



**Rosslare Harbour and Kilrane
Local Area Plan
2012 - 2018**



**Strategic Environmental Assessment
Statement**



Wexford County Council
Planning & Development

Table of Contents

Section 1	Introduction	1
Section 2	Summary of how environmental considerations and the Environmental Report were integrated into the Plan	6
Section 3	Summary of how submissions, observations and consultations were taken into account during the preparation of the Plan	14
Section 4	Reasons for choosing the Plan as adopted, in light of other reasonable alternatives considered	16
Section 5	Monitoring Measures	20

Acronyms

AA	Appropriate Assessment
CDB	County Development Board
CDP	County Development Plan
CSO	Central Statistics Office
DCENR	Department of Communications, Energy and Natural Resources
DECLG	Department of Environment, Community and Local Government
DEHLG	Department of Environment, Heritage and Local Government
EPA	Environmental Protection Agency
GSI	Geological Survey of Ireland
IROPI	Imperative Reasons of Overriding Public Interest
LAP	Local Area Plan
MI	Marine Institute
NIR	Natura Impact Report
NMS	National Monuments Service
NPWS	National Parks and Wildlife Service
NRA	National Roads Authority
NSS	National Spatial Strategy 2002-2020
PFRA	Preliminary Flood Risk Assessment
RPGs	Regional Planning Guidelines for the South East Region 2010-2022
SEA	Strategic Environmental Assessment
SEO	Strategic Environmental Objective
SFRA	Strategic Flood Risk Assessment
WCC	Wexford County Council
WEMA	Wexford Energy Management Agency

Section 1 - Introduction

Introduction

This document is the Strategic Environmental Assessment (SEA) Statement for the Rosslare Harbour and Kilrane Local Area Plan 2012-2018. The SEA Statement has been prepared in accordance with Article 9(1) of the SEA Directive and Article 14(l)(1) of the Planning and Development (SEA) Regulations 2004 (as amended). This document identifies how the SEA process was taken into account in the preparation of the Plan and how it influenced the decision-making process.

Background to SEA

On the 5th June 2001, the European Council adopted Directive 2001/42/EC on the Assessment of the Effects of Certain Plans and Programmes on the Environment (the SEA Directive) which took effect in member states on the 21st July 2004. The Directive was transposed into Irish Law through two sets of Regulations as follows:

- European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. 435 of 2004), amended by the European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011 (S.I. No. 200 of 2011); and
- Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. 436 of 2004), amended by the Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011 (S.I. No. 201 of 2011).

The Directive requires all European Union member States to systematically evaluate the likely significant effects of implementing a plan or programme prior to its adoption. Land-use plans are evaluated in accordance with the Planning and Development (SEA) Regulations 2004 (as amended).

Summary of SEA Process

The Rosslare Harbour and Kilrane Local Area Plan 2012-2018 was subject to a process of SEA which included the following key stages:

Screening

The Planning and Development (SEA) Regulations 2004 (as amended) require SEA to be carried out in respect of a Local Area Plan (LAP) where the population of the area is 5,000 persons or more, where the area covered by the Plan is more than 50 square kilometres or where the Plan is for a town and its environs. In all other cases, SEA must be carried out where it is considered that the Plan would be likely to have significant effects on the environment. This is determined through a screening process.

A screening process was undertaken before the preparation of the Draft Rosslare Harbour and Kilrane LAP. The screening process concluded that the Plan would be likely to have significant effects on the environment and SEA was therefore required to be carried out in parallel with its formulation.

Scoping and Statutory Consultation

The purpose of scoping is to determine the level of detail to be included in the Environmental Report. It helps the SEA to become focused upon the important issues such as those relating to existing environmental problems.

Initial scoping took place with the prescribed Environmental Authorities in February/March 2011. A Draft Scoping Report was sent to the Authorities and they were given a five week period to make submissions and observations. Submissions were received from the Department of Environment, Heritage and Local Government (DEHLG), the Department of Communications, Energy and Natural Resources (DCENR) and the Environmental Protection Agency (EPA) regarding the information to be contained in the Environmental Report. The points raised in the submissions were factored into the Environmental Report where appropriate.

