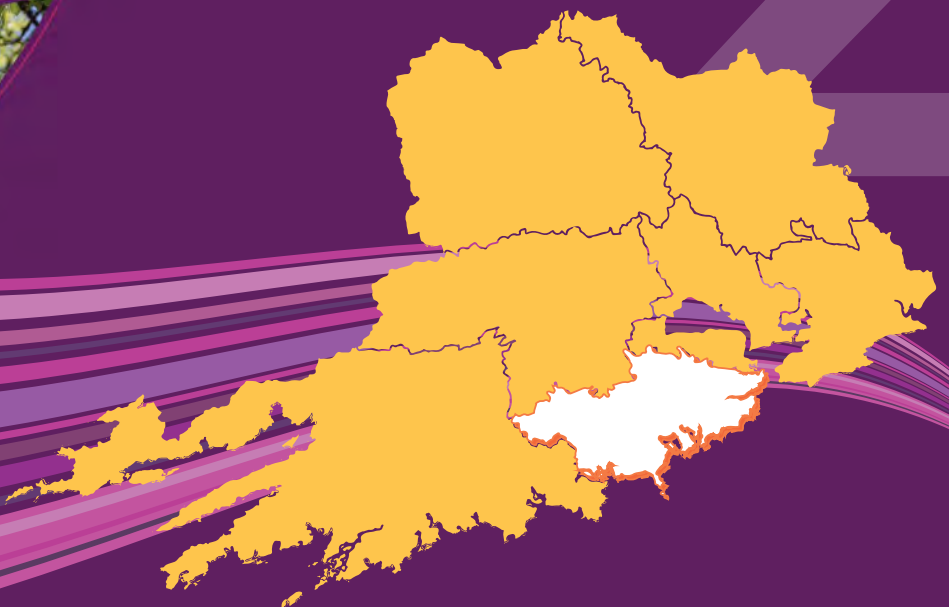




**Cork
County Council**
Comhairle Contae Chorcaí

Draft
**Bandon Kinsale
Municipal District
Environmental Reports**



16th 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. 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 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 16th November 2016** to **4.00pm** on **Friday 06th January 2017**.

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

- On-line via 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 6th January 2017**, will be taken into consideration in the finalisation of the Municipal District Local Area Plan.



Environmental Reports

Table of Contents

	<i>Section</i>	<i>Page No.</i>
1.	Strategic Environmental Assessment Environmental Report	4
2.	Strategic Flood Risk Assessment	117
3.	Habitats Directive Screening Report	148

Bandon Kinsale Municipal District

1 Strategic Environmental Assessment Environmental Report

Sub-Section

1. Introduction
2. The Draft Bandon Kinsale 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

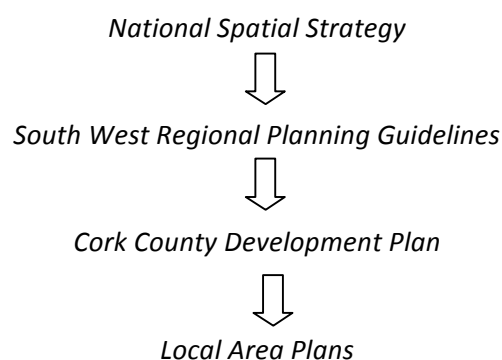
Sub-Section

- 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 Bandon Kinsale 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 Currently the Town Development Plans adopted by the nine former Town Councils of Cobh, Clonakilty, Fermoy, Kinsale, Macroom, Mallow, Midleton, Skibbereen and Youghal remains in force pending the making of the next County Development Plan in 2020. It is proposed to vary the Town Development Plans, such that the zoning provisions and associated policy objectives of the Town Development Plans are updated and incorporated into the new Local Area Plans. The Town Plans will remain in force but the relevant zoning provisions will be those of the new Local Area Plan.

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	Fermoy	42,226	Charleville, Fermoy, Mitchelstown	29
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



Figure: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 1.2: Information to be contained in an Environmental Report

Item	Information to be contained in an Environmental Report	Relevant Section of Environmental Report
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 1.4.2 The results of this analysis and review are presented in a Natura Impact Report which is contained in Section B of Volume Two of the Draft Municipal District Local Area 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 Appendix A of this report. 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 Waterbodies 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 Bandon Kinsale 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 Bandon Kinsale 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 Bandon Electoral Area Local Area Plans was adopted in 2011 and must be replaced by end of July 2017. On the 14th 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 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 Bandon Kinsale Municipal District is located south west of Cork City and in 2011 the population of the area stood at 42,454. This population is spread across a network of settlements including 3 Main Towns, 34 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 over 40% of the population of the Municipal District living in the open countryside i.e. not within a settlement.

2.3.2 Bandon is the largest town within the Municipal District with a population of 6,640 in 2011. The other Main Towns populations are Kinsale (4,893) and Carrigaline South (4,858).

Table 2.1: Distribution of population within the Bandon-Kinsale Municipal District 2011			
	Settlements	Estimated Population 2011	%
Towns(3)	Bandon (6,640), Kinsale (4,893), Carrigaline (South)(4,858)	16,391	39%
Key Villages (5)	Crosshaven and Bays, Ballinspittle, Belgooly, Inishannon, Riverstick.	8,320*	20%
Villages (7)	Ballinadee, Ballinhassig, Ballygarvan, Halfway Kilbrittain, Minane Bridge, Old Chapel.		
Village Nuclei (10)	Aghyohill, Ballyfeard, Ballyheada, Crossmahon, Dunderrow, Fivemilebridge, Gaggan, Garrettstown/ Garrrylucas, Nohoval,Tinkers Cross.		
Other Locations (12)	Ballymartle, Barrells Cross, Brownsmill, Gogginshill, Jagoe's Mill, Kilcolman, Killeady, Kilmacsimon Quay, Oysterhaven, Robert's Cove, Sandycove, Tracton.		
Rural Areas		17,743*	41%
Total Population		42,454	

* Village and Rural Populations are estimated figures

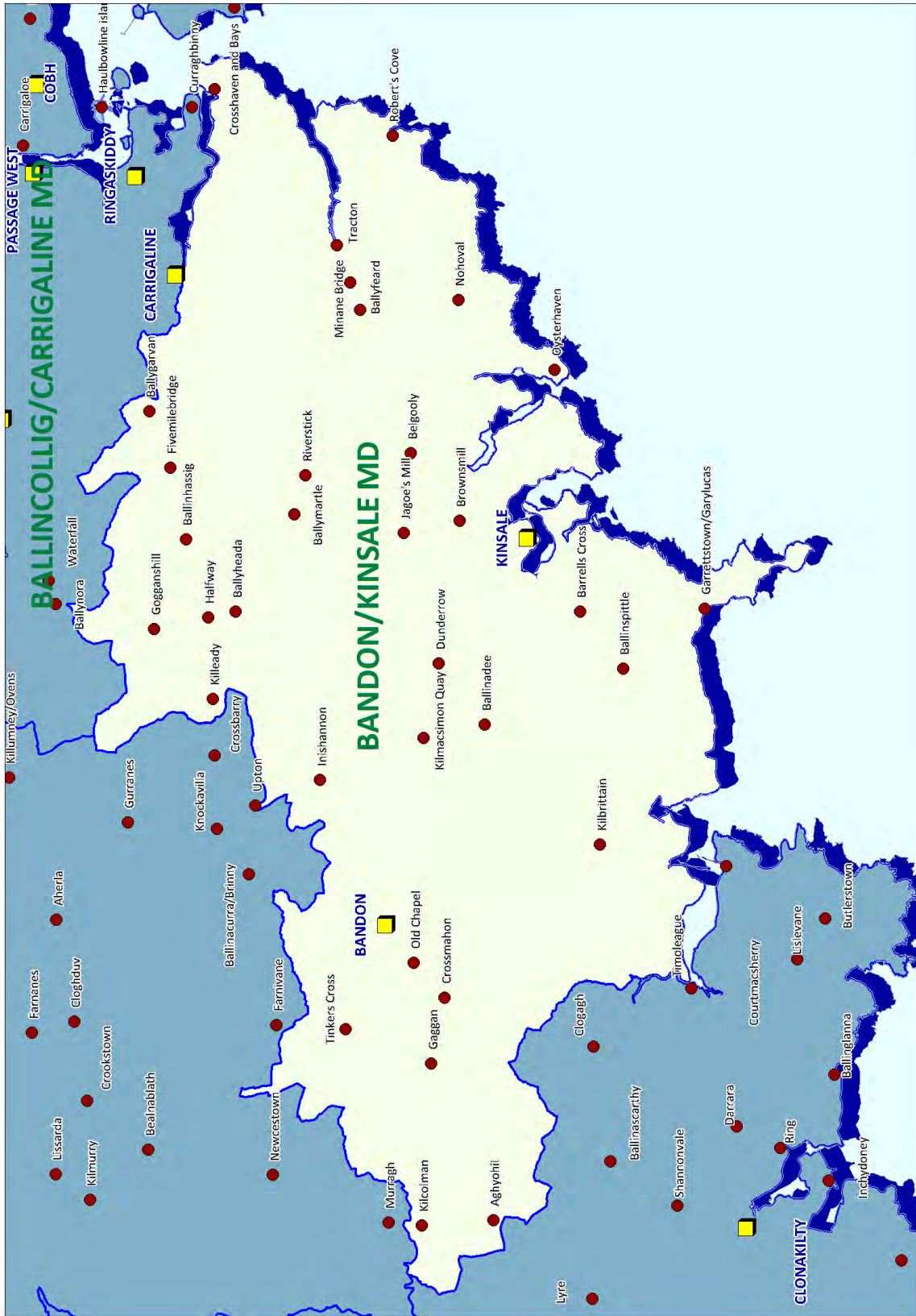


Figure 2.1: Bandon Kinsale Municipal District Settlements

Population Trends

2.3.3 Within the Bandon Kinsale Municipal District the County Development Plan provides for growth in population of 3,579 persons. The number of households is expected to grow by 3,926 leading to a net requirement for 3,707 new houses within the Municipal District. The County Development Plan indicates that 80ha of residentially zoned land is required.

2.3.4 The population growth target will require the provision of 3,498 new housing units, with at least 1,606 units allocated to the 2 Main Towns of Bandon and Kinsale. The housing target for Carrigaline (South) is allocated to the Ballincollig-Carrigaline Municipal District for the entire town of Carrigaline. Housing growth of 1,642 units is also planned for the villages.

Table 2.2 Population Trends and Targets within the Bandon Kinsale Municipal District 2002-2022

	Population 2002	Population 2011	Population Target 2022
Total Main Towns*	8,715*	11,533*	13,487*
Total Villages and Rural Areas	14,562	26,063	26,641
Total Population	23,956	37,596	40,128

* Carrigaline is excluded from the figure as the boundary change prior to 2011 does not provide 2 figures for Carrigaline North & South

2.4 Growth Strategy

2.4.1 At present planning policy for the settlements within the Bandon Kinsale Municipal District is spread across the Bandon Electoral Area Local Area Plan adopted in 2011 and the Kinsale Town Development Plan 2009. The intention is that local planning policy for all settlements within the Municipal District will be contained within the new Bandon Kinsale Municipal District Local Area Plan 2017.

2.4.2 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.

2.4.3 Within the Bandon Kinsale Municipal District the County Plan provides for growth in population of 3,550 persons. The number of households is expected to grow by 3,926 leading to a net requirement for 3,498 new houses within the Municipal District in the period 2011-2022. The County Development Plan indicates that 80ha 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.

2.4.4 Through its County Development Plan 2014, the Council has split this growth between the 2 towns with 1,606 new houses proposed, the majority of which are planned for Bandon (1,505). Housing growth is also planned within the villages (1,642 units).

2.4.5 Table 3.1 below shows that the current provision of zoned lands within the main towns is sufficient to accommodate 2,622 new dwelling units providing headroom of 1,016 units or 63% in excess of the net requirement of 1,606 within the towns of the Municipal District for new units. Table 3.1 also shows that the greatest number of new dwellings is planned in Bandon with significant new growth also planned in Kinsale.

Table 2.2: Bandon-Kinsale Municipal District

Housing Requirement					Housing Supply	
	Census 2011	Population Target	New Units Required	Net Estimated Requirement (ha)	Estimated Net Residential area zoned (ha)	Estimated Housing Yield
Bandon	6,640	7,765	892	45	91.84	1,766
Kinsale	4,893	5,722	714	36	39.8	856
Carrigaline (South)	4,858	5,876	See Carrigaline (North)			
Main Towns	16,391	19,363	1,606	80	131.64	2,622
Villages	8,320	10,846	1,642	--	--	1,418
Rural	17,743	15,795	250	--	--	--
Total Villages and Rural	26,063	26,641	1,892	--	--	1,418
Total Municipal District	42,454	46,004	3,498	80	131.64	4,040

2.4.6 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 2.2. 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.

2.4.7 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 of this Municipal District is 1,642 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 1,944 units.

2.4.8 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.

2.4.9 The Settlement network of this Municipal District includes twelve 'Other Locations' Ballymartle, Barrells Cross, Brownsmill, Gogginshill, Jagoe's Mill, Kilcolman, Killeady, Kilmacsimon Quay, Oysterhaven, Robert's Cove, Sandycove, Tracton. The County Development Plan Strategy recognises other locations, as areas which may not form a significant part of the settlement network, but do perform important functions with regard to tourism, heritage, recreation and other uses. No changes are proposed to the strategy for 'Other Locations' as part of the review of the Local Area Plans.

2.5 Contents of the Draft Plan

2.5.1 The Draft Local Area Plan provides a blueprint for the development of Bandon Kinsale 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 influenced the preparation of the Draft Plan namely;

Role of the Cork County Development Plan 2014

Approach to deal with Town Council Development Plans

Special Policy Areas-Framework Masterplans x

Settlement Network

Infrastructure

Water Services

Flood Risk

Regeneration Areas

Quality in Urban Design

Green Belts around Towns

Environmental Assessment 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 Bandon Kinsale Municipal District. It sets out the housing requirements and zoned housing land supply for each of the 6 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 2 Main Towns of Bandon and Kinsale in the Bandon Kinsale Municipal District. Where appropriate Regeneration Areas have also been identified.

Table 3.1: Bandon-Kinsale Municipal District

	Housing Requirement				Housing Supply	
	Census 2011	Population Target	New Units Required	Net Estimated Requirement (ha)	Estimated Net Residential area zoned in LAP / TCP (ha)	Estimated Housing Yield (LAPs and TCPs)
Bandon	6,640	7,765	892	45	91.84	1,766
Kinsale	4,893	5,722	714	36	39.8	856
Carrigaline (South)	4,858	5,876	See Carrigaline (North)			
Main Towns	16,391	19,363	1,606	80	131.64	2,622

2.5.4 **Bandon** is the largest settlement within the Bandon Kinsale Municipal District. The town is a town of special architectural importance in a pleasant riverside setting flanked by rising land to the north and south. The town performs an important service function to a wide hinterland as well as being the key gateway to West Cork.

2.5.5 The aim of the Local Area Plan is to strengthen Bandon's position as a premier market town through the creation of a unique sense of place by embracing its rich built and natural heritage and encouraging continued expansion of its employment and service function. It is also important that the town centre continues to develop as the primary location for retail and services. The Plan supports the delivery of key pieces of infrastructure needed to facilitate its continued growth as the Gateway to West Cork.

2.5.6 **Kinsale** is the second largest town in the Bandon Kinsale Municipal District area. The settlement is picturesque sitting on the attractive estuary of the Bandon River. The town's attractive medieval townscape and building stock is the focus of its international gourmet offer, niche retail including a vibrant art and crafts offer and cultural buildings.

2.5.7 The strategic aims for Kinsale are to provide for additional residential and employment development which reinforces the town's compact form, is responsive to its scenic coastal setting and continues to support its special heritage, marine and tourism functions. It is also important that the infrastructure projects planned for the town are carried out in a timely manner.

2.5.8 **Carrigaline** is situated 13 km south of Cork City and is separated from the city suburbs by open green belt. Carrigaline has a distinctive identity as a thriving Metropolitan Town with a strong village character, unique setting, history and community spirit. It is located at the mouth of the Owenboy River and at the Head of the Owenboy Estuary which forms part of Cork Harbour.

2.5.9 The strategic aim for Carrigaline is to consolidate the rapid growth of recent years broadly within the town's existing development boundary, protecting its important green belt setting while maintaining its distinctiveness as a self contained Metropolitan Town with improvement of the town centre and the town's residential amenities.

Section 4 Key Villages

2.5.10 There are 5 **Key Villages** within the Bandon Kinsale Municipal District: Ballinspittle, Belgooly, Crosshaven and the Bays, Inishannon and Riverstick.

2.5.11 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.

Name	Existing Number of Houses Q1 2015 (Geodirectory)	Growth 2005 to 2015 (Geodirectory)	Overall Scale of Development (No. of houses)	Normal Recommended Scale of any Individual scheme
Ballinspittle	121	50	100	12
Belgooly	273	199	150	12
Crosshaven and the Bays	1,801	368	286	50
Inishannon	315	80	150	12
Riverstick	249	187	150	25
Total Key Villages			836	

Section 5 Villages, Village Nuclei and Other Locations

2.5.12 There are 7 **villages** in the Bandon-Kinsale Municipal District as follows; Ballinadee, Ballinhassig, Ballygarvan, Halfway, Kilbrittain, Minane Bridge and Old Chapel .

2.5.13 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.

Villages	Existing Number of Houses Q1 2015 (Geodirectory)	Growth 2010 to 2015 (Geodirectory)	Overall Scale of Development (No. of houses)	Normal Recommended Scale of any Individual scheme.
Ballinadee	8	-2	34	5
Ballinhassig	25	0	70	25
Ballygarvan	178	-2	45	10
Halfway	111	1	10	4
Kilbrittain	82	1	86	10
Minane Bridge	58	-1	20	5
Old Chapel	112	-2	80	10

2.5.14 There are ten Village Nuclei in the Bandon-Kinsale Municipal District as follows; Aghyohil, Ballyfeard, Ballyheada, Crossmahon, Dunderrow, Fivemilebridge, Gaggan, Garrettstown/ Garrylucas, Nohoval and Tinker's Cross.

2.5.15 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.

Table 5.2. Scale of Development in Bandon Kinsale Municipal District Village Nuclei

Village Nuclei	Existing Number of Houses Q1 2015 (Geodirectory)	Growth 2005 to 2015 (Geodirectory)	Overall Scale of Development (No. of houses)	Normal Recommended Scale of any Individual scheme.
Aghyohil	31	4	20	2-3
Ballyfeard	5	0	10	2-3
Ballyheada	21	2	20	2-3
Crossmahon	25	0	23	2-3
Dunderrow	60	0	67	2-3
Fivermilebridge	31	0	10	2-3
Gaggan	28	4	25	2-3
Garrettstown/ Garrylucus		0	20	2-3
Nohoval	27	2	39	2-3
Tinkers Cross	10	1	13	2-3

2.5.16 There are 12 **Other Locations** in the Bandon-Kinsale Municipal District as follows; Ballymartle, Barrells Cross, Brownsmill, Gogginshill, Jagoe's Mill, Kilcolman, Killeady, Kilmacsimon Quay, Oysterhaven, Robert's Cove, Sandycove and Tracton.

2.5.17 It is a strategic aim of the Cork County Development Plan, 2014 to recognise Other Locations, as areas which may not form a significant part of the settlement network, but do perform important functions with regard to tourism, heritage, recreation and other uses.

Section 6 Putting the Plan into Practice

2.5.18 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 behavioral 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 It 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) were 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 Bandon Kinsale 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 Bandon Kinsale MD stood at 42,454. In the period to 2022, the population target allocated by the Cork County Development Plan 2014 provides for the population to grow by 3,550 persons or 8.3% approximately. The majority of this growth is targeted at the two towns of the District; Bandon and Kinsale. The population growth for Carrigaline (South) is allocated for the entire town to the Municipal District of Ballincollig-Carrigaline. Growth is also provided for across the network of smaller settlements within the District.

Table 3.1: Bandon-Kinsale Municipal District

Housing Requirement					Housing Supply	
	Census 2011	Population Target	New Units Required	Net Estimated Requirement (ha)	Estimated Net Residential area zoned in LAP / TCP (ha)	Estimated Housing Yield (LAPs and TCPs)
Bandon	6,640	7,765	892	45	91.84	1,766
Kinsale	4,893	5,722	714	36	39.8	856
Carrigaline (South)	4,858	5,876	See Carrigaline (North)			
Main Towns	16,391	19,363	1,606	80	131.64	2,622
Villages	8,320	10,846	1,642	--	--	1,418
Rural	17,743	15,795	250	--	--	--
Total Villages and Rural	26,063	26,641	1,892	--	--	1,418
Total Municipal District	42,454	46,004	3,498	80	131.64	4,040

Current Estimated Strategic Land Reserve (LAPs and TCPs) for this Municipal District is 51.3Ha

Source: Cork County Development Plan 2014- Volume One. Appendix B, Table B 7

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 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, candidate 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 Bandon Kinsale MD are illustrated in Figure 3.1.
- 3.3.2 There are 4 SPAs, 1 SAC, and numerous pNHA's dispersed throughout the Bandon Kinsale MD. The reasons for designation range from ecological, plants, ornithological, woodland, heath, bats and vegetation.



