 Sources of Flooding

- 3.2.1 This SFRA has primarily reviewed flood risk from fluvial 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 such risks will need to be assessed at the project stage.
- 3.2.2 This approach has been adopted for two main reasons. Firstly, the review of flooding in the Fermoy Municipal District shows rivers to be the most common source of damage and it is this source of flooding that has been taken into account in the Local Area Plan process. Other sources of flooding are considered to present a lesser risk in this Municipal District 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.

### 3.2 Fluvial Flooding

- 3.2.3 Flooding of watercourses is associated with the exceedance of 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. There are two main catchment types - large and relatively flat or small and steep, the two giving two very different responses during large rainfall events.
- 3.2.4 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.
- 3.2.5 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.
- 3.2.6 Rivers are the primary cause of flooding in the Fermoy Municipal District with flood events attributed to fluvial sources ranging from the Blackwater River in particular to smaller tributaries and drains.
- 3.2.7 The Fermoy municipal district landscape is characterised by the Blackwater and its tributaries criss-crossing the district. The Blackwater flows through counties Kerry, Cork and Waterford, extending to 134km in length and, together with its 29 tributaries, drains a catchment of 3324 km<sup>2</sup>. The catchment is a broad valley surrounded by mountains to the north and south. The Blackwater is also noted for its diverse range of habitats that are protected as part of the Blackwater River Special Area Of Conservation (SAC). Many of the tributaries are major rivers themselves such as the Araglin, Awbeg, Funshion and Bride. The table below lists the

settlements in the district that have rivers running through or close to their development boundary.

<b>Rivers in the Fermoy Municipal District</b>	
<b>Settlement</b>	<b>River</b>
Fermoy	Blackwater
Mitchelstown	Gradoge, Tributary of the Funshion
Charleville	Glen
Ballyhooly	Blackwater
Castlelyons/Bridebridge	Shanowenadrimina Stream, Tributary of the River Bride
Castletownroche	Blackwater
Conna	Bride
Doneraile	Blackwater
Glanworth	Funshion
Kildorrery	Farahy / Funshion
Kilworth	Douglas (Araglin)
Rathcormack	Shanowen, Tributary of the River Bride
Ballindangan	Nutgrove 18
Ballyhea	Awbeg
Ballynoe	Douglas
Clondulane	Blackwater
Curraglass	Bride
Glenahulla	Funshion
Killavullen	Ross (Killavullen) and the Blackwater
Shanballymore	Blackwater
Aghern	Bride
Araglin	Araglin
Knockanevin	Sheep
Rockmills	Funshion

3.2.8 Recent significant flood events have included significant inundation at Castlelyons following Storm Desmond in Dec. 2015/Jan. 2016. It should be noted that flood events occur frequently within the Municipal District. Within the Blackwater (Munster) Catchment there are 210 flood events recorded by the OPW.

### 3.3 Other Sources of Flooding

3.3.1 Other sources of flooding including pluvial, ground water, drainage systems and reservoirs are detailed below. Risks from these sources have not been specifically considered in the Strategic Flood Risk Assessment undertaken for the Fermoy Municipal District and need to be addressed at the planning application stage.

- Pluvial Flooding:** Pluvial flooding is a result of rainfall generated overland flows of water. 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:** 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.
- **Flooding from Drainage Systems:** Flooding from artificial 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. Sewer flooding problems will often be associated with regularly occurring storm events during which sewers and associated infrastructure can become blocked or fail.
- **Flooding from Reservoirs, Lakes and other Artificial Sources:** Reservoirs can be a major source of flood risk, as demonstrated in the 2009 flooding, when waters released from the Inniscarra Dam flooded sections of Cork City.

## Section 4 Addressing Flood Risk in the Fermoy Local Area Plan

### 4.1 Introduction

4.1.1 This section details the approach to Flood Risk Management adopted in the Fermoy Municipal District Local Area Plan.

### 4.2 Collation of Flood Risk Data

4.2.1 In 2010, as part of the review of its 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 using data prepared on its behalf by JBA Consultants. The Council also conferred with OPW officials, the Lead Agency for Flood Risk Management in Ireland, in completing the county wide assessment of flood risks and in formulating the flood risk management strategy which informed the preparation the 2011 Local Area Plans.

4.2.2 For the purposes of the assessment, information about flood risks was collated from a number of sources including:

- ‘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 provided flood extent information for river catchments where a more detailed CFRAMS study was not available.
- Draft River Lee Catchment Flood Risk Assessment and Management Study (Lee CFRAMS) data was used for areas within the catchment of the study.

4.2.3 This data was amalgamated into a single ‘Indicative Flood Zone Map’ for the County, which was then used as the basis for the flood risk assessment of the 2011 Local Area Plans. The flood zone map showed the areas known to be at risk of fluvial (river) or tidal flooding only. It should be noted that the flood zones are based on an undefended scenario and do not take the presence of flood protection structures such as walls or embankments into account. This is to allow for the fact that there is still a residual risk of flooding behind the defences due to overtopping or breach, and that there may be no guarantee that the defences will be maintained in perpetuity. This is accordance with the requirements of the Guidelines which specify an undefended assessment of risk.

4.2.4 In 2016, as part of the further review of the Local Area Plans the Council commissioned an update of the flood zone mapping used in the 2011 to take account of the information that has become available in the intervening period from other flood studies, including the outputs from the National CFRAM Programme (Catchment Flood Risk Assessment and Management), undertaken by the OPW.

4.2.5 The updated flood zone mapping provides information on the three main flood zones as follows:

- **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, should only be considered in this zone if adequate sites are not available in Zone C, and subject to a flood risk assessment demonstrating that the risk can be appropriately managed”.
- **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.

4.2.6 Extracts from the flood zone map are shown, where relevant, on the settlement maps included in the Local Area Plan. 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 may be refined where possible over time as other more detailed flood risk assessments are completed by the OPW.

4.2.7 Within areas not specifically identified by the plan as being at risk of fluvial or tidal flooding (i.e. within Zone C) a flood risk screening assessment may still be required to assess potential impact of development on adjoining Flood Zones A or B, particularly with respect to surface water management . An assessment of the risk of other sources of flooding such as pluvial or ground water flooding may also be needed.

4.2.8 The inclusion of the flood zone information on the settlement maps of the Municipal District is the first step in managing flood risk in the future. The updated mapping provides for an improved understanding of flood risk issues within the County. The maps indicate the extent of flood zones 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.

4.2.9 As part of the review of the Local Area Plans, all zoned lands in areas at risk of flooding have been considered in the context of the updated indicative flood zone maps.

### 4.3 Flood Risk within the Fermoy Municipal District

4.3.1 Flood risk to each settlement has been appraised based on the Indicative Flood Zones which cross the settlement boundary, and is summarised in Table 4.1.

<b>Table 4.1: Flood Risk by Settlement in Fermoy Municipal District</b>		
<b>Settlement</b>	<b>Indicative Fluvial/ Coastal Flood Risk within Development Boundary</b>	<b>Comment</b>
<b>Main Settlements</b>		
Fermoy	Yes	All development proposals within the Indicative Flood Zone Areas will need to comply with the flood risk assessment procedure detailed in Section 4.6 of this report i.e. verification of Indicative Flood Zone mapping, compliance with the requirements of the Development Plan Justification Test, and detailed site specific assessment, as appropriate.
Mitchelstown	Yes	
Charleville	Yes	
<b>Key Villages</b>		
Ballyhooly	No	Indicative Flood Zone Mapping does not indicate a fluvial risk. See Paragraph 4.2.7. regarding the need for further assessment.
Castlelyons/Bridebridge	Yes	All development proposals within the Indicative Flood Zone Areas will need to comply with the flood risk assessment procedure detailed in Section 4.6 of this report i.e. verification of Indicative Flood Zone mapping, compliance with the requirements of the Development Plan Justification Test, and detailed site specific assessment, as appropriate.
Castletownroche	Yes	
Conna	Yes	
Doneraile	Yes	
Glanworth	Yes	
Kildorrery	No	Indicative Flood Zone Mapping does not indicate a fluvial risk. See Paragraph 4.2.7. regarding the need for further assessment.
Kilworth		
Newtownshandrum		
Rathcormack	Yes	All development proposals within the Indicative Flood Zone Areas will need to comply with the flood risk assessment procedure detailed in Section 4.6 of this report i.e. verification of Indicative Flood Zone mapping, compliance with the requirements of the Development Plan Justification Test, and detailed site specific assessment, as appropriate.

<b>Table 4.1: Flood Risk by Settlement in Fermoy Municipal District</b>		
<b>Settlement</b>	<b>Indicative Fluvial/ Coastal Flood Risk within Development Boundary</b>	<b>Comment</b>
Watergrasshill	No	Indicative Flood Zone Mapping does not indicate a fluvial risk. See Paragraph 4.2.7. regarding the need for further assessment.
<b>Villages</b>		
Ballindangan	Yes	All development proposals within the Indicative Flood Zone Areas will need to comply with the flood risk assessment procedure detailed in Section 4.6 of this report i.e. verification of Indicative Flood Zone mapping, compliance with the requirements of the Development Plan Justification Test, and detailed site specific assessment, as appropriate
Ballyhea	Yes	
Ballynoe	No	Indicative Flood Zone Mapping does not indicate a fluvial risk. See Paragraph 4.2.7. regarding the need for further assessment.
Bartlemy	No	
Clondulane	Yes	All development proposals within the Indicative Flood Zone Areas will need to comply with the flood risk assessment procedure detailed in Section 4.6 of this report i.e. verification of Indicative Flood Zone mapping, compliance with the requirements of the Development Plan Justification Test, and detailed site specific assessment, as appropriate.
Coolagown	No	Indicative Flood Zone Mapping does not indicate a fluvial risk. See Paragraph 4.2.7. regarding the need for further assessment.
Curraglass	Yes	All development proposals within the Indicative Flood Zone Areas will need to comply with the flood risk assessment procedure detailed in Section 4.6 of this report i.e. verification of Indicative Flood Zone mapping, compliance with the requirements of the Development Plan Justification Test, and detailed site specific assessment, as appropriate
Glenahulla	Yes	
Killavullen	Yes	
Shanballymore	No	Indicative Flood Zone Mapping does not indicate a fluvial risk. See Paragraph



<b>Table 4.1: Flood Risk by Settlement in Fermoy Municipal District</b>		
<b>Settlement</b>	<b>Indicative Fluvial/ Coastal Flood Risk within Development Boundary</b>	<b>Comment</b>
		4.2.7. regarding the need for further assessment.
<b>Village Nuclei</b>		
Aghern	No	Indicative Flood Zone Mapping does not indicate a fluvial /coastal risk. See Paragraph 4.2.7. regarding the need for further assessment.
Araglin	No	
Ballygiblin	No	
Curraghalla	No	
Grange	No	
Kildinan	No	
Knockanevin	Yes	All development proposals within the Indicative Flood Zone Areas will need to comply with the flood risk assessment procedure detailed in Section 4.6 of this report i.e. verification of Indicative Flood Zone mapping, compliance with the requirements of the Development Plan Justification Test, and detailed site specific assessment, as appropriate
Rockmills	No	Indicative Flood Zone Mapping does not indicate a fluvial risk. See Paragraph 4.2.7. regarding the need for further assessment.

#### **4.4 Flood Risk Management Strategy**

- 4.4.1 The assessment and management of flood risks in relation to planned future development is an important element of sustainable development. The majority of towns, villages and smaller settlements 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.
- 4.4.2 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 The approach adopted has generally been to

- Include, on the settlement maps, information on the areas at risk of flooding (extent of Flood Zones A and B),
- 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.

4.4.4 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.

#### **4.5 The Approach to Zoning in Areas at Risk of Flooding.**

4.5.1 Within the areas identified by the Indicative Flood Risk Mapping 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, land use zoning objectives within the indicative Flood Risk Areas have been included in the plan where either:

- The land use zoning objective has been considered in the context of the “Development Plan Justification Test” set out in the Ministerial Guidelines;
- The zoning objective stemmed from a similar objective 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.

4.5.2 In the preparation of the Draft Fermoy Municipal District 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 generally 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.

4.5.3 In such circumstances, all of the following criteria must be satisfied :

- a) the urban settlement is targeted for growth in the NSS, RPGs, or statutory plans defined under the provisions of the Planning and Development Act, 2000, as amended.
- b) the zoning is required to achieve the proper planning and sustainable development of an urban settlement and is
  - Essential to facilitate the 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 to achieving compact and sustainable urban growth; and

- 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
- 4.5.4 A flood Risk 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.
- 4.5.5 In the preparation of the Draft Fermoy Municipal District Local Areas Plan the final element of the Justification Test (part (c ) above), which requires a site specific flood risk assessment to be carried out, was not undertaken. 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.
- 4.5.6 Instead, the approach taken in the Draft Local Area Plan provides, in the first instance, for the detailed assessment of the extent of the actual flood risk relative to that indicated on the indicative mapping via a phased flood risk assessment procedure. The first stage of this assessment process provides a prospective developer with the opportunity to verify the Indicative Flood Zone Mapping in the first instance, and address any local ambiguities. Depending on the outcome of the verification stage, a prospective developer may then have the opportunity to demonstrate compliance with the requirements of the Development Plan Justification Test and carry out a detailed site specific assessment, as appropriate. This flood risk assessment process is set out in Chapter 11 of the County Development Plan 2014.
- 4.5.7 Development proposals on lands 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.
- 4.5.8 The Table below lists the specific zoned sites within the Fermoy Municipal District that are located within either Flood Zone A or B and the circumstances of their inclusion.

<b>Table 4.2: Specific Land Use Zonings located within Flood Zone A or B</b>				
<b>Settlement</b>	<b>Zoning Objective</b>	<b>Development Plan Justification Test &amp; Other Assessment Criteria</b>	<b>Reason for inclusion in the LAP</b>	<b>Comment</b>
Fermoy	FY-T-01	Justification Test	Partially applied	Existing Town Centre. Part three of the test was not completed.
		Existing Zoning	✓	Previously zoned Town Centre in the Fermoy Town Development Plan 2009. Part of the area is at risk of flooding and is defended.  A site specific flood risk assessment will be required i.e.