Preparation of Environmental Report

The preparation of an Environmental Report on the likely significant effects on the environment of implementing the Plan included documenting the following:

- An outline of the contents and main objectives of the Plan, and of its relationship with other relevant plans and programmes;
- A description of relevant aspects of the current state of the environment and the evolution of the environment without implementation of the Plan;
- A description of the environmental characteristics of areas likely to be significantly affected;
- Identification of any existing environmental problems which are relevant to the Plan, particularly those relating to European protected sites;
- A list of the environmental protection objectives at international, EU and national level, which are relevant to the Plan and a description of how they have been taken into account in the formulation of the Plan;
- A description of the likely significant effects on the environment (biodiversity, human health, cultural heritage, air, soil, water etc);
- Mitigation measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment caused by implementing the Plan;
- An outline of the reasons for selecting the alternatives considered and a description of how the assessment was undertaken, including any difficulties encountered in compiling the required information;
- A description of proposed monitoring measures;
- A non-technical summary of the above information.

The purpose of the Environmental Report is to document the likely environmental implications or consequences of decisions regarding the future accommodation of growth in the plan area. The Environmental Report is presented as an appendix to the Plan.

Statutory Consultation on the Draft Plan and Environmental Report

In accordance with the Planning and Development Act 2000 (as amended) and the Planning and Development (SEA) Regulations 2004 (as amended), consultation took place with the Minister, the Board, the prescribed authorities (including environmental authorities) and the public. Copies of the Draft Plan and Environmental Report were sent to the Minister, the Board and prescribed authorities and were placed on public display for a period of six weeks. During this time 22 submissions were made to the Planning Authority. The submissions were taken into account and Material Alterations to the Draft Plan were subsequently proposed by the Members. The proposed alterations were screened for SEA. The SEA Screening Report concluded that the proposed alterations would not have any likely significant effects on the environment in addition to those identified in the Environmental Report for the Draft LAP.

Copies of the proposed alterations and SEA Screening Report were sent to the Minister, the Board and prescribed authorities and were placed on public display for a period of four weeks. During this time seven submissions were made to the Planning Authority. Four of these submissions related to the proposed alterations and were taken into consideration. Following consideration of these submissions the Plan was adopted with all of the Material Alterations on 13th February 2012. The Elected Members were required by legislation to take into account the Environmental Report before the making of the Plan.

Preparation of SEA Statement

This SEA Statement was prepared following the adoption of the Plan. The SEA Statement provides information on how the Environmental Report and submissions/consultations were taken into account in the decision-making process. It also includes a summary of the measures which will put in place to monitor the significant environmental effects of implementing the Plan.

Monitoring

Monitoring of the implementation of the Rosslare Harbour and Kilrane LAP will be undertaken for the duration of the Plan. The overall objective of this stage

of the SEA process is to monitor the significant environmental effects during the implementation of the Plan so as “to identify at an early stage unforeseen adverse effects and to be able to undertake appropriate remedial action” (Article 10(1) of the SEA Directive 2001/42/EC).

Purpose of SEA Statement

The main purpose of the SEA Statement is to document how environmental considerations, the views of statutory consultees and other submissions and observations received during the consultation phases have been taken into account during the preparation of the Plan and the arrangements put in place for monitoring. The SEA Statement provides transparency and accountability, by informing the public of how environmental effects were considered in the decision-making process. The SEA Statement must be sent to the prescribed authorities with a copy of the Plan as adopted and be made available to the public.

The SEA Statement includes the following information:

- Summary of how environmental considerations have been integrated into the Plan;
- Summary of how the Environmental Report and submissions/ observations received during consultation have been taken into account in the Plan;
- Reasons for choosing the plan, as adopted, in the light of the other reasonable alternatives considered; and
- Measures that are to be undertaken to monitor the significant environmental effects of implementing the Plan.

Section 2 - Summary of how environmental considerations and the Environmental Report were integrated into the Plan

The environment has been a key consideration throughout the preparation of the Plan. The SEA scoping process identified a range of issues which required particular attention in the preparation of the Plan such as architectural and archaeological heritage, nature conservation, water quality, landscape character (including seascape) and flood risk. As a result, the Council formulated specific policies and objectives in the Plan. The SEA Environmental Report and Natura Impact Report (NIR), carried out as part of the Appropriate Assessment (AA), were used to evaluate these policies and objectives in order to maximise potential positive impacts and reduce potential negative impacts on the environment.