Figure 3.1 Bandon Kinsale Ecological Map

Table 3.2 Important Ecological Sites

Name	Special Area of Conservation	Settlement
Courtmacsherry Estuary	SAC 1230	Kilbrittain

Name	Special Protection Area	Settlement
Cork Harbour	SPA 4030	Carrigaline, Crosshaven
Courtmacsherry Bay	SPA 4219	Kilbrittain
Sovereign Islands	SPA 4124	Sandycove
Old Head of Kinsale	SPA 4021	Kinsale

Name	Proposed Natural Heritage Area	Settlement
Garrylucus Marsh	pNHA 0087	Garrettstown/ Garrylucus
Garrettstown Marsh	pNHA 1053	Garrettstown/ Garrylucus
Sovereign Islands	pNHA 4124	Sandycove
Old Head of Kinsale	pNHA 0100	Kinsale, Garrettstown/ Garrylucus
James Fort	pNHA 1060	Kinsale
Bandon Valley above Inishannon	pNHA 1740	Inishannon
Bandon Valley below Inishannon	pNHA 1515	Inishannon
Bandon Valley west of Bandon	pNHA 1034	Bandon, Oldchapel, Gaggin
Owenboy River	pNHA 1990	Carrigaline
Minane Bridge Marsh	pNHA 1966	Minane Bridge
Fountainstown Swamp	pNHA0371	Fountainstown
Templebreedy National School, Crosshaven	pNHA -0107	Crosshaven

Protected Species

- 3.3.3 Within the MD the Bandon Valley is reported to have otters in many places, a species listed in Annex II of the E.U. Habitats Directive as it is threatened within the E.U.
- 3.3.4 The Cork Harbour SPA is an internationally important wetland site, regularly supporting in excess of 20,000 wintering waterfowl, for which it is amongst the top five sites in the country. Several of the species which occur regularly are listed in Annex 1 of the EU Birds Directive, i.e. whooper swan, Golden Plover, Bar-tailed Godwit, Ruff and Common Tern. Other birds of conservation concern within the Municipal District include the Cormorant, Grey Plover, Kittiwake and Guillemot, some of which require protection under the EU Birds Directive.
- 3.3.5 Templebreedy National School houses a bat colony which is listed as a protected species.
- 3.3.6 The SEA has been informed by the findings of the Habitats Directive Assessment process and will include appropriate mapping highlighting important sites within the area. The SEA process has also been informed by the Ecological Baseline study commissioned by the Council.

Refuges

3.3.7 Within the Municipal District the Old Head of Kinsale is listed as a Refuge for fauna.

Ramsar Sites

3.3.8 Cork Harbour is a designated Ramsar Wetland for wintering birds.

Existing Sensitivities in relation to Biodiversity

3.3.9 Carrigaline and Crosshaven are situated adjacent to Cork Harbour which is designated as a Special Protection Area under the Habitats Directive as it is a significant site for wintering birds. Currently untreated waste from both Carrigaline and Crosshaven discharges into the Harbour which is resulting in negative environmental impacts on the existing marine environment. However, the Cork Lower Harbour Sewerage Scheme is currently under construction and will serve Crosshaven, Carrigaline and a wide network of settlements around the Harbour. This will lead to improved environmental effects within the Lower Harbour. The plant is expected to be operational by the first half of 2017 and so these issues will not impede development within these settlements.

Ecological Baseline Study for Main Towns in Bandon Kinsale Municipal District

3.3.10 Habitat Mapping for the 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 in this area are peaty podzolics which provide a land use of limited grassland. Given the geographical extent of this area there is a variety of soil types around the main settlements including gleys and acid brown soils.

Table 3.3 Bandon Kinsale MD Soil Types			
Rolling Lowland/ Lee Valley & Cork Harbour	Brown Podzolics 90% Less depleted of nutrients	Acid Brown earths 10% Most occur on lime deficient parent materials, therefore acidic in nature, relatively mature and well drained	Old Red sandstone, Lower avonian shale and Rhyolite glacial till.

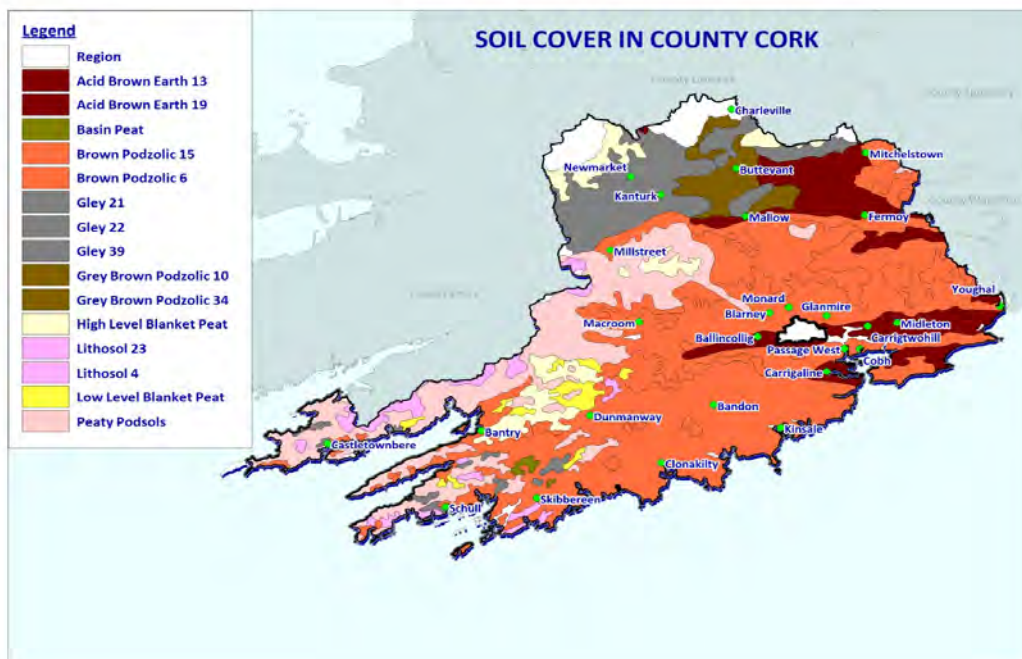


Figure 3.2 Soil Cover in County Cork

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. As part of the review of the Local Area Plans it is proposed to prepare a companion document outlining the Water Services Infrastructural Investment needs in each Municipal District.
- 3.5.5 So far as the villages are concerned, in many cases (see Table 3.7) 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 3.6, 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.

Table 3.4 :Strategy for Water Services Provision

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

Table 3.4 :Strategy for Water Services Provision		
		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 Error! No text of specified style in document.:5 Proposed Scale of Development for Bandon Kinsale LAP

Name	Existing Number of Houses Q1 2015 (Geo directory)	Outstanding Planning Permissions Q1 2015 (No. of houses)	Proposed level of Development (CDP 2014 and LAPs 2011)	Drinking Water Status	Waste-Water Status
Main Towns					
Bandon	6,640	-	892		
Kinsale	4,893	-	714		
Carrigaline (South)		-			
		-See Carrigaline North			
Total Main Towns			1606		
Key Villages (5)					
Ballinspittle	121	0	100		
Belgooly	273	0	150		
Crosshaven and Bays	1801	325	286		
Inishannon	315	80	150		
Riverstick	249	0	150		
Total Key Villages			836		
Villages (7)					
Ballinadee	8	0	34		None
Ballinhassig	25	41	70		None
Ballygarvan	178	0	45		
Halfway	111	0	10		
Kilbrittain	82	0	86		
Minane Bridge	58	0	20		
Old Chapel	112	0	80		
Total Villages			311		
Village Nuclei (10)					
Aghyohil	31	2	20	Private GWSS	None
Ballyfeard	5	-	10	None	None
Ballyheada	21	-	20		None
Crossmahon	25	1	23	None	None
Dunderrow	60	-	67		None
Fivemilebridge	31	-	10		None
Gaggan	28	8	25		None
Garrettstown/ Garrylucas	-	-	20		None
Nohoval	27	-	39		None
Tinkers Cross	10	7	13	None	None
Total Village Nuclei			247		
Overall Total			3,034		
Water Services Key	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.				
	None – no existing Irish Water Services.				

Flooding

- 1.1.1 The assessment and management of flood risks in relation to planned future development is an important element of this local area plan. The majority of towns, villages and smaller settlements has 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.
- 1.1.2 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.

- 1.1.3 The Councils 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. In 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.
- 1.1.4 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.
- 1.1.5 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'.
- 1.1.6 Flood Zone Mapping for the rural parts of the Municipal District (i.e. outside of a settlement boundary) is not shown within the Volume 1 of the Local Area Plan, but is available to view online, for information purposes, as part of the Local Area Plan Map Browser at www.corkcoco.ie.

Existing Sensitivities in relation to Water

- 3.5.8 Infrastructure investment in the Lower Harbour Sewerage Scheme is ongoing and is due to be operational in the first half of 2017. This will result in positive environmental effects within the Lower Harbour which is a designated Special Protection Area for wintering birds and will provide the necessary infrastructure to allow the Lower Harbour settlements like Crosshaven and Carrigaline realise their target growth. .
- 3.5.9 In terms of water services infrastructure within the Municipal District Table 3.2 in section 3 of this document details the current status of the water services infrastructure within the Bandon Kinsale 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.

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 wind farms.

- 3.6.4 Part of Cork Airport complex including one of its runways traverses this Municipal District's boundary. The air quality aspect of the airside operations at Cork Airport have previously been assessed through a combination of a review of measured data and modelling of the dispersion of aircraft emissions. An air quality survey commissioned by Cork Airport in 2006 determined that concentrations of common pollutants in the vicinity of the airport were within air quality standards.
- 3.6.5 The conclusion from the latest environmental assessment carried out at Cork Airport is that the air quality at residential locations in the vicinity of the airport is comfortably within current air quality standards and that future intensification of operations is unlikely to have a significant impact.
- 3.6.6 The most likely scenario for the evolution of future air quality is that the effect of the increased aircraft movements will be offset by reductions in jet engine pollutant emissions. This would mean that air quality will remain essentially unchanged in the locality.
- 3.6.7 While air quality is not an issue at present, given the significant levels of growth forecast for the Airport, and the lack of on-going monitoring data, it is considered appropriate that an air quality monitoring programme be established.
- 3.6.8 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.
- 3.6.9 Cork Airport currently has three noise contours associated with aircraft operations, namely 57db (outer zone).66dB (inner zone) and 72dB (inner, inner zone). These existing noise contours for the airport are indicated on the map below.

Noise Map

- 3.6.10 The noise environment and contours around the airport are likely to change as a result of future growth and development. Increased operations, changes in aircraft type and mix, changes in the associated operations such as maintenance and construction activity during implementation of developments will all contribute to increased noise.
- 3.6.11 The Environmental Noise Regulations 2006 transpose the EU Environmental Noise Directive into National Law. These require the preparation of a Strategic Noise Map and an Action Plan for airports where the number of aircraft movements exceeds 50,000 per annum. In 2014 there were 49,246 aircraft movements at Cork Airport, expected to rise to over 60,000 movements during the life time of this plan. A Strategic Noise Map and an Action Plan will therefore be required.

Existing Sensitivities in relation to Air and Climate

- 3.6.12 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 this Plan.
- 3.6.13 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.

- 3.6.14 Part of the airport runway and landing approach zones traverse the north-eastern portion of the Municipal District. Elevated noise levels associated with airport traffic movements are an issue in Ballygarvan and Ballinhassig.
- 3.6.15 While air quality is currently not an issue, given the significant levels of growth forecast for the Airport, and the lack of on-going monitoring data, it is considered appropriate that an air quality monitoring programme be established. One of the key manifestations of climate change is flooding. The Council has a body of information in relation to the areas that are at risk of flooding and will test the outputs of the proposed new local area plan against that information as part of the Strategic Flood Risk Assessment of the new plan.
- 3.6.16 At present, noise is not a significant issue at Cork Airport, largely because established planning policies have kept the airport approaches free from development. Notwithstanding this it is appropriate that a noise monitoring programme be carried out as movements will exceed the 50,000 threshold in the current statutory lifetime of this Local Area Plan.

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).
- 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).
- 3.8.3 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. Given the coastal geography of County Cork and the significance role that some of the County’s coastal ports and towns played in historic events over the centuries there is very high potential for underwater cultural material in the form of shipwreck remains and associated artefacts. Some of the coastal towns may have been subject to reclamation and infrastructure may have been developed to facilitate the

maritime landscape. Maritime artefacts such as quays, jetties, anchorages, access routes to the sea etc are all important cultural heritage resources

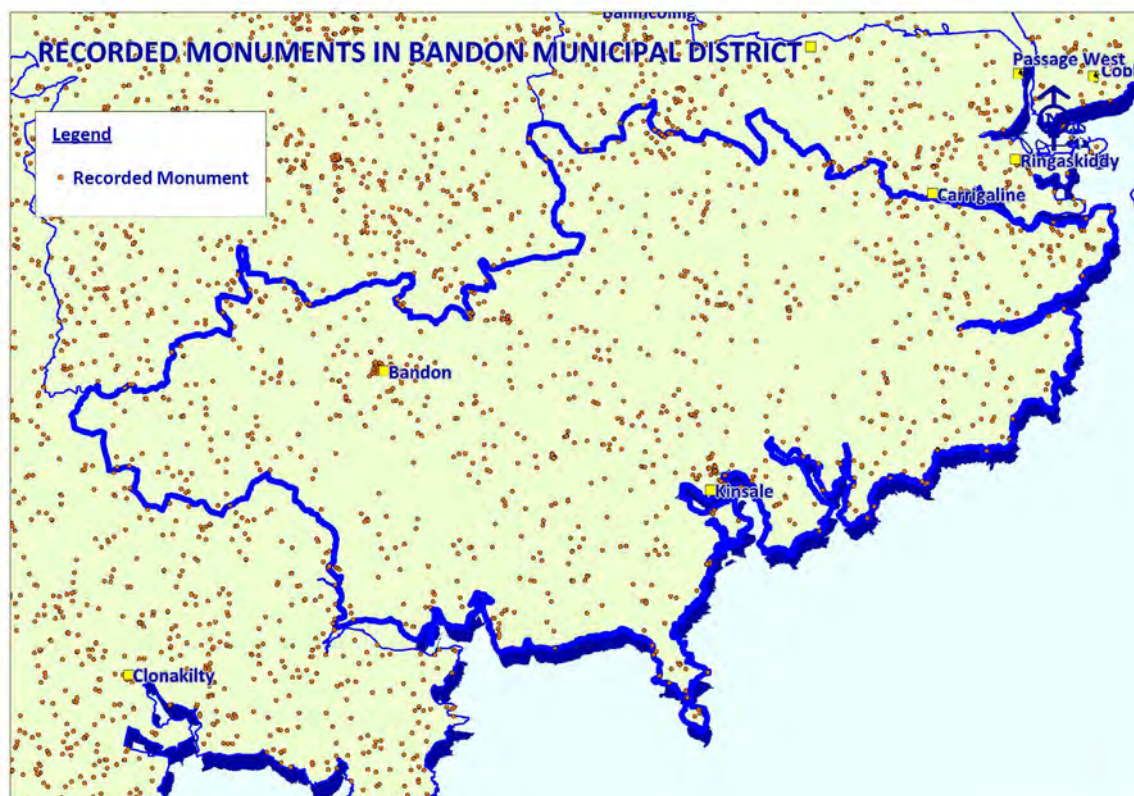


Figure 3.3: Recorded Monuments

3.8.4 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 50 structures currently designated in the Kinsale Town Development Plan 2009. Figure 3.3 illustrates the distribution of protected structures in the Bandon Kinsale MD while Table 4.5 provides information at main town level.

3.8.5 There are 7 Architectural Conservation Areas designated within this Municipal District as per the County Development Plan 2014 and 1 within the Kinsale 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 demesne or park. All of these are within settlements designated for growth. All of the 7 Architectural Conservation Areas designations are in Bandon. Six of these (St. Peters; Barrett’s Hill; Christchurch; Knockbrogan East; South Main Street and Irishtown) reflect the various stages of urban growth within the town and are designed to protect the important elements of character within the town. Castlebernard Estate is designated because of the significance of the historic houses and associated large demesne landscape and features to the west of the town (including lands within the development boundary). Within Kinsale the boundary of the architectural conservation area is extensive and coincides with the former town council boundary.

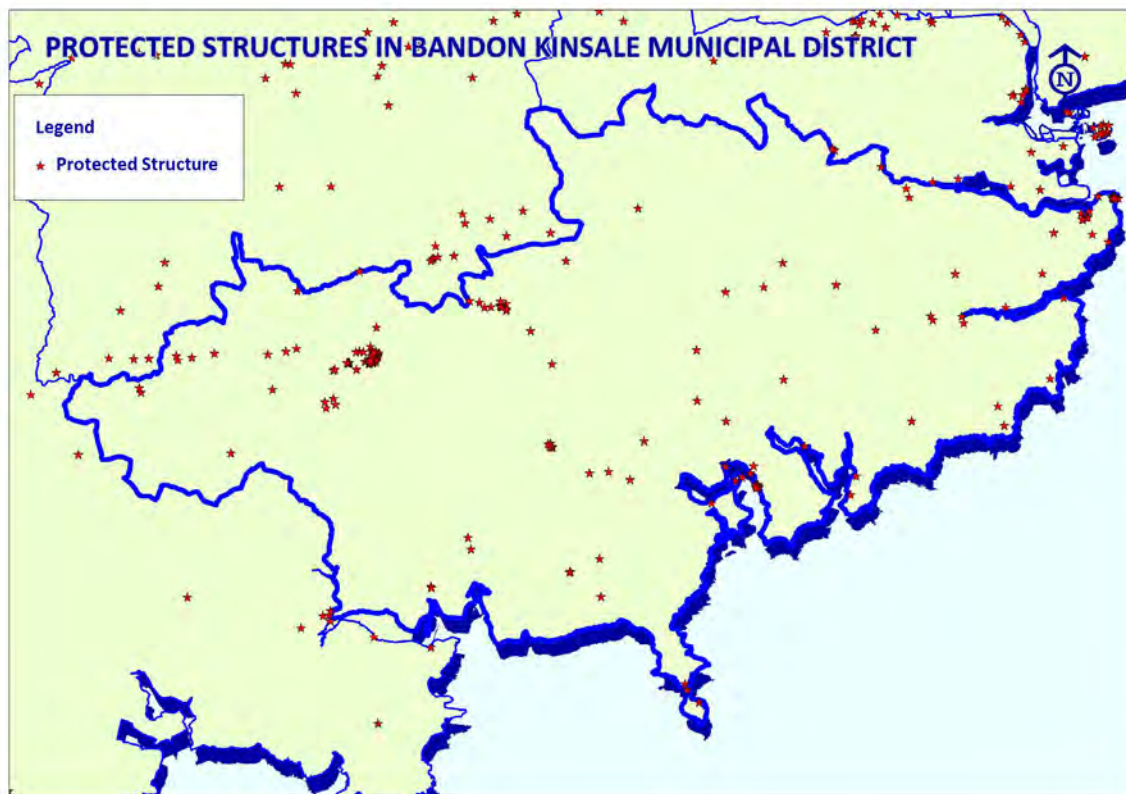


Figure 3.4: Protected Structures

Table 3.6 Bandon Kinsale Built Heritage Designations				
Settlement Name	ACA	RPS	NIAH (Buildings & Gardens)	Archaeology
Bandon	7	54	213 (1 of National Importance)	10 No. sites* (including 17 th century walled Town)
Kinsale	1	50	190 (4 National)	12 no. sites (including Medieval walled Town & 2 National Monument)
Carrigaline (South)	0	6	12	29 sites
(*as per Urban Archaeology Survey)				

Existing Sensitivities in relation to Cultural Heritage

3.8.6 Both Bandon and Kinsale are important walled towns with a complex archaeological and architectural heritage, some of National importance. The Plan has set out clear guidance and policy objectives to protect the heritage assets of these towns and enhance the cultural assets where relevant.

3.9 Landscape

3.9.1 The landscape sensitivity of the Bandon Kinsale MD has been classified in accordance with Table 3.9. The SEA will explore landscape issue as they relate to the Local Area Plan process in accordance with the policy set out in the County Development Plan.