Table 4.2: Specific Land Use Zonings located within Flood Zone A or B				
Settlement	Zoning Objective	Development Plan Justification Test & Other Assessment Criteria	Reason for inclusion in the LAP	Comment
				verification of Indicative Flood Zone Mapping, compliance with the requirements of the Development Plan Justification Test, and detailed site specific assessment, as appropriate, in accordance with Objectives WS 6-1 and WS 6-2 as detailed in Chapter 11, Volume 1 of the Cork County Development Plan, 2014..
Fermoy	FY-T-02	Justification Test	Partially applied	Part three of the test was not completed.
		Existing Zoning	✓	<p>Previously zoned Town Centre in the Fermoy Town Development Plan 2009. The lands are at risk of flooding but are defended.</p> <p>A site specific flood risk assessment will be required i.e. verification of Indicative Flood Zone Mapping, compliance with the requirements of the Development Plan Justification Test, and detailed site specific assessment, as appropriate, in accordance with Objectives WS 6-1 and WS 6-2 as detailed in Chapter 11, Volume 1 of the Cork County Development Plan, 2014.</p>
Fermoy	FY-T-03	Justification Test	Partially applied	Part three of the test was not completed.
		Existing Zoning	✓	<p>Previously zoned Town Centre in the Fermoy Town Development Plan 2009. The lands are at risk of flooding but are defended.</p> <p>A site specific flood risk assessment will be required i.e. verification of Indicative Flood Zone Mapping, compliance with the requirements of the Development Plan Justification Test, and detailed site specific assessment, as appropriate, in</p>

Table 4.2: Specific Land Use Zonings located within Flood Zone A or B				
Settlement	Zoning Objective	Development Plan Justification Test & Other Assessment Criteria	Reason for inclusion in the LAP	Comment
				accordance with Objectives WS 6-1 and WS 6-2 as detailed in Chapter 11, Volume 1 of the Cork County Development Plan, 2014.
Fermoy	FY-T-04	Justification Test	Partially applied	Part three of the test was not completed. Zoning objective provides for car parking or other flood compatible uses only.
		Existing Zoning	✓	Previously zoned Town Centre in the Fermoy Town Development Plan 2009. The lands are at risk of flooding but are defended.  A site specific flood risk assessment will be required i.e. verification of Indicative Flood Zone Mapping, compliance with the requirements of the Development Plan Justification Test, and detailed site specific assessment, as appropriate, in accordance with Objectives WS 6-1 and WS 6-2 as detailed in Chapter 11, Volume 1 of the Cork County Development Plan, 2014.
Mitchelstown	MH- T-01	Justification Test	Partially applied	Existing town centre. Part three of the test was not completed.
		Existing Zoning	✓	Previously zoned Town Centre in the Fermoy Electoral Area Local Area Plan 2011. Part of the zone is within the area at risk of flooding.  A site specific flood risk assessment will be required i.e. verification of Indicative Flood Zone Mapping, compliance with the requirements of the Development Plan Justification Test, and detailed site specific assessment, as appropriate, in accordance with Objectives WS

Table 4.2: Specific Land Use Zonings located within Flood Zone A or B				
Settlement	Zoning Objective	Development Plan Justification Test & Other Assessment Criteria	Reason for inclusion in the LAP	Comment
				6-1 and WS 6-2 as detailed in Chapter 11, Volume 1 of the Cork County Development Plan, 2014.
Mitchelstown	MH- T-02	Justification Test	Partially applied	Part three of the test was not completed.
		Existing Zoning	✓	<p>Previously zoned Town Centre in the Fermoy Electoral Area Local Area Plan 2011. Part of the zone is within the area at risk of flooding.</p> <p>A site specific flood risk assessment will be required i.e. verification of Indicative Flood Zone Mapping, compliance with the requirements of the Development Plan Justification Test, and detailed site specific assessment, as appropriate, in accordance with Objectives WS 6-1 and WS 6-2 as detailed in Chapter 11, Volume 1 of the Cork County Development Plan, 2014.</p>
Mitchelstown	MH- U-01	Justification Test	Partially applied	<p>Part three of the test was not completed.</p> <p>Lands are zoned for the provision of a car park, which is generally accepted as a flood compatible use.</p>
		Existing Zoning	✓	<p>Previously zoned for the provision of a car park in the Fermoy Electoral Area Local Area Plan 2011. The lands are at risk of flooding.</p> <p>A site specific flood risk assessment will be required i.e. verification of Indicative Flood Zone Mapping, compliance with the requirements of the Development Plan Justification Test, and detailed site specific assessment, as appropriate, in accordance with Objectives WS 6-1 and WS 6-2 as detailed in</p>

Table 4.2: Specific Land Use Zonings located within Flood Zone A or B				
Settlement	Zoning Objective	Development Plan Justification Test & Other Assessment Criteria	Reason for inclusion in the LAP	Comment
				Chapter 11, Volume 1 of the Cork County Development Plan, 2014.
Mitchelstown	MH- R-03	Justification Test	Partially applied	Part three of the test was not completed.  The flood risk is confined to a very small portion of the perimeter of the site and development can be avoided in the areas at risk of flooding.
		Existing Zoning	✓	Previously zoned for Residential use in the Fermoy Electoral Area Local Area Plan 2011. Flood risk affects only a very small part of the site.  A site specific flood risk assessment will be required i.e. verification of Indicative Flood Zone Mapping, compliance with the requirements of the Development Plan Justification Test, and detailed site specific assessment, as appropriate, in accordance with Objectives WS 6-1 and WS 6-2 as detailed in Chapter 11, Volume 1 of the Cork County Development Plan, 2014.
Mitchelstown	MH- R-06	Justification Test	Partially applied	Part three of the test was not completed.  The flood risk is confined to a very small portion of the site and development can be avoided in the area at risk of flooding.
		Existing Zoning	✓	Previously zoned for Residential use in the Fermoy Electoral Area Local Area Plan 2011. Flood risk affects only a very small part of the site.  A site specific flood risk assessment will be required i.e. verification of Indicative Flood Zone Mapping, compliance with the requirements of the

Table 4.2: Specific Land Use Zonings located within Flood Zone A or B				
Settlement	Zoning Objective	Development Plan Justification Test & Other Assessment Criteria	Reason for inclusion in the LAP	Comment
				Development Plan Justification Test, and detailed site specific assessment, as appropriate, in accordance with Objectives WS 6-1 and WS 6-2 as detailed in Chapter 11, Volume 1 of the Cork County Development Plan, 2014.
Charleville	CV-R-06	Justification Test	Not Applied	
		Existing Zoning	✓	<p>Previously zoned Residential in the Kanturk Electoral Area Local Area Plan 2011. The lands were not identified as being at risk of flooding during the preparation of the 2011 LAP. The more recent CFRAM assessment shows that part of the land is at risk is flooding.</p> <p>A site specific flood risk assessment will be required i.e. verification of Indicative Flood Zone Mapping, compliance with the requirements of the Development Plan Justification Test, and detailed site specific assessment, as appropriate, in accordance with Objectives WS 6-1 and WS 6-2 as detailed in Chapter 11, Volume 1 of the Cork County Development Plan, 2014.</p> <p>It is recommended that the zoning objective for these lands be reconsidered at the amendment stage of the plan with a view to reclassifying the land as part of the built up area.</p>
Charleville	CV-R-04	Justification Test	Partially applied	<p>Part three of the test was not completed.</p> <p>The flood risk is confined to a very small portion of the site and development can be avoided in the area at risk of flooding.</p>



Table 4.2: Specific Land Use Zonings located within Flood Zone A or B				
Settlement	Zoning Objective	Development Plan Justification Test & Other Assessment Criteria	Reason for inclusion in the LAP	Comment
		Existing Zoning	✓	<p>Previously zoned for Residential use in the Kanturk Electoral Area Local Area Plan 2011. Flood risk affects only a very small part of the site.</p> <p>A site specific flood risk assessment will be required i.e. verification of Indicative Flood Zone Mapping, compliance with the requirements of the Development Plan Justification Test, and detailed site specific assessment, as appropriate, in accordance with Objectives WS 6-1 and WS 6-2 as detailed in Chapter 11, Volume 1 of the Cork County Development Plan, 2014.</p>
Charleville	CV-B-06	Justification Test	Partially applied	<p>Part three of the test was not completed.</p> <p>The flood risk is confined to a very small part of the site and development can be avoided in the area at risk of flooding.</p>
		Existing Zoning	✓	<p>Previously zoned for Business use in the Kanturk Electoral Area Local Area Plan 2011. Flood risk affects only a very small part of the site.</p> <p>A site specific flood risk assessment will be required i.e. verification of Indicative Flood Zone Mapping, compliance with the requirements of the Development Plan Justification Test, and detailed site specific assessment, as appropriate, in accordance with Objectives WS 6-1 and WS 6-2 as detailed in Chapter 11, Volume 1 of the Cork County Development Plan, 2014.</p>
Castlelyons / Bridebridge	X-01 / SPA1	Justification Test	Not Applied	This is a 'Special Policy Area' Objective carried forward from

Table 4.2: Specific Land Use Zonings located within Flood Zone A or B				
Settlement	Zoning Objective	Development Plan Justification Test & Other Assessment Criteria	Reason for inclusion in the LAP	Comment
		Existing Zoning	✓	<p>the Fermoy Electoral Area Local Area Plan 2011. The zoning objective is largely a protective one, seeking retain the special character of the area which includes an historic church, churchyard, country houses and other historic structures. Part of the area is at risk of flooding and development will need to be avoided in these areas.</p> <p>A site specific flood risk assessment will be required i.e. verification of Indicative Flood Zone Mapping, compliance with the requirements of the Development Plan Justification Test, and detailed site specific assessment, as appropriate, in accordance with Objectives WS 6-1 and WS 6-2 as detailed in Chapter 11, Volume 1 of the Cork County Development Plan, 2014..</p>
Glanworth	X-01	Justification Test	Partially applied	Part three of the test was not completed.
		Existing Zoning	✓	<p>This is a mixed use zoning on a small brownfield site within the core of the village, carried forward from the Fermoy Electoral Area Local Area Plan 2011. Only a small part of the site is shown to be at risk of flooding and development will need to be avoided in these areas.</p> <p>A site specific flood risk assessment will be required i.e. verification of Indicative Flood Zone Mapping, compliance with the requirements of the Development Plan Justification Test, and detailed site specific assessment, as appropriate, in accordance with Objectives WS</p>

Table 4.2: Specific Land Use Zonings located within Flood Zone A or B				
Settlement	Zoning Objective	Development Plan Justification Test & Other Assessment Criteria	Reason for inclusion in the LAP	Comment
				6-1 and WS 6-2 as detailed in Chapter 11, Volume 1 of the Cork County Development Plan, 2014..
Rathcormack	C-01	Justification Test	Partially applied	Part three of the test was not completed.
		Existing Zoning	✓	<p>This objective relates to the provision of community facilities on a brownfield site within the heart of the village which comprises the site and structures of the former village national school. A new school was constructed in the village in recent years.</p> <p>Only part of the site is shown to be at risk of flooding and development will need to be avoided in these areas.</p> <p>A site specific flood risk assessment will be required i.e. verification of Indicative Flood Zone Mapping, compliance with the requirements of the Development Plan Justification Test, and detailed site specific assessment, as appropriate, in accordance with Objectives WS 6-1 and WS 6-2 as detailed in Chapter 11, Volume 1 of the Cork County Development Plan, 2014..</p>
Ballyhea	C-01	Justification test	Not Applied	-
		Existing Zoning	✓	<p>This zoning extends the site of the National School to facilitate its extension. Part of the site is at risk of flooding and development will need to be avoided in these areas.</p> <p>A site specific flood risk assessment will be required i.e.</p>

Table 4.2: Specific Land Use Zonings located within Flood Zone A or B				
Settlement	Zoning Objective	Development Plan Justification Test & Other Assessment Criteria	Reason for inclusion in the LAP	Comment
				verification of Indicative Flood Zone Mapping, compliance with the requirements of the Development Plan Justification Test, and detailed site specific assessment, as appropriate, in accordance with Objectives WS 6-1 and WS 6-2 as detailed in Chapter 11, Volume 1 of the Cork County Development Plan, 2014..

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.

#### 4.6 Approach to Development in Areas at Risk of Flooding

4.6.1 Where development is proposed within an area at risk of flooding, either on land that is subject to a specific zoning objective, lands within the "existing built up area" of a town or within a development boundary of a village, intending applicants need to comply with the provisions of Chapter 11 of the Cork County Development Plan 2014 and Objectives WS 6-1 and WS 6-2, as appropriate, and with the provisions of the Ministerial Guidelines – 'The Planning System and Flood Risk Management'.

#### 4.7 Flood Risk and Development Management

4.7.1 The following key requirements for the management of development in areas at risk of flooding shall be adhered to:

- a) 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.
- b) 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.
- c) 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.
- d) 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.
- e) 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.

## Section 5 Managing Flood Risk in the Future

### 5.1 What has the LAP Achieved

5.1.1 The inclusion of Indicative Flood Zone maps for the settlements of the Municipal District 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 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 Flood Risk Data		
Data	Source	Timeframe
Ongoing CFRAM Studies	OPW	End of 2016 / Early 2017
County Development Plan Updates	Cork County Council	2020
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 Local Area Plans	Cork County Council	Upon LAP review
Detailed FRAs	Various	Unknown
Flood Defence Feasibility / Design Reports	OPW primarily	Unknown

# **Draft Fermoy Municipal District Local Area Plan**

## **Habitats Directive Assessment Screening Report**

November 2016



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# **1 Introduction**

## **1.1 Context**

Cork County Council is in the process of preparing the Fermoy Municipal District Electoral Area Local Area Plan. This is a plan which will set development policy for the towns, villages and other settlements within the Fermoy Municipal District until 2023.

In accordance with requirements under the EU Habitats Directive (43/92/EEC) and EU Birds Directive (79/409/EEC) as provided for in part XAB of the Planning and Development Act 2010, 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 sites<sup>1</sup>), 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 or animal species for which these sites are designated. This assessment process is called a Habitats Directive Assessment (HDA) and must be carried out at all stages of the plan making process.

## **1.2 Legislative Background Habitats Directive Assessment**

Habitats Directive Assessment is an iterative process which runs parallel to and informs the plan making process. It involves analysis and review of draft policies as they emerge during each stage of plan making, to ensure that their implementation will not impact on sites designated for nature conservation, nor on the habitats or species for which they are designated. Within this process, regard is had to the potential for policies and zoning proposals set out in the plan 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, programmes, policies or projects.

The process may result in the development of new policy areas and/or the modification or removal of certain policies to be presented in the final plan. The results of this analysis and review are presented in Habitats Directive Reports which are produced for at each stage of the plan making process plan. At the end of the plan making process, an Appropriate Assessment Conclusion Statement or Screening Conclusion Statement will be produced which will contain a summary of how ecological considerations in relation to Natura 2000 sites have been integrated into the plan. The final Habitats Directive Report and a declaration in relation to the potential for the plan to affect the integrity of Natura 2000 sites within its potential impact zone will also be produced at that time.

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<sup>1</sup> 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.

Article 6(3) of the Habitats Directive identifies what is required in terms of assessment of plans of projects.

**Habitats Directive Article 6(3)**

Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.

EU and National Guidance sets out two main stages to the assessment process which are as follows:

**Stage One: Screening**

The process which identifies what might be likely impacts arising from a plan on a Natura 2000 site, either alone or in combination with other projects or plans, and considers whether these impacts are likely to be significant. No further assessment is required if no significant impacts on Natura 2000 sites are identified during the screening stage. The screening assessment is normally contained in a Habitats Directive Screening Report.

**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 compilation of a Natura Impact Report by the Planning Authority which is a report of scientific evidence and data relating to European sites for which significant negative impacts have not been previously screened out. This is used to identify and classify any implications of the plan for these sites in view of their conservation objectives. The Appropriate Assessment must include a determination as to whether or not the plan or its proposed amendments would adversely affect the integrity of any European site or sites. The plan may be adopted if adverse effects on the integrity of European sites can be ruled out during the Appropriate Assessment process. The plan may not be adopted on foot of an Appropriate Assessment, if it is found that it will give rise to adverse impacts on one or more European sites, or if uncertainty remains in relation to potential impacts on one or more European sites.