The Environmental Report includes a set of Strategic Environmental Objectives (SEOs) which were developed from international, national and regional policies which generally govern environmental protection. The SEOs were used as standards against which the policies and objectives of the Plan were evaluated in order to highlight those with the potential for environmental impact. The SEOs are shown in Table 1 below.

Table 1: Strategic Environmental Objectives (SEOs)

Biodiversity, Flora & Fauna	B1	To avoid loss of habitats and flora and fauna in designated wildlife sites.
	B2	To avoid significant adverse impacts, including direct, cumulative and indirect impacts, by development within and outside designated wildlife sites to habitats and flora and fauna within these sites.
	B3	Conserve, protect and avoid loss of diversity and integrity of non-designated habitats, species or their sustaining resources in non-designated ecological sites.

	B4	To prevent the loss of ecological corridors, networks or parts there of which provide significant connectivity between areas of local biodiversity.
Population & Human Health	P1	To improve people's quality of life based on high quality living environments, working and recreational facilities.
	P2	To reduce the risk of flooding and harm to people, property and the environment.
	P3	To protect human health from hazards or nuisances arising from exposure to incompatible land uses/developments.
	P4	To improve travel choice and accessibility, reduce the need for travel by car and shorten the length and duration of journeys.
Soil	S1	To maintain the quality of soils.
	S2	To maximise the sustainable re-use of brownfield lands and give preference to the re-use of brownfield lands.
	S3	To minimise the amount of waste to landfill.
Water	W1	To maintain or improve the quality of surface water (including coastal and estuarine) to status objectives as set out in the Water Framework Directive and the South Eastern River Basin Management Plan (2009-2015).
	W2	To prevent pollution and contamination of ground water.
	W3	To promote sustainable water use based on long-term protection of available water resources.
	W4	To maintain and improve the quality of drinking water supplies.
Air & Climatic Factors	A1	Reduce all forms of air pollution and reduce dependence on travel by private car.
	A2	Promote energy conservation and the development of renewable energy sources.
Material Assets	M1	Maintain the quality of, and access to, assets such as open spaces, water resources and all other physical and social infrastructure.
Cultural Heritage	C1	To promote the protection and conservation of the cultural, including architectural and archaeological, heritage.

Landscape	L1	To conserve and enhance valued natural landscapes, including seascape, and features within them.
	L2	To protect and enhance town and village character.

Three development alternatives were considered and are summarised in Section 4 of this Statement. The alternatives were evaluated to determine how they would likely affect the status of the SEOs. After deciding on the preferred development strategy a number of mitigation measures were subsequently outlined in the Environmental Report. Mitigation measures are measures envisaged to prevent, reduce and as fully as possible offset any significant adverse impacts on the environment of implementing the Plan. The mitigation measures are shown in Table 2 below.

Table 2: Mitigation Measures

Biodiversity	MM1	Land within the plan area which is adjacent to the Carnsore Point SAC to be zoned as open space prohibiting non-compatible developments.
	MM2	HDA required for any proposed developments likely to have an impact on the Natura 2000 site network.
	MM3	Include policies for the protection of important habitats and species outside of the designated ecological sites.
	MM4	Include policies to retain existing hedgerows, trees and traditional field boundaries which provide important ecological networks.
	MM5	Protect riparian zones and natural land drains by maintaining an appropriately sized buffer zone (minimum 5-10m) along all watercourses and land drains, with no infilling or removal of vegetation within these buffer zones.
Population and Human Health	MM6	Include policies and objectives for the delivery of high quality infrastructural, social and community facilities to serve the existing and future population of the area.
	MM7	Zone for compatible uses in areas identified as having high probability of flooding (Zone A) and mitigate the risk of