Table 3.7 Landscape Character Assessment				
Landscape Character Types	Main Settlements located within LCT	LCT Value	LCT Sensitivity	LCT Importance
City Harbour and Estuary	Carrigaline, Crosshaven & Bays	Very high	Very High	National
Broad Fertile Lowland Valleys 6(b)	Bandon, Inishannon, Ballygarvan	Medium	Medium	Local
Indented Estuarine	Kinsale, Dunderrow	Very high	Very High	County
Rolling Patchwork Farmland	Kilbrittain, Ballinspittle	Medium	Medium	Local

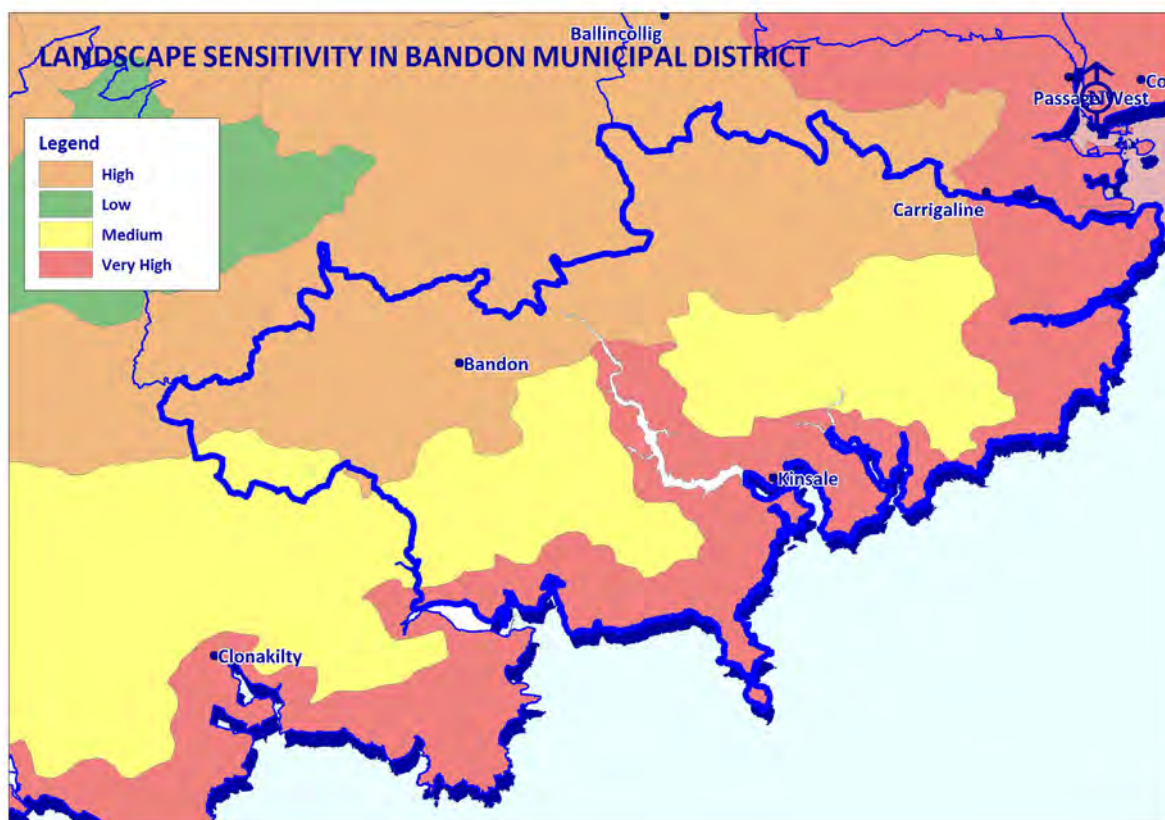


Figure 3.5: Landscape Sensitivity in Bandon Kinsale

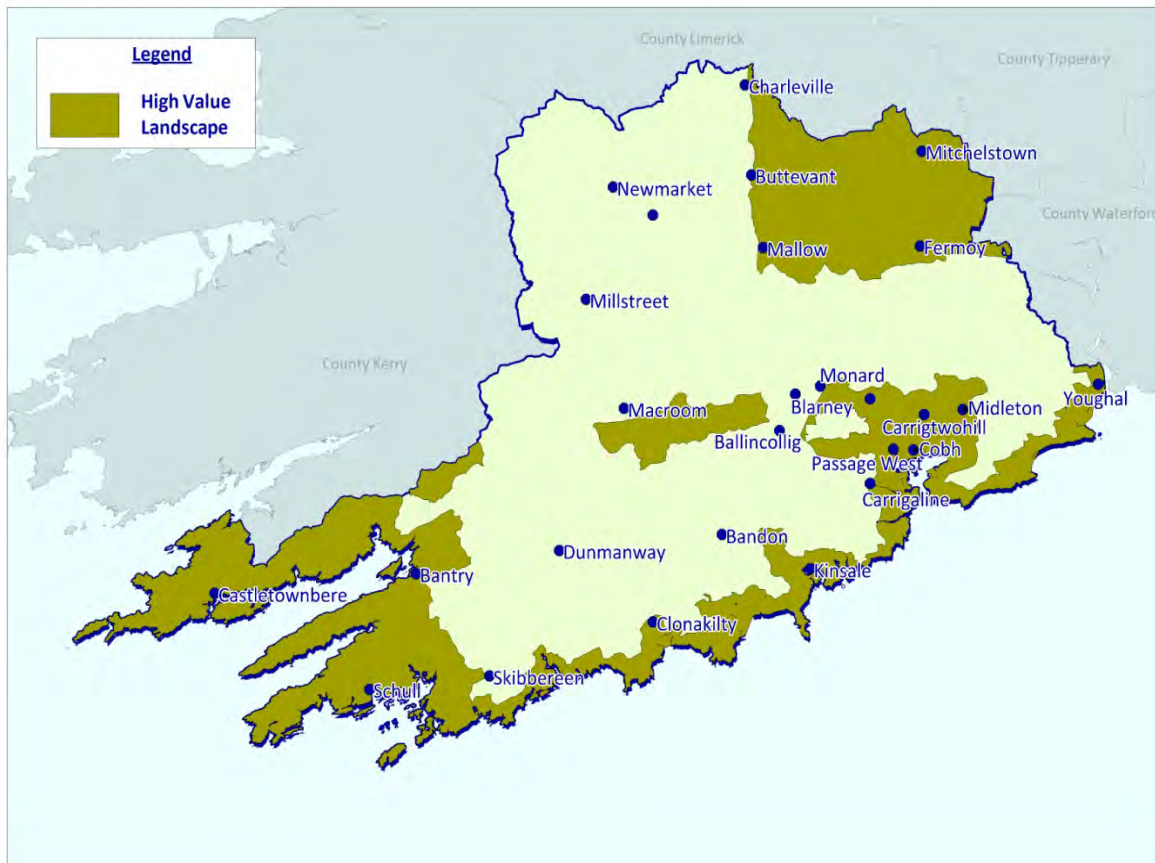


Figure 3.6: Landscape Value

Existing Sensitivities in relation to Landscape

3.9.2 Future growth within the Municipal District is largely directed to the Main Towns of Bandon, Kinsale and Carrigaline (South). All these settlements are located either in an area of very high Landscape Value (Kinsale & Carrigaline) or Medium Landscape Value (Bandon). It is important that future development in Kinsale, Carrigaline and Crosshaven and the Bays are designed and sited to ensure assimilation into these highly sensitive landscapes and strategic areas of landscape importance are acknowledged and protected within the Plan.

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 Reports, of the Draft Plan.

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

Environmental Protection Objective	Targets	Indicators
<p>Population (P)</p> <p>EPO 1: 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>Human Health (HH)</p> <p>EPO 2: To protect and enhance human health and manage hazards or nuisances arising from traffic & 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/crèches/ community facilities provided.</p> <p>Amount of (Km) new cycleways provided.</p>
<p>Biodiversity, Flora and Fauna (BFF)</p> <p>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.</p>	<ul style="list-style-type: none"> • Maintain the favourable conservation status of all habitats and species, especially those protected under national and international legislation. • Implement the actions of the Cork County Biodiversity Action Plan. • Establishment of a Green Infrastructure Strategy for the County • Protect habitats from 	<ul style="list-style-type: none"> • 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. • Reduction in the quantum of greenfield land in the county as measured by the increase in the amount of brownfield land associated

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"> • Number of actions achieved in Biodiversity Action Plan • Progress on Green Infrastructure strategy
Soil (S) EPO 4: Protect the function and quality of the soil resource in the Bandon Kinsale 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.
Water (W) 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.	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.
Air Quality and Climate Factors (AQ/C) EPO 6: 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>EPO 7: 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>Cultural Heritage (CH)</p> <p>EPO 8: 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>Landscape (L)</p> <p>EPO 9: 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>Material Assets (MA)</p> <p>EPO 10: 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>Flooding (F)</p> <p>EPO 11: 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

Infrastructure and location
Infrastructural capacity for settlement expansion**
Connected to gas distribution network
Index of recycling facilities
Proportion of households with broadband internet
Presence of farmers markets
Water and wastewater
Water quality of water bodies
Wastewater treatment spare capacity
Unaccounted for water
Populated area at risk of flooding**
Urban wastewater treatment status
Population and urban form
Planned population density **
Proportion of population unemployed
Proportion of population with 3 rd level education
Housing vacancy rate
Distance to nearest largest retail centre
Transport and energy
Average transport CO ₂
Settlement walkability
Number of public transport services/1000 population**
Average household heating CO ₂
Proportion of population travelling to work by private car
Livability
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
** key performance indicators

Table 5.2: Main Towns Sustainable Settlement Ranking

Settlement	SDI Score 2013	Category	Population 2011
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 B. 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 Bandon Kinsale Municipal District has a narrower urban structure of towns and villages compared to others within the County. The Draft Bandon Kinsale Municipal District Local Area Plan provides for the development of 3 main towns (including Carrigaline South) and 34 villages and smaller settlements. Table X show the network of settlements provided for within the current Draft Bandon Kinsale 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 Municipal District. Scenarios which would be inconsistent with this approach, by focusing more growth on one Municipal District 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. 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 Bandon Kinsale Municipal District, this scenario reallocates growth, with a larger proportion of the population directed towards Bandon with the aim of delivering a sufficient critical mass of population in this town so as to justify further investments in primarily bus based public transport and growth in rural areas is curtailed.

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 Bandon. Many of the settlements within the Municipal District 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 Bandon where the 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 centre of the Municipal District can be more targeted, potentially leading to better quality provision of public transport facilities which can strengthen Bandon's position as a market town and its strategic links with Cork City and the towns of Clonakilty and Skibbereen (which would also be served by an enhanced public transport corridor). Additional investment in infrastructure could promote additional inward investment and economies of scale in niche agri-business within the town whilst also enhancing accessibility of the town as a place to visit, for shopping or tourism purposes.
- 5.3.11 Within the main growth area of Bandon, 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 city and its environs 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 settlement 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 population targets for Kinsale and Carrigaline which are outside the proposed transport corridor 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.

5.3.14 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). The reduced population targets for towns outside the corridor 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.

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
Bandon Kinsale MD				
Bandon	6,540	7,765	8,634	2,094
Kinsale	4,893	5,722	5,471	578
Carrigaline (South)	4,858	5,876	5,458	500
Total Main Towns	16,391	19,363	19,563	3,172
Villages and Rural	26,063	26,641	26,441	378
Total Bandon Kinsale MD	42,454	46,004	46,004	3,550

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 Bandon Kinsale Municipal District this scenario focuses growth in Bandon and Kinsale with reduced growth targets in Carrigaline. This takes account of the proposed employment policies of the Plan. This approach reinforces the important employment focus of the Ring Towns of Bandon and Kinsale as acknowledged in the County Development Plan. It is acknowledged that Carrigaline functions as a commuter town and relies on the City and the nearby strategic employment area of Ringaskiddy to fulfill its employment function.

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. Both Bandon and Kinsale 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 the principal settlements, making them more self sufficient. This could potentially have negative impacts on soil, air quality, heritage, biodiversity and landscape but these impacts can be mitigated by implementing good proactive 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 Bandon and Kinsale 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.

Table 5.4: Scenario 2 Population Targets				
	Census Population 2011	CDP 2014 2022 Target Population	Scenario 2 Population Target 2022	Scenario 2 Population Growth 2011 - 2022
Bandon Kinsale MD				
Bandon	6,540	7,765	8,040	1500
Kinsale	4,893	5,722	6,393	1500
Carrigaline (South)	4,858	5,876	5,158	300
Total Main Towns	16,391	19,363	19,691	3,300
Villages and Rural	26,063	26,641	26,313	250
Total Bandon Kinsale MD	42,454	46,004	46,004	3,550

Scenario 3: Balanced Growth

5.3.22 In this scenario the target growth is split between the main settlements and the villages and rural areas. The principle strength of this scenario lies in the balanced approach allowing for moderate growth to take place in the main settlements but at the same time allowing for continued 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 Bandon Kinsale Municipal District, half of the growth is split between the three towns of Bandon, Kinsale and Carrigaline (South) 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 Municipal District 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 will ultimately help them perform their function as the primary growth centres in the Municipal District.

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
Bandon Kinsale MD				
Bandon	6,540	7,765	7,765	1,225
Kinsale	4,893	5,722	5,722	829
Carrigaline	4,858	5,876	5,876	1,018
Total Main Towns	16,391	19,363	19,363	2,972
Villages and Rural	26,063	26,641	26,641	578
Total Bandon Kinsale	42,454	46,004	46,004	3,550

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 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
Scenario 1	EPO 2, 6, 7, 10	EPO1 3, 5	8	EPO 4, 9
Scenario 2	EPO 2, 6, 7, 10	EPO 1, 3, 5	8	EPO 4, 9
Scenario 3	EPO 1, 2, 6, 7, 10			EPO 3, 4, 5, 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 Bandon Kinsale 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.

6.2.4 The Draft Bandon Kinsale Municipal District Local Area Plan 2016 document has been prepared by undertaking a review of the existing statutory plans for the area including the Bandon Electoral Area Local Area Plan 2011 (as amended) and the Kinsale Town Development Plan 2009 and updating the provisions 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 Bandon Electoral Area Local Area Plan 2011 and the Kinsale 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. Therefore there are few issues arising that need to be assessed *de novo*.

- 6.2.5 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.
- 6.2.6 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.
- 6.2.7 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.
- 6.2.8 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.
- 6.2.9 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 Bandon Kinsale Municipal District

- 6.2.10 Habitat Mapping for the Bandon and Kinsale 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 Bandon Kinsale Municipal District Local Area Plan Objectives						
Objectives	Positive (+)	Negative (-)	Uncertain (?)	Neutral (Ne)	SEA Recommendation	LAP Response
Section 1 Introduction						
IN-01	EPO-1; EPO-2, EPO-3, EPO-4, EPO-6, EPO-7, EPO-9, EPO-11			EPO-5, EPO-8, EPO-10	No change required	
GB1-1	EPO-1, EPO-2, EPO-3, EPO-4, EPO-6, EPO-7, EPO-9			EPO-5, EPO-8, EPO-10, EPO-11	No change required	
GB1-2	EPO-1			EPO-2, EPO-4, EPO-5, EPO-6, EPO-7, EPO-8, EPO-9, EPO-10, EPO-11 EPO-3	No change required	
Section 2 Local Area Strategy						
LAS-01	EPO-3, EPO-5, EPO-7, EPO-9, EPO-10			EPO-1, EPO-2, EPO-4, EPO-6, EPO-8, EPO-11	No change required	
Section 3 Main Towns						
Bandon						

BD-GO-01	EPO-1, EPO-2, EPO-4, EPO-5, EPO-6, EPO-7, EPO-8, EPO-10, EPO-11			EPO-3, EPO-9	No change required	
BD-GO-02	EPO-2, EPO-4, EPO-5, EPO-7, EPO-10, EPO-11			EPO-1, EPO-3, EPO-6, EPO-8, EPO-9	No change required	
BD-GO-03	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	
BD-GO-04	EPO-1, EPO-2, EPO-6, EPO-8, EPO-9, EPO-10			EPO-3, EPO-4, EPO-5, EPO-7, EPO- 11	No change required	
BD-GO-05	EPO-1, EPO-3, EPO-5, EPO-10			EPO-2, EPO-4, EPO-6, EPO-7, EPO-8, EPO-9, EPO- 11	No change required	

BD-GO-06	EPO-1, EPO-2, EPO-3, EPO-4, EPO-6, EPO-7, EPO-8, EPO-9, EPO-10, EPO-11			EPO-5	No change required	
BD-GO-07	EPO-1, EPO-2, EPO-6, EPO-8, EPO-10			EPO-3, EPO-4, EPO-5, EPO-7, EPO-9, EPO- 11	No change required	
BD-R-01 to BD-R-03, BD-R-05 to BD-R-17 & BD-B-01 to BD-B-07	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	
BD-R-04	EPO-1, EPO-2, EPO-10			EPO-4, EPO-5, EPO-6, EPO-7, EPO-8, EPO-9, EPO- 11	No change required	
BD-R-09 & BD-R-13	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	

BD-I-01, I-02, BD-U-01, BD-U-02	EPO-1, EPO-10			EPO-2, EPO-3, EPO-4, EPO-5, EPO-6, EPO-7, EPO-8, EPO-9, EPO-11		
BD-T-01 to BD-T-04	EPO-1, EPO-2, EPO-4, EPO-6, EPO-7, EPO-8, EPO-10			EPO-3, EPO-5, EPO-9, EPO-11		
BD-C-01	EPO-3, EPO-10			EPO-1, EPO-2, EPO-4, EPO-5, EPO-6, EPO-7, EPO-8, EPO-9, EPO-11	No change required	
BD-U-03, BD-04, BD-U-05	EPO-1, EPO-2, EPO-6, EPO-7, EPO-9, EPO-10, EPO-11			EPO-3, EPO-4, EPO-5, EPO-8	No change required	
BD-O-01	EPO-1, EPO-2, EPO-3, EPO-4, EPO-6, EPO-7, EPO-8, EPO-9, EPO-10, EPO-11			EPO-5	No change required	

BD-O-02, BD-O-03, BD-O-04, BD-O-05, BD-O-06, BD-O-07	EPO-1, EPO-2, EPO-3, EPO-4, EPO-6, EPO-7, EPO-9, EOP-10, EPO-11			EPO-5, EPO-8	No change required	
BD-X-01	EPO-1, EPO-2, EPO-4, EPO-6, EPO-7, EPO-8, EPO-10, EPO-11			EPO-3, EPO-5, EPO-9		
Kinsale						
KS-GO-01	EPO-1, EPO-2, EPO-4, EPO-5, EPO-6, EPO-7, EPO-10, EPO-11			EPO-3, EPO-8, EPO-9	No change required	
KS-GO-02	EPO-1, EPO-2, EPO-3, EPO-4, EPO-6, EPO-7, EPO-8, EPO-9, EPO-10, EPO-11			EPO-5	No change required	
KS-GO-03, KS-GO-7, KS-GO-8	EPO-1, EPO-2, EPO-6, EPO-7, EPO-8, EPO-10			EPO-3, EPO-4, EPO-5, EPO-9, EPO-11	No change required	

KS-GO-04	EPO-1, EPO-3, EPO-5, EPO-10			EPO-2, EPO-4, EPO-6, EPO-7, EPO-7, EPO-8, EPO-9, EPO-11	No change required	
KS-GO-05, KS-GO-06	EPO-8, EPO-9			EPO-1, EPO-2, EPO-3, EPO-4, EPO-5, EPO-6, EPO-7, EPO-10, EPO-11	No change required	
KS-GO-09	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	
KS-R-01 to R-09 & KS-B-01, to KS-B-04	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	

KS-I-01, KS-I-02	EPO-1, EPO-10			EPO-2, EPO-3, EPO-4, EPO-5, EPO-6, EPO-7, EPO-8, EPO-9, EPO11	No change required	
KS-T-01	EPO-1, EPO-2, EPO-4, EPO-6, EPO-7, EPO-8, EPO-10			EPO-3, EPO-5, EPO-9, EPO-11	No change required	
KS-T-02	EPO-1, EPO-2, EPO-4, EPO-6, EPO-7, EPO-10			EPO-3, EPO-5, EPO-8, EPO-9, EPO-11	No change required	
KS-C-01, KS-C-02	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	
KS-C-03	EPO-1, EPO-2, EPO-5, EPO-10			EPO-3, EPO-4, EPO-6, EPO-7, EPO-8, EPO-9, EPO-11	No change required	

KS-U-01, KS-U-02	EPO-1, EPO-10			EPO-2, EPO-3, EPO-5, EPO-6, EPO-7, EPO-4, EPO-8, EPO-9 EPO-11	No change required	
KS-U-03	EPO-1, EPO-2, EPO-6, EPO-7, EPO-10, EPO-11			EPO-3, EPO-4, EPO-5, EPO-8, EPO-9	No change required	
KS-O-01, KS-O-02, KS-O-03, KS-O-04, KS-O-05, KS-O-06, KS-O-07, KS-O-08, KS-O-09, KS-O-10, KS-O-11	EPO-1, EPO-2, EPO-3, EPO-4, EPO-6, EPO-7, EPO-8, EPO-9, EPO-10, EPO-11			EPO-5	No change required	
Carrigaline (South)						
CL-GO-01	EPO-1 EPO-2 EPO-4 EPO-5 EPO-6 EPO-7 EPO-10 EPO-11			EPO-3 EPO-8 EPO-9	No change required	
CL-GO-02	EPO-1 EPO-2 EPO-3 EPO-4 EPO-6 EPO-7 EPO-8 EPO-9 EPO-10 EPO-11			EPO-5	No change required	