The directive provides for a derogation procedure which can allow a plan or project to proceed in spite of a finding that the plan or project could / would give rise to adverse effects on the overall integrity of one or more Natura 2000 sites. Derogation procedures can only be progressed in very limited circumstances which are set out in Article 6(4) of the Directive (see below).

#### **Habitats Directive Article 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 a 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.

EU and National Guidance identifies the procedures which must be followed in circumstances where a derogation from the Habitats Directive is sought to allow a project or a plan to proceed, despite a finding that it will give rise to adverse effects on the integrity of one or more Natura 2000 sites. These procedures can only be invoked where it has been shown that there are no alternative ways to implement the plan/project which avoid adverse effects on the integrity of one or more European sites, where it has been demonstrated that there are imperative reasons of overriding public interest for which the plan/project must proceed and where measures have been developed and provided to compensate for any losses to be incurred. These further stages are described below.

#### **Stage Three: Assessment of alternative solutions**

In circumstances where the potential for a plan to give rise to adverse effects on the integrity of a European site or sites has not been ruled out during the appropriate assessment process, it can only be considered for authorisation where it is demonstrated that there are no alternative solutions and that there Imperative Reasons of Overriding Public Interest (IROPI) which can allow the plan or project to proceed. Stage three of a Habitats Directive Assessment involves the assessment of alternative solutions.

**Stage Four: Assessment where no alternative solutions exist and where adverse impacts remain**  
The fourth stage of the Habitats Directive Assessment process involves demonstrating that Imperative Reasons of Overriding Public Interest exist, and the assessment of the compensatory measures which are proposed to be implemented. In every case in which a local authority envisages approving or preceding with a plan or project on grounds of IROPI, the Minister for Arts, Heritage and the Gaeltacht must be consulted.

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

This document represents the first phase of the Habitats Directive Assessment process for the Draft Fermoy Municipal District Local Area Plan – Consultation Draft. It contains the findings of the Habitats Directive screening assessment of this plan.

## **2 How this Report Was Prepared**

### **2.1 Working Methods**

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.

### **2.2 Consultation**

This report, with the **draft Fermoy Municipal District Local Area Plan** and the **Environmental Report** has been referred to statutory consultees and is available for public consultation from **Wednesday 16<sup>th</sup> November 2016 to Friday 06<sup>th</sup> January 2017**, so that the public or other interested stakeholders and statutory consultees have the opportunity to submit their comments and observations. These matters will then be considered and a decision made as to whether it is necessary to amend the draft plan to reflect the issues raised. The plan and this report is now available from the Council website at [www.corkcoco.ie](http://www.corkcoco.ie).

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

The information contained in this report is based on a desktop review of information relating to these sites and to the habitats and species that they support. References and data used are cited in the back of this report.

## **3 Draft Plan Screening**

### **3.1 Screening Methodology**

EU Guidelines (2001) set out a process for screening landuse plans, which involves four main steps as follows:

- Provide a description of the proposed plan.
- Identify relevant Natura 2000 sites, and compile information on their qualifying interests and conservation objectives.
- Identify the potential effects of the plan on the identified Natura 2000 sites.
- Assess of the significance of any effects on identified Natura 2000 sites, having regard to potential for ‘in combination’ effects.

This process is applied to all proposed plans or projects except those which are directly connected with the necessary management of a Natura 2000 site or sites. This report follows the steps set out above.

### **3.2 Description of the draft Plan**

The **Fermoy Municipal District Local Area Plan** will be a strategic plan identifying where development is to be directed and how/where supporting infrastructure is to be provided within the plan area from 2017 to 2023. The draft plan proposes population targets for settlements within the district and identifies where that development is proposed to be located through its zoning maps and corresponding policy objectives.

#### **Section 1 Introduction**

This section of the plan sets out the review process to date, the overall plan context and the overall approach/key policies that will influence the preparation of the Draft Plan namely the:

- Role of the Cork County Development Plan 2014
- Approach to Town Council Development Plans
- Special Policy Areas Framework Masterplans
- Settlement Network
- Infrastructure
- Water Services
- Development Contributions
- Regeneration Areas
- Flood Risk Assessment and Management
- Quality in Urban Design
- Green Belts around Towns
- Strategic Land Reserve
- Environmental Assessments including:
  - Strategic Environmental Assessment,
  - Strategic Flood Risk Assessment and
  - Habitats Directive Assessment

#### **Section 2 Local Area Strategy**

This section set out the overall strategy for the Fermoy Municipal District. It sets out the housing requirements and zoned housing land supply for each of the three main towns, sets out the appropriate scale of growth within the village network and the current infrastructure position for all the main towns and smaller settlement within the settlement network. It assesses the current employment position in the Municipal District and the key Environment and Heritage assets within the area.

The key message is that sufficient land has been provided to meet population targets but that infrastructure remains a key constraint to delivering on those targets.

#### **Section 3 Main Towns**

The purpose of this section is to set out the policies and objectives including land use zoning maps for the three Main Towns of Fermoy, Mitchelstown and Charleville in the Fermoy Municipal District. Where appropriate, Regeneration Areas have also been identified.

This section of the plan sets out proposals for population growth and other development objectives for the main towns.

#### **Section 4 Key Villages**

There are eleven key villages in the Fermoy Municipal District Doneraile, Newtownshandrum, Kilworth, Glanworth, Rathcormack, Castlelyons/Bridebridge, Castletownroche, Ballyhooly, Watergrasshill, Conna and Kildorrey.

This section of the plan sets out proposed scale of growth and other development objectives for each of these main villages over the lifetime of the plan.

#### **Section 5 Villages, Village Nuclei and Other Locations**

There are ten villages and eight village nuclei in the Fermoy Municipal District. The villages are Killavullen, Bartlemy, Ballynoe, Clondulane, Ballindangan, Glennahulla, Ballyhea, Shanballymore, Coolagown and Curraglass. The village nuclei and other locations are Aghern, Grange, Ballygiblin, Araglin, Curraghalla, Kildinan (The Pound), Knockanevin and Rockmills.

This section of the plan sets out proposed scale of growth and other development objectives for each of settlements over the lifetime of the plan.

#### **Section 6 Putting the Plan into Practice**

This section of the plan assigns responsibility for the implementation of the Plan's policies to various agencies including the Local Authority. It also sets out the expected timeframes for the delivery of physical and social infrastructure, including the assignment of Plan priorities and funding streams necessary to secure key development objectives. It also outlines the approach to monitoring and how the Plan will inform other Plans within its functional area.

### **3.3 Natura 2000 Sites Within the Potential Impact Zone of the Plan**

The Fermoy Municipal District is located to the north of Cork City .The plan encompasses the main towns of Fermoy, Charleville and Mitchelstown along with twenty nine villages / village nuclei and large area of open countryside. The boundaries of the plan area are shown on **Figure 1** below. The Natura 2000 sites subject to screening are shown in **Figure 2**.







Table 1: All Natura 2000 Sites Within the Fermoy MD or otherwise identified as requiring screening			
Site Code	Site Name	Qualifying Interests	Conservation Objectives
0077	Ballymacoda (Clonpriest and Pillmore) SAC	<ul style="list-style-type: none"> <li>• Estuaries [1130]</li> <li>• Mudflats and sandflats not covered by seawater at low tide [1140]</li> <li>• <i>Salicornia</i> and other annuals colonising mud and sand [1310]</li> <li>• Atlantic salt meadows (Glauco-Puccinellietalia maritima) [1330]</li> </ul>	<p>To maintain the favourable conservation condition of the following habitats for which the Ballymacoda (Clonpriest and Pillmore) SAC is designated:</p> <ul style="list-style-type: none"> <li>• Estuaries;</li> <li>• Mudflats and sandflats not covered by seawater at low tide</li> <li>• Atlantic salt meadows (Glauco-Puccinellietalia)</li> </ul> <p>and to restore the favourable conservation condition of the following habitats for which the Ballymacoda (Clonpriest and Pillmore) SAC is designated:</p> <ul style="list-style-type: none"> <li>• <i>Salicornia</i> and other annuals colonising mud and sand</li> </ul> <p>which are defined by attributes and targets set out in <a href="#">NPWS Conservation Objectives for Ballymacoda (Clonpriest and Pillmore) 15 Feb 2015</a> available at <a href="http://www.NPWS.ie">www.NPWS.ie</a></p>
0646	Galtee Mountains SAC	<ul style="list-style-type: none"> <li>• European dry heaths [4030]</li> <li>• Alpine and Boreal heaths [4060]</li> <li>• Species-rich <i>Nardus</i> grasslands, on siliceous</li> </ul>	<p>To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which this SAC has been selected:</p>

Table 1: All Natura 2000 Sites Within the Fermoy MD or otherwise identified as requiring screening			
Site Code	Site Name	Qualifying Interests	Conservation Objectives
		<p>substrates in mountain areas (and submountain areas, in Continental Europe) [6230]</p> <ul style="list-style-type: none"> <li>• Blanket bogs (* if active bog) [7130]</li> <li>• Calcareous rocky slopes with chasmophytic vegetation [8210]</li> <li>• Siliceous rocky slopes with chasmophytic vegetation [8220]</li> </ul>	<ul style="list-style-type: none"> <li>• European dry heaths [4030]</li> <li>• Alpine and Boreal heaths [4060]</li> <li>• Species-rich <i>Nardus</i> grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230]</li> <li>• Blanket bogs (* if active bog) [7130]</li> <li>• Calcareous rocky slopes with chasmophytic vegetation [8210]</li> <li>• Siliceous rocky slopes with chasmophytic vegetation [8220]</li> </ul> <p>as set out in <a href="#">Galtee Mountains SAC Conservation Objectives February 13 2015</a> available at <a href="http://www.NPWS.ie">www.NPWS.ie</a></p>
1058	Great Island Channel SAC	<ul style="list-style-type: none"> <li>• Mudflats and sandflats not covered by seawater at low tide [1140]</li> <li>• Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330]</li> </ul>	<p>To maintain the favourable conservation condition of the following habitats for which the Barley Cove to Ballyrisode SAC is designated:</p> <ul style="list-style-type: none"> <li>• Mudflats and sandflats not covered by seawater at low tide [1140]</li> </ul> <p>and to restore the favourable conservation condition</p>

Table 1: All Natura 2000 Sites Within the Fermoy MD or otherwise identified as requiring screening			
Site Code	Site Name	Qualifying Interests	Conservation Objectives
			<p>of</p> <ul style="list-style-type: none"> <li>• Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330]</li> </ul> <p>which are defined by attributes and targets set out in <a href="#">Conservation Objectives for the Great Island Channel SAC June 6 2014</a> available at <a href="http://www.NPWS.ie">www.NPWS.ie</a></p>
2036	Ballyhoura Mountains SAC	<ul style="list-style-type: none"> <li>• Northern Atlantic wet heaths with <i>Erica tetralix</i> [4010]</li> <li>• European dry heaths [4030]</li> <li>• Blanket bogs (* if active bog) [7130]</li> </ul>	<p>To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which this SAC has been selected:</p> <ul style="list-style-type: none"> <li>• Northern Atlantic wet heaths with <i>Erica tetralix</i> [4010]</li> <li>• European dry heaths [4030]</li> <li>• Blanket bogs (* if active bog) [7130]</li> </ul> <p>as set out in the <a href="#">Conservation Objectives for Ballyhoura Mountains SAC February 13 2015</a> available at <a href="http://www.NPWS.ie">www.NPWS.ie</a></p>
2037	Carrigeenamronety Hill SAC	<ul style="list-style-type: none"> <li>• <i>Trichomanes speciosum</i> (Killarney Fern) [1421]</li> </ul>	<p>To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which this SAC has been selected:</p>

Table 1: All Natura 2000 Sites Within the Fermoy MD or otherwise identified as requiring screening			
Site Code	Site Name	Qualifying Interests	Conservation Objectives
			<ul style="list-style-type: none"> <li>• <i>Trichomanes speciosum</i> (Killarney Fern) [1421]</li> </ul> <p>as set out in the <a href="#">Conservation Objectives for Carrigeenamronety Hill SAC February 13 2015</a> available at <a href="http://www.NPWS.ie">www.NPWS.ie</a></p>
2137	Lower River Suir SAC	<ul style="list-style-type: none"> <li>• Atlantic salt meadows (Glauco-Puccinellietalia maritima) [1330]</li> <li>• Mediterranean salt meadows (Juncetalia maritimi) [1410]</li> <li>• Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]</li> <li>• Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]</li> <li>• Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0]</li> <li>• Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) [91E0]</li> <li>• <i>Taxus baccata</i> woods of the British Isles [91J0]</li> <li>• <i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029]</li> <li>• <i>Austroptamobius pallipes</i> (White-clawed</li> </ul>	<p>To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which this SAC has been selected:</p> <ul style="list-style-type: none"> <li>• Atlantic salt meadows (Glauco-Puccinellietalia maritima) [1330]</li> <li>• Mediterranean salt meadows (Juncetalia maritimi) [1410]</li> <li>• Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]</li> <li>• Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]</li> <li>• Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0]</li> <li>• Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) [91E0]</li> </ul>

Table 1: All Natura 2000 Sites Within the Fermoy MD or otherwise identified as requiring screening			
Site Code	Site Name	Qualifying Interests	Conservation Objectives
		<ul style="list-style-type: none"> <li>Crayfish) [1092]</li> <li>• <i>Petromyzon marinus</i> (Sea Lamprey) [1095]</li> <li>• <i>Lampetra planeri</i> (Brook Lamprey) [1096]</li> <li>• <i>Lampetra fluviatilis</i> (River Lamprey) [1099]</li> <li>• <i>Alosa fallax fallax</i> (Twaite Shad) [1103]</li> <li>• <i>Salmo salar</i> (Salmon) [1106]</li> <li>• <i>Lutra lutra</i> (Otter) [1355]</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Taxus baccata</i> woods of the British Isles [91J0]</li> <li>• <i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029]</li> <li>• <i>Austropotamobius pallipes</i> (White-clawed Crayfish) [1092]</li> <li>• <i>Petromyzon marinus</i> (Sea Lamprey) [1095]</li> <li>• <i>Lampetra planeri</i> (Brook Lamprey) [1096]</li> <li>• <i>Lampetra fluviatilis</i> (River Lamprey) [1099]</li> <li>• <i>Alosa fallax fallax</i> (Twaite Shad) [1103]</li> <li>• <i>Salmo salar</i> (Salmon) [1106]</li> <li>• <i>Lutra lutra</i> (Otter) [1355]</li> </ul> <p>as set out in the Conservation Objectives for <a href="#">Lower River Suir SAC February 13 2015</a> available at <a href="http://www.NPWS.ie">www.NPWS.ie</a></p>
2170	Blackwater River (Cork/Waterford) SAC	<ul style="list-style-type: none"> <li>• Estuaries [1130]</li> <li>• Mudflats and sandflats not covered by seawater at low tide [1140]</li> <li>• Perennial vegetation of stony banks [1220]</li> <li>• <i>Salicornia</i> and other annuals colonising mud and sand [1310]</li> <li>• Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330]</li> <li>• Mediterranean salt meadows (<i>Juncetalia</i></li> </ul>	<p>To maintain the favourable conservation condition of the following habitats and species for which the Blackwater River SAC is designated:</p> <ul style="list-style-type: none"> <li>• <i>Austropotamobius pallipes</i> (White-clawed Crayfish) [1092]</li> <li>• <i>Lampetra planeri</i> (Brook Lamprey) [1096]</li> <li>• <i>Lampetra fluviatilis</i> (River Lamprey) [1099]</li> <li>• <i>Salmo salar</i> (Salmon) [1106]</li> </ul>