		flooding through layout and design of new developments.
	MM8	Provide appropriate buffer zones/open space between potentially conflicting land uses and have regard to any strategic noise maps for the area.
	MM9	Include policies which aim to reduce the number and length of car journeys by encouraging cycling, walking and use of public transport and locate land uses having regard to their accessibility requirements.
Soil	MM10	To give preference to the development of brownfield sites.
	MM11	Promote the implementation of the Joint Waste Management Plan for the South East 2006-2011 together with any future Waste Management Plans. This includes waste prevention, minimisation, reuse, recycling and recovery as methods of managing waste.
Water	MM12	Protect and improve water quality in accordance with the measures set out in the South Eastern River Basin Management Plan (2009-2015) and the Pollution Reduction Programme for the Waterford Harbour Shellfish Area.
	MM13	Protect existing groundwater aquifers and surface waters from pollution.
	MM14	Promote public awareness on the maintenance of water quality and its economic and sustainable use.
	MM15	Zone for compatible uses in areas identified as having high probability of flooding (Zone A) and mitigate the risk of flooding through layout and design of new developments.
	MM16	Protect and improve natural drainage systems where possible and in the case of development works require the provision of acceptable mitigation measures in order to minimise the risk of flooding and negative impacts on water quality.
	MM17	Require the provision of adequate storm water retention facilities in all new developments, including the use of soft landscaping and sustainable drainage techniques.

	MM18	Ensure that development should not itself be subject to an inappropriate risk of flooding nor should it cause or exacerbate such a risk at other locations.
Air	MM19	Require all new building developments to meet low energy performance targets.
Material Assets	MM20	Ensure that adequate infrastructure is available to serve the existing and future population of the area.
	MM21	Ensure the provision of, and access to, high quality open spaces, play areas and community facilities.
Cultural Heritage	MM22	Prohibit development that would negatively impact of the architectural, archaeological and natural heritage of the area.
Landscape	MM23	Promote high-quality developments along the seafront and ensure that new development does not detract from important views and vistas.
	MM24	Ensure that new development does not detract from the character and heritage of the town.

The mitigation measures have been incorporated into the Plan and the policies and objectives refined and refocused where necessary. Table 4 below identifies the policies and objectives in the Plan which have been influenced by the mitigation measures contained in the Environmental Report.

Table 3: Incorporation of Mitigation Measures into the Plan

	Mitigation Measure	Policies & Objectives in LAP
Biodiversity, Flora & Fauna	MM1	Zoning Map and Land Use Zoning Matrix contained in Section 4.6
	MM2	Section 1.8 – Appropriate Assessment Section 5.8 – Amenity, Recreation & Open Space - Objectives ARO2, ARO5, ARO6, ARO7 & ARO8 Section 5.9 – Tourism - Policy 8 Section 5.10.3 - Natural Heritage - Policy 3 Section 5.11 - Transport - Policy 3
	MM3	Section 5.10.3 – Natural Heritage – Policy 2 & 6
	MM4	Section 5.3 – Housing – Objective H5 Section 5.8 – Amenity, Recreation & Open Space – Policy 6 Section 5.10.3 – Natural Heritage – Policy 5
	MM5	Section 5.10.3 – Natural Heritage – Policy 4
	MM6	Section 5.3.2 – Housing – Objective H4 Section 5.7 – Community Facilities – Policies 1 & 2, Objective C1 Section 5.7.1 – Educational Facilities – Policy 1 Section 5.7.2 – Childcare Facilities – Policies 1 & 2 Section 5.8 – Amenity, Recreation & Open Space – Policies 1, 2, 3 & 9, Objectives ARO2 – ARO8 Section 5.11 – Transport – Policies 6 & 7, Objectives T1-T6 Section 5.12 – Wastewater Treatment & Water Supply – Policy 1
Population & Human Health	MM7	Appendix 3 - Strategic Flood Risk Assessment Zoning Map and Land Use Zoning Matrix contained in Section 4.6 Section 5.14 – Flooding & Surface Water Disposal – Policies 1-4
	MM8	Zoning Map and Land Use Zoning Matrix contained in Section 4.6