CL-GO-03	EPO-1 EPO-2 EPO-6 EPO-7 EPO-8 EPO-10			EPO-4 EPO-3 EPO-5 EPO-9 EPO-11	No change required	
CL-GO-04	EPO-1 EPO-3 EPO-5 EPO-10			EPO-2 EPO-4 EPO-6 EPO-7 EPO-8 EPO-9 EPO-11	No change required	
CL-GO-05, CL-GO-06	EPO-8 EPO-9			EPO-1 EPO-3 EPO-5 EPO-10 EPO-2 EPO-4 EPO-6 EPO-7 EPO-11	No change required	
CL-GO-07, CL-GO-08	EPO-1 EPO-2 EPO-6 EPO-7 EPO-8 EPO-10			EPO-3, EPO-4 EPO-5 EPO-9 EPO-11	No change required	
CL-GO-09 CL-GO-10	EPO-1 EPO-10			EPO-2 EPO-3 EPO-4 EPO-5 EPO-6 EPO-7 EPO-11 EPO-8 EPO-9	No change required	

CL-R-01 CL-R-02 CL-R-03	EPO-1 EPO-2 EPO-10			EPO-4 EPO-3 EPO-5 EPO-6 EPO-7 EPO-8 EPO-9 EPO-11	No change required	
CL-R-04	EPO-1 EPO-2 EPO-10			EPO-4 EPO-3 EPO-5 EPO-6 EPO-7 EPO-8 EPO-9 EPO-11	No change required	
CL-R-05, CL-R-06 CL-R-07 CL-R-08 CL-R-09 CL-R-10 CL-R-11 CL-R-12 CL-R-13 CL-R-14 CL-R-15 CL-R-16 CL-R-17	EPO-1 EPO-2 EPO-10			EPO-4 EPO-3 EPO-5 EPO-6 EPO-7 EPO-8 EPO-9 EPO-11	No change required	
CL-B-01, CL-B-02	EPO-3 EPO-10			EPO-1 EPO-2 EPO-4 EPO-5 EPO-6 EPO-7 EPO-8 EPO-9 EPO-11	No change required	

CL-T-01	EPO-1 EPO-2 EPO-4 EPO-6 EPO-7 EPO-8 EPO-10			EPO-5 EPO-9 EPO-3 EPO-11	No change required	
CL-C-01, CL-C-02	EPO-3 EPO-10			EPO-1 EPO-2 EPO-4 EPO-5 EPO-6 EPO-7 EPO-8 EPO-9 EPO-11	No change required	
CL-U-01, CL-U-02	EPO-1 EPO-10			EPO-2 EPO-3 EPO-4 EPO-9 EPO-5 EPO-6 EPO-7 EPO-8 EPO-11	No change required	
CL-U-03, CL-U-04 CL-U-05	EPO-1 EPO-2 EPO-6 EPO-7 EPO-9 EPO-10 EPO-11			EPO-3 EPO-4 EPO-5 EPO-8	No change required	
CL-U-06	EPO-1 EPO-10			EPO-2 EPO-3 EPO-5 EPO-6 EPO-7 EPO-8 EPO-11 EPO-4 EPO-9	No change required	

CL-U-07, CL-U-08	EPO-1 EPO-2 EPO-6 EPO-7 EPO-9 EPO-10 EPO-11			EPO-3 EPO-4 EPO-5 EPO-8	No change required	
CL-U-09	EPO-1 EPO-2 EPO-10			EPO-3 EPO-4 EPO-6 EPO-5 EPO-7 EPO-8 EPO-9 EPO- 11	No change required	
CL-U-10, CL-U-11, CL-U-12	EPO-1 EPO-2 EPO-6 EPO-7 EPO-9 EPO-10 EPO-11			EPO-3 EPO-4 EPO-5 EPO-8	No change required	
CL-U-13	EPO-1 EPO-9			EPO-2 EPO-3 EPO-5 EPO-6 EPO-7 EPO-8 EPO- 11 EPO-4 EPO-9	No change required	
CL-U-14	EPO-1 EPO-2 EPO-6 EPO-7 EPO-9 EPO-10 EPO-11			EPO-3 EPO-4 EPO-5 EPO-8	No change required	

CL-O-01	EPO-1 EPO-2 EPO-3 EPO-4 EPO-6 EPO-7 EPO-8 EPO-9 EPO-10 EPO-11			EPO-5	No change required	
CL-O-02	EPO-1 EPO-2 EPO-3 EPO-4 EPO-6 EPO-7 EPO-9 EPO-10 EPO-11			EPO-5 EPO-8	No change required	
Section 4 Key Villages						
GO-KV	EPO-1, EPO-2, EPO-4, EPO-5, EPO-6, EPO-7, EPO-8, EPO-10, EPO-11			EPO-3, EPO-9	No change required	
Ballinspittle						
DB-01	EPO-1, EPO-2, EPO-4, EPO-5, EPO-6, EPO-7, EPO-8, EPO-10, EPO-11			EPO-3, EPO-9	No change required	

DB-02	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	
DB-03	EPO-1, EPO-2, EPO-6, EPO-7, EPO-10			EPO-3, EPO-4, EPO-5, EPO-8, EPO-9	No change required	
U-01	EPO-1, EPO-2, EPO-5, EPO-10			EPO-3, EPO-4, EPO-6, EPO-7, EPO-8, EPO-9, EPO-11	No change required	
O-01	EPO-1, EPO-2, EPO-3, EPO-4, EPO-6, EPO-7, EPO-9, EPO-10, EPO-11			EPO-5, EPO-8	No change required	
Belgooly						
DB-01	EPO-1, EPO-2 EPO-4 EPO-6, EPO-7, EPO-8, EPO-10, EPO-11			EPO-3, EPO-5, EPO-9	No change required	

DB-02	EPO-1, EPO-2, EPO-4, EPO-6, EPO-7, EPO-8, EPO-10			EPO-3, EPO-5, EPO-9, EPO-11	No change required	
U-01 & U-02	EPO-1, EPO-2, EPO-5, EPO-6, EPO-7, EPO-8, EPO-10, EPO-11			EPO-3, EPO-4, EPO-6, EPO-7, EPO-8, EPO-9, EPO-11	No change required	
O-01	EPO-1, EPO-2, EPO-3, EPO-4, EPO-6, EPO-7, EPO-9, EPO-10, EPO-11			EPO-5, EPO-8	No change required	
Crosshaven and the Bays						
DB-01	EPO-1, EPO-2, EPO-4, EPO-5, EPO-6, EPO-7, EPO-8, EPO-10, EPO-11			EPO-3, EPO-9	No change required	
DB-02, DB-03, DB-04	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	

DB-05	EPO-1, EPO-10, EPO-3			EPO-2, EPO-4, EPO-5, EPO-6, EPO-7, EPO-8, EPO-9, EPO-11	No change required	
T-01	EPO-1, EPO-2, EPO-4, EPO-6, EPO-7, EPO-8, EPO-10			EPO-3, EPO-5, EPO-9, EPO-11	No change required	
I-01	EPO-1, EPO-4, EPO-10			EPO-2, EPO-3, EPO-5, EPO-7, EPO-8, EPO-9, EPO-11	No change required	
X-01	EPO-1, EPO-2, EPO-4, EPO-6, EPO-7, EPO-10, EPO-11			EPO-3, EPO-5, EPO-8, EPO-9,	No change required	
X-02	EPO-1, EPO-2, EPO-4, EPO-6, EPO-7, EPO-8, EPO-9 EPO-10, EPO-11			EPO-3, EPO-5	No change required	

O-01 to O-09	EPO-1, EPO-2 EPO-3, EPO-4 EPO-6, EPO-7, EPO-9, EPO-10, EPO-11			EPO-5, EPO-8	No change required	
U-01 to U-10	EPO-1, EPO-2, EPO-6, EPO-7, EPO-9, EPO-10, EPO-11			EPO-3, EPO-4, EPO-5, EPO-8	No change required	
Inishannon						
DB-01	EPO-1, EPO-2, EPO-4, EPO-5, EPO-6, EPO-7, EPO-8, EPO-10, EPO-11			EPO-3, EPO-9	No change required	
U-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	
U-02, U-03	EPO-1, EPO-2, EPO-6, EPO-7, EPO-9, EPO-10, EPO-11			EPO-3, EPO-4, EPO-5, EPO-8	No change required	

O-01	EPO-1, EPO-2, EPO-3, EPO-4, EPO-6, EPO-7, EPO-9, EPO-10, EPO-11			EPO-5, EPO-8	No change required	
B-01	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	
X-01, X-02	EPO-1, EPO-2, EPO-3, EPO-4, EPO-7, EPO-9, EPO-10, EPO-11			EPO-5, EPO-6, EPO-8	No change required	
Riverstick						
DB-01	EPO-1, EPO-2, EPO-4, EPO-5, EPO-6, EPO-7, EPO-8, EPO-10, EPO-11			EPO-3, EPO-9	No change required	
DB-02, C-01, O-01	EPO-1, EPO-2, EPO-3, EPO-4, EPO-6, EPO-7, EPO-8, EPO-10, EPO-11			EPO-3, EPO-9	No change required	

DB-03	EPO-1, EPO-2, EPO-3, EPO-4, EPO-6, EPO-9, EPO-10, EPO-11			EPO-5, EPO-7, EPO-8	No change required	
Section 5 Villages, Village Nuclei and Other Locations						
Villages						
GO-01	EPO-1, EPO-2, EPO-4, EPO-5, EPO-6, EPO-7, EPO-8, EPO-10, EPO-11			EPO-3, EPO-9	No change required	
Ballinadee						
DB-01	EPO-1, EPO-2, EPO-4, EPO-5, EPO-6, EPO-7, EPO-8, EPO-10, EPO-11			EPO-3, EPO-9	No change required	
DB-02, O-01, O-02	EPO-1, EPO-2, EPO-3, EPO-4, EPO-6, EPO-7, EPO-9, EPO-10, EPO-11			EPO-5, EPO-8	No change required	
Ballinhassig						

DB-01	EPO-1, EPO-2, EPO-5, EPO-6, EPO-7, EPO-8, EPO-9, EPO-10, EPO-11			EPO-3, EPO-4	No change required	
DB-02, O-01, U-02, U-03	EPO-1, EPO-2, EPO-3, EPO-4, EPO-6, EPO-7, EPO-9, EPO-10, EPO-11			EPO-5, EPO-8	No change required	
T-01	EPO-1, EPO-2, EPO-4, , EPO-6, EPO-7, EPO-8, EPO-10			EPO-3, EPO-5, EPO-9, EPO- 11	No change required	
Ballygarvan						
DB-01	EPO-1, EPO-2, EPO-5, EPO-6, EPO-7, EPO-8, EPO-9, EPO-10, EPO-11			EPO-3, EPO-4	No change required	
DB-02, O-01, U-01	EPO-1, EPO-2, EPO-3, EPO-4, EPO-6, EPO-7, EPO-9, EPO-10, EPO-11			EPO-5, EPO-8	No change required	

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	
Halfway						
DB-01	EPO-1, EPO-2, EPO-5, EPO-6, EPO-7, EPO-8, EPO-9, EPO-10, EPO-11			EPO-3, EPO-4	No change required	
DB-02	EPO-1, EPO-2, EPO-3, EPO-4, EPO-6, EPO-7, EPO-9, EPO-10, EPO-11			EPO-5, EPO-8	No change required	
Kilbrittain						
DB-01, DB-02, O-01	EPO-1, EPO-2, EPO-5, EPO-6, EPO-7, EPO-8, EPO-9, EPO-10, EPO-11			EPO-3, EPO-4	No change required	

T-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	
O-02,, U-01, U-02	EPO-1, EPO-2, EPO-3, EPO-4, EPO-6, EPO-7, EPO-9, EPO-10, EPO-11			EPO-5, EPO-8	No change required	
C-01	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	
Minane Bridge						
DB-01, DB-02, O-01	EPO-1, EPO-2, EPO-5, EPO-6, EPO-7, EPO-8, EPO-9, EPO-10, EPO-11			EPO-3, EPO-4		

T-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	
O-02, U-01, U-01	EPO-1, EPO-2, EPO-3, EPO-4, EPO-6, EPO-7, EPO-9, EPO-10, EPO-11			EPO-5, EPO-8	No change required	
C-01	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	
Oldchapel						
DB-01	EPO-1, EPO-2, EPO-5, EPO-6, EPO-7, EPO-9, EPO-10, EPO-11			EPO-3, EPO-4, EPO-8	No change required	
B-01, B-02	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	

O-01, O-02	EPO-1, EPO-2, EPO-3, EPO-5, EPO-6, EPO-7, EPO-8, EPO-9, EPO-10, EPO-11			EPO-4	No change required	
Village Nuclei						
GO-01	EPO-1, EPO-2, EPO-3, EPO-5, EPO-6, EPO-7, EPO-9, EPO-10, EPO-11			EPO-4, EPO-8	No change required	
Aghyohil						
DB-01	EPO-1, EPO-2, EPO-5, EPO-6, EPO-7, EPO-9, EPO-10, EPO-11			EPO-3, EPO-4, EPO-8	No change required	
DB-02	EPO-1, EPO-2, EPO-6, EPO-7, EPO-10, EPO-11			EPO-3, EPO-4, EPO-5, EPO-8, EPO-9	No change required	
O-01, O-02	EPO-1, EPO-2, EPO-3, EPO-5, EPO-6, EPO-7, EPO-8, EPO-9, EPO-10, EPO-11			EPO-4	No change required	

Ballyfeard						
DB-01	EPO-1, EPO-2, EPO-5, EPO-6, EPO-7, EPO-9, EPO-10, EPO-11			EPO-3, EPO-4, EPO-8	No change required	
DB-02	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	
Ballyheada						
DB-01	EPO-1, EPO-2, EPO-5, EPO-6, EPO-7, EPO-9, EPO-10, EPO-11			EPO-3, EPO-4, EPO-8	No change required	
DB-02, C-01	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	
Crossmahon						

DB-01	EPO-1, EPO-2, EPO-5, EPO-6, EPO-7, EPO-9, EPO-10, EPO-11			EPO-3, EPO-4, EPO-8		
DB-02	EPO-1, EPO-2, EPO-3, EPO-4, EPO-6, EPO-7, EPO-8, EPO-9, EPO-10, EPO-11			EPO-5	No change required	
Dunderrow						
DB-01	EPO-1, EPO-2, EPO-5, EPO-6, EPO-7, EPO-10, EPO-11			EPO-3, EPO-4, EPO-8, EPO-9	No change required	
DB-02	EPO-1, EPO-2, EPO-3, EPO-4, EPO-6, EPO-7, EPO-8, EPO-9, EPO-10, EPO-11			Epo-5	No change required	
U-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	

Fivemilebridge						
DB-01	EPO-1, EPO-2, EPO-3, EPO-5, EPO-6, EPO-7, EPO-10, EPO-11			EPO-3, EPO-4, EPO-8, EPO-9		
DB-02	EPO-1, EPO-2, EPO-3, EPO-5, EPO-6, EPO-7, EPO-8, EPO-9, EPO-10, EPO-11			EPO-4	No change required	
U-01	EPO-1, EPO-10			EPO-2, EPO-3, EPO-4, EPO-5, EPO-6, EPO-7, EPO-8, EPO-11	No change required	
Gaggin						
DB-01	EPO-1, EPO-2, EPO-5, EPO-6, EPO-7, EPO-10, EPO-11			EPO-3, EPO-4, EPO-8, EPO-9	No change required	
Garrettstown/ Garrylucas						
DB-01, DB-02	EPO-1, EPO-2, EPO-4, EPO-6, EPO-7, EPO-8, EPO-10			EPO-3, EPO-5, EPO-9, EPO-11	No change required	

O-01	EPO-1, EPO-2, EPO-3, EPO-4, EPO-6, EPO-7, EPO-8, EPO-9, EPO-10, EPO-11			EPO-5	No change required	
X-01, X-02	EPO-1, EPO-2, EPO-3, EPO-4, EPO-6, EPO-7, EPO-9, EPO-10, EPO-11			EPO-5, EPO-8	No change required	
X-03	EPO-1, EPO-2, EPO-3, EPO-4, EPO-6, EPO-7, EPO-10, EPO-11			EPO-5, EPO-8, EPO-9	No change required	
Nohoval						
DB-01	EPO-1, EPO-2, EPO-5, EPO-6, EPO-7, EPO-10, EPO-11			EPO-3, EPO-4, EPO-8, EPO-9	No change required	
Tinker's Cross						
DB-01	EPO-1, EPO-2, EPO-5, EPO-6, EPO-7, EPO-10, EPO-11			EPO-3, EPO-4, EPO-8, EPO-9	No change required	

C-01	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	
Other Locations						
Ballymartle						
DB-01	EPO-1, EPO-2, EPO-5, EPO-6, EPO-7, EPO-10, EPO-11			EPO-3, EPO-4, EPO-8, EPO-9	No change required	
DB-02	EPO-1, EPO-2, EPO-3, EPO-4, EPO-6, EPO-7, EPO-8, EPO-9, EPO-10, EPO-11			EPO-5	No change required	
Barrell's Cross						
DB-01	EPO-1, EPO-2, EPO-5, EPO-6, EPO-7, EPO-10, EPO-11			EPO-3, EPO-4, EPO-8, EPO-9	No change required	

DB-02	EPO-1, EPO-2, EPO-3, EPO-4, EPO-6, EPO-7, EPO-8, EPO-9, EPO-10, EPO-11			EPO-5	No change required	
Brown's Mill						
DB-01	EPO-1, EPO-2, EPO-5, EPO-6, EPO-7, EPO-10, EPO-11			EPO-3, EPO-4, EPO-8, EPO-9	No change required	
Gogginshill						
DB-01	EPO-1, EPO-2, EPO-5, EPO-6, EPO-7, EPO-10, EPO-11			EPO-3, EPO-4, EPO-8, EPO-9	No change required	
Jagoe's Mill						
DB-01	EPO-1, EPO-2, EPO-5, EPO-6, EPO-7, EPO-10, EPO-11		,	EPO-3, EPO-4, EPO-8, EPO-9	No change required	
Kilcolman						
DB-01	EPO-1, EPO-2, EPO-5, EPO-6, EPO-7, EPO-10, EPO-11			EPO-3, EPO-4, EPO-8, EPO-9	No change required	
Killeady						

DB-01	EPO-1, EPO-2, EPO-5, EPO-6, EPO-7, EPO-10, EPO-11			EPO-3, EPO-4, EPO-8, EPO-9	No change required	
Kilmacsimon Quay						
DB-01	EPO-1, EPO-2, EPO-5, EPO-6, EPO-7, EPO-10, EPO-11			EPO-3, EPO-4, EPO-8, EPO-9	No change required	
DB-02	EPO-1, EPO-2, EPO-5, EPO-4, EPO-6, EPO-7, EPO-8, EPO-9, EPO-10, EPO-11			EPO-3	No change required	
DB-03	EPO-1, EPO-2, EPO-3, EPO-4, EPO-6, EPO-7, EPO-8, EPO-9, EPO-10, EPO-11			EPO-5	No change required	
Oysterhaven						
DB-01	EPO-1, EPO-2, EPO-5, EPO-6, EPO-7, EPO-10, EPO-11			EPO-3, EPO-4, EPO-8, EPO-9	No change required	

DB-02	EPO-1, EPO-2, EPO-3, EPO-4, EPO-6, EPO-7, EPO-8, EPO-9, EPO-10, EPO-11			EPO-5	No change required	
Robert's Cove						
DB-01	EPO-1, EPO-2, EPO-5, EPO-6, EPO-7, EPO-10, EPO-11			EPO-3, EPO-4, EPO-8, EPO-9	No change required	
DB-02	EPO-1, EPO-2, EPO-3, EPO-4, EPO-6, EPO-7, EPO-8, EPO-9, EPO-10, EPO-11			EPO-5	No change required	
Sandycove						
DB-01	EPO-1, EPO-2, EPO-4, EPO-6, EPO-7, EPO-8, EPO-9, EPO-10, EPO-11			EPO-3, EPO-5	No change required	
Tracton						

DB-01	EPO-1, EPO-2, EPO-4, EPO-6, EPO-7, EPO-8, EPO-9, EPO-10, EPO-11			EPO-3, EPO-5	No change required	
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6.3 Mitigation/Recommended Changes

- 6.3.1 The 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 Bandon Kinsale 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 Issues that did come to light are identified below along with recommended mitigation measures.

Issue One – The Correlation between Sustainable Population Growth and the provision of Infrastructure,
In the Municipal District the towns in particular have been allocated substantial target growths. However, in many instances water services infrastructure is at over capacity or reaching capacity and there is no provision/indication made for how the infrastructure will be provided to secure the sustainable population growth on the towns.

Mitigation Measures - Recommendations

Where appropriate, include a general objective, which sets out a clear strategy of how a settlement can meet the provision of appropriate and sustainable water services infrastructure in order to secure the sustainable population growth and supporting development proposed.

Issue Two – The Correlation between Population Targets for the Settlement Network and Landscape

A large portion of the coastal landscape within the Municipal District is designated as “High Value Landscape” within the County Development Plan 2014.

Mitigation Measures - Recommendations

Kinsale is within a designated “High Value Landscape”. Lands zoned for new residential and business use within Kinsale have additional text requiring comprehensive landscaping proposals. Sensitive lands in both Bandon and Kinsale have been zoned open space to protect key landscape features within these towns.

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.

Table 6.1: General Overview of the Process after the Environmental Report

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 Bandon Kinsale Municipal District Local Area Plan is available from the Council website at 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 Bandon Kinsale 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 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 finalization of the Bandon Kinsale Municipal District Local Area Plan.