Table 1: All Natura 2000 Sites Within the Fermoy MD or otherwise identified as requiring screening			
Site Code	Site Name	Qualifying Interests	Conservation Objectives
		<p>17ygnus1717) [1410]</p> <ul style="list-style-type: none"> <li>• Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]</li> <li>• Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0]</li> <li>• Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) [91E0]</li> <li>• <i>Taxus baccata</i> woods of the British Isles [91J0]</li> <li>• <i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029]</li> <li>• <i>Austropotamobius pallipes</i> (White-clawed Crayfish) [1092]</li> <li>• <i>Petromyzon marinus</i> (Sea Lamprey) [1095]</li> <li>• <i>Lampetra planeri</i> (Brook Lamprey) [1096]</li> <li>• <i>Lampetra fluviatilis</i> (River Lamprey) [1099]</li> <li>• <i>Alosa fallax fallax</i> (Twaite Shad) [1103]</li> <li>• <i>Salmo salar</i> (Salmon) [1106]</li> <li>• <i>Lutra lutra</i> (Otter) [1355]</li> <li>• <i>Trichomanes speciosum</i> (Killarney Fern) [1421]</li> </ul>	<ul style="list-style-type: none"> <li>• Estuaries [1130]</li> <li>• Mudflats and sandflats not covered by seawater at low tide [1140]</li> <li>• Perennial vegetation of stony banks [1220]</li> <li>• <i>Salicornia</i> and other annuals colonising mud and sand [1310]</li> <li>• Mediterranean salt meadows (<i>Juncetalia ygnus</i>) [1410]</li> <li>• <i>Trichomanes speciosum</i> (Killarney Fern) [1421]</li> <li>• Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]</li> </ul> <p>and to restore the favourable conservation condition of</p> <ul style="list-style-type: none"> <li>• <i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029]</li> <li>• <i>Petromyzon marinus</i> (Sea Lamprey) [1095]</li> <li>• <i>Alosa fallax fallax</i> (Twaite Shad) [1103]</li> <li>• Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330]</li> <li>• Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0]</li> <li>• Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus</i></li> </ul>

Table 1: All Natura 2000 Sites Within the Fermoy MD or otherwise identified as requiring screening			
Site Code	Site Name	Qualifying Interests	Conservation Objectives
			<p><i>excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) [91E0]</p> <ul style="list-style-type: none"> <li>• <i>Lutra lutra</i> (Otter) [1355]</li> </ul> <p>which are defined by attributes and targets set out in <a href="#">Conservation Objectives for Blackwater River SAC July 31 2012</a> available at <a href="http://www.NPWS.ie">www.NPWS.ie</a></p> <p>*status of <i>Taxus baccata</i> woods of the British Isles as a qualifying feature for this SAC is currently under review.</p>
4023	Ballymacoda Bay SPA	<ul style="list-style-type: none"> <li>• Wigeon (<i>Anas penelope</i>) [A050]</li> <li>• Teal (<i>Anas crecca</i>) [A052]</li> <li>• Ringed Plover (<i>Charadrius hiaticula</i>) [A137]</li> <li>• Golden Plover (<i>Pluvialis apricaria</i>) [A140]</li> <li>• Grey Plover (<i>Pluvialis squatarola</i>) [A141]</li> <li>• Lapwing (<i>Vanellus vanellus</i>) [A142]</li> <li>• Sanderling (<i>Calidris alba</i>) [A144]</li> <li>• Dunlin (<i>Calidris 18ygnus</i>) [A149]</li> <li>• Black-tailed Godwit (<i>Limosa limosa</i>) [A156]</li> <li>• Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]</li> <li>• Curlew (<i>Numenius arquata</i>) [A160]</li> <li>• Redshank (<i>Tringa 18ygnus18</i>) [A162]</li> <li>• Turnstone (<i>Arenaria interpres</i>) [A169]</li> </ul>	<p>To maintain the favourable conservation condition of the following bird species in Ballymacoda Bay SPA:</p> <ul style="list-style-type: none"> <li>• Wigeon (<i>Anas penelope</i>) [A050]</li> <li>• Teal (<i>Anas crecca</i>) [A052]</li> <li>• Ringed Plover (<i>Charadrius hiaticula</i>) [A137]</li> <li>• Golden Plover (<i>Pluvialis apricaria</i>) [A140]</li> <li>• Grey Plover (<i>Pluvialis squatarola</i>) [A141]</li> <li>• Lapwing (<i>Vanellus vanellus</i>) [A142]</li> <li>• Sanderling (<i>Calidris alba</i>) [A144]</li> <li>• Dunlin (<i>Calidris 18ygnus</i>) [A149]</li> <li>• Black-tailed Godwit (<i>Limosa limosa</i>) [A156]</li> <li>• Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]</li> </ul>



Table 1: All Natura 2000 Sites Within the Fermoy MD or otherwise identified as requiring screening			
Site Code	Site Name	Qualifying Interests	Conservation Objectives
		<ul style="list-style-type: none"> <li>• Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]</li> <li>• Common Gull (<i>Larus canus</i>) [A182]</li> <li>• Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183]</li> <li>• Wetland and Waterbirds [A999]</li> </ul>	<ul style="list-style-type: none"> <li>• Curlew (<i>Numenius arquata</i>) [A160]</li> <li>• Redshank (<i>Tringa erythrorhynchos</i>) [A162]</li> <li>• Turnstone (<i>Arenaria interpres</i>) [A169]</li> <li>• Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]</li> <li>• Common Gull (<i>Larus canus</i>) [A182]</li> <li>• Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183]</li> </ul> <p>and</p> <ul style="list-style-type: none"> <li>• to maintain the favourable conservation condition of the wetland habitat in Ballymacoda Bay SPA as a resource for the regularly-occurring migratory birds that utilise it</li> </ul> <p>as defined by attributes and targets set out in <a href="#">Conservation Objectives Ballymacoda Bay SPA Feb 19 2015</a> which are available at <a href="http://www.NPWS.ie">www.NPWS.ie</a></p>
4028	Blackwater Estuary SPA	<ul style="list-style-type: none"> <li>• Wigeon (<i>Anas penelope</i>) [A050]</li> <li>• Golden Plover (<i>Pluvialis apricaria</i>) [A140]</li> <li>• Lapwing (<i>Vanellus vanellus</i>) [A142]</li> <li>• Dunlin (<i>Calidris cygnus</i>) [A149]</li> <li>• Black-tailed Godwit (<i>Limosa limosa</i>) [A156]</li> <li>• Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]</li> <li>• Curlew (<i>Numenius arquata</i>) [A160]</li> </ul>	<p>To maintain the favourable conservation condition of the following bird species in the Blackwater Estuary SPA:</p> <ul style="list-style-type: none"> <li>• Wigeon (<i>Anas penelope</i>) [A050]</li> <li>• Golden Plover (<i>Pluvialis apricaria</i>) [A140]</li> <li>• Lapwing (<i>Vanellus vanellus</i>) [A142]</li> </ul>

Table 1: All Natura 2000 Sites Within the Fermoy MD or otherwise identified as requiring screening			
Site Code	Site Name	Qualifying Interests	Conservation Objectives
		<ul style="list-style-type: none"> <li>• Redshank (<i>Tringa tygnus</i>) [A162]</li> <li>• Wetland and Waterbirds [A999]</li> </ul>	<ul style="list-style-type: none"> <li>• Dunlin (<i>Calidris cygnus</i>) [A149]</li> <li>• Black-tailed Godwit (<i>Limosa limosa</i>) [A156]</li> <li>• Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]</li> <li>• Curlew (<i>Numenius arquata</i>) [A160]</li> <li>• Redshank (<i>Tringa 20ygnus20</i>) [A162]</li> </ul> <p>and</p> <ul style="list-style-type: none"> <li>• to maintain the favourable conservation condition of the wetland habitat in the Blackwater Estuary SPA as a resource for the regularly-occurring migratory birds that utilise it</li> </ul> <p>as defined by attributes and targets set out in <a href="#">Conservation Objectives Blackwater Estuary SPA May 17 2012</a> which are available at <a href="http://www.NPWS.ie">www.NPWS.ie</a></p>
4030	Cork Harbour SPA	<ul style="list-style-type: none"> <li>• Little Grebe (<i>Tachybaptus ruficollis</i>) [A004]</li> <li>• Great Crested Grebe (<i>Podiceps cristatus</i>) [A005]</li> <li>• Cormorant (<i>Phalacrocorax carbo</i>) [A017]</li> <li>• Grey Heron (<i>Ardea cinerea</i>) [A028]</li> <li>• Shelduck (<i>Tadorna tadorna</i>) [A048]</li> <li>• Wigeon (<i>Anas penelope</i>) [A050]</li> <li>• Teal (<i>Anas crecca</i>) [A052]</li> <li>• Pintail (<i>Anas acuta</i>) [A054]</li> </ul>	<p>To maintain the favourable conservation condition of the following bird species in Cork Harbour SPA:</p> <ul style="list-style-type: none"> <li>• Little Grebe (<i>Tachybaptus ruficollis</i>) [A004]</li> <li>• Great Crested Grebe (<i>Podiceps cristatus</i>) [A005]</li> <li>• Cormorant (<i>Phalacrocorax carbo</i>) [A017]</li> <li>• Grey Heron (<i>Ardea cinerea</i>) [A028]</li> <li>• Shelduck (<i>Tadorna tadorna</i>) [A048]</li> </ul>

Table 1: All Natura 2000 Sites Within the Fermoy MD or otherwise identified as requiring screening			
Site Code	Site Name	Qualifying Interests	Conservation Objectives
		<ul style="list-style-type: none"> <li>• Shoveler (<i>Anas clypeata</i>) [A056]</li> <li>• Red-breasted Merganser (<i>Mergus serrator</i>) [A069]</li> <li>• Oystercatcher (<i>Haematopus ostralegus</i>) [A130]</li> <li>• Golden Plover (<i>Pluvialis apricaria</i>) [A140]</li> <li>• Grey Plover (<i>Pluvialis squatarola</i>) [A141]</li> <li>• Lapwing (<i>Vanellus vanellus</i>) [A142]</li> <li>• Dunlin (<i>Calidris 21ygnus</i>) [A149]</li> <li>• Black-tailed Godwit (<i>Limosa limosa</i>) [A156]</li> <li>• Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]</li> <li>• Curlew (<i>Numenius arquata</i>) [A160]</li> <li>• Redshank (<i>Tringa 21ygnus21</i>) [A162]</li> <li>• Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]</li> <li>• Common Gull (<i>Larus canus</i>) [A182]</li> <li>• Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183]</li> <li>• Common Tern (<i>Sterna hirundo</i>) [A193]</li> <li>• Wetland and Waterbirds [A999]</li> </ul>	<ul style="list-style-type: none"> <li>• Wigeon (<i>Anas penelope</i>) [A050]</li> <li>• Teal (<i>Anas crecca</i>) [A052]</li> <li>• Pintail (<i>Anas acuta</i>) [A054]</li> <li>• Shoveler (<i>Anas clypeata</i>) [A056]</li> <li>• Red-breasted Merganser (<i>Mergus serrator</i>) [A069]</li> <li>• Oystercatcher (<i>Haematopus ostralegus</i>) [A130]</li> <li>• Golden Plover (<i>Pluvialis apricaria</i>) [A140]</li> <li>• Grey Plover (<i>Pluvialis squatarola</i>) [A141]</li> <li>• Lapwing (<i>Vanellus vanellus</i>) [A142]</li> <li>• Dunlin (<i>Calidris 21ygnus</i>) [A149]</li> <li>• Black-tailed Godwit (<i>Limosa limosa</i>) [A156]</li> <li>• Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]</li> <li>• Curlew (<i>Numenius arquata</i>) [A160]</li> <li>• Redshank (<i>Tringa 21ygnus21</i>) [A162]</li> <li>• Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]</li> <li>• Common Gull (<i>Larus canus</i>) [A182]</li> <li>• Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183]</li> <li>• Common Tern (<i>Sterna hirundo</i>) [A193]</li> </ul> <p>and to maintain the favourable conservation condition of the wetland habitat in Cork Harbour SPA as a resources for the regularly-occurring migratory birds that utilise it as defined by attributes and targets set out in <a href="#">Conservation Objectives Cork</a></p>

Table 1: All Natura 2000 Sites Within the Fermoy MD or otherwise identified as requiring screening			
Site Code	Site Name	Qualifying Interests	Conservation Objectives
			<a href="#">Harbour SPA Dec 16 2014</a> which are available at <a href="http://www.NPWS.ie">www.NPWS.ie</a>
4094	River Blackwater Callows SPA	<ul style="list-style-type: none"> <li>• Whooper Swan (<i>Cygnus 22ygnus</i>) [A038]</li> <li>• Wigeon (<i>Anas penelope</i>) [A050]</li> <li>• Teal (<i>Anas crecca</i>) [A052]</li> <li>• Black-tailed Godwit (<i>Limosa limosa</i>) [A156]</li> <li>• Wetland and Waterbirds [A999]</li> </ul>	<p>To maintain or restore the favourable conservation condition of bird species listed as Special Conservation Interests for this SPA:</p> <ul style="list-style-type: none"> <li>• Whooper Swan (<i>Cygnus 22ygnus</i>) [A038]</li> <li>• Wigeon (<i>Anas penelope</i>) [A050]</li> <li>• Teal (<i>Anas crecca</i>) [A052]</li> <li>• Black-tailed Godwit (<i>Limosa limosa</i>) [A156]</li> </ul> <p>and to maintain or restore the favourable condition of the wetland habitat at Blackwater Callows as a resource for the regularly-occurring migratory waterbirds that utilise it as set out in the <a href="#">Conservation Objectives for the Blackwater Callows SPA</a> which are available at <a href="http://www.NPWS.ie">www.NPWS.ie</a></p>
4095	Kilcolman Bog SPA	<ul style="list-style-type: none"> <li>• Whooper Swan (<i>Cygnus 22ygnus</i>) [A038]</li> <li>• Teal (<i>Anas crecca</i>) [A052]</li> <li>• Shoveler (<i>Anas clypeata</i>) [A056]</li> <li>• Wetland and Waterbirds [A999]</li> </ul>	<p>To maintain or restore the favourable conservation condition of bird species listed as Special Conservation Interests for this SPA:</p> <ul style="list-style-type: none"> <li>• Whooper Swan (<i>Cygnus 22ygnus</i>) [A038]</li> <li>• Teal (<i>Anas crecca</i>) [A052]</li> </ul>

Table 1: All Natura 2000 Sites Within the Fermoy MD or otherwise identified as requiring screening			
Site Code	Site Name	Qualifying Interests	Conservation Objectives
			<ul style="list-style-type: none"> <li>• Shoveler (<i>Anas clypeata</i>) [A056]</li> </ul> <p>and to maintain or restore the favourable condition of the wetland habitat at Kilcolman Bog as a resource for the regularly-occurring migratory waterbirds that utilise it as set out in the <a href="#">Conservation Objectives for Kilcolman Bog</a> which are available at <a href="http://www.NPWS.ie">www.NPWS.ie</a></p>
4161	Stacks to Mullaghareirks Mountains, West Limerick Hills and Mountain Eagle SPA	<ul style="list-style-type: none"> <li>• Hen Harrier (<i>Circus cyaneus</i>) [A082]</li> </ul>	<p>To maintain or restore the favourable conservation condition of bird species listed as Special Conservation Interests for this SPA:</p> <ul style="list-style-type: none"> <li>• Hen Harrier (<i>Circus cyaneus</i>) [A082]</li> </ul> <p>as set out in the <a href="#">Conservation Objectives for the Stacks to Mullaghareirks Mountains, West Limerick Hills and Mountain Eagle SPA</a> which are available at <a href="http://www.NPWS.ie">www.NPWS.ie</a></p>

### 3.4 Screening Assessment

#### Preliminary Screening

The purpose of this screening exercise is to identify whether any of the policies or zoning objectives set out in the draft plan could have the potential to give rise to negative effects on any of the Natura 2000 sites listed above.