Soil	MM9	Section 5.11 – Transport – Policies 6, 7 & 9, Objectives T4 & T5	
	MM10	Section 4.4.3 - Phasing of Development Section 5.3.2 - Future Residential Development – Policy 3 Section 5.5 - Retail and Commercial – Policy 5 Section 5.6 – Town Centre – Policy 3	
	MM11	Section 5.15 – Waste Management – Policies 1 & 2	
	MM12	Section 5.10.3 - Natural Heritage – Policy 6 Section 5.11 – Transport – Policy 3	
	MM13	Section 5.12 - Wastewater Treatment & Water Supply – Policy 2	
	MM14	Section 5.12 - Wastewater Treatment & Water Supply – Policy 4	
	Water	MM15	Appendix 3 - Strategic Flood Risk Assessment Zoning Map and Land Use Zoning Matrix contained in Section 4.6 Section 5.14 - Flooding and Surface Water Disposal – Policy 3
		MM16	Section 5.14 - Flooding and Surface Water Disposal – Policy 2
		MM17	Section 5.14 - Flooding and Surface Water Disposal – Policy 4
		MM18	Section 5.14 - Flooding and Surface Water Disposal – Policy 1
Air	MM19	Section 5.2 - Sustainable Development – Policies 1, 2 & 3 Section 5.3.3 - Residential Density – Policy 1	
	MM20	Section 5.12 - Wastewater Treatment & Water Supply – Policy 1	

Material Assets	MM21	Section 5.3.2 - Future Residential Development – Objective H4 Section 5.7 – Community Facilities – Policies 1 & 2, Objective C1 Section 5.7.1 – Education Facilities – Policy 1 Section 5.7.2 – Childcare Facilities – Policy 1 & 2 Section 5.8 – Amenity, Recreation & Open Space -Policies 1-4, 7 & 9, Objectives ARO1-ARO8	
	MM22	Section 5.10.1 – Architectural Heritage – Policies 1, 2 & 3 Section 5.10.2 – Archaeological Heritage – Policies 1 & 2 Section 5.10.3 – Natural Heritage – Policies 1-6	
	MM23	Section 3.2.7 – Views to Protect Section 5.8 – Amenity, Recreation & Open Space – Policy 8	
	Landscape	MM24	Section 3.2.3 – Buildings in the town Section 3.2.5 – Infill Development Opportunities Section 3.2.6 – Other Urban Design Elements Section 5.3.4 – Infill and Backland Development Section 5.5 - Retail and Commercial – Policies 4 & 5

Section 3 - Summary of how submissions, observations and consultations were taken into account during the preparation of the Plan

In accordance with the Planning and Development Act 2000 (as amended) and the Planning and Development (SEA) Regulations 2004 (as amended), consultation took place with the Minister, the Board, the prescribed authorities (including environmental authorities) and the public. Copies of the Draft Plan and Environmental Report were sent to the Minister, the Board and prescribed authorities and were placed on public display for a period of six weeks. During this time 22 submissions were made to the Planning Authority. All of the submissions received within the public display period were taken into account and Material Alterations to the Draft Plan were subsequently proposed by the Members.

The alterations comprised of:

- Seven changes to the zoning objectives, including the insertion of a buffer zone around industry and light industry land use zonings.
- The inclusion in the Plan of a statement highlighting that possible future projects facilitated under the Plan, such as expansion of the Europort and coastal protection works, will be subject to Appropriate Assessment and compliance with the Habitats Directive, and may need to proceed to stage 3 alternatives or stage 4 IROPI if adequate mitigation is not possible.
- Alteration of amenity, recreation and open space policy to ensure that, where removal of hedgerow is required to accommodate new development, compensatory green infrastructures should be incorporated into the design of new developments as appropriate.
- Reference in the Plan and Environmental Report to the presence of the Bee Orchid and Black Guillemot nesting grounds within the plan area.
- Inclusion of a footnote stating that whilst the provision of rail freight is an objective of the Plan, it is not a pre-condition of the development of LoLo traffic at Rosslare Europort.

- Alteration of transport policy to restrict access onto the proposed national road network in the plan area.
- Insertion of a new transport policy to require the submission of a Traffic and Transport Assessment and/or Road Safety Audit for developments with the potential to create significant additional demands on the transport network by virtue of the nature of their activity, the number of employees, their location or a combination of these factors and for significant developments affecting National roads.
- Inclusion in Objective T2 (road upgrades) of L-3064 from junction with N25 at Kilrane to St. Aidan's Cemetery.
- Reference in the Environmental Report to the SEA amending regulations and Waste Water Discharge (Authorisation) Regulations.
- Inclusion in the Strategic Flood Risk Assessment (SFRA) of the Preliminary Flood Risk Assessment (PFRA) maps received from the OPW in October 2011 and revision of justification test to address the zoning of lands at Ballygerry.