Section 8: Non Technical Summary

Sub-Section

- 8.1 Introduction
- 8.2 The Draft Bandon Kinsale 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 Non Technical Summary

8.1 Introduction

8.1.1 This is the non technical summary of the Environmental Report of the Draft Bandon Kinsale Municipal District Local Area Plan 2016, Strategic Environmental Assessment (SEA). The purpose of this summary report is to provide a clear synopsis of the overall findings of the SEA process in relation to the Draft Amendment and outline the key likely environmental consequences of policies and objectives. Correspondingly, the findings of each chapter are dealt with below.

8.1.2 The SEA is being carried out in order to comply with the provisions of the SEA Regulations and in order to improve the planning and environmental management of the area. This report should be read in conjunction with the Draft Bandon Kinsale Municipal District Local Area Plan 2016. A Strategic Environmental Assessment is an important mechanism in promoting sustainable development and in raising awareness of significant environmental issues and in ensuring that such issues are addressed within the capacity of the planning system. It seeks to inform the decision making process before a decision is made to adopt the draft plan.

8.2 The Draft Bandon Kinsale Municipal District Local Area Plan

8.2.1 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.

8.2.2 The current series of Local Area Plans were adopted in 2011 and must be replaced by end of July 2017. On the 14th 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.

8.3 Environmental Baseline

8.3.1 This section of the Environmental Report summarises the environmental baseline in the Municipal District. The baseline assessment methodology contains the following steps:

- Description of the current state of the environment
- The primary environmental issues of relevance to the Plan
- The characteristics of the environment likely to be significantly affected by the Plan.
- The evolution of the environment in the absence of the Plan
- The interaction between environmental topics

8.3.2 The baseline has been compiled using all available datasets and in conjunction with indicators suggested during scoping. The main sources of data used in the compilation of this baseline were (amongst others):

- Scoping Responses from the Environmental Authorities
- Existing databases such as the EPA, Cork County Council and the (CSO)
- Information supplied by Cork County Council during the SEA scoping stage.

8.3.3 The characteristics of the existing environment are described under the following headings:

- Biodiversity/Flora and Fauna
- Soil and Geology
- Water Resources
- Air and Climate
- Cultural Heritage including Architectural and Archaeological Heritage
- Landscape

8.3.4 There are also a number of maps included in this section to highlight the baseline environment of the area, the majority of which indicate the existing situation for the environmental issues identified above. A cumulative sensitivity map at the Municipal District level has also been provided as effects cannot be considered in isolation.

8.4 Environmental Protection Objectives

8.4.1 This section aims to identify the relevant Environmental Protection Objectives (EPOs). SEA objectives are used to help show whether the objectives of the plan are beneficial for the environment, to compare the environmental effects of alternatives, or to suggest improvements. The Environmental Protection Objectives set out in this section are set out under a range of topics and are used as the standards against which the future development scenarios, strategic aims, strategic principles and development objectives of the plan can be evaluated, to help to identify areas in which significant adverse impacts are likely to occur, if unmitigated.

8.5 Alternatives

8.5.1 The following section identifies and describes the alternative scenarios considered during the drafting process of the Local Area Plan. Article 5 of the Strategic Environmental Assessment Directive requires the Environmental Report to consider “reasonable alternatives taking into account the objectives and the geographical scope of the plan. The alternative population growth scenarios that were considered included an employment-focused approach; a public transport focused approach and a balanced approach and the preferred scenario from an environmental perspective is provided. Mitigation measures which attempt to prevent, reduce and as fully as possible offset any significant adverse effects of the environment of implementing the preferred alternative are identified in this chapter where applicable.

8.6 Evaluation of the Draft Local Area Plan

8.6.1 This chapter outlines in a tabular form the likely positive and negative impacts of the Local Area Plan policies on the EPO objectives detailed in Section 4. It is considered that the majority of the policies will either improve the state of the EPO or else are unlikely to interact with them adversely. However, a certain amount of policies are more likely to have either an uncertain or negative impact and in these cases it is recommended that mitigation objectives be included so as to minimise damage to the relevant EPO.

Recommended Changes

8.6.2 This section will outline the possible mitigation measures or changes envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment, identified in Section 6 arising from the implementation of the Plan and as such seeks to tie together the SEA process. As a result of this analysis and in light of the SEA process, certain mitigation measures have been identified although in general it is considered that where potential conflict or uncertainty has been demonstrated, adequate compensatory objectives are proposed that will seek to negate any potential significant impacts from proposed policies.

8.7 Monitoring

8.7.1 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 Strategy 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.

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
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		

Bandon Kinsale Municipal District Draft Local Area Plan

DRAFT Strategic Flood Risk Assessment

November 2016

Contents

Section 1 Introduction

1.1	Scope	1
1.2	Report Structure	1
1.3	The Planning System and Flood Risk	1
1.4	Definition of Flood Risk	2

Section 2 Local Study Area

2.1	Introduction: The Bandon Kinsale Municipal District	4
2.2	Population and Household Growth	5
2.3	Environment and Heritage	5
2.4	Infrastructure	6

Section 3 Flood Risk in the Bandon Kinsale Municipal District

3.1	Sources of Flooding	7
3.2	Fluvial Flooding	7
3.3	Other Sources of Flooding	9

Section 4 Addressing Flood Risk in the Bandon Kinsale LAP

4.1	Introduction	11
4.2	Collation of Flood Risk Data	11
4.3	Flood Risk within the Municipal District	12
4.4	Flood Risk Management Strategy	16
4.5	Approach to Zoning in Areas at Risk of Flooding	16
4.6	Approach to Development in Areas at Risk of Flooding	29
4.7	Flood Risk in Development Management	31

Section 5 Flood Risk in the Future

5.1	What has the LAP Achieved	33
5.2	Monitoring and Review	33

Section 1 Introduction

1.1 Scope

- 1.1.1 This Strategic Flood Risk Assessment of the Draft Bandon Kinsale 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 Bandon Kinsale 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 Bandon Kinsale 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 Bandon-Kinsale 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.

2.2 Population and Household Growth

- 2.2.1 Within the Bandon Kinsale Municipal District the County Development Plan provides for growth in population of 3,550 persons. The number of households is expected to grow by 3,926 leading to a net requirement for 3,707 new houses. The County Development Plan indicates that 80ha 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 Almost half of the growth is allocated to the towns, with 1,606 new houses proposed, of which 892 are proposed in Bandon and 714 units are proposed in Kinsale. Housing growth is also planned within the villages (1,642 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 1,606 new dwelling units and capacity, in terms of the current provision of zoned lands within the towns, to accommodate 2,622.

Table 2.1: Bandon-Kinsale Municipal District

	Housing Requirement				Housing Supply	
	Census 2011	Population Target	New Units Required	Net Estimated Requirement (ha)	Estimated Net Residential area zoned in LAP / TCP (ha)	Estimated Housing Yield (LAPs and TCPs)
Bandon	6,640	7,765	892	45	91.84	1,766
Kinsale	4,893	5,722	714	36	39.8	856
Carrigaline (South)	4,858	5,876	See Carrigaline (North)			
Main Towns	16,391	19,363	1,606	80	131.64	2,622
Villages	8,320	10,846	1,642	--	--	1,418
Rural	17,743	15,795	250	--	--	--
Total Villages and Rural	26,063	26,641	1,892	--	--	1,418
Total Municipal District	42,454	46,004	3,498	80	131.64	4,040

Current Estimated Strategic Land Reserve (LAPs and TCPs) for this Municipal District is 51.3Ha

Source: Cork County Development Plan 2014- Volume One. Appendix B, Table B 7

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, candidate 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 Heritage and Scenic Amenity Maps in Volume 3 in that Plan. Designated sites in the Bandon Kinsale Municipal District are detailed in the table below.

Code	Description	Natura 2000 Site
SAC 1230	Courtmacsherry Estuary	Yes
SPA 4030	Cork Harbour	Yes
SPA 4219	Courtmacsherry Bay	Yes
SPA 4124	Sovereign Islands	Yes
SPA 4021	Old Head of Kinsale	Yes
pNHA 0087	Garrylucus Marsh	No
pNHA 1053	Garrettstown Marsh	No
pNHA 4124	Sovereign Islands	No
pNHA 0100	Old Head of Kinsale	No
pNHA 1060	James Fort	No
pNHA 1740	Bandon Valley above Inishannon	No
pNHA 1515	Bandon Valley below Inishannon	No
pNHA 1034	Bandon Valley west of Bandon	No
pNHA 1990	Owenboy River	No
pNHA 1966	Minane Bridge Marsh	No
pNHA0371	Fountainstown Swamp	No
pNHA-0107	Templebreedy National School, Crosshaven	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 Bandon Kinsale Municipal District include its diverse coastal geomorphology including structural features, raised beaches and Devonian (ORS) within Cork Harbour, raised marine platforms across Carboniferous sandstones at between Courtmacsherry Bay to the Old Head of Kinsale and Lower Carboniferous fossils between Fountainstown Creek to Ringabella Beach. Other areas of geological interest include Myrtleville to Ram’s Head (Devonian Section), Upper Carboniferous features on the west coast of the Old Head of Kinsale and Lower Carboniferous and Devonian stratigraphy from Ringabella, Fountainstown, Myrtleville and Rams Head. Devonian and Carboniferous type section for Munster Basin are also found at Ballinspittle and Kinsale.

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.

- 2.4.2 In Bandon, extension and upgrading of the sewer network is required to increase the flow capacity within the town. Works are programmed to commence in the second half of 2016. The treatment plant has some compliance issues and plans to upgrade the plant are at a preliminary report stage.
- 2.4.3 There is limited spare capacity within the water supply. There is currently no infrastructure available to provide adequate water pressure and flows to the north western parts of the town and other high areas. A new reservoir, network extensions and water conservation measures are required to resolve this issue.
- 2.4.4 A new combined sewer is proposed within the town to deal with disposal of both wastewater and surface water flows.
- 2.4.5 Kinsale receives its drinking water from the Innishannon WS which is sourced from the Bandon River at Inishannon. At present the Inishannon WS has limited spare capacity and there is an issue concerning the availability of adequate reservoir storage. Upgrading of water supply is required and provision of adequate reservoir storage is required. Within Kinsale extensions of watermains will be required.
- 2.4.6 A new reservoir in Kinsale may be required in order to provide adequate storage and also adequate pressures for high areas. At present there is no Irish Water Scheme to upgrade Inishannon WS Drinking water is supplied from two different sources. Additional reservoir storage and a general upgrading of the scheme are required. Water supply improvements are required to service land that is currently zoned for development.
- 2.4.7 Carrigaline receives its drinking water from the Inishannon WS and from the Cork Harbour and City WS at Inniscarra. At present the Inishannon WS has limited spare capacity and there is an issue concerning the availability of adequate reservoir storage. However the Cork Harbour and City WS has capacity to provide a water supply for proposed development in Carrigaline. Upgrading / extension of local watermains will be required to service some locations in Carrigaline.
- 2.4.8 There is no Wastewater Treatment Plant serving Carrigaline. Wastewater from Carrigaline is conveyed via a largely combined sewer system to the Coolmore Pumping Station from where it is pumped to ultimately discharge at the Dognose Bank in Ringaskiddy. The Lower Harbour Sewerage Scheme currently under construction will address this issue. Extension and/or upgrading of sewers are required to service some locations in Carrigaline.
- 2.4.9 There are also significant water and wastewater infrastructure constraints in a large number of settlements within the village network of the Municipal District.
- 2.4.10 Investment in roads infrastructure is also critical to create capacity in the road network to accommodate planned future development especially within the Main Towns of the Municipal District. Completion of the Southern Relief Road and delivery of a new Northern Relief Road, for example is needed to relieve congestion within Bandon town centre and to free up capacity within the road network to facilitate planned development.
- 2.4.11 Similarly in Kinsale the provision of an Inner Relief Road along with a Northern Relief Road are required to reduce congestion and offer alternative routes for movement around the town.

Section 3 Flood Risk in the Bandon Kinsale Municipal District

3.1 Sources of Flooding

- 3.2.1 This SFRA has primarily reviewed flood risk from fluvial and tidal 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 Bandon Kinsale Municipal District shows rivers and tidal forces to be the most common source of damage and it is these sources 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 Bandon Kinsale Municipal District with flood events attributed to fluvial sources ranging from the Bandon River, Owenboy River, River Stick and their smaller tributaries and drains.
- 3.2.7 There are a number of rivers which flow through settlements in the Municipal District which include; Bandon River (Bandon, Innishannon and Kinsale), Owenaboy River (Carrigaline) and the River Stick (Belgooly). The River Bandon, flows in a valley cut in rocks of the Carboniferous Period (about 360 to 300 million years ago) but covered with glacial drift and alluvium. The river rises in the Maughanaclea Hills in western Cork and flows east to a point west of Caha Bridge where it turns south, before turning east again to the southeast of Dunmanway. It then flows in a broad fertile valley, with woodlands, to Bandon, and loops in an arc past Inishannon,

where it flows southeast and then east, becoming an estuary reaching the sea in Kinsale Harbour.

- 3.2.8 The Lee River catchment covers an area of approximately 2,000 square kilometres. The catchment is defined by the land area drained by the River Lee, its tributaries and Cork Harbour. The Owenboy River is within the sub-catchment of the River Lee. There is a history of frequent floods within the Lee Catchment which cause damage to public roads, properties and farmland and result from both fluvial and tidal mechanisms. In the recent past, notable flood events have occurred in August 1986, November 2000, November 2002, October 2004, December 2006 and most recently in November 2009.
- 3.2.9 Recent significant flood events have included significant inundation of the floodplain along the Bandon River in Bandon Town Centre in 2009 and 2015. It should be noted that such events occur frequently. The OPW has approved plans to implement a €10 million flood relief scheme in the town which has recently commenced. The approved option is a combination of dredging the existing channel by 1.8m downstream of Bandon Weir and the provision of flood defence walls on the south bank upstream and downstream of Bandon Bridge and defence walls and embankments on the northern bank spanning from Bandon Bridge to the wastewater treatment plant. Improvements to the existing flood embankments at the shopping centre are also included in the proposed works.
- 3.2.10 The Council has put in place an early warning system for flooding (FEWS) in co-operation with the Office of Public Works and consultants as part of the towns flood management plan. This is based on monitored water level data upstream and alerts local authority staff and registered members of the public of a potential flood events.
- 3.2.11 Periodic flooding has occurred in low lying areas of Carrigaline in the past from the Owenboy River which is tidal at this location. A large portion of the town centre is within the flood risk zone.

3.3 Coastal Flooding

- 3.4.1 Coastal flooding, which is caused by higher sea level than normal, largely as a result of storm surge, resulting in the sea overflowing onto the land. Coastal flooding is influenced by the following three factors;
- High tide level
 - Storm surges caused by high winds
 - Wave action, which is dependent upon wind speed and direction, local topography and exposure
- 3.4.2 In the Bandon Kinsale Municipal District, the areas of Carrigaline, Kinsale and Crosshaven are susceptible to tidal flooding. The areas at risk were identified as part of the Draft River Lee Catchment Flood Risk Assessment and Management Study and have been dealt with at the Local Area Plan level.
- 3.4.3 In Kinsale the surface water drainage networks within the town generally perform adequately, however some areas in the lower portions of the town have experienced flooding such as The Long Quay and the Glen area due to excessive rainfall coupled with a high tide. Cork County Council recently commenced works on the Kinsale Main Drainage scheme to alleviate flooding problems in vulnerable

locations. This drainage network comprises of several separate systems and will discharge at a number of locations including Scilly Dam, Pier Road and Denis' Quay.

3.4 Other Sources of Flooding

3.4.1 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 Kanturk – Mallow 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 Bandon Kinsale Local Area Plan

4.1 Introduction

4.1.1 This section details the approach to Flood Risk Management adopted in the Bandon Kinsale 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. I

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 Bandon Kinsale 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.

Table 4.1: Flood Risk by Settlement in the Bandon Kinsale Municipal District		
Settlement	Indicative Fluvial/ Coastal Flood Risk within Development Boundary	Comment
Main Settlements		
Bandon	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.
Kinsale	Yes	
Carrigaline (South)	Yes	
Key Villages		
Ballinspittle	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.
Belgooly	Yes	
Crosshaven and Bays	Yes	
Inishannon	Yes	
Riverstick	Yes	
Villages		
Ballinadee	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.
Ballinhassig	No	Indicative Flood Zone Mapping does not indicate a fluvial /coastal risk. See Paragraph 4.2.7 regarding the need for further assessment.
Ballygarvan	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

Table 4.1: Flood Risk by Settlement in the Bandon Kinsale Municipal District		
Settlement	Indicative Fluvial/ Coastal Flood Risk within Development Boundary	Comment
		Zone mapping, compliance with the requirements of the Development Plan Justification Test, and detailed site specific assessment, as appropriate.
Halfway	No	Indicative Flood Zone Mapping does not indicate a fluvial /coastal risk. See Paragraph 4.2.7 regarding the need for further assessment.
Kilbrittain	No	
Minane Bridge	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.
Oldchapel	Yes	
Village Nuclei		
Aghyohil	No	Indicative Flood Zone Mapping does not indicate a fluvial /coastal risk. See Paragraph 4.2.7 regarding the need for further assessment.
Ballyfeard	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.
Ballyheada	No	Indicative Flood Zone Mapping does not indicate a fluvial /coastal risk. See Paragraph 4.2.7 regarding the need for further assessment.
Crossmahon	No	
Dunderrow	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

Table 4.1: Flood Risk by Settlement in the Bandon Kinsale Municipal District		
Settlement	Indicative Fluvial/ Coastal Flood Risk within Development Boundary	Comment
		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.
Fivemilebridge	No	Indicative Flood Zone Mapping does not indicate a fluvial /coastal risk. See Paragraph 4.2.7 regarding the need for further assessment.
Gaggan	No	
Garrettstown/ Garrylucas	No	
Nohoval	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.
Tinker's Cross	No	Indicative Flood Zone Mapping does not indicate a fluvial /coastal risk. See Paragraph 4.2.7 regarding the need for further assessment.
Other Locations		
Ballymartle	No	Indicative Flood Zone Mapping does not indicate a fluvial /coastal risk. See Paragraph 4.2.7 regarding the need for further assessment.
Barrell's Cross	No	
Brownsmill	No	
Gogginshill	No	
Jago's Mill	No	
Kilcolman	No	
Killeady	No	
Kilmacsimon Quay	No	
Oysterhaven	No	

Table 4.1: Flood Risk by Settlement in the Bandon Kinsale Municipal District		
Settlement	Indicative Fluvial/ Coastal Flood Risk within Development Boundary	Comment
Robert's Cove	No	
Sandycove	No	
Tracton	No	

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 Bandon Kinsale 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. 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
 - o Essential to facilitate the regeneration and/or expansion of the centre of the urban settlement;
 - o Comprises significant previously developed and/or under-utilised lands;
 - o Is within or adjoining the core of an established or designated urban settlement;
 - o Will be essential to achieving compact and sustainable urban growth; and
 - o 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
- c) 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.

4.4.5 In the preparation of the Draft Bandon Kinsale 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.

4.4.6 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.

- 4.4.7 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.
- 4.4.8 The Table below lists the specific zoned sites within the Bandon Kinsale Municipal District that are located within either Flood Zone A or B and the circumstances of their inclusion.