As a preliminary assessment, the Natura 2000 sites were assessed to identify whether there was any hydrological or other linkage between them and the plan areas, or whether implementation of the plan would require exploitation of resources (eg water) from within any Natura 2000 site (identifying potential pathways for impact). The results of this preliminary screening are set out in **Table 2 below**.

**Table 2: Preliminary Screening Assessment**

Site Name	Screening Determination
Ballymacoda (Clonpriest and Pillmore) SAC (0077)	<p>The SAC is over 10km from the boundary of the Municipal District and there is no hydrological linkage between this SAC and any settlement for which policy is proposed in the Fermoy MD Local Area Plan. No policies in the plan direct activity into this SAC. No potential for impact on this site is identified. No further assessment is considered to be required.</p> <p><b>No further assessment is required.</b></p>
Galtee Mountains SAC (0646)	<p>This SAC is approximately 4km north of the Fermoy MD Boundary. There is no hydrological linkage between the SAC and any settlements within the Municipal District. No policies in the plan direct activity into this SAC. No further assessment is considered to be required.</p> <p><b>No further assessment is required.</b></p>
Great Island Channel SAC (1058)	<p>This SAC is over 10km from the Fermoy Municipal District area. The primary freshwater inputs to this SAC are the Owenacurra and Dungourney Rivers at Midleton and the Tibbotstown River at Carrigtwohill. The Owenacurra rises in the Fermoy MD; however, there is no hydrological linkage between this river and any settlement for which policy is proposed in the Fermoy MD Local Area Plan. No policies in the plan direct activity into this SAC. No potential for impact on this site is identified. No further assessment is considered to be required.</p>

**Table 2: Preliminary Screening Assessment**

Site Name	Screening Determination
	<p><b>No further assessment is required.</b></p>
<p>Ballyhoura Mountains SAC (2036)</p>	<p>The village of <b>Ballyhea</b> is the nearest settlement to this SAC and is located about 4km west of the site. However, there is no hydrological linkage between the SAC and the settlement. No policies in the plan direct activity into this SAC. No potential for impact on this site is identified. No further assessment is considered to be required.</p> <p><b>No further assessment is required.</b></p>
<p>Carrigeenamronety Hill SAC (2037)</p>	<p>There is no hydrological linkage between the SAC and any settlement for which policy is proposed in the Fermoy MD LAP. No policies in the plan direct activity into this SAC. No potential for impact on this site is identified. No further assessment is considered to be required.</p> <p><b>No further assessment is required.</b></p>
<p>Blackwater River SAC (2170)</p>	<p>The boundaries of a number of settlements within the Fermoy MD LAP overlap with the Blackwater River SAC which runs through the MD area. These include the settlements of <b>Fermoy, Doneraile, Castlelyons/Bridesbridge, Conna, Killavullen, Araglin and Castletownroche.</b></p> <p>Waste water treatment plants associated with number of settlements within the Fermoy MD discharge treated wastewater directly to the SAC. These include the settlements of <b>Fermoy, Doneraile, Kilworth, Rathcormac, Castlelyons/Bridesbridge, Castltownroche, Killavullen, Ballyhooly, Bartlemy, Conna, Shanballymore and Araglin.</b></p> <p>A number of settlements have a hydrological connection to the SAC and some of these have WWTP's with discharges to rivers within the catchment of the SAC. These settlements are <b>Mitchlestown, Watergrasshill, Glanworth, Kildorrey, Ballynoe, Clondulane, Ballindangan, Glennahulla, Ballyhea, Curraglass, Ballygiblin, Farahy, Aghern and Kildinan (the Pound).</b></p>

**Table 2: Preliminary Screening Assessment**

Site Name	Screening Determination
	<p>Discharges from treatment plants or surface water discharges could have the potential to affect water quality in the SAC and/or could have the potential to affect hydrological processes in the river. Further screening is required in respect of policies proposed for the above listed settlements.</p> <p><b>Further assessment is required.</b></p>
<p>Ballymacoda Bay SPA (4023)</p>	<p>There is no hydrological linkage between this SPA and any settlement for which policy is proposed in the Fermoy MD Local Area Plan. No policies in the plan direct activity into this SAC. No potential for impact on this site is identified. No further assessment is considered to be required.</p> <p><b>No further assessment is required.</b></p>
<p>Blackwater Estuary SPA (4028)</p>	<p>This SPA is located at the mouth of the Blackwater River in Youghal. It overlaps with the Blackwater River SAC. It has a hydrological connection to all of the settlements situated on the Blackwater and the Bride including those within the Fermoy MD area. The largest of these being <b>Killavullen, Castletownroche, Ballyhooly, Fermoy, Rathcormac and Castlelyons</b>. Discharges from treatment plants in these settlements could have the potential to contribute to elevated nutrients within this catchment which could have the potential to affect the quality or extent of wetland habitats within this SPA. Further screening is required.</p> <p><b>Further assessment is required.</b></p>
<p>Cork Harbour SPA (4030)</p>	<p>The Butlerstown River flows south from near the settlement boundary of <b>Watergrasshill</b> to enter Cork Harbour via the Glashaboy Estuary which forms part of the Cork Harbour SPA. However, there is no direct hydrological connectivity between the settlement and the river. It is considered unlikely that policies associated with the Watergrasshill settlement have the potential to have negative effects on the Cork Harbour SPA. No further assessment is required.</p> <p><b>No further assessment is required.</b></p>



**Table 2: Preliminary Screening Assessment**

Site Name	Screening Determination
Blackwater Callows SPA (4094)	<p>The development boundary of <b>Fermoy</b> is located 110m west of this SPA and the plan proposes a walk along the banks of the river within the SPA. Fermoy WWTP discharges to the Blackwater River immediately upstream of the SPA. Further assessment is required.</p> <p><b>Further assessment is required.</b></p>
Kilcolman Bog SPA (4095)	<p>The nearest settlement to this site is <b>Doneraile</b> which is over 2.5km from the site. There are no proposals in the plan which relates to the use of resources from within this site or which direct activity into the SPA. No potential for impact is identified and no further assessment is required in respect of this SPA.</p> <p><b>No further assessment is required.</b></p>

Potential for significant negative effects were screened out as a result of preliminary screening for the following Natura 2000 sites:

**Code Site Name**

- 0077 Ballymacoda (Clonpriest and Pillmore) Special Area of Conservation
- 0646 Galtee Mountains Special Area of Conservation
- 1058 Great Island Channel Special Area of Conservation
- 2036 Ballyhoura Mountains Special Area of Conservation
- 2037 Carrigeenamronery Hill Special Area of Conservation
- 4023 Ballymacoda Bay Special Protection Area
- 4030 Cork Harbour Special Protection Area
- 4095 Kilcolman Bog Special Protection Area

**Detailed Screening**

Further assessment has been completed for the remaining sites. These are sites which are located in areas where hydrological or other possible ecological linkages have been identified between them and settlements for which policy is proposed at preliminary screening stage. Screening has been completed having regard to plan policies and zoning objectives. Particular attention has been paid in this exercise to policies which could

- direct development into areas within or adjacent to Natura 2000 sites;
- give rise to a risk of increased levels of disturbance affecting populations of species in any Natura 2000 site;

- encourage increased recreational or other human activity within or near any Natura 2000 sites;
- give rise to increased pressure on environmental resources (eg water) which could affect any Natura 2000 sites;
- increase risk of spread of invasive species within or near Natura 2000 sites; or
- influence how land within or close to Natura 2000 sites is developed and managed in the future.

The focus of detailed screening is on the following sites:

<b>Code</b>	<b>Site Name</b>
2170	Blackwater River Special Area of Conservation
4026	Blackwater Estuary Special Protection Area
4094	Blackwater Callows Special Protection Area

The qualifying interests and conservation objectives which have been set for each of these sites are summarised in **Appendix I**. The outcomes of screening assessments completed for each of these sites is set out below.

#### **Blackwater River SAC (2170)-Screening Assessment**

##### **SAC Description and Key Concerns**

The Blackwater River Special Area of Conservation is a very large site extending from its headwaters on the Cork Kerry border to its estuary at Youghal on the Cork Waterford border. It incorporates the main channels of the Blackwater, Bride, Allow and Awbeg as well as their many tributaries and to the Licky River (Co. Waterford) which meets the sea upstream of Youghal. The site is designated for the protection of a number of freshwater and estuarine habitat types, woodland habitat types, freshwater mammalian, fish and invertebrate species as well as the protected plant species the Killarney Fern.

The qualifying features and conservation objectives of this SAC are listed in **Appendix I** of this plan and includes the freshwater invertebrate species Freshwater Pearl Mussel. The conservation objective for this species as currently published, requires the restoration of its favourable conservation status in the entire Blackwater catchment. However, the Department of Arts, Heritage, Rural, Regional and Gaeltacht affairs has notified Cork County Council of its intention to amend this objective and the Freshwater Pearl Mussel Regulations of 2009, so that they apply only to the Allow River upstream of Kanturk and to the Licky River. No settlements within the Fermoy MD area are within the portion of the SAC to which the Freshwater Pearl Mussel Conservation Objective applies.

The targets which are required to be met to protect freshwater habitats and species within this

SAC (other than in the Allow upstream of Kanturk and in the Licky), are to ensure that water quality reaches a minimum of **Q4 – Good Status**; to maintain a stable hydrological regime; to protect the natural extent and quality of riverbed habitats with low levels of sediment and algal and macrophyte growth; and to maintain open channels and free passage of fish. The targets which are required to be met to restore the favourable conservation condition of Freshwater Pearl Mussel in the Allow River, will require the restoration of water quality to **Q5 – High Status** in respect of macroinvertebrates and phytobenthos; restoration of substratum quality so that there are well oxygenated, have low levels of sediments and algal and macrophyte growth and that host fish populations are maintained and protected.

Water quality in the catchment is variable. Much of the main channel of the Blackwater is assigned Good to High Status, however some sections of the river and some of its tributaries have been assigned Moderate to Poor Status only. Much of the main channel of the Bride River is assigned Good Status, however one of its tributaries (Flesk) is assigned Poor status. The Allow River is assigned Good – High Status along most of its length. The Awbeg is assigned Good status along most of its length (EPA Envision Maps, 2012 data).

In the context of this report, and having regard to the Conservation Objectives which apply to this site, the key concerns are to ensure that

- zoning policies for lands within settlements with boundaries which overlap with the SAC are compatible with the protection of the SAC;
- the river systems which form part of or feed into the Blackwater River SAC have sufficient assimilative capacity to cope with the additional nutrient loading which will be generated by the increased population growth provided for in this plan;
- policies in the plan will not result in increased nutrient loading to aquatic systems within the SAC or its catchment;
- policies in the plan will not affect natural hydrological processes within the receiving catchment; and
- policies within the plan will not put undue recreational pressure on river bank habitats or associated species.

## Assessment

### Boundary Issues:

Settlements within the Fermoy MD whose boundaries overlap with the Blackwater River Special Area of Conservation are **Fermoy, Doneraile, Castlelyons/Bridesbridge, Conna, Killavullen and Castletownroche**. There is also a very small overlap with the boundary of Araglin and the SAC.

Some of these lands lie within areas zoned as Open Space and are unlikely to come under pressure for development. While no SAC lands within these settlements are zoned specifically

for development, lands within the SAC without a specific Open Space zoning could come under pressure to be developed. In respect of these areas, Development boundary (DB) and General (G) objectives in the plan clarify that development in these settlements can only be progressed where it is shown to be compatible with the requirements of the Habitats Directive. In order to reduce pressure for development in these areas, it is recommended that consideration be given to zoning SAC land within the settlement boundaries of these towns as Open Space - not suitable for development, at the amendments stage.

**Water Quality Issues – Waste-water Treatment:**

Many of the freshwater species for which the SAC is designated are sensitive to changes in water quality and have the potential to be affected by changes in water quality which could be brought about by increasing nutrient inputs. Waste water treatment plants associated with a number of settlements within the Fermoy MD discharge treated wastewater directly to the SAC. These include the settlements of **Fermoy, Castlelyons/Bridesbridge, Kilworth, Rathcormac, Ballyhooly, Castletownroche, Conna, Doneraile, Bartlemy, Killavullen, and Shanballymore.** Waste-water treatment plants associated with **Mitchelstown, Watergrasshill, Glanworth, Kildorrery, Ballynoe and Clondulane** discharge to watercourses within the catchment of the SAC.

The plan proposes population target increases for these settlements in accordance with the Core Strategy set out in the 2014 County Development Plan with the most significant levels of growth being targeted to the main towns of Fermoy (938 new houses), Charleville 9804 new houses) and Mitchelstown (1,040 new houses). The catchment must have sufficient assimilative capacity to cater for the additional loading which will arise from growth proposed in these settlements (Note: this is not assessed in this report), and the respective WWTP's must not only have capacity, but must be operating in accordance with their license conditions and be shown not to be having a negative effect on water quality, in order to be satisfied that the proposed growth established in the plan can be accommodated, while ensuring compliance with the Habitats Directive and with the Water Framework Directive.

**Table 2.3** of the plan identifies which of these plants have capacity to cater for the additional growth during the lifetime of the plan and which of the plants will require further investment to increase capacity, through a colour coding system. While plants coded green in the draft LAP do not have capacity issues, there may be other issues pertaining to these plants which have resulted in lack of compliance with their license conditions, or, in some cases, where the plants are identified to be affecting downstream water quality. These plants will require investment and upgrading to ensure not only that capacity issues are addressed, but also that issues relating to license compliance and impacts on water quality are addressed. It is stated in relevant Development Boundary and General Objectives in the plan that development will not be permitted unless it can be shown that wastewater infrastructure is in place which will secure the objectives of the Habitats Directive and the Water Framework Directive. In the interest of

clarity, it is recommended that consideration be given at the amendments stage to identifying the WWTPs which have issues (other than capacity issues) which may require investment or further improvements at the plants in order to accommodate proposed growth.