The proposed alterations were screened for SEA. The SEA Screening Report concluded that the proposed alterations would not have any likely significant effects on the environment in addition to those identified in the Environmental Report for the Draft Plan.

Copies of the proposed alterations and SEA Screening Report were sent to the Minister, the Board and prescribed authorities and were placed on public display for a period of four weeks. During this time seven submissions were made to the Planning Authority. Four of these submissions related to the proposed alterations and were taken into consideration. The Plan was made with all of the Material Alterations on 13th February 2012.

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

Consideration of Alternatives

The SEA Directive requires that reasonable alternatives, taking into account the objectives and the geographical scope of the plan or programme are identified, described and evaluated for their likely significant effects on the environment. As part of the plan process three alternatives were considered. The LAP is framed in the policy context of the Wexford County Development Plan 2007-2013 (CDP), the Regional Planning Guidelines for the South East Region 2010-2022 (RPGs) and the National Spatial Strategy (NSS). As such, strategic options are limited. The population targets, and therefore future land requirements, are set by the Core Strategy contained in the CDP. Hence the alternatives that were considered for the Plan generally focus on the location of new development.

The first scenario would see the zoning objectives of the Rosslare Harbour and Kilrane LAP 2002 carried forward. This scenario could see further sporadic housing developments on the outskirts of the town with poor linkages to the town centre, community facilities and public transport nodes. Opportunities for infill development and renewal of derelict sites in the town centre would not be taken up as greenfield development would be likely pursued. There would also be significant and widespread deterioration of the character of the edges of the town.

The second scenario involves the redevelopment and renewal of brownfield sites within the town centre and surrounding areas. These brownfield sites, together with the unfinished housing estates, would be used to accommodate future growth in the town. This strategy promotes the development of a compact urban form that would maximise the efficient use of land. It also targets derelict sites and aims to improve the overall townscape. The drawback with this scenario is the availability and adequacy of these lands to accommodate a major employer if they looked to set up in the town. In

addition the majority of brownfield sites are located in the town centre area and are more suited to mixed use developments. This scenario could therefore result in an inadequate supply of suitable and available land for new housing and industrial developments /port-related activity envisaged for the town.

The third scenario involves the sequential development of greenfield lands but development of brownfield sites would also be encouraged. Enough greenfield land would be zoned to accommodate the population targets set for the area under the CDP, as well as growth associated with the Europort. Greenfield lands in the centre of the plan area would be zoned over edge of town sites in order to create a compact urban form with efficient use of infrastructure and services. Sufficient town centre sites would be reserved for the provision of community facilities and public open spaces. Existing circulation routes would be connected by a small number of new linking routes with pedestrian and cycle linkages a key consideration in any development.

Evaluation of Alternatives

The alternatives were evaluated to determine how they would likely affect the status of the SEOs. This evaluation was carried out in matrix format as shown in Table 4 below.

Table 4: Summary of Alternatives Assessed Against SEOs

	No Significant Impact	Potential Positive Impact	Potential Negative Impact	Uncertain Impact
Alternative Scenario 1	B1, S3, W2, W3, W4, A2 , M1, L2		P1, P2, P3, P4, S1, S2, A1	B2, B3, B4, W1, C1, L1
Alternative Scenario 2	B1, B2, B3, B4, P2, S3, W2, W3, W4, A2, M1, L1	P1, P3, P4, S1, S2, A1, L2		W1, C1
Alternative Scenario 3	B1, B3, S1, S3, W2, W3, W4, A2, M1	P1, P3, P4, S2, A1, L2	P2	B2, B3, B4, W1, C1, L1

Reason for Choosing the Preferred Alternative

It was considered that alternative scenario 1 would provide excess lands required to meet the population targets assigned to the area under the CDP. In addition it was considered to have the most potential negative impacts on the SEOs. Alternative scenario 2, although providing the most beneficial impacts on the SEOs, would not provide sufficient lands to accommodate the projected growth during the plan period. Alternative 3 was therefore chosen as the preferred development strategy and forms the basis for the development strategy in the LAP.

This strategy promotes the development of brownfield sites and allows for the sequential development of greenfield lands subject to the provision of appropriate infrastructure on a planned and phased basis. Greenfield lands in the centre of the plan area are zoned over edge of town sites in order to create a compact urban form with efficient use of infrastructure and services. Sufficient land is zoned to accommodate growth allocated to the area under the CDP. This is considered the most sustainable alternative having regard to

the population targets for the area and the potential growth associated with the Europort.