Table 4.2: Specific Land Use Zonings located within Flood Zone A or B				
Settlement	Zoning Objective	Development Plan Justification Test & Other Assessment Criteria	Reason for inclusion in the LAP	Comment
Bandon	BD R-04	Justification Test	Not Applied	
		Existing Zoning	✓	Previously zoned as residential in the Bandon Electoral Area Local Area Plan 2011. Part of the area is 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 6-1 and WS 6-2 as detailed in Chapter 11, Volume 1 of the Cork County Development Plan, 2014.
Bandon	BD R 15	Justification Test	Not Applied	
		Existing Zoning	✓	Previously zoned as residential in the Bandon Electoral Area Local Area Plan 2011. A small part of the area is 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

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
				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.
Bandon	BD-X-01	Justification Test	Not Applied	-
		Existing Zonings	✓	<p>Part of the site is subject to flood risk. Previously zoned for mixed use development in the 2011 LAP. Specific text has been included limiting development proposals within the flood risk area.</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>
Bandon	BD T-01	Justification Test	Partially applied	Part three of the test was not completed.
		Existing Zoning	✓	<p>Previously zoned as town centre in the Bandon Electoral Area Local Area Plan 2011. Part of the area is subject to flood risk.</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</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
				County Development Plan, 2014.
Bandon	BD T-02	Justification Test	Partially applied	Part three of the test was not completed.
		Existing Zoning	✓	<p>Previously zoned as town centre in the Bandon Electoral Area Local Area Plan 2011. The area is subject to flood risk.</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>
Bandon	BD T-03	Justification Test	Partially applied	Part three of the test was not completed.
		Existing Zoning	✓	<p>Previously zoned as town centre in the Bandon Electoral Area Local Area Plan 2011. Part of the area is subject to flood risk.</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>
Kinsale	KST-01	Justification Test	Not applied	

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 Zonings	✓	<p>Previously zoned for Town Centre use in the Kinsale Town Plan 2009. Part of the land is 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>
Carrigaline	CLT-01	Justification Test	Not applied	
		Existing Zonings	✓	<p>Previously zoned for Town Centre use in the 2005 & 2011 LAP. Part of the land is 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>
Carrigaline	CLR-04	Justification Test	Not Applied	-
		Existing Zonings	✓	<p>Part of this site is at risk of flooding. Previously zoned for residential use in the 2005 & 2011 LAP.</p> <p>A site specific flood risk</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
				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.
Carrigaline	CL-R-13	Justification Test	Not Applied	-
		Existing Zonings	✓	<p>Previously zoned for Residential use in the 2011 LAP (Amendment No2 Shannonpark Framework Masterplan)</p> <p>Only part of the land is at risk of flooding.</p> <p>Development proposals will need to follow 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. See Table 4.3 for details. See also Section 4.7.</p>
Carrigaline	CL R-15	Justification Test	Not Applied	-
		Existing Zonings	✓	<p>Previously zoned for Residential use in the 2011 LAP (Amendment No2 Shannonpark Framework Masterplan)</p> <p>Only part of the land is at risk of flooding.</p> <p>Development proposals will need to follow the flood risk assessment procedure detailed</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
				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. See Table 4.3 for details. See also Section 4.7.
Carrigaline	CL B-01	Justification Test	Not Applied	
		Existing Zonings	✓	Previously zoned for Business use in the 2005 & 2011 LAP. Part of the land is at risk of flooding. Development proposals will need to follow 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. See Table 4.3 for details. See also Section 4.7.
Crosshaven and Bays	I-01	Justification Test	Not Applied	-
		Existing Zonings	✓	Previously zoned for marine-related industrial use in the 2011 LAP. Water compatible use. 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

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
				County Development Plan, 2014.
Crosshaven and Bays	T-01	Justification Test	Not Applied	
		Existing Zonings	✓	Previously zoned for town centre in the 2011 LAP. 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.

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 Bandon Kinsale Municipal District Local Area Plan

Habitats Directive Assessment Screening Report

Prepared by Cork County Council
Planning Policy Unit
November 2016

Contents

1	Introduction	4
1.1	Context.....	4
1.2	Legislative Background Habitats Directive Assessment	4
2	How this Report Was Prepared	7
2.1	Working Methods	7
2.2	Consultation.....	7
2.3	Data Sources, Gaps and Limitations.....	7
3	Draft Plan Screening.....	7
3.1	Screening Methodology	7
3.2	Description of the draft Plan.....	8
3.3	Natura 2000 Sites Within the Potential Impact Zone of the Plan	9
3.4	Screening Assessment.....	21
4	Screening Conclusion and Recommendations	32
5	Next Steps	36
5.1	Post Consultation	36
6	Sources of Information.....	36
6.1	National Parks and Wildlife Service Data	36
6.2	Guidance	36
	Appendix I Natura 2000 Site Data.....	37

1 Introduction

1.1 Context

Cork County Council is in the process of preparing the Bandon Kinsale 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 Bandon Kinsale Municipal District Area 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 sites¹), must be assessed as an integral part of the process of drafting of the plan. This is to determine whether or not the implementation of plan policies could have negative consequences for the habitats or plant 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.

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

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 proceeding 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 Bandon Kinsale 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 Bandon Kinsale Municipal District Local Area Plan** and the **Environmental Report** has been referred to statutory consultees and is available for public consultation from **Wednesday 16th November 2016 to Friday 06th 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 are now available from the Council website at 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 **Bandon Kinsale 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
- Settlement Network
- Urban Expansion Areas
- Water Services
- Development Contributions
- Regeneration Areas
- Flood Risk Assessment and Management
- 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 Bandon Kinsale Municipal District. It sets out the housing requirements and zoned housing land supply for each of the 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 two Main Towns of Bandon and Kinsale in the Bandon Kinsale 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 five key villages in the Bandon Kinsale Municipal District Ballinspittle, Belgooly, Crosshaven and Bays, Innishannon and Riverstick.

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 seven villages, ten village nuclei and twelve other locations in the Bandon Kinsale Municipal District. The villages are; Ballinadee, Ballinhassig, Ballygarvan, Halfway, Kilbrittan, Minane Bridge, Old Chapel. The village nuclei are Aghyohil, Ballyfeard, Ballyheada, Crossmahon, Dunderrow, Fivemilebridge, Gaggan, Garreststown/Garrylucas, Nohoval and Tinker Cross. The other locations are Ballymartle, Barrels Cross, Brownsmill, Gogginshill, Jagoe's Mill, Kilcolman, Killeady, Kilmacsimon Quay, Oysterhaven, Robert's Cove, Sandycove and Tracton.

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 Bandon Kinsale Municipal District covers an area to the south west of Cork City. The plan encompasses the main towns of Bandon, Kinsale and Carrigaline as well as thirty six villages and village nuclei. The boundaries of the plan area are shown on **Figure 1** below. The Natura 2000 sites subject to screening are shown in **Figure 2**.

Figure 1: Cork Municipal Districts Areas



Figure 2 Natura 2000 Sites Subject to Screening

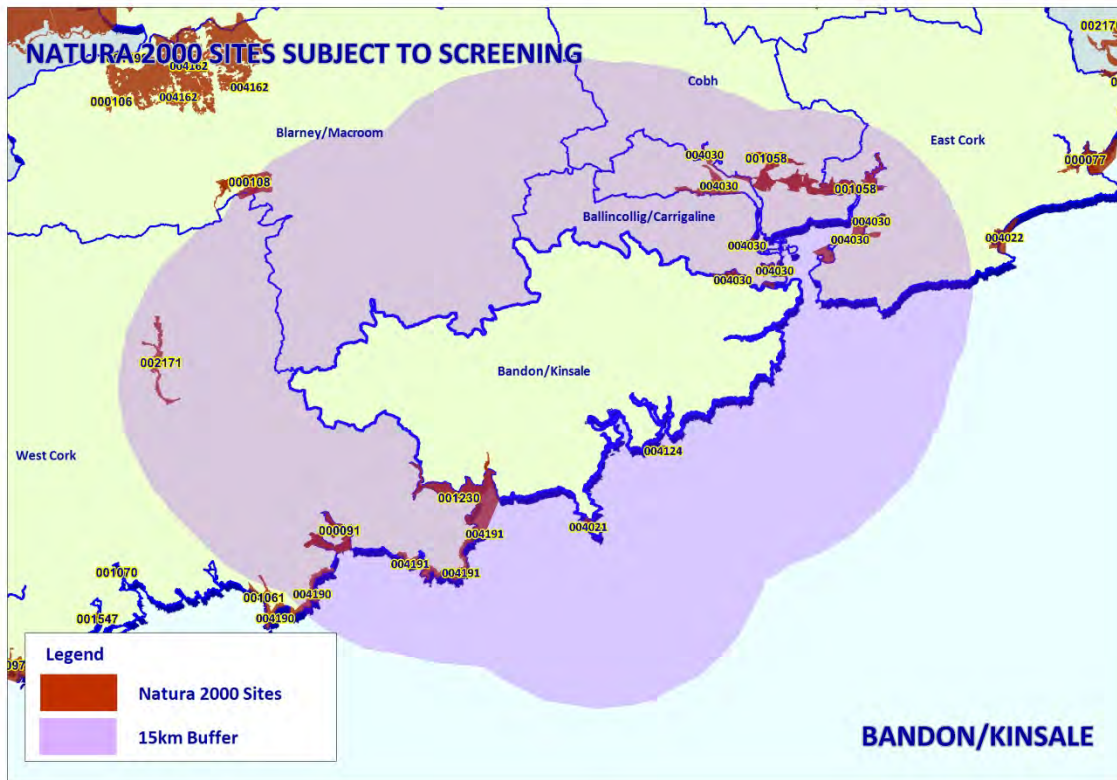


Table 1 sets out the Natura 2000 sites which are subject to screening in this report. It includes all Natura 2000 sites within the plan boundary area and Natura 2000 sites within 15km of the plan boundary. The habitats and species for which these sites are designated are also listed in Table 1 as are their Conservation Objectives. The potential for Natura 2000 sites that are >15km from the plan boundary area to be affected by policies set out in the draft plan was also considered. This could include sites which are hydrologically connected to watercourses or water bodies within the plan boundary area. No such sites were identified.

#

Table 1: All Natura 2000 Sites Within the Bandon Kinsale MD or otherwise identified as requiring screening			
Site Code	Site Name	Qualifying Interests	Conservation Objectives
0091	Clonakilty Bay SAC	<ul style="list-style-type: none"> • Mudflats and sandflats not covered by seawater at low tide [1140] • Annual vegetation of drift lines [1210] • Embryonic shifting dunes [2110] • Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] • Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] • Atlantic decalcified fixed dunes (Calluno-Ulicetea) [2150] 	<p>To maintain the favourable conservation condition of the following habitats for which the Clonakilty Bay SAC is designated:</p> <ul style="list-style-type: none"> • Mudflats and sandflats not covered by seawater at low tide [1140]; • Annual vegetation of drift lines [1210]; • Embryonic shifting dunes [2110]; • Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120]; • Atlantic decalcified fixed dunes (Calluno-Ulicetea) [2150]; <p>and to restore the favourable conservation condition of</p> <ul style="list-style-type: none"> • Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] <p>which are defined by attributes and targets set out in NPWS Conservation Objectives for Clonakilty Bay SAC 27 May 2014 available at www.NPWS.ie</p>
0108	The Gearagh SAC	<ul style="list-style-type: none"> • Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260] • Rivers with muddy banks with <i>Chenopodium rubric p.p.</i> and <i>Biention p.p.</i> vegetation [3270] 	<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"> • Water courses of plain to montane levels with the Ranunculion fluitantis and

Table 1: All Natura 2000 Sites Within the Bandon Kinsale MD or otherwise identified as requiring screening			
Site Code	Site Name	Qualifying Interests	Conservation Objectives
		<ul style="list-style-type: none"> • Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0] • Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) [91E0] • <i>Lutra lutra</i> (Otter) [1355] 	<ul style="list-style-type: none"> • Callitricho-Batrachion vegetation [3260] • Rivers with muddy banks with <i>Chenopodium rubric</i> p.p. and <i>Biention</i> p.p. vegetation [3270] • Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0] • Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) [91E0] • <i>Lutra lutra</i> (Otter) [1355] <p>as set out in Conservation Objectives for the Gearagh SAC available at www.NPWS.ie</p>
1058	Great Island Channel SAC	<ul style="list-style-type: none"> • Mudflats and sandflats not covered by seawater at low tide [1140] • Atlantic salt meadows (<i>Glaucopuccinellietalia maritima</i>) [1330] 	<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"> • Mudflats and sandflats not covered by seawater at low tide [1140] <p>and to restore the favourable conservation condition of</p> <ul style="list-style-type: none"> • Atlantic salt meadows (<i>Glaucopuccinellietalia maritima</i>) [1330] <p>which are defined by attributes and targets set out in Conservation Objectives for the Great Island Channel</p>

Table 1: All Natura 2000 Sites Within the Bandon Kinsale MD or otherwise identified as requiring screening			
Site Code	Site Name	Qualifying Interests	Conservation Objectives
			SAC June 6 2014 available at www.NPWS.ie
1230	Courtmacsherry Estuary SAC	<ul style="list-style-type: none"> • Estuaries [1130] • Mudflats and sandflats not covered by seawater at low tide [1140] • Annual vegetation of drift lines [1210] • Perennial vegetation of stony banks [1220] • <i>Salicornia</i> and other annuals colonising mud and sand [1310] • Atlantic salt meadows (<i>Glaucopuccinellietalia maritimae</i>) [1330] • Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] • Embryonic shifting dunes [2110] • Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] • Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] 	<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"> • Estuaries [1130] • Mudflats and sandflats not covered by seawater at low tide [1140] • Annual vegetation of drift lines [1210] • Perennial vegetation of stony banks [1220] • Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] • Embryonic shifting dunes [2110] • Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] • Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] <p>and to restore the favourable conservation condition of</p> <ul style="list-style-type: none"> • <i>Salicornia</i> and other annuals colonising mud and sand [1310] • Atlantic salt meadows (<i>Glaucopuccinellietalia maritimae</i>) [1330] <p>which are defined by attributes and targets set out in Conservation Objectives for Courtmacsherry Estuary</p>

Table 1: All Natura 2000 Sites Within the Bandon Kinsale MD or otherwise identified as requiring screening			
Site Code	Site Name	Qualifying Interests	Conservation Objectives
			SAC July 9 2014 available at www.NPWS.ie
2171	Bandon River SAC	<ul style="list-style-type: none"> • Water courses of plain to montane levels with the <i>Ranunculus fluitans</i> and Callitricho-Batrachion vegetation [3260] • Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) [91E0] • <i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029] • <i>Lampetra planeri</i> (Brook Lamprey) [1096] 	<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"> • Water courses of plain to montane levels with the <i>Ranunculus fluitans</i> and Callitricho-Batrachion vegetation [3260] • Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) [91E0] • <i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029] • <i>Lampetra planeri</i> (Brook Lamprey) [1096] <p>as set out in the Conservation Objectives for the Bandon River SAC February 13 2015 available at www.NPWS.ie</p>
4021	Old Head of Kinsale SPA	<ul style="list-style-type: none"> • Kittiwake (<i>Rissa tridactyla</i>) [A188] • Guillemot (<i>Uria aalge</i>) [A199] 	<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"> • Kittiwake (<i>Rissa tridactyla</i>) [A188] • Guillemot (<i>Uria aalge</i>) [A199] <p>as set out in the Conservation Objectives Old Head of</p>

Table 1: All Natura 2000 Sites Within the Bandon Kinsale MD or otherwise identified as requiring screening			
Site Code	Site Name	Qualifying Interests	Conservation Objectives
			Kinsale SPA February 13 2015 which are available at www.NPWS.ie
4030	Cork Harbour SPA	<ul style="list-style-type: none"> • Little Grebe (<i>Tachybaptus ruficollis</i>) [A004] • Great Crested Grebe (<i>Podiceps cristatus</i>) [A005] • Cormorant (<i>Phalacrocorax carbo</i>) [A017] • Grey Heron (<i>Ardea cinerea</i>) [A028] • Shelduck (<i>Tadorna tadorna</i>) [A048] • Wigeon (<i>Anas penelope</i>) [A050] • Teal (<i>Anas crecca</i>) [A052] • Pintail (<i>Anas acuta</i>) [A054] • Shoveler (<i>Anas clypeata</i>) [A056] • Red-breasted Merganser (<i>Mergus serrator</i>) [A069] • Oystercatcher (<i>Haematopus ostralegus</i>) [A130] • Golden Plover (<i>Pluvialis apricaria</i>) [A140] • Grey Plover (<i>Pluvialis squatarola</i>) [A141] • Lapwing (<i>Vanellus vanellus</i>) [A142] • Dunlin (<i>Calidris ygnus</i>) [A149] • Black-tailed Godwit (<i>Limosa limosa</i>) [A156] • Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] • Curlew (<i>Numenius arquata</i>) [A160] • Redshank (<i>Tringaygnus</i>) [A162] • Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] 	<p>To maintain the favourable conservation condition of the following bird species in Cork Harbour SPA:</p> <ul style="list-style-type: none"> • Little Grebe (<i>Tachybaptus ruficollis</i>) [A004] • Great Crested Grebe (<i>Podiceps cristatus</i>) [A005] • Cormorant (<i>Phalacrocorax carbo</i>) [A017] • Grey Heron (<i>Ardea cinerea</i>) [A028] • Shelduck (<i>Tadorna tadorna</i>) [A048] • Wigeon (<i>Anas penelope</i>) [A050] • Teal (<i>Anas crecca</i>) [A052] • Pintail (<i>Anas acuta</i>) [A054] • Shoveler (<i>Anas clypeata</i>) [A056] • Red-breasted Merganser (<i>Mergus serrator</i>) [A069] • Oystercatcher (<i>Haematopus ostralegus</i>) [A130] • Golden Plover (<i>Pluvialis apricaria</i>) [A140] • Grey Plover (<i>Pluvialis squatarola</i>) [A141] • Lapwing (<i>Vanellus vanellus</i>) [A142] • Dunlin (<i>Calidris ygnus</i>) [A149] • Black-tailed Godwit (<i>Limosa limosa</i>) [A156] • Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] • Curlew (<i>Numenius arquata</i>) [A160] • Redshank (<i>Tringaygnus</i>) [A162]

Table 1: All Natura 2000 Sites Within the Bandon Kinsale MD or otherwise identified as requiring screening			
Site Code	Site Name	Qualifying Interests	Conservation Objectives
		<ul style="list-style-type: none"> • Common Gull (<i>Larus canus</i>) [A182] • Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183] • Common Tern (<i>Sterna hirundo</i>) [A193] • Wetland and Waterbirds [A999] 	<ul style="list-style-type: none"> • Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] • Common Gull (<i>Larus canus</i>) [A182] • Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183] • Common Tern (<i>Sterna hirundo</i>) [A193] <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 Conservation Objectives Cork Harbour SPA Dec 16 2014 which are available at www.NPWS.ie</p>
4081	Clonakilty Bay SPA	<ul style="list-style-type: none"> • Shelduck (<i>Tadorna tadorna</i>) [A048] • Dunlin (<i>Calidrisygnus</i>) [A149] • Black-tailed Godwit (<i>Limosa limosa</i>) [A156] • Curlew (<i>Numenius arquata</i>) [A160] • Wetland and Waterbirds [A999] 	<p>To maintain the favourable conservation condition of the following bird species in Clonakilty Bay SPA:</p> <ul style="list-style-type: none"> • Shelduck (<i>Tadorna tadorna</i>) [A048] • Dunlin (<i>Calidrisygnus</i>) [A149] • Black-tailed Godwit (<i>Limosa limosa</i>) [A156] • Curlew (<i>Numenius arquata</i>) [A160] <p>and to maintain the favourable conservation condition of the wetland habitat in Clonakilty Bay SPA as a resource for the regularly-occurring migratory birds that utilise it as defined by attributes and targets set out in Conservation Objectives Clonakilty Bay SPA Oct 17 2014 which are available at www.NPWS.ie</p>

Table 1: All Natura 2000 Sites Within the Bandon Kinsale MD or otherwise identified as requiring screening			
Site Code	Site Name	Qualifying Interests	Conservation Objectives
4109	The Gearagh SPA	<ul style="list-style-type: none"> • Wigeon (<i>Anas penelope</i>) [A050] • Teal (<i>Anas crecca</i>) [A052] • Mallard (<i>Anas platyrhynchos</i>) [A053] • Coot (<i>Fulica atra</i>) [A125] • Wetland and Waterbirds [A999] 	<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"> • Wigeon (<i>Anas penelope</i>) [A050] • Teal (<i>Anas crecca</i>) [A052] • Mallard (<i>Anas platyrhynchos</i>) [A053] • Coot (<i>Fulica atra</i>) [A125] <p>and to maintain or restore the favourable condition of the wetland habitat at the Gearagh as a resource for the regularly-occurring migratory waterbirds that utilise it as set out in the Conservation Objectives for the Gearagh SPA which are available at www.NPWS.ie</p>
4124	Sovereign Islands SPA	<ul style="list-style-type: none"> • Cormorant (<i>Phalacrocorax carbo</i>) [A017] 	<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"> • Cormorant (<i>Phalacrocorax carbo</i>) [A017] <p>as set out in the Conservation Objectives for the Sovereign Islands SPA which are available at www.NPWS.ie</p>

Table 1: All Natura 2000 Sites Within the Bandon Kinsale MD or otherwise identified as requiring screening			
Site Code	Site Name	Qualifying Interests	Conservation Objectives
4190	Galley Head to Duneen Point SPA	<ul style="list-style-type: none"> • Chough (<i>Pyrrhocorax pyrrhocorax</i>) [A346] 	<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"> • Chough (<i>Pyrrhocorax pyrrhocorax</i>) [A346] <p>as set out in the Conservation Objectives for the Galley Head to Duneen Point SPA which are available at www.NPWS.ie</p>
4191	Seven Heads SPA	<ul style="list-style-type: none"> • Chough (<i>Pyrrhocorax pyrrhocorax</i>) [A346] 	<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"> • Chough (<i>Pyrrhocorax pyrrhocorax</i>) [A346] <p>as set out in the Conservation Objectives for the Seven Heads SPA which are available at www.NPWS.ie</p>
4219	Courtmacsherry Bay SPA	<ul style="list-style-type: none"> • Great Northern Diver (<i>Gavia immer</i>) [A003] • Shelduck (<i>Tadorna tadorna</i>) [A048] • Wigeon (<i>Anas penelope</i>) [A050] • Red-breasted Merganser (<i>Mergus serrator</i>) [A069] • Golden Plover (<i>Pluvialis apricaria</i>) [A140] • Lapwing (<i>Vanellus vanellus</i>) [A142] • Dunlin (<i>Calidris alpina</i>) [A149] 	<p>To maintain the favourable conservation condition of the following bird species in Courtmacsherry Bay SPA:</p> <ul style="list-style-type: none"> • Great Northern Diver (<i>Gavia immer</i>) [A003] • Shelduck (<i>Tadorna tadorna</i>) [A048] • Wigeon (<i>Anas penelope</i>) [A050] • Red-breasted Merganser (<i>Mergus serrator</i>) [A069] • Golden Plover (<i>Pluvialis apricaria</i>) [A140]