Licensed WWTP's in the Blackwater Catchment which were identified to be having an observable negative effect on water quality and/or where there were issues relating to license compliance in 2015 are **Fermoy, Mitchelstown, Castlelyons, Kilworth, Rathcormac, Watergrasshill, Ballyhooly, Castletownroche, Conna, Glanworth, Kildorrery, Killavullen and Clondulane.**

Settlements which have a certified waste water discharge to riverine systems within the catchment of SAC are **Bartlemy, Shanballymore and Ballyhea.** There is no information readily available to determine whether the discharges from WWTPs in these settlements is affecting water quality. This will need to be assessed as and when development proposals arise in these settlements which requires a connection to the WWTP.

**Issues Relating to Hydrology:**

The maintenance of open water and stable hydrological processes in freshwater river systems within the SAC is an important component in ensuring the protection of river substrates which can support healthy freshwater habitats and sustainable populations of freshwater species. Many of the settlements in the Fermoy MD are located along river systems and some of the land within these settlements is identified to be at risk of flooding. Surface water running off from these settlements is generally discharged to the nearest watercourse. Some of the settlements rely on the rivers of the SAC for their drinking water supply. Both surface water inputs and abstractions from rivers can have the potential to affect natural hydrological processes in rivers.

In order to ensure that new development can be accommodated without affecting natural hydrological processes, it will be important to ensure that surface water discharges are maintained at Greenfield rates and that increased levels of water abstraction from SAC rivers does not affect natural hydrological processes.

In relation to surface water disposal, flood policy is set out in Section 1 (Policy Ref IN-01) of the plan and the requirement to ensure that new development incorporate an acceptable means of surface water disposal is referenced in General Objectives associated with individual settlements including both the main towns and the villages. These policies should help to ensure that new development in the settlements will be appropriately designed to ensure that there will be no increase in run off rates to the watercourses in the receiving catchment. However, it is recommended that consideration be given to strengthening the General Objective relating to disposal of surface water in the plan, to clarify that surface water run-off should always be maintained at Greenfield rates, and to encourage use of SuDS.

There are three surface water abstractions which provide drinking water to settlements within this MD area. These are on the Blackwater River supplying **Fermoy**, on the Bride River supplying **Conna** and on the **Awbeg** River supplying Castletownroche. It is unclear at this point whether the increased growth proposed for these settlements will require increasing the volume of water to be abstracted from these sources. It will be necessary to carry out ecological assessment in respect of any proposals to increase the volume of water to be abstracted from watercourses within the SAC to facilitate new development proposed in this plan. It is recommended that this would be clarified in the plan.

**Developments Within the SAC:**

Riverside walks can provide an attractive amenity for residents and visitors to towns and villages and a number are proposed through this plan. It will be important that any such walks are designed sensitively to ensure that impacts on riverside and riverbank habitats and disturbance to species such as Otter are avoided. There is a riverside walk proposed within the SAC along the banks of the Blackwater in the village of Killavullen (U-01). It is recommended that consideration would be given to adding explanatory text to the related objective to clarify that this walk must be designed sensitively to ensure that its development and use will not cause damage to sensitive habitats or disturbance to freshwater fauna.

**Conclusion**

**Nutrients Issues:**

It is stated in relevant Development Boundary and General Objectives for relevant settlements in the plan that development will not be permitted unless it can be shown that wastewater infrastructure is in place which will secure the objectives of the Habitats Directive and the Water Framework Directive. For some settlements, additional capacity may need to be provided to allow development to proceed in accordance with the plan. For other settlements there may be assimilative capacity, plant design or outfall location issues which will also need to be addressed. In the interest of clarity, it is recommended that consideration be given at the amendments stage to identifying the WWTPs which have issues (other than capacity issues) which may require investment or further improvements at the plants in order to accommodate proposed growth.

Subject to adherence to DB and GO objectives which clarify the constraints on development associated with provision of appropriate wastewater treatment infrastructure, and provided it can be shown that the receiving watercourses have sufficient assimilative capacity to cater for the additional growth which is proposed in the individual settlements within this MD which are within the Blackwater catchment, it is considered that the growth which is proposed in this plan can be accommodated without giving rise to significant negative effects on the Blackwater River SAC.

**Hydrological Issues:**

Development objectives clarify that new development within settlements must make adequate provision for stormwater disposal. It is recommended that this objective would be strengthened to clarify that surface water run-off should always be maintained at Greenfield rates, and to encourage use of SuDS.

**Boundary Issues:**

In order to reduce pressure for development within this SAC, where the boundaries of the SAC overlap with settlement boundaries, it is recommended that these areas be zoned as Open Space - not suitable for development. This applies to land within the settlements of **Fermoy, Doneraile, Castlelyons/Bridesbridge, Conna, Killavullen** and **Castletownroche**.

**Abstraction Issues:**

It is recommended that it would be clarified in the plan that increasing abstractions from freshwater sources within the SAC will be subject to Habitats Directive Assessment and will only be permitted where it is shown that the abstraction can be achieved without interfering with the achievement of the Conservation Objectives which are established for this SAC.

**Walkways:**

It is recommended that explanatory text would be added to objective **Killavullen U-01** to clarify that this walk must be designed sensitively to ensure that their development and use will not cause damage to sensitive habitats or disturbance to freshwater fauna within the Blackwater River SAC.

**Overall Conclusion:**

Some changes to the draft plan are required to ensure compliance with the Habitats Directive. It is recommended that these changes would be made at the amendments stage. Subject to the implementation of these changes and adherence to protective policies set out in the LAP, it is considered that potential for development supported by this plan to give rise to significant negative effects on the Blackwater River SAC can be ruled out.

**Blackwater Estuary SPA (4028) - Screening Assessment**

**SPA Description and Key Concerns**

This is a sheltered south-facing estuary, located on the eastern boundary of Co. Cork. The principle habitat types are mudflats and sandflats, with saltmarsh fringing the estuarine channels. The site is of high ornithological importance for its variety and numbers of wintering waterfowl, in particular its internationally important population of Black-tailed Godwit, as well as a range of other species. This site overlaps with the estuarine portion of the Blackwater River SAC. The qualifying interests of the SPA and their Conservation Objectives are set out in

Appendix 1 of this report.

This SPA is approximately 35 km downstream from the Fermoy MD. However, all discharges to river systems in the catchment of the Blackwater will pass through the estuary, and consideration must be given to potential for discharges associated with development provided for by this plan, to contribute to cumulative negative effects on water quality and estuarine habitats within the SPA, and ultimately on the health of populations of birds reliant on those habitats.

Water quality in the estuary was assessed to be reaching Moderate status (EPA Envision Maps, 2010-2012). The primary potential source of impact on the SPA relates to the growth targets for settlements in the Fermoy MD area which have treatment plants discharging into the rivers within the catchment of the Blackwater. Unless these rivers have sufficient assimilative capacity and the settlements have appropriate treatment infrastructure to cater for the additional growth, there is a risk that new development would give rise to increased nutrient inputs to the system, affecting water quality in the estuary and potentially affecting estuarine habitats and their dependant bird species.

**Assessment**

Policies in the plan require the provision of appropriate waste-water treatment infrastructure to be provided in all settlements within the MD, which can cater for the additional growth proposed in the area. The infrastructure must be in place in advance of new development progressing and must be capable of treating effluent to a standard to ensure it can comply with WFD and Habitats Directive requirements.

**Table 2.3** of the plan identifies which of the plants associated with the settlements identified above have capacity to cater for the additional growth during the lifetime of the plan and which of the plants will require further investment to increase capacity, through a colour coding system. While plants coded green in the draft LAP do not have capacity issues, there may be other issues pertaining to these plants which have resulted in lack of compliance with their license conditions, or, in some cases, where the plants are identified to be affecting downstream water quality. These plants will require investment and upgrading to ensure not only that capacity issues are addressed, but also that issues relating to license compliance and impacts on water quality are addressed. It is stated in relevant Development Boundary and General Objectives in the plan that development will not be permitted unless it can be shown that wastewater infrastructure is in place which will secure the objectives of the Habitats Directive and the Water Framework Directive. In the interest of clarity, it is recommended that consideration be given at the amendments stage to identifying the WWTPs which have issues (other than capacity issues) which may require investment or further improvements at the plants in order to accommodate proposed growth.



Licensed WWTP's which were identified to be having an observable negative effect on water quality and/or where there were issues relating to license compliance in 2015 are **Fermoy, Mitchelstown, Castlelyons, Kilworth, Rathcormac, Watergrasshill, Ballyhooly, Castletownroche, Conna, Glanworth, Kildorrery, Killavullen and Clondulane.**

Settlements which have a certified waste water discharge to riverine systems within the catchment of SAC are **Bartlemy, Shanballymore and Ballyhea.** There is no information readily available to determine whether the discharges from WWTPs in these settlements is affecting water quality. This will need to be assessed as and when development proposals arise in these settlements.

## **Conclusion**

### **Nutrients Issues:**

It is stated in relevant Development Boundary and General Objectives for relevant settlements in the plan that development will not be permitted unless it can be shown that wastewater infrastructure is in place which will secure the objectives of the Habitats Directive and the Water Framework Directive. For some settlements, additional capacity may need to be provided to allow development to proceed in accordance with the plan. For other settlements there may be assimilative capacity, plant design or outfall location issues which will also need to be addressed. In the interest of clarity, it is recommended that consideration be given at the amendments stage to identifying the WWTPs which have issues (other than capacity issues) which may require investment or further improvements at the plants in order to accommodate proposed growth.

Subject to adherence to DB and GO objectives which clarify the constraints on development associated with provision of appropriate wastewater treatment infrastructure, and provided it can be shown that the receiving watercourses have sufficient assimilative capacity to cater for the additional growth which is proposed in the individual settlements within this MD which are within the Blackwater catchment, it is considered that the growth which is proposed in this plan can be accommodated without giving rise to significant negative effects on the Blackwater Estuary SPA.

### **Overall Conclusion:**

Some changes to the draft plan are required to ensure compliance with the Habitats Directive. It is recommended that these changes would be made at the amendments stage. Subject to the implementation of these changes and adherence to protective policies set out in the LAP, it is considered that potential for development supported by this plan to give rise to significant negative effects on the Blackwater Estuary SPA can be ruled out.

## **Blackwater Callows SPA (4094)-Screening Assessment**

### **SPA Description and Key Concerns**

This wetland site is located downstream from Fermoy, and overlaps with the Blackwater River SAC. It consists of seasonally flooded grassland within the flood plain of the Blackwater. This site is designated for the protection of internationally important numbers of the Annex I species Whooper Swan that occur at the site, for nationally important numbers of Wigeon, Teal, Black-tailed Godwit and for the wetland habitats these birds are dependent on. The birds use this site as a winter feeding ground with most species using flooded areas as well as adjacent pastureland and arable fields. Activities causing significant disturbance to wintering birds at this site, or decreasing the area of flooded land within the winter could have the potential to affect this site. The qualifying interests and conservation objectives for this site are set out in Appendix I of this report.

In the context of this report, and having regard to the conservation objectives, the key concern is to ensure that policies in the plan will not

- direct recreational or other activities into the site which could have the potential to cause significant disturbance related impacts;
- result in a reduction in natural flooding patterns within the SPA.

### **Assessment**

The nearest settlement to the SPA is Fermoy and the site lies within the green belt of the town. The policy for the green belt where new individual housing is strongly discouraged other than in certain exceptional cases and where the proposal is consistent with proper planning and sustainable development.

The previous plan proposed a riverside walk extending from the town into the SPA. This proposal has not been carried forward into the new plan.

The maintenance of stable hydrological processes in the Blackwater River, which will maintain seasonal flooding patterns in the callows will be vital to ensuring that this area continues to provide valuable winter feeding grounds for wetland birds. Key to this will be to ensure that surface water run-off from new development is maintained at Greenfield rates. Flood Policy is set out in Section 1 (Policy Ref IN-01) of the plan and the requirement to ensure that new development incorporates an acceptable means of surface water disposal is referenced in General Objectives associated with individual settlements. Consideration should be given to strengthening the General Objective relating to disposal of surface water in the plan, to clarify that surface water run-off should always be maintained at Greenfield rates, and to encourage use of SuDS.

**Conclusion**

The development proposals for Fermoy and the wider plan are generally compatible with the protection of the Blackwater Callows SPA, however, it is recommended that consideration would be given to strengthening the General Objective relating to disposal of surface water in the plan, to clarify that surface water run-off should always be maintained at Greenfield rates, and to encourage use of SuDS.

**4 Screening Conclusions and Recommendations**

<b>Fermoy Municipal District Local Area Plan – Consultation Draft Screening Conclusion</b>	
<b>Natura 2000 sites subject to Screening for Appropriate Assessment</b>	Ballymacoda (Clonpriest and Pillmore SAC 0077 Galtee Mountains SAC 0646 Great Island Channel SAC 1058 Ballyhoura Mountains SAC 2036 Carrigeenamronety Hill SAC 2037 Lower River Suir SAC 2137 Blackwater River (Cork/Waterford) SAC 2170 Ballymacoda Bay SPA 4023 Blackwater Estuary SPA 4028 Cork Harbour SPA 4030 Blackwater Callows SPA 4094 Kilcolman Bog 4095 Stacks to Mullaghareirks Mountains, West Limerick Hills and Mountain Eagle SPA 4161
<b>Description of the Plan</b>	See Section 2 of this report.
<b>Is the Plan Directly Connected with Or Necessary to the Management of the Natura 2000 sites identified above</b>	No
<b>Are there other projects or plans that together with this plan could give</b>	Other plans that set land use policy and promote the intensification of economic, tourism, agriculture and forestry activity in within the catchments of Cork Harbour, South East Cork

<p><b>rise to cumulative impacts on any of the above listed sites.</b></p>	<p>and the Blackwater River, may include policies whose implementation could result in negative ‘in combination’ effects on habitats and species for which the above listed sites are designated include <i>inter alia</i>:</p> <ul style="list-style-type: none"> <li>• Atlantic Gateways Initiative 2006</li> <li>• Common Agricultural Policy (2014-2020)</li> <li>• Cork Area Strategic Plan (2008)</li> <li>• Cork County Development Plan 2015</li> <li>• Kanturk – Mallow MD Draft Local Area Plan 2016</li> <li>• East Cork MD Local Area Plan</li> <li>• Forests, products and people – Irelands forest policy-a renewed vision 2014</li> <li>• Harvest 2020-A Vision for Irish Agri-Food and Fisheries</li> <li>• National Climate (2007-2012) Climate Adaptation Framework (2012)</li> <li>• National Development Plan 2007-2013</li> <li>• National Renewable Energy Action Plan</li> <li>• National Spatial Strategy</li> <li>• National Tourism Action Plan 2016-2018</li> <li>• National Waste Management Plan 2004-2009</li> <li>• North and West Cork Strategic Plan 2002-2020</li> <li>• Smarter Travel. A New Transport Policy for Ireland 2009-2020</li> <li>• South Western Regional Planning Guidelines 2010-2022</li> </ul> <p>The primary issues of concern are</p> <ul style="list-style-type: none"> <li>• policies which could result in increased pressure for development within Natura 2000 sites;</li> <li>• policies resulting in an increased pressure on water quality in sensitive catchments; and</li> <li>• policies which may hinder natural hydrological processes in freshwater systems.</li> </ul>
<p><b>Assessment of Significant Effects</b></p>	
<p><b>Describe how the plan (alone or in combination is likely to affect Natura</b></p>	<p>The key policy areas which were identified at the draft plan screening stage which could have the potential to give rise to impacts on the Natura 2000 networks were:</p>