Section 5 - Monitoring Measures

Introduction

Article 10 of the SEA Directive requires that monitoring be carried out in order to identify at an early stage any unforeseen adverse effects due to the implementation of the Plan and to be able to undertake appropriate remedial action. Monitoring is a key element of the effective implementation of the LAP. Its purpose is to cross check significant effects which arise during the implementation stage of the Plan against those predicted during the preparation stage. Monitoring can also be used to fill gaps identified at the baseline, impact prediction and evaluation stages.

Monitoring is based on indicators which measure changes to the environment. The following list of indicators has been devised following consultation with the Environmental Authorities and having regard to the availability of resources and relevance of the indicators to monitor the environmental baseline. The indicators allow quantitative measures of trends and progress over time relating to the SEOs used in the evaluation. Focus is given to indicators which are relevant to the likely significant environmental effects of implementing the Plan and existing monitoring arrangements are used in order to monitor the selected indicators where possible.

Monitoring Sources

CDB – County Development Board

CSO – Central Statistics Office

EPA – Environmental Protection Agency

GSI – Geological Survey of Ireland

MI – Marine Institute

NMS – National Monuments Service

NPWS – National Parks & Wildlife Service

NRA – National Roads Authority

WCC – Wexford County Council

WEMA - Wexford Energy Management Agency

Table 5: List of Monitoring Indicators and Targets

	Environmental Objectives	Targets	Indicators	Monitoring Source
Biodiversity, Flora and Fauna	B1: To avoid loss of habitats and flora and fauna in designated wildlife sites.	Maintenance of favourable conservation status for all habitats and species protected under national and international legislation.	Conservation status of habitats and species as assessed under Article 17 of the Habitats Directive.	NPWS, WCC
	B2: To avoid significant adverse impacts, including direct, cumulative and indirect impacts, by development within and outside designated wildlife sites to habitats and flora and fauna within these sites.	No significant impacts by development within and outside designated wildlife sites to habitats and flora and fauna within these sites during lifetime of the Plan.	Number of significant impacts by development within and outside designated wildlife sites to habitats and flora & fauna within these sites.	NPWS, WCC
	B3: Conserve, protect and avoid loss of diversity and integrity of non-designated habitats, species or their sustaining resources in non-designated ecological sites.	No/reduced loss of hedgerows.	Number of significant impacts by development to non-designated habitats and species.	NPWS, WCC
	B4: To prevent the loss of ecological corridors, networks or parts thereof which provide significant connectivity between areas of local biodiversity.	No ecological networks or parts thereof which provide significant connectivity between areas of local biodiversity to be lost without remediation as a result of implementation of the Plan.	Percentage loss of connectivity between areas of local biodiversity as a result of implementation of the Plan.	NPWS, WCC
Population and Human Health	P1: To improve people's quality of life based on high quality living environments, working and recreational facilities.	<p>No significant deterioration in human health as a result of environmental factors.</p> <p>Increase employment opportunities in the plan area.</p> <p>Increase in the number of green spaces and amenities available to the public.</p> <p>Bonds to ensure the completion of developments until taken in charge.</p>	<p>Occurrence of any decline in human health in or adjacent to the plan area.</p> <p>Employment rates over the lifetime of the Plan.</p> <p>No. or area of green spaces and amenities available to the public.</p> <p>Completion/no. of developments taken in charge.</p>	WCC, CDB, CSO