Table 1: All Natura 2000 Sites Within the Bandon Kinsale MD or otherwise identified as requiring screening			
Site Code	Site Name	Qualifying Interests	Conservation Objectives
		<ul style="list-style-type: none"> • Black-tailed Godwit (<i>Limosa limosa</i>) [A156] • Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] • Curlew (<i>Numenius arquata</i>) [A160] • Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] • Common Gull (<i>Larus canus</i>) [A182] • Wetland and Waterbirds [A999] 	<ul style="list-style-type: none"> • Lapwing (<i>Vanellus vanellus</i>) [A142] • Dunlin (<i>Calidris alpina</i>) [A149] • Black-tailed Godwit (<i>Limosa limosa</i>) [A156] • Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] • Curlew (<i>Numenius arquata</i>) [A160] • Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] • Common Gull (<i>Larus canus</i>) [A182] <p>and to maintain the favourable conservation condition of the wetland habitat in Courtmacsherry Bay SPA as a resources for the regularly-occurring migratory birds that utilise it as defined by attributes and targets set out in Conservation Objectives Courtmacsherry Bay SPA Oct 3 2014 which are available at www.NPWS.ie</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 (e.g. 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	Preliminary Screening Assessment
Clonakilty Bay SAC Site Code 0091	The Bandon-Kinsale MD is located 8km east of this SAC. There is no hydrological linkage between the SAC and any settlements within the Bandon-Kinsale MD. There are no proposals in the plan which relate to the use of resources from within the site or which direct activity into the SAC. No potential for impact on this site is identified. No further assessment is considered to be required.
The Gearagh SAC Site Code 0108	This SAC is located approximately 13km north of the Bandon-Kinsale MD. There is no overlap between the catchment of the Gearagh and the Bandon-Kinsale MD. There are no proposals in the plan which relate to the use of resources from within the site or which direct activity into the SAC. No potential for impacts are identified and no further assessment is required in respect of this SAC.
Great Island Channel Special Area of Conservation Site Code 1058	This SAC is over 9km from the Bandon-Kinsale Municipal District area. The Bandon-Kinsale Municipal District has a hydrological connection to Cork Harbour via the Lee catchment flows into Cork harbour via Cork city. The primary freshwater inputs to the Great Island Channel SAC are the Owenacurra and Dungourney Rivers at Middleton and the Tibbotstown River at Carrigtwohill. There is no hydrological linkage between the the Owenacurra and Dungourney Rivers and any settlement for which policy is proposed in the Bandon-Kinsale MD Local Area Plan. No policies in the plan direct activity into this SAC. No potential for impact on this site is

	<p>identified.</p> <p>No further assessment is considered to be required.</p>
<p>Courtmacsherry Estuary SAC</p> <p>Site Code 1230</p>	<p>The boundary of the MD runs through the Courtmacsherry Estuary. The village of Kilbrittain has a hydrological connection to the SAC via the Kilbrittain River. Treated effluent from the Kilbrittain WWTP discharges upstream of the SAC. No other settlements within the MD have been identified with a hydrological or other ecological connection to this SAC.</p> <p>Further screening is required in respect of policies proposed for Kilbrittain.</p>
<p>Bandon River SAC</p> <p>Site Code 2171</p>	<p>This SAC is located approximately 12km to the north of the Bandon Kinsale MD. While the Bandon River flows through this Municipal District, the SAC portion of the river is located upstream of this MD. There is no potential for the objectives and policies associated with settlements in the Bandon-Kinsale MD to have impacts on the SAC.</p> <p>No further assessment is considered to be required in respect of this site.</p>
<p>Old Head of Kinsale SPA</p>	<p>This SPA is located within the Bandon Kinsale Municipal District, however there no settlements for which policy is proposed in the plan within 2km of the SPA. There are no proposals in the plan which relate to the use of resources from within the site or which direct activity into the SPA.</p> <p>No potential for impacts are identified and no further assessment is required in respect of this SPA.</p>
<p>Cork Harbour SPA</p> <p>Site Code 4030</p>	<p>This SPA comprises the estuarine inlets of Cork Harbour including the Owenboy Estuary at Carrigaline and Crosshaven which settlements lie within this Municipal District. Policies for the settlement of Carrigaline which lies within both the Bandon-Kinsale and the Ballincollig-Carrigaline Municipal Districts are assessed in the screening report prepared for the Ballincollig-Carrigaline MD LAP. Policies relating to the settlement of Crosshaven (Crosshaven and Bays settlement) are set out in the Key Villages section of the plan and require further assessment. There is also a proposal to extend the Cork Harbour SPA to encompass the tidal inlet at Minane Bridge (Ringabella Creek). This area is located downstream of the settlement of Minane Bridge and adjacent to the settlement of Myrtleville which forms part of the settlement Crosshaven and Bays as identified in the MD Local Area Plan.</p>

	<p>The settlements of Ballygarvan, Halfway and Ballinhassig and have a hydrological connection to the SPA via the Owenboy River. Both Ballygarvan and Halfway have WWTP's which discharge treated effluent to the Owenboy River.</p> <p>Further assessment is required in respect of this site.</p>
Clonakilty Bay SPA	<p>The Bandon-Kinsale MD is located 8km east of this SPA. There is no hydrological linkage between the SPA and any settlements with the Bandon-Kinsale MD. No policies in the plan direct activity into this SPA. No potential for impact on this site is identified.</p> <p>No further assessment is considered to be required.</p>
The Gearagh SPA	<p>This SPA is located approximately 15km north of the Bandon Kinsale MD. There is no overlap between the catchment of the Gearagh and the Bandon-Kinsale MD. There are no proposals in the plan which relate to the use of resources from within the site or which direct activity into the SPA.</p> <p>No potential for impacts are identified and no further assessment is required in respect of this SPA.</p>
Sovereign Island SPA	<p>This SPA is located on an uninhabited island offshore near Oysterhaven. No policies in the plan direct activity into this SPA. No potential for impact on this site is identified.</p> <p>No further assessment is considered to be required.</p>
Galley Head to Duneen Point SPA	<p>This SPA is located along the coastline west of Clonakilty. It is over 13km from the Bandon Kinsale Municipal District. No policies in the plan direct activity into this SPA. No potential for impact on this site is identified.</p> <p>No further assessment is considered to be required.</p>
Seven Heads SPA	<p>This SPA is located along the coastline west of Courtmacsherry over 7km from the SPA. No policies in the plan direct activity into this SPA. No potential for impact on this site is identified.</p> <p>No further assessment is considered to be required.</p>

<p>Courtmacsherry Bay SPA</p>	<p>The boundary of the MD runs through the Courtmacsherry Estuary. The village of Kilbrittain has a hydrological connection to the SAC via the Kilbrittain River. Treated effluent from the Kilbrittain WWTP discharges upstream of the SAC. No other settlements within the MD have been identified with a hydrological or other ecological connection to this SAC.</p> <p>Further screening is required in respect of policies proposed for Kilbrittain.</p>
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Potential for significant negative effects were screened out as a result of preliminary screening for the following Natura 2000 sites:

Code Site Name

- 0091 Clonakilty Bay Special Area of Conservation
- 0108 The Gearagh Special Area of Conservation
- 1058 Great Island Channel Special Area of Conservation
- 2171 Bandon River Special Area of Conservation
- 4021 Old Head of Kinsale Special Protection Area
- 4081 Clonakilty Bay Special Protection Area
- 4109 The Gearagh Special Protection Area
- 4124 Sovereign Island Special Protection Area
- 4190 Galley Head to Duneen Point Special Protection Area
- 4191 Seven Heads Special Protection Area

Detailed Screening

Further screening was then 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 (e.g. 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:

Code Site Name

- 1230 Courtmacsherry Estuary Special Area of Conservation

- 4030 Cork Harbour Special Protection Area
- 4219 Courtmacsherry Bay 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.

Courtmacsherry Estuary SAC-Screening Assessment
<p>SAC Description and Key Concerns</p> <p>This is a large coastal site which supports estuarine habitats including extensive mudflats and salt marsh, as well as dune habitat types. The rare plant Sea-kale occurs within the site. This SAC overlaps with Courtmacsherry Estuary SPA, and is an important site for wintering waterfowl. The qualifying features and conservation objectives for which the SAC is designated are listed in Appendix I of this plan.</p> <p>The villages of Kilbrittain (Bandon–Kinsale MD) as well as Timoleague and Courtmacsherry (West Cork MD) and are located along the coast adjacent to this SAC, and waste-water from these settlements is discharged to the bay.</p> <p>In the context of this plan, having regard to the Conservation Objectives which apply to the SAC, the key concerns are to ensure that</p> <ul style="list-style-type: none">• policies for the settlement of Kilbrittain will not result in increased nutrient loading to the estuary;• policies for the settlement of Kilbrittain will not affect natural hydrological processes within the estuary;• policies in the plan do not encourage or direct development into the SAC;• policies within the plan will not put undue recreational pressure on coastal habitats.
<p>Assessment</p> <p>Nutrients Issues:</p> <p>The provision of adequate waste water treatment infrastructure is a key requirement to ensuring the protection of mudflat habitats for which the Courtmacsherry Estuary SAC is designated.</p> <p>The plan proposes the development of an additional 86 houses in Kilbrittain, however this settlement is identified in the plan (Table 2.3) as one which has capacity issues which may prevent the achievement of this objective. This is recognised in objective GO-01 (c) Villages which states that development of individual dwelling units served by individual treatment systems only will be considered until such time as a public system is available. While there is a</p>

public system available in Kilbrittain, there are issues with this plant which have resulted in license compliance failures and downstream impacts on water quality have been observed which may be affecting WFD water quality status. It is recommended it would be clarified in the plan that new developments which require a connection to the public WWTP in Kilbrittain can only be permitted when waste water treatment facilities are available which will secure the objectives of the Birds and Habitats Directives and the Water Framework Directive.

Protection of Natural Hydrological Processes:

The additional growth proposed for the Kilbrittain could have the potential to increase levels of surface water run-off and possibly to alter hydrological patterns affecting wetland areas used by feeding birds. It is clarified in General Objectives associated with the key villages, villages and other locations that new development in the villages must make adequate provision for storm water storage and disposal. It is recommended that consideration would be given to strengthening this objective to encourage new development to make provision for SuDS, and to clarify that surface water run-off should be controlled to ensure that Greenfield rates of run-off are maintained, in order to ensure that new development proposed in the plan would not result in increased levels of surface water run-off to the SAC.

Subject to this amendment being made, it is considered that development proposed through this plan will not pose a significant risk of impact on hydrological processes and natural flooding patterns around the SAC.

Boundary Issues: There are no issues relating to settlement boundary overlaps with this site and the plan does not direct development or activity into the SAC. It is not envisaged that policies in the plan will increase recreational or other pressures on coastal habitats within this SAC.

Conclusion

It is recommended it would be clarified in the plan that new developments in Kilbrittain can only be permitted when waste water treatment facilities are available which will secure the objectives of the Birds and Habitats Directives and the Water Framework Directive.

It is recommended that it would be clarified in the plan that new developments adjacent to Courtmacsherry Estuary would be required to make provision for SuDS and to clarify that surface water run-off from these settlements should be controlled to ensure that Greenfield rates of run-off are maintained in order to ensure that new development proposed in the plan would not result in increased levels of surface water run-off to the SAC.

Subject to these changes being made and to subject strict adherence to policies in the plan which relate to the protection of Natura 2000 sites, it is considered that policies contained in this plan will not pose a significant risk of impact on the Courtmacsherry Estuary SAC.

Cork Harbour SPA-Screening Assessment

SPA Description and Key Concerns

This is a large site which is made up of a number of discrete sheltered river estuarine systems discharging to Cork Harbour. The primary habitats of the SPA are intertidal mudflats which are of very high importance for the high numbers and variety of wintering waterfowl species which occur here. The SPA also has a nationally important breeding colony of Common Tern. The qualifying interests of the SPA and their Conservation Objectives are set out in **Appendix 1** of this report. This SPA comprises the estuarine inlets of Cork Harbour including the Owenboy Estuary at **Carrigaline** and **Crosshaven** which settlements lie within this Municipal District. There is a small boundary overlap between the village of Crosshaven. The settlements of **Ballygarvan**, **Halfway** and **Ballinhassig** have a hydrological connection to the SPA via the Owenboy River. Ballygarvan and Halfway have WWTP's which discharge treated effluent to the Owenboy River.

Policies for the settlement of Carrigaline which lies within both the Bandon-Kinsale and the Ballincollig-Carrigaline Municipal Districts are assessed in the screening report prepared for the Ballincollig-Carrigaline MD LAP.

Policies relating to the settlements of Crosshaven (**Crosshaven and the Bays** settlement), Ballygarvan, Halfway and Ballinhassig are set out in this plan and require further assessment.

There is also a proposal to extend the Cork Harbour SPA to encompass the tidal inlet at Ringabella Creek. This area is located downstream of the settlement of **Minane Bridge** and adjacent to the settlement of **Myrtleville** which forms part of the settlement **Crosshaven and Bays** as identified in the MD Local Area Plan.

The plan proposes the development of an additional 286 dwellings in the Crosshaven and Bays settlement, 70 dwellings in Ballinhassig, 45 dwellings in Ballygarvan, 20 dwellings in Minane Bridge and 10 dwellings in Halfway. It also supports the expansion of sustainable tourism activities and improving access to the water for sport and recreation activity at Crosshaven.

The key concerns for this assessment, having regard to the Conservation Objectives which apply to this SPA are to ensure that:

- policies in the plan will not affect the extent or quality of available feeding and roosting habitats or sites in the estuary;
- policies in the plan do not support recreational / amenity uses or other activities within or near the SPA which would have a high risk of causing disturbance to species for

which the SPA is designated.

Assessment

Boundary Issues: There is a small overlap between the boundary of the SPA and the settlement of Crosshaven. The area comprises reclaimed land which would once have formed part of the intertidal zone and is identified to be at risk of flooding. It is recommended that consideration would be given to zoning this area as Open Space in order to minimise pressure for development on this site.

Recreation and Marine Tourism: Policies for Crosshaven and the Bays strongly support and encourage tourism development and access to water for recreational purposes (DB-02 and DB-03). However, the sensitivity of the SPA is also recognised in the plan, and it is stated in policy DB-05 (Crosshaven and Bays) that new development in this village will only be permitted where it shown to be compatible with the protection of this site. Individual proposals which may increase boating or other marine based activities within or near the SPA will need to be subject to assessment on a case by case basis to assess their compatibility with the protection of the SPA. Strict adherence to DB-05 will be required to ensure that these policies are compatible with the protection of the SPA.

Protection of natural dynamic coastal hydrological processes:

The installation of coastal protection infrastructure or other physical infrastructure in the coastal zone could have the potential to affect natural hydrological processes and could thereby interfere with the protection of wetland habitats upon which birds for which this SPA is designated are dependant. There are no policies in the plan which propose the installation of coastal protection infrastructure or which propose development directly within the coastal zone around this SPA.

The additional growth proposed in the Crosshaven and Bays settlement could have the potential to increase levels of surface water run-off and possibly to alter hydrological patterns affecting wetland areas used by feeding birds. It is clarified in General Objectives associated with the key villages, villages and other locations that new development in the villages must make adequate provision for storm water storage and disposal. It is recommended that consideration would be given to strengthening this proposal to encourage new development to make provision for SuDS and to clarify that surface water run-off should be controlled to ensure that Greenfield rates of run-off are maintained in order to ensure that new development proposed in the plan would not result in increased levels of surface water run-off to the SPA.

Nutrients Issues

Elevated levels of nutrients are a less critical issue for estuarine birds than they are for estuarine habitats, as increased nutrients in mudflat systems can result in increased food availability for

birds, notwithstanding the fact that the conservation condition of the habitat is reduced. Elevated levels of nutrients can in some circumstances result in a decrease in food availability for birds by causing an increase in the spread of algal mats over these areas.

Waste water from Crosshaven is currently pumped to Ringaskiddy from where it is discharged untreated to Cork Harbour at Dognose Bank. A new WWTP is currently under construction at Shanbally to which foul water from the settlements of the lower harbour including Crosshaven will be directed for treatment before discharge in the outer channel of Cork Harbour between Roches Point and Crosshaven. This location is considered to be sufficiently distant from the SPA to ensure that treated effluent discharging here does not pose a risk of impact on this site.

Settlement specific objectives clarify that the new growth in the Key Village settlements (which includes Crosshaven and the Bays) clarify that appropriate and sustainable waste water infrastructure must be available to cater for additional growth proposed in this plan. Until such time as the plant is operational, the village will have limited capacity for development of individual dwellings served by individual waste water treatment systems. It is understood that these policies will constrain development in this settlement until such time as the new WWTP is operational.

There are two villages (Ballygarvan and Halfway) located in this MD which have WWTP's which discharge effluent to the Owenboy River. The Owenboy enters Cork Harbour at Crosshaven and its estuary forms part of the Cork Harbour SPA. The treatment plant in Ballygarvan is identified to have capacity issues, while Halfway is coded green in Table 2.3 (no capacity issues). Ballinhassig which is located in the Owenboy river valley has no WWTP. The village of Minane Bridge is served by a WWTP which discharges treated effluent to a stream which flows east to Ringabella Creek which is proposed to be included within the Cork Harbour SPA.

Policy for these settlements is set out in GO-01 Villages (GO-01(C)) states that only the development of individual dwelling units will be considered in the villages in the absence of a public wastewater treatment system. While there is a public system available in Ballygarvan, there are issues with this plant which have resulted in license compliance failures. There is no system available in Ballinhassig. It is not known whether the treatment plants in Halfway or Minane Bridge which are authorised via certificate are having an effect on water quality as monitoring data for these plants is not readily available (issues relating to capacity are identified for Minane Bridge in the plan).

It is recommended it would be clarified in the plan that new developments in the villages which require a connection to WWTP discharging to Cork Harbour or to rivers in its catchment, can only be permitted when waste water treatment facilities are available which will secure the objectives of the Birds and Habitats Directives and the Water Framework Directive.

Subject to adherence to these policies, it is considered that the plan will not pose a significant risk of impact on the SPA associated with nutrients inputs.

Conclusion

It is recommended it would be clarified in the plan that new developments in settlements within the catchment of Cork Harbour which require a connection to public waste water treatment systems can only be permitted when waste water treatment facilities are available which will secure the objectives of the Birds and Habitats Directives and the Water Framework Directive.

It is recommended that it would be clarified in the plan that new developments adjacent to Cork Harbour would be required to make provision for SuDS and to clarify that surface water run-off from these settlements should be controlled to ensure that Greenfield rates of run-off are maintained in order to ensure that new development proposed in the plan would not result in increased levels of surface water run-off to the SSPA.

It is recommended that areas of the SPA within the Crosshaven and Bays settlement be zoned as Open Space not suitable for development.

Subject to these changes being made and to subject strict adherence to policies in the plan which relate to the protection of Natura 2000 sites, it is considered that policies contained in this plan will not pose a significant risk of impact on the Cork Harbour SPA.

Courtmacsherry Bay SPA-Screening Assessment

SPA Description and Key Concerns

This is a largely estuarine in nature and consists of the drowned valley of the Argideen and Kilbrittain Rivers. The site overlaps with Courtmacsherry SAC. It is of particular importance for the range and numbers of wintering birds that feed on the wetland habitats of the estuary some of which occur in nationally and internationally important numbers. The species for which this site is designated are listed in **Appendix I** to this report, as are the Conservation Objectives which apply to the site.

The villages of Kilbrittain (Bandon–Kinsale MD) as well as Timoleague and Courtmacsherry (West Cork MD) are located along the coast adjacent to this SPA, and waste-water from these settlements is discharged to the bay. The plan proposes the development of an additional 86 houses in Kilbrittain over the lifetime of the plan.

In the context of this plan, having regard to the Conservation Objective which apply to the SPA, the key concerns are to ensure that

- policies in the plan will not affect the extent or quality of available feeding and

- roosting habitats or sites in the estuary;
- policies in the plan do not support recreational / amenity uses or other activities within or near the SPA which would have a high risk of causing disturbance to species for which the SPA is designated.

Assessment

Protection of natural dynamic coastal hydrological processes:

The installation of coastal protection infrastructure or other physical infrastructure in the coastal zone could have the potential to affect natural hydrological processes and could thereby interfere with the protection of wetland habitats upon which birds for which this SPA is designated are dependant. There are no policies in the plan which propose the installation of coastal protection infrastructure or which propose development directly within the coastal zone around this SPA.

The additional growth proposed for the Kilbrittain could have the potential to increase levels of surface water run-off and possibly to alter hydrological patterns affecting wetland areas used by feeding birds. It is clarified in General Objectives associated with the villages and other locations that new development in the villages must make adequate provision for storm water storage and disposal. It is recommended that consideration would be given to strengthening this proposal to encourage new development to make provision for SuDS and to clarify that surface water run-off should be controlled to ensure that Greenfield rates of run-off are maintained in order to ensure that new development proposed in the plan would not result in increased levels of surface water run-off to the SPA.