<p>2000 sites)</p>	<ul style="list-style-type: none"> <li>• policies which could result in increased pressure for development within Natura 2000 sites;</li> <li>• policies resulting in an increased pressure on water quality in sensitive catchments; and</li> <li>• policies which may hinder natural hydrological processes within the in freshwater systems.</li> </ul>
<p><b>Recommended changes to the plan</b></p>	<p>A number of recommendations for modifications to the draft plan are proposed to ensure compliance with the Habitats and Birds Directives. These are summarised below.</p> <p><b>Blackwater River SAC</b> – Zone undeveloped SAC land identified as exiting built up area in Fermoy, Doneraile, Castlelyons/Bridesbridge, Conna, Killavullen and Castletownroche as Open Space not suitable for development; Identify WWTP’s in the plan where there are water quality impacts and/or license compliance issues to be addressed in order to facilitate development as proposed to proceed – Fermoy, Mitchelstown, Castlelyons, Kilworth, Rathcormac, Watergrasshill, Ballyhooly, Castletownroche, Conna, Glanworth, Kildorrery, Killavullen and Clondulane; Strengthen objective relating to surface water management to accord with similar objectives for settlements in other parts of Blackwater catchment as set out in Kanturk MD draft LAP; Clarify that any proposals to increase volumes of abstraction of water from the Blackwater (Fermoy), Bride (Conna) or Awbeg (Castletownroche) must be subject to Habitats Directive Assessment; and modify objective Killavullen U-01 to clarify that this walk must be designed sensitively to ensure that their development and use will not cause damage to sensitive habitats or disturbance to freshwater fauna.</p> <p><b>Blackwater Estuary SPA</b> - Identify in the plan WWTP’s where there are water quality impacts and/or license compliance issues to be addressed in order to facilitate development as proposed to proceed;</p> <p><b>Blackwater Callows SPA</b> – No changes required.</p>
<p><b>List of Agencies Consulted</b></p>	<p>The draft plan and this report will be referred to all of the relevant Statutory Authorities and will available for consideration by the</p>

	general public from November 16 <sup>th</sup> 2016.
<b>Conclusion</b>	Subject to adherence to protective policies in the plan relating to provision of appropriate waste water infrastructure and management of surface water, and to adoption of recommended changes as set out above, it is considered that potential for this plan to give rise to significant negative effects on the Natura 2000 network can be screened out.
<b>Data Collected to Carry Out the Assessment</b>	
<b>Who carried out the assessment</b>	Planning Policy Unit Cork County Council
<b>Sources of Data</b>	See references
<b>Level of Assessment Completed</b>	Screening for Appropriate Assessment
<b>Where can the full results of the assessment be accessed and viewed</b>	Habitats Directive Assessment will continue through the process of making this plan. All documents associated with the process will be available at <a href="http://www.corkcoco.ie">www.corkcoco.ie</a>

## 5 Next Steps

### 6.1 Post Consultation

Submissions or observations regarding the **Fermoy Municipal District Draft Local Area Plan** document and to the Environmental Report and Habitats Directive Screening Report are now welcome up to 4pm on Friday 06th January 2017.

All such submissions lodged within the above period and prior to the close of business at 4.00pm on Friday 06th January 2017, will be taken into consideration in the finalisation of the Local Area Plan, and proposed amendments will be published during a second round of public consultation which will commence in the spring of 2017. Proposed amendments will be subject to Habitats Directive Screening Assessment and the findings of that assessment will be published alongside the proposed amendments.

## **6 Sources of Information**

### **6.1 National Parks and Wildlife Service Data**

Information relating to individual Natura 2000 sites including Article 17 Conservation Assessment Reports for Habitats and Species In Ireland (2013), individual site synopses, Natura 2000 data forms, and information relating to the qualifying features and conservation objectives of individual sites was sourced from the NPWS database ([www.NPWS.ie](http://www.NPWS.ie))

### **6.2 Guidance**

Guidance used in the preparation of this report included the following:

European Communities, Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC. European Communities, 2000.

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. European Communities, 2001.

Environment, Heritage and Local Government. Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities. 2009.

## Appendix I

### Blackwater River SAC (Site Code 2170)

#### Qualifying Interests

1130	Estuaries	
1140	Mudflats and sandflats not covered by seawater at low tide	
1220	Perennial vegetation of stony banks	
1310	<i>Salicornia</i> and other annuals colonising mud and sand	
1330	Atlantic salt meadows ( <i>Glauco-Puccinellietalia maritimae</i> )	
1410	Mediterranean salt meadows ( <i>Juncetalia maritimi</i> )	
3260	Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation	
91A0	Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	
91E0	*Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> ( <i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i> )	
91J0	* <i>Taxus baccata</i> woods of the British Isles	
1029	Freshwater Pearl Mussel	<i>Margaritifera margaritifera</i>
1092	White-clawed Crayfish	<i>Austropotamobius pallipes</i>
1095	Sea Lamprey	<i>Petromyzon marinus</i>
1096	Brook Lamprey	<i>Lampetra planeri</i>
1099	River Lamprey	<i>Lampetra fluviatilis</i>
1103	Twaite Shad	<i>Alosa fallax</i>
1106	Atlantic Salmon	<i>Salmo salar</i>
1355	Otter	<i>Lutra lutra</i>
1421	Killarney Fern	<i>Trichomanes speciosum</i>



Conservation Objectives - Attributes and Targets (summary)

<b><i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029]</b>					
<b>Conservation Objective: To restore the favourable conservation condition of Freshwater Pearl Mussel in the Blackwater River SAC</b>					
<b>Attribute/Target</b>					
<b>Distribution</b>	<b>Population Size</b>	<b>Population Structure: recruitment</b>	<b>Population Structure: adult mortality</b>	<b>Habitat Extent</b>	<b>Water quality: macroinverts and phytobenthos (diatoms)</b>
Maintain at 161km	Restore to 35,000 adult mussels.	Restore to least 20% of population no more than 65mm in length; and at least 5% of population no more than 30mm in length	No more than 5% decline from previous number of live adults counted; dead shells less than 1% of the adult population and scattered in distribution	Restore suitable habitat in more than 35km and any additional stretches necessary for salmonid spawning	Restore water quality macroinvertebrates: EQR greater than 0.90; phytobenthos: EQR greater than 0.93

<b><i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029] cont'd</b>				
<b>Conservation Objective: To restore the favourable conservation condition of Freshwater Pearl Mussel in the Blackwater River SAC</b>				
<b>Attribute/Target</b>				
<b>Substratum quality: filamentous algae (macroalgae), macrophytes (rooted higher plants)</b>	<b>Substratum quality: sediment</b>	<b>Substratum quality: oxygen availability</b>	<b>Hydrological regime: flow variability</b>	<b>Host Fish</b>
Restore substratum quality-filamentous algae: absent or trace (<5%); macrophytes: absent or trace (<5%)	Restore substratum quality-stable cobble and gravel substrate with very little fine material; no artificially	Restore to no more than 20% decline from water column to 5cm depth in substrate	Restore appropriate hydrological regimes	Maintain sufficient juvenile salmonids to host glochidial larvae

	elevated levels of fine sediment			
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***Austropotamobius pallipes* White-clawed Crayfish 1092**

**Conservation Objective: To maintain the favourable conservation condition of White-clawed Crayfish in the Blackwater River SAC**

**Attribute/Target**

<b>Distribution</b>	<b>Population Structure Recruitment</b>	<b>Negative Indicator Species</b>	<b>Disease</b>	<b>Water Quality</b>	<b>Habitat Quality Heterogeneity</b>
No reduction from baseline	Juveniles and/or females with eggs in at least 50% of positive samples	No alien crayfish species	No instances of disease	At least Q 3-4 at all sites sampled by EPA	No decline in heterogeneity or habitat quality

***Petromyzon marinus* (Sea Lamprey) [1095]**

**Conservation Objective: To restore the favourable conservation condition of Sea Lamprey in the Blackwater River SAC**

**Attribute/Target**

<b>Distribution: extent of anadromy</b>	<b>Population structure of juveniles</b>	<b>Juvenile density in fine sediment</b>	<b>Extent and distribution of spawning habitat</b>	<b>Availability of juvenile habitat</b>
Greater than 75% of main stem length of rivers accessible from estuary	At least three age/size groups present	Juvenile density at least 1/m <sup>2</sup>	No decline in extent and distribution of spawning beds	More than 50% of sample sites positive

***Lampetra planeri* (Brook Lamprey) [1096]**

<b>Conservation Objective: To maintain the favourable conservation condition of Brook Lamprey in the Blackwater River SAC</b>				
<b>Attribute/Target</b>				
<b>Distribution: extent of anadromy</b>	<b>Population structure of juveniles</b>	<b>Juvenile density in fine sediment</b>	<b>Extent and distribution of spawning habitat</b>	<b>Availability of juvenile habitat</b>
Access to all watercourses down to first order streams	At least three age/size groups of brook/river lamprey present	Mean catchment juvenile density of brook/river lamprey at least 2/m <sup>2</sup>	No decline in extent and distribution of spawning beds	More than 50% of sample sites positive

<b><i>Lampetra fluviatilis</i> (River Lamprey) [1099]</b>				
<b>Conservation Objective: To maintain the favourable conservation condition of River Lamprey in the Blackwater River SAC</b>				
<b>Attribute/Target</b>				
<b>Distribution: extent of anadromy</b>	<b>Population structure of juveniles</b>	<b>Juvenile density in fine sediment</b>	<b>Extent and distribution of spawning habitat</b>	<b>Availability of juvenile habitat</b>
Access to all watercourses down to first order streams	At least three age/size groups of river/brook lamprey present	Mean catchment juvenile density of brook/river lamprey at least 2/m <sup>2</sup>	No decline in extent and distribution of spawning beds	More than 50% of sample sites positive for brook/river lamprey juveniles

<b><i>Alosa fallax</i> (Twaite Shad) [1099]</b>				
<b>Conservation Objective: To restore the favourable conservation condition of Twaite Shad in the Blackwater River SAC</b>				
<b>Attribute/Target</b>				
<b>Distribution: extent of anadromy</b>	<b>Population structure: age classes</b>	<b>Extent and distribution of spawning habitat</b>	<b>Water quality and oxygen levels</b>	<b>Spawning habitat quality: Filamentous algae; macrophytes; sediment</b>

Greater than 75% of main stem length of rivers accessible from estuary	More than one age class present	No decline in extent and distribution of spawning habitats	No lower than 5mg/l	Maintain stable gravel substrate with very little fine algal (macroalgae growth and macrophyte (rooted higher plant) growth
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***Salmo salar* (Atlantic Salmon) [1106]**

**Conservation Objective: To maintain the favourable conservation condition of Salmon in the Blackwater River SAC**

**Attribute/Target**

<b>Distribution: extent of anadromy</b>	<b>Adult spawning fish</b>	<b>Salmon fry abundance</b>	<b>Out-migrating smolt abundance</b>	<b>Number and distribution of reeds</b>	<b>Water quality</b>
100% of river channels down to second order accessible from estuary	Conservation Limit (CL) for each system consistently exceeded	Maintain or exceed 0+ fry mean catchment-wide abundance threshold value. Currently set at 17 salmon fry/5min sampling	No significant decline	No decline in number and distribution of spawning reeds due to anthropogenic causes	At least Q4 at all sites sampled by EPA

**Estuaries [1130]**

**Conservation Objective: To maintain the favourable conservation condition of Estuaries in the Blackwater River SAC**

**Attribute/Target**

<b>Habitat Area</b>	<b>Community Extent</b>	<b>Community Structure: <i>Mytilus edulis</i> density</b>	<b>Community Distribution</b>
Permanent habitat area is	Maintain the extent of the	Conserve the high quality of	Conserve the following community types in natural

stable or increasing, subject to natural processes (1208ha)	<i>Mytilus edulis</i> – dominated community, subject to natural processes.	the <i>Mytilus edulis</i> – dominated community, subject to natural processes.	conditions: Intertidal estuarine sandy mud community complex; Subtidal estuarine fine sand with <i>Bathyporeia</i> spp. community complex; Sand and mixed sediment with polychaetes and crustaceans community complex; Coarse sediment community complex.
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**Mudflats and sandflats not covered by seawater at low tide [1140]**

**Conservation Objective: To maintain the favourable conservation condition of mudflats and sandflats not covered by seawater at low tide for the Blackwater River SAC**

**Attribute/Target**

<b>Habitat Area</b>	<b>Community extent</b>	<b>Community structure: <i>Zostera</i> shoot density</b>	<b>Community structure: <i>Mytilus edulis</i> density</b>	<b>Community Distribution</b>
The permanent habitat is stable or increasing subject to natural processes 284ha.	Maintain the extent of the <i>Zostera</i> and <i>Mytilus edulis</i> dominated communities, subject to natural processes	Conserve the high quality of the <i>Zostera</i> dominated community, subject to natural processes	Conservation the high quality of the <i>Mytilus edulis</i> dominated community, subject to natural processes	The following community types should be conserved in a natural condition: Intertidal estuarine sandy mud community complex and Sand and mixed sediment with polychaetes and crustaceans community complex

**Perennial vegetation of stony banks [1220]**

**Conservation Objective: To maintain the favourable conservation condition of Perennial vegetation of stony banks for the Blackwater River SAC**

**Attribute/Target**

Habitat Area	Habitat Distribution	Physical structure: functionality and sediment supply	Vegetation structure: zonation	Vegetation composition: typical species and sub-communities	Vegetation composition: negative indicator species
Area stable or increasing, subject to natural processes including erosion and succession	No decline, or change in habitat distribution, subject to natural processes.	Maintain the natural circulation of sediment and organic matter, without any physical obstructions	Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession	Maintain the typical vegetated shingle flora including the range of sub-communities within the different zones	Negative indicator species (including non-natives) to represent less than 5% cover

**Salicornia and other annuals colonising mud and sand**

**Conservation Objective: To maintain the favourable conservation condition of *Salicornia* and other annuals colonising mud and sand in Blackwater River SAC**

**Attribute/Target**

Habitat Area	Habitat Distribution	Physical Structure: sediment supply	Physical structure: creeks and pans	Physical structure: flooding regime	Vegetation structure: zonation	Vegetation structure: height	Vegetation structure: vegetation cover	Vegetation composition : typical species and sub-communities	Vegetation structure: negative indicator species – <i>Spartina anglica</i>
Stable or increasing subject to natural processes	No decline or change in habitat distribution, subject to natural processes	Maintain natural circulation of sediments and organic matter, without any physical	Maintain/res tore creek and pan structure, subject to natural processes, including	Maintain natural tidal regime	Maintain the range of coastal habitats including transitional zones, subject to	Maintain structural variation in sward	Maintain more than 90% of area outside creeks vegetated	Maintain the presence of species-poor communities listed in SMP	No significant expansion of common cordgrass with an annual spread of

		obstructions	erosion and succession		natural processes including erosion and succession				less than 1% where it is known to occur
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**Atlantic Salt Meadows (*Glauco-Puccinellietalia maritimae*) 1330**