	Environmental Objectives	Targets	Indicators	Monitoring Source
	P2: To reduce the risk of flooding and harm to people, property and the environment.	Reduction in incidents of flood damage to properties. No highly vulnerable development to be permitted in flood zones A and B or where such development is permitted, to be mitigated through siting, layout and design.	Properties at risk of flooding. Type of development in Flood Zones A and B.	WCC
	P3: To protect human health from hazards or nuisances arising from exposure to incompatible land uses/developments.	Conflicting land uses (if any) to be separated by appropriately sized buffer zones. Noise levels for new developments not to exceed 55 dB.	Distance between conflicting land uses. Noise monitoring.	EPA, WCC
	P4: To improve travel choice and accessibility, reduce the need for travel by car and shorten the length and duration of journeys.	Reduce road traffic in line with <i>Smarter Travel - A Sustainable Transport Future</i> . Increased investment in walkways and cycle paths.	Average daily motor vehicle flows. Proportion of travel by mode. Monetary investment in bus and rail travel, walking and cycling routes.	WCC, NRA, CSO
	S1: To maintain the quality of soils.		Filling of lands for development to be accompanied by waste permit licences where required. Historic landfill to undergo a full risk assessment and any necessary remedial actions to be carried out. Waste management plans to be carried out for large developments and/or demolition of structures which are likely to contain hazardous material.	Waste permit licences granted. Remediation works carried out on landfill. Waste Management Plans.
S2: To maximise the sustainable re-use of brownfield lands and give preference to the re-use of brownfield lands.		All brownfield land to be redeveloped by the end of the plan period.	Area of brownfield land available.	WCC

	Environmental Objectives	Targets	Indicators	Monitoring Source
	S3: To minimise the amount of waste to landfill.	Reduction in the quantities of waste sent to landfill. Increase in the quantities of waste sent for recycling. Increase no. of bring banks in the plan area.	Quantity of household waste sent to landfill. Quantity of household waste sent for recycling. No. of bring centres provide in the plan area.	EPA, WCC
Water	W1: To maintain or improve the quality of surface water (including coastal and estuarine) to status objectives as set out in the Water Framework Directive and the South Eastern River Basin Management Plan (2009-2015).	Improvement or at least no deterioration in surface water quality by 2015.	Changes in receiving water quality as identified during water quality monitoring for WFD, SERBD & POMS.	EPA, MI, WCC
	W2: To prevent pollution and contamination of ground water.	Improvement or at least no deterioration in groundwater quality by 2015. Implementation of Ground Water Protection Scheme for County Wexford.	Changes in groundwater quality.	EPA, GSI, WCC
	W3: To promote sustainable water use based on long-term protection of available water resources.	Implement the Water Conservation Programme.	Water Conservation Programme.	EPA, WCC
	W4: To maintain and improve the quality of drinking water supplies.	Improvement in levels of compliance with drinking water quality standards.	Any WTP upgrade.	EPA, WCC
Air & Climatic Factors	A1: Reduce all forms of air pollution and reduce dependence on travel by private car.	Maintain/improve air quality within Air Quality index bands; Reduce road traffic in line with <i>Smarter Travel - A Sustainable Transport Future</i> ; Increased investment in walkways.	Change in Air Quality; Average daily motor vehicle flows; Proportion of travel by mode; Monetary investment in bus and rail travel, and walking routes.	EPA, WCC, NRA, CSO
	A2: Promote energy conservation and the development of renewable energy sources.	Require all new building developments to meet low energy performance targets.	Increased use of Building Energy Rating (BER).	WCC

	Environmental Objectives	Targets	Indicators	Monitoring Source
		Develop Rosslare Europort as a centre to support the renewable energy industry with potential for wind, wave, tidal and electric vehicles development.	No. of developments which support the renewable energy industry.	
Material Assets	M1: Maintain the quality of, and access to, assets such as open spaces, water resources and all other physical and social infrastructure.	Maintenance of walkways and public rights-of-way. Integration of road, rail and maritime services. Provision of adequate water and wastewater infrastructure.	Maintenance of walkways and public rights-of-way. Integration of road, rail and maritime services. WWTP & WTP upgrades.	WCC
Cultural Heritage	C1: To promote the protection and conservation of the cultural heritage, including architectural and archaeological heritage.	No development permitted during the lifetime of the Plan which will result in the loss/partial loss of protected structures or sites of archaeological importance.	Number of protected structures or archaeological monuments damaged due to development.	NMS, WCC
Landscape	L1: To conserve and enhance valued natural landscapes, including seascape, and features within them.	Ensure no significant disruption of important views or vistas. Brownfield sites along cliff top to be redeveloped and enhanced, ensuring that seascape views are not adversely affected.	Design, height, scale and no. of new developments along the cliff top.	WCC
	L2: To protect and enhance town and village character	Ensure that new development in the town centre does not detract from the character of the area.	No. and type of developments permitted in the town centre.	WCC