Subject to this amendment being made, it is considered that development proposed through this plan will not pose a significant risk of impact on hydrological processes and natural flooding patterns around the SPA.

Nutrients Issues:

Elevated levels of nutrients are a less critical issue for estuarine birds than they are for estuarine habitats, as increased nutrients in mudflat systems can result in increased food availability for birds, notwithstanding the fact that the conservation condition of the habitat is reduced. Elevated levels of nutrients can in some circumstances result in a decrease in food availability for birds by causing an increase in the spread of algal mats over these areas.

The provision of adequate waste water treatment infrastructure is a key requirement to ensuring the protection of mudflat habitats for which the Courtmacsherry Estuary SAC is designated and will also contribute towards the maintenance of healthy populations of invertebrate communities of mudflat habitats upon which birds for which this SPA is designated, feed.

The plan proposes the development of an additional 86 houses in Kilbritten, however this settlement is identified in the plan (Table 2.3) as one which has capacity issues which may prevent the achievement of this objective. This is recognised in objective GO-01 (c) Villages which states that development of individual dwelling units served by individual treatment systems will be considered until such time as a public system is available. While there is a public system available in Kilbritten, there are issues with this plant which have resulted in license compliance failures and downstream impacts on water quality have been observed which may be affecting WFD water quality status. It is recommended it would be clarified in the plan that new developments requiring a connection to the public waste water system in Kilbritten can only be permitted when waste water treatment facilities are available which will secure the objectives of the Birds and Habitats Directives and the Water Framework Directive.

Boundary Issues: There are no issues relating to settlement boundary overlaps with this site.

Risk of Disturbance to Birds: There are no policies in this plan which promote recreational or other activity within the SPA which could risk of disturbance to birds.

Conclusion

It is recommended it would be clarified in the plan that new developments in Kilbritten which require a connection to the WWTP can only be permitted when waste water treatment facilities are available which will secure the objectives of the Birds and Habitats Directives and the Water Framework Directive.

It is recommended that it would be clarified in the plan that new developments adjacent to Courtmacsherry Estuary would be required to make provision for SuDS and to clarify that surface water run-off from these settlements should be controlled to ensure that Greenfield rates of run-off are maintained in order to ensure that new development proposed in the plan would not result in increased levels of surface water run-off to the SPA.

Subject to these changes being made and to subject strict adherence to policies in the plan which relate to the protection of Natura 2000 sites, it is considered that policies contained in this plan will not pose a significant risk of impact on the Courtmacsherry Estuary SPA.

4 Screening Conclusion and Recommendations

Bandon Kinsale Municipal District Local Area Plan Consultation Draft - Screening Conclusion	
Natura 2000 sites subject to Screening for	Clonakilty Bay SAC (0091) The Gearagh SAC (0108)

<p>Appropriate Assessment</p>	<p>Great Island Channel SAC (1058) Courtmacsherry Estuary SAC (1230) Bandon River (2171) Old Head of Kinsale SPA (4021) Cork Harbour SPA (4030) Clonakilty Bay SPA (4081) The Gearagh SPA (4109) Soverign Islands SPA (4124) Galley Head to Dunnen Point SPA (4190) Courtmacsherry Bay SPA (4219)</p>
<p>Description of the Plan</p>	<p>See Section 2 of this report.</p>
<p>Is the Plan Directly Connected with Or Necessary to the Management of the Natura 2000 sites identified above</p>	<p>No</p>
<p>Are there other projects or plans that together with this plan could give rise to cumulative impacts on any of the above listed sites.</p>	<p>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 and Courtmacsherry Estuary 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"> • Atlantic Gateways Initiative 2006 • Common Agricultural Policy (2014-2020) • Cork Area Strategic Plan (2008) • Draft West Cork MD LAP 2016 • Draft Blarney-Macroon MD LAP 2016 • Draft Ballincollig-Carrigaline MD LAP 2016 • Forests, products and people – Irelands forest policy-a renewed vision 2014 • Harvest 2020-A Vision for Irish Agri-Food and Fisheries • Marine Leisure Infrastructure Strategy for the Southern Division of Cork County 2010-2020 • National Climate (2007-2012) Climate Adaptation Framework (2012) • National Development Plan 2007-2013

	<ul style="list-style-type: none"> • National Renewable Energy Action Plan • National Spatial Strategy • National Waste Management Plan 2004-2009 • Port of Cork Strategic Development Plan 2010 • Smarter Travel. A New Transport Policy for Ireland 2009-2020 • South Western Regional Planning Guidelines 2010-2022 • Tourism Action Plan 2016-2018 <p>The primary issues of concern are</p> <ul style="list-style-type: none"> • policies which could result in increased pressure for development within Natura 2000 sites; • policies resulting in an increased pressure on water quality in sensitive catchments; • policies which may hinder natural hydrological processes in freshwater systems; • policies which could result in significant disturbance to birds within SPAs
Assessment of Significant Effects	
<p>Describe how the plan (alone or in combination is likely to affect Natura 2000 sites)</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> <ul style="list-style-type: none"> • policies which could result in increased pressure for development within Natura 2000 sites; • policies resulting in an increased pressure on water quality in sensitive catchments; • policies which may hinder natural hydrological processes within the in freshwater systems; • policies which could direct activity into SPAs which could have the potential to cause disturbance to birds at wintering grounds or breeding sites.
<p>Recommended changes to the plan</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>Courtmacsherry Estuary SAC and Courtmacsherry Bay SPA -</p>

	<p>Clarify in the plan that new developments in Kilbrittain which require a connection to the WWTP can only be permitted when waste water treatment facilities are available which will secure the objectives of the Birds and Habitats Directives and the Water Framework Directive; clarify that new developments adjacent to Courtmacsherry Estuary must be required to make provision for SuDS and that surface water run-off from these settlements must be controlled to ensure that Greenfield rates of run-off are maintained.</p> <p>Cork Harbour SPA: Clarify that new developments in settlements within the catchment of Cork Harbour which require a connection to public waste water treatment systems can only be permitted when waste water treatment facilities are available which will secure the objectives of the Birds and Habitats Directives and the Water Framework Directive; clarify that new developments in settlements adjacent to Cork Harbour are required to make provision for SuDS and that surface water from these settlements must be controlled to ensure that Greenfield rates of run-off are maintained; zone an area of SPA within the Crosshaven and Bays settlement as Open Space not suitable for development.</p>
List of Agencies Consulted	The draft plan and this report will be referred to all of the relevant Statutory Authorities and will available for consideration by the general public from November 16 th 2016.
Conclusion	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.
Data Collected to Carry Out the Assessment	
Who carried out the assessment	Planning Policy Unit Cork County Council
Sources of Data	See references
Level of Assessment Completed	Screening for Appropriate Assessment

Where can the full results of the assessment be accessed and viewed	Habitats Directive Assessment will continue through the process of making this plan. All documents associated with the process will be available at www.corkcoco.ie
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5 Next Steps

5.1 Post Consultation

Submissions or observations regarding the **Bandon Kinsale 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)

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 Natura 2000 Site Data

Courtmacsherry Estuary SAC (Site Code 1230)

Qualifying Interests

- 1130 Estuaries
- 1140 Mudflats and sandflats not covered by seawater at low tide
- 1210 Annual vegetation of drift lines
- 1220 Perennial vegetation of stony banks
- 1310 Salicornia and other annuals colonising mud and sand
- 1330 Atlantic salt meadows
- 1410 Mediterranean salt meadows
- 2110 Embryonic shifting dunes
- 2120 Shifting dunes along the shoreline with *Ammophila arenaria*
- 2130 Fixed coastal dunes with herbaceous vegetation

Conservation Objectives - Attributes and Targets (summary)

Estuaries [1130]	
Conservation Objective: To maintain the favourable conservation condition of Estuaries for Courtmacsherry Estuary SAC	
Attribute/Target	
Habitat Area	Community Distribution
Permanent habitat area is stable or increasing, subject to natural processes (490ha)	Conserve the following community types in natural conditions: Sandy mud with <i>Hediste diversicolor</i> and <i>Tubificoides benedii</i> ; Sand to mixed sediment with oligochaetes community complex; Sand with <i>Nephtys cirrosa</i>

	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 Courtmacsherry Estuary SAC	
Attribute/Target	
Habitat Area	Community Distribution
The permanent habitat area is stable or increasing, subject to natural processes	Conserve the following community types in a natural condition: Sandy mud to mixed sediments with <i>Tubificoides benedii</i> and <i>Hediste diversicolor</i> community complex; Sand to mixed sediment with oligochaetes community complex; Sand with <i>Nephytys cirrosa</i> community complex.

Annual vegetation of drift lines [1210]					
Conservation Objective: To maintain the favourable conservation condition of Annual vegetation of drift lines for Courtmacsherry Estuary 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,	No decline, or change in habitat distribution, subject to natural	Maintain the natural circulation of sediment and organic matter,	Maintain the range of coastal habitats including transitional	Maintain the presence of species-poor communities with	Negative indicator species (including non-natives) to represent

including erosion and succession (0.14ha)	processes	without any physical obstructions	zones, subject to natural processes including erosion and succession	typical species: sea rocket, sea sandwort, prickly saltwort and oraches	less than 5% cover
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Perennial vegetation of stony banks					
Conservation Objective: To maintain the favourable conservation condition of Perennial vegetation of stony banks for Courtmacsherry Estuary 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 – nb population of yellow-horned poppy	Negative indicator species (including non-natives) to represent less than 5% cover

<i>Salicornia</i> and other annuals colonising mud and sand					
Conservation Objective: To restore the favourable conservation condition of <i>Salicornia</i> and other annuals colonising mud and sand for Courtmacsherry Estuary SAC					
Attribute/Target					

Habitat Area	Habitat Distribution	Physical Structure: sediment supply	Physical structure: creeks and pans	Physical structure: flooding regime
Area increasing subject to natural processes, including erosion (1.18ha)	No decline or change in habitat distribution subject to natural processes	Maintain or where necessary restore, 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

Salicornia and other annuals colonising mud and sand cont'd				
Conservation Objective: To restore the favourable conservation condition of <i>Salicornia</i> and other annuals colonising mud and sand for Courtmacsherry Estuary SAC				
Attribute/Target				
Vegetation structure: zonation	Vegetation structure: height	Vegetation structure: vegetation cover	Vegetation composition: typical species and sub-communities	Vegetation structure: negative indicator species – <i>Spartan angelica</i>
Maintain the 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 the presence of species-poor communities listed in SMP	No significant expansion of common cordgrass with an annual spread of less than 1% where it is known to occur

Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>)
Conservation Objective: To maintain the favourable conservation condition of Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>)

in the Courtmacsherry Estuary SAC				
Attribute/Target				
Habitat Area	Habitat Distribution	Physical Structure: sediment supply	Physical structure: creeks and pans	Physical structure: flooding regime
Stable or increasing subject to natural processes including erosion and succession – Harbour View-10.79ha	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

Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) cont'd				
Conservation Objective: To maintain the favourable conservation condition of Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) in the Courtmacsherry Estuary SAC				
Attribute/Target				
Vegetation structure: zonation	Vegetation structure: height	Vegetation structure: vegetation cover	Vegetation composition: typical species and sub-communities	Vegetation structure: negative indicator species – <i>Spartina angelica</i>
Maintain the 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 cord grass with an annual spread of less than 1% where it is known to occur

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Mediterranean salt meadows (Juncetalia maritimi) [1410]				
Conservation Objective: To maintain the favourable conservation condition of Mediterranean salt meadows (Juncetalia maritimi) for Courtmacsherry Estuary SAC				
Attribute/Target				
Habitat Area	Habitat Distribution	Physical Structure: sediment supply	Physical structure: creeks and pans	Physical structure: flooding regime
Stable or increasing subject to natural processes including erosion and succession – Harbour View- 3.45ha	No decline subject to natural processes	Maintain/restore 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

Mediterranean salt meadows (Juncetalia maritimi) [1410] cont'd				
Conservation Objective: To maintain the favourable conservation condition of Mediterranean salt meadows (Juncetalia maritimi) for Courtmacsherry Estuary SAC				
Attribute/Target				
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>
Maintain the 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% where it is known to occur

Embryonic shifting dunes [2110]						
Conservation Objective: To maintain the favourable conservation condition of Embryonic shifting dunes for Courtmacsherry Estuary SAC						
Attribute/Target						
Habitat Area	Habitat Distribution	Physical structure: functionality and sediment supply	Vegetation structure: zonation	Vegetation composition: plant health of foredune grasses	Vegetation composition: typical species and sub communities	Vegetation composition: negative indicator species
Area stable or increasing, subject to natural processes, including erosion and succession – Harbour View 0.65ha	No decline, 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	More than 95% of sand couch grass and/or lyme grass should be healthy (i.e. green plant parts above ground and flowering heads present)	Maintain the presence of species poor communities with typical species: sand couch grass and/or lyme grass	Negative indicator species (including non-native species) to represent less than 5% cover

Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120]						
Conservation Objective: To maintain the favourable conservation condition of Shifting dunes along the shoreline with <i>Ammophila arenaria</i> in Courtmacsherry Estuary SAC						
Attribute/Target						

Habitat Area	Habitat Distribution	Physical structure: functionality and sediment supply	Vegetation structure: zonation	Vegetation composition: plant health of dune grasses	Vegetation composition: typical species and sub communities	Vegetation composition: negative indicator species
Area stable or increasing, subject to natural processes, including erosion and succession (0.41ha)	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	95% of marram grass and/or lyme grass should be healthy (i.e. green plant parts above ground and flowering heads present)	Maintain the presence of species poor communities dominated by marram grass and/or lyme grass	Negative indicator species (including non-native species) to represent less than 5% cover

Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]								
Conservation Objective: To maintain the favourable conservation condition Fixed coastal dunes with herbaceous vegetation (grey dunes) in Courtmacsherry Estuary SAC								
Attribute/Target								
Habitat Area	Habitat Distribution	Physical Structure: functionality and sediment supply	Vegetation structure: zonation	Vegetation structure: bare ground	Vegetation structure: sward height	Vegetation composition: typical species and sub-communities	Vegetation composition: negative indicator species	Vegetation composition; scrub/trees
Area stable or increasing, subject to natural processes, including erosion and	No decline, or change in habitat distribution, subject to natural processes	Maintain the natural circulation of sediment and organic matter, without any physical	Maintain the range of coastal habitats including transitional zones, subject	Bare ground should not exceed 10% of fixed dune habitat, subject to natural	Maintain structural variation within sward	Maintain range of sub communities with typical species	Negative indicator species to represent less than 5% cover	No more than 5% cover or under control

succession (4.31ha)		obstructions	to natural processes including erosion and succession	processes				
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NPWS (2014) Conservation Objectives: Courtmacsherry Estuary SAC 1230. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

Cork Harbour SPA 004030

Qualifying Interests

A004	Little Grebe	A056	Shoveler	A160	Curlew
A005	Great Crested Grebe	A069	Red-breasted	A162	Redshank
A017	Cormorant	A130	Oystercatcher	A179	Black-headed Gull
A028	Grey Heron	A140	Golden Plover	A183	Common Gull
A048	Shelduck	A141	Grey Plover	A183	Lesser Black-backed Gull
A050	Wigeon	A142	Lapwing	A193	Common Tern
A052	Teal	A149	Dunlin	A999	Wetland and Waterbirds
A054	Pintail	A156	Black-tailed Godwit		
		A157	Bar-tailed Godwit		

Conservation Objectives

1. To maintain the favourable conservation condition of the following species in the Cork Harbour SPA:

Little Grebe; Great Crested Grebe; Cormorant; Grey Heron; Shelduck; Wigeon; Teal; Pintail; Shoveler; Red-breasted Merganser; Oystercatcher; Golden Plover; Grey Plover; Lapwing; Dunlin; Black-tailed Godwit; Bar-tailed Godwit; Curlew; Redshank; Black-headed Gull; Common Gull and Lesser Black-backed Gull.

The primary targets for each of these species are to

- ensure that the long term population trend is stable or increasing; and
- to ensure that there is no significant decrease in the range, timing or intensity of use of areas by each of these species, other than occurring from natural patterns of variation. Population trends and distribution for each species are available [here](#)

2. To maintain the favourable conservation condition of Common Tern in Cork Harbour SPA.

The primary targets for this species are to ensure that there is no significant decline in

- breeding population;

- productivity rates;
- distribution of breeding colonies; or
- prey biomass availability;

and that there is no significant increase in barriers to connectivity or disturbance at breeding sites.

3. To maintain the favourable conservation condition of the wetland habitat in Cork harbour SPA as a resource for the regularly occurring migratory waterbirds that utilise it.

The primary target for this habitat is that the permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 2,587 ha, other than that occurring from natural patterns of variation.

NPWS (2014) Conservation Objectives for Cork Harbour SPA {4030}. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

Courtmacsherry Bay SPA 4219

Qualifying Interests

A003	Great Northern Diver	A156	Black-tailed Godwit
A048	Shelduck	A157	Bar-tailed Godwit
A050	Wigeon	A160	Curlew
A069	Red-breasted Meranser	A179	Black-headed Gull
A140	Golden Plover	A182	Common Gull
A142	Lapwing	A999	Wetland and Waterbirds
A149	Dunlin		

Conservation Objectives - Attributes and Targets (summary)

A003 Great Northern Diver <i>Gavia immer</i>			
To maintain the favourable conservation condition of Great Northern Diver in Courtmacsherry Bay 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 great northern diver, other than occurring from natural patterns of variation	Waterbird distribution from the 2010/2011 waterbird survey programme is discussed in part five of the conservation objective supporting document.

A048 Shelduck <i>Tadorna tadorna</i>

To maintain the favourable conservation condition of Shelduck in Courtmacsherry Bay 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 Shelduck, other than occurring from natural patterns of variation	Waterbird distribution from the 2010/2011 waterbird survey programme is discussed in part five of the conservation objective supporting document.

A050 Wigeon Anas penelope			
To maintain the favourable conservation condition of Wigeon in Courtmacsherry Bay 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 Wigeon, other than occurring from natural patterns of variation	Waterbird distribution from the 2010/2011 waterbird survey programme is discussed in part five of the conservation objective supporting document.

A069 Red-breasted Merganser Mergus serrator			
To maintain the favourable conservation condition of Red-breasted Merganser in Courtmacsherry Bay 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 Red-breasted merganser, other than occurring from natural patterns of variation	Waterbird distribution from the 2010/2011 waterbird survey programme is discussed in part five of the conservation objective supporting document.

A140 Golden Plover *Pluvialis apricaria*

To maintain the favourable conservation condition of Golden Plover in Courtmacsherry Bay 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 golden plover, other than occurring from natural patterns of variation	Waterbird distribution from the 2010/2011 waterbird survey programme is discussed in part five of the conservation objective supporting document.

A142 Lapwing *Vanellus vanellus*

To maintain the favourable conservation condition of Lapwing in Courtmacsherry Bay 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 occurring from natural patterns of variation	Waterbird distribution from the 2010/2011 waterbird survey programme is discussed in part five of the conservation objective supporting document.

A149 Dunlin <i>Calidris alpina</i>			
To maintain the favourable conservation condition of Dunlin in Courtmacsherry Bay 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 dunlin, other than occurring from natural patterns of variation	Waterbird distribution from the 2010/2011 waterbird survey programme is discussed in part five of the conservation objective supporting document.

A156 Black-tailed Godwit <i>Limosa limosa</i>			
To maintain the favourable conservation condition of Black tailed Godwit in Courtmacsherry Bay 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 black-tailed godwit, other than occurring from natural patterns of variation	Waterbird distribution from the 2010/2011 waterbird survey programme is discussed in part five of the conservation objective supporting document.

A157 Bar-tailed Godwit *Limosa lapponica*

To maintain the favourable conservation condition of Bar-tailed Godwit in Courtmacsherry Bay 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 bar-tailed godwit, other than occurring from natural patterns of variation	Waterbird distribution from the 2010/2011 waterbird survey programme is discussed in part five of the conservation objective supporting document.

A160 Curlew Numenius arquata			
To maintain the favourable conservation condition of Curlew in Courtmacsherry Bay 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 curlew, other than occurring from natural patterns of variation	Waterbird distribution from the 2010/2011 waterbird survey programme is discussed in part five of the conservation objective supporting document.

A179 Black-headed Gull Chroicocephalus ridibundus			
To maintain the favourable conservation condition of Black-headed Gull in Courtmacsherry Bay 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 black-headed gull, other than occurring from natural patterns of	Waterbird distribution from the 2010/2011 waterbird survey programme is discussed in part five of the conservation objective supporting document.

		variation	
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A182 Common Gull Larus canus			
To maintain the favourable conservation condition of Common Gull in Courtmacsherry Bay 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 common gull, other than occurring from natural patterns of variation	Waterbird distribution from the 2010/2011 waterbird survey programme is discussed in part five of the conservation objective supporting document.

A999 Wetlands			
To maintain the favourable conservation condition of wetland habitats in Courtmacsherry Bay SPA, as a recourse for the regularly – occurring migratory waterbirds 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 wetland habitat should be stable and not significantly less than the area of 1,299	The wetland habitat area was estimated as 1,299ha using OSI data and relevant orthophotographs. For further information see part three of the conservation objectives supporting documents.

		hectares, other than that occurring from natural patterns of variation.	
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