**Conservation Objective: To restore the favourable conservation condition of Atlantic Salt Meadows (*Glauco-Puccinellietalia maritimae*) for the Blackwater River SAC**

**Attribute/Target**

<b>Habitat Area</b>	<b>Habitat Distribution</b>	<b>Physical Structure: sediment supply</b>	<b>Physical structure: creeks and pans</b>	<b>Physical structure: flooding regime</b>	<b>Vegetation structure: zonation</b>	<b>Vegetation structure: height</b>	<b>Vegetation structure: vegetation cover</b>	<b>Vegetation composition: typical species and sub-communities</b>	<b>Vegetation structure: negative indicator species – <i>Spartina anglica</i></b>
Area stable or increasing subject to natural processes including erosion and succession (min 30.90ha)	No decline or change in habitat distribution subject to natural processes	Maintain natural circulation of sediments and organic matter, without any physical obstructions	Maintain creek and pan structure, subject to natural processes, including erosion and succession	Maintain natural tidal regime	Maintain range of coastal habitats including transitional zones, subject to natural processes including erosion and	Maintain structural variation in sward	Maintain more than 90% of area outside creeks vegetated	Maintain range of sub-communities with typical species listed in SMP	No significant expansion of common cordgrass, with an annual spread of less than 1%

					succession			
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**Lutra Lutra (Otter)**

**Conservation Objective: To restore the favourable conservation condition of Lutra Lutra (Otter) in the Blackwater River SAC**

Attribute/Target							
Distribution	Extent of terrestrial habitat	Extent of marine habitat	Extent of freshwater (river) habitat	Extent of freshwater (lake) habitat	Couching sites and holts	Fish biomass available	Barriers to connectivity
No significant decline	No significant decline. Area mapped and calculated as 103ha above HWM; 1165.7ha along river banks/around ponds	No significant decline. Area mapped as 647.2ha	No significant decline. Length mapped and calculated as 599.54km	No significant decline. Area mapped and calculated as 25.06ha	No significant decline	No significant decline	No significant increase

**Mediterranean salt meadows (Juncetalia maritimi) [1410]**

**Conservation Objective: To restore the favourable conservation condition of Mediterranean salt meadows (Juncetalia maritimi) for Kenmare River SAC**

Attribute/Target									
Habitat Area	Habitat Distribution	Physical Structure: sediment supply	Physical structure: creeks and pans	Physical structure: flooding regime	Vegetation structure: zonation	Vegetation structure: height	Vegetation structure: vegetation cover	Vegetation composition: typical species and sub-communities	Vegetation structure: negative indicator species – <i>Spartina Anglica</i>



Area stable or increasing subject to natural processes including erosion and succession	No decline or change in habitat distribution subject to natural processes	Maintain natural circulation of sediments and organic matter, without any physical obstructions	Maintain creek and pan structure, subject to natural processes, including erosion and succession	Maintain natural tidal regime	Maintain range of coastal habitats including transitional zones, subject to natural processes including erosion and succession	Maintain structural variation in sward	Maintain more than 90% of area outside creeks vegetated	Maintain range of sub-communities with typical species listed in SMP	No significant expansion of common cordgrass, with an annual spread of less than 1%
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<b>Killarney Fern (<i>Trichomanes speciosum</i>)</b>							
<b>Conservation Objective: To maintain the favourable conservation condition of Killarney Fern in the Blackwater River SAC</b>							
<b>Attribute/Target</b>							
<b>Distribution</b>	<b>Population size</b>	<b>Habitat Extent</b>	<b>Hydrological conditions: visible water</b>	<b>Hydrological conditions: water</b>	<b>Hydrological conditions: humidity</b>	<b>Light levels: shading</b>	<b>Invasive Species</b>
No decline. Two locations known within the SAC	Maintain size and extent of existing colonies, including sporophyte from counts and number of gametopye patches	No loss of suitable habitat, such as shaded rock crevices, caves or gullies in, or near to, known colonies. No loss of woodland	Maintain hydrological conditions at the locations so that all colonies are in dripping or damp seeping habitats, and water is visible at all locations	No increase. Presence of desiccated sporophyte mats indicates conditions are unsuitable	No increase. Presence of desiccated sporophyte fronds or gametophyte mats indicates conditions are unsuitable	No changes due to anthropogenic impacts	Absent or under control

		canopy at or near to known locations					
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**Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation [3260]**

**Conservation Objective: To maintain the favourable conservation condition of Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation in the Blackwater River SAC**

Attribute/Target							
Habitat area	Habitat area	Hydrological regime: river flow	Hydrological regime: tidal influence	Substratum composition: particle size range	Water quality nutrients	Vegetation composition: typical species	Floodplain connectivity
Area stable or increasing subject to natural processes	No decline, subject to natural processes	Maintain appropriate hydrological regimes	Maintain natural tidal regime	The substratum should be dominated by the particle size ranges, appropriate to the habitat sub-type (typically sands, gravels and cobbles)	The concentration of nutrients in the water column should be sufficiently low to prevent changes in species composition or habitat condition	Typical species of the relevant habitat sub-type should be present and in good condition	The area of active floodplain at and upstream of the habitat should be maintained

**Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles**

**Conservation Objective: To maintain the favourable conservation condition of Old Sessile Oak Woods in the Blackwater River SAC**

Attribute/Target					
Habitat Area	Habitat Distribution	Woodland Size	Woodland Structure:	Woodland Structure;	Woodland Structure:

			cover and height	community diversity and extent	natural regeneration
Area stable or increasing, subject to natural processes at least 263.7ha for sub sites surveyed	No decline	Area stable or increasing. Where topographically possible, "large" woods at least 25ha in size and "small" woods at least 3ha in size	Diverse structure with a relatively closed canopy containing mature trees; sub-canopy layer with semi mature trees and shrubs; and well-developed herb layer	Maintain diversity and extent of community types	Seedlings, saplings and pole age-classes occur in adequate proportions to ensure survival of woodland canopy

Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles cont'd					
Conservation Objective: To maintain the favourable conservation condition of Old Sessile Oak Woods in the Blackwater River SAC					
Attribute/Target					
Woodland Structure: dead wood	Woodland Structure: veteran trees	Woodland Structure: indicators of local distinctiveness	Vegetation composition: native tree cover	Vegetation composition: typical species	Vegetation composition: negative indicator species
At least 30m <sup>3</sup> /ha of fallen timber greater than 10cm diameter; 30 snags/ha;; both categories should include stems greater than 40cm diameter	No decline	No decline	No decline. Native tree cover not less than 95%	A variety of typical native species present, depending on woodland type, including Sessile Oak and Birch	Negative indicator species, particularly non-native invasive species , absent or under control

Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) [91E0]					
Conservation Objective: To restore the favourable conservation condition of Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion,					

<b>Alnion incanae, Salicion albae) in the Blackwater River SAC</b>					
<b>Attribute/Target</b>					
<b>Habitat Area</b>	<b>Habitat Distribution</b>	<b>Woodland size</b>	<b>Woodland structure: cover and height</b>	<b>Woodland structure: community diversity and extent</b>	<b>Woodland Structure: natural regeneration</b>
Area stable or increasing subject to natural processes, at least 19.2ha for sites surveyed	No decline	Area stable or increasing. Where topographically possible 'large' woods at least 25ha in size and 'small woods' at least 3 ha in size	Diverse structure with a relatively closed canopy containing mature trees; sub-canopy layer with semi-mature trees and shrubs; and well developed herb layer	Maintain diversity and extent of community types	Seedlings, saplings and pole age-classes occur in adequate proportions to ensure survival of woodland canopy

<b>Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) [91E0] cont'd</b>						
<b>Conservation Objective: To restore the favourable conservation condition of Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) in the Blackwater River SAC</b>						
<b>Attribute/Target</b>						
<b>Hydrological regime: Flooding depth/height of water table</b>	<b>Woodland structure: dead wood</b>	<b>Woodland structure: veteran trees</b>	<b>Woodland structure: indicators of local distinctiveness</b>	<b>Vegetation composition: native tree cover</b>	<b>Vegetation composition: typical species</b>	<b>Vegetation composition: negative indicator species</b>
Appropriate hydrological regime necessary for maintenance of alluvial vegetation	At least 30m <sup>3</sup> /ha of fallen timber; 30 snags/ha; both categories should include stems greater	No decline	No decline.	No decline. Native tree cover not less than 95%	A variety of typical native species present, depending on woodland type, including alder, willows, and locally,	Negative indicator species, particularly non-native invasive species, absent or under control

	than 40cm diameter (greater than 20cm diameter in the case of alder)				oak and ash	
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**NPWS (2012) Conservation Objectives: Blackwater River SAC 2165. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.**

**Blackwater Estuary SPA (Site Code 4028) - Site Data**

**Qualifying Interest**

- A050 Wigeon
- A140 Golden Plover
- A142 Lapwing
- A149 Dunlin
- A156 Black-tailed Godwit
- A157 Bar-tailed Godwit
- A160 Curlew
- A162 Redshank
- A999 Wetland and Waterbirds

**Conservation Objectives - Attributes and Targets (summary)**

<b>{A050} Wigeon <i>Anas Penelope</i></b>
<b>Conservation Objective: To maintain the favourable conservation condition of Wigeon in Blackwater Estuary SPA, which is defined by the following list of attributes and targets:</b>

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Waterbird population trends are presented in part four of the conservation objectives supporting document
Distribution	Range, timing and intensity of use of areas	No significant decrease in the range, timing or intensity of use of areas by teal, other than that occurring from natural patterns of variation	Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in part five of the conservation objectives supporting document

**[A140] Golden Plover *Pluvialis apricaria***

**Conservation Objective: To maintain the favourable conservation condition of Golden Plover in Blackwater Estuary SPA, which is defined by the following list of attributes and targets:**

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Population trends are presented in part four of the conservation objectives supporting document
Distribution	Range, timing and intensity of use of areas	No significant decrease in the range, timing or intensity of use of areas by Golden Plover, other than that occurring from natural patterns of variation	Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in part five of the conservation objectives supporting document

**[A142] Lapwing *Vanellus vanellus***

**Conservation Objective: To maintain the favourable conservation condition of Lapwing in Blackwater Estuary SPA, which is defined by the following list of attributes and targets:**

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Waterbird population trends are presented in part four of the conservation objectives supporting document
Distribution	Range, timing and intensity of use of areas	No significant decrease in the range, timing or intensity of use of areas by Lapwing, other than that occurring from natural patterns of variation	Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in part five of the conservation objectives supporting document

**[A149] Dunlin *Calidris alpina alpina***

**Conservation Objective: To maintain the favourable conservation condition of Dunlin in Blackwater Estuary SPA, which is defined by the following list of attributes and targets:**

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Population trends are presented in part four of the conservation objectives supporting document
Distribution	Range, timing and intensity of use of areas	No significant decrease in the range, timing or intensity of use of areas by Black-tailed Godwit, other than that occurring from natural patterns of variation	Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in part five of the conservation objectives supporting document

**[A156] Black-tailed Godwit *Limosa limosa***

**Conservation Objective: To maintain the favourable conservation condition of Black-tailed Godwit in Blackwater Estuary SPA, which is defined by the following list of attributes and targets:**

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Population trends are presented in part four of the conservation objectives supporting document
Distribution	Range, timing and intensity of use of areas	No significant decrease in the range, timing or intensity of use of areas by Black-tailed Godwit, other than that occurring from natural patterns of variation	Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in part five of the conservation objectives supporting document

**[A157] Bar-tailed Godwit *Limosa lapponica***

**Conservation Objective: To maintain the favourable conservation condition of Bar-tailed Godwit in Blackwater Estuary SPA, which is defined by the following list of attributes and targets:**

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Population trends are presented in part four of the conservation objectives supporting document
Distribution	Range, timing and intensity of use of areas	No significant decrease in the range, timing or intensity of use of areas by Bar-tailed Godwit other than that occurring from natural patterns of variation	Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in part five of the conservation objectives supporting document

**[A160] Curlew *Numenius arquata***

**Conservation Objective: To maintain the favourable conservation condition of Curlew in Blackwater Estuary SPA, which is defined by the following list of attributes and targets:**

Attribute	Measure	Target	Notes
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Population trend	Percentage change	Long term population trend stable or increasing	Population trends are presented in part four of the conservation objectives supporting document
Distribution	Range, timing and intensity of use of areas	No significant decrease in the range, timing or intensity of use of areas by curlew, other than that occurring from natural patterns of variation	Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in part five of the conservation objectives supporting document

**[A162] Redshank *Tringa totanus***

**Conservation Objective: To maintain the favourable conservation condition of Redshank in Blackwater Estuary SPA, which is defined by the following list of attributes and targets:**

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Population trends are presented in part four of the conservation objectives supporting document
Distribution	Range, timing and intensity of use of areas	No significant decrease in the range, timing or intensity of use of areas by Black-tailed Godwit, other than that occurring from natural patterns of variation	Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in part five of the conservation objectives supporting document

**[A999] Wetlands**

**Conservation Objective: To maintain the favourable conservation condition of wetland habitat in Blackwater Estuary SPA, as a resource for the regularly occurring migratory birds that utilise it. This is defined by the following attribute and target:**

Attribute	Measure	Target	Notes
Habitat area	Hectares	The permanent area occupied by the	As determined by regular low tide

		wetland habitat should be stable and not significantly less than the area of 281 hectares, other than that occurring from natural patterns of variation	and other waterbird surveys. Waterbird distribution from the 2009/2010 waterbird survey programme is discussed in part five of the conservation objective supporting document.
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**Blackwater Callows SPA (Site Code 4094) - Site Data**

**Qualifying Interests**

- A038 Whooper Swan
- A050 Wigeon
- A052 Teal
- A156 Black-tailed Godwit
- A999 Wetland and Waterbirds

**Conservation Objectives**

To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA:

Code	Common Name	Scientific Name
A038	Whooper Swan	<i>Cygnus cygnus</i>
A050	Wigeon	<i>Anas Penelope</i>
A052	Teal	<i>Anas crecca</i>
A156	Black-tailed Godwit	<i>Limosa limosa</i>

To acknowledge the importance of Ireland’s wetland to wintering waterbirds, “Wetland and Waterbirds” may be included as a Special Conservation Interest for some SPAs that have been designated for wintering waterbirds and that contain a wetland site of significant importance to one or more of the species of Special Conservation Interest . Thus, a second objective is included as follows:

To maintain or restore the favourable conservation condition of the wetland habitat at Blackwater Callows SPA as a resource for the regularly occurring migratory waterbirds that utilise it.

**NPWS (2015) Conservation objective for Blackwater Callows {4094}. Generic Version 4.0. Department of Arts, Heritage and the Gaeltacht**

