

STRATEGIC ENVIRONMENTAL ASSESSMENT
ENVIRONMENTAL REPORT
BUNCLODY LOCAL AREA PLAN 2009-2015



Wexford County Council

14th April 2009

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NON TECHNICAL SUMMARY

This is the Non-Technical Summary to the Environmental Report on the Bunclody Local Area Plan 2009-2015. The purpose of the Environmental report is to provide the Elected members of Wexford County Council with a clear understanding of the likely environmental consequences of decisions regarding the future accommodation of growth in the Bunclody area.

Purpose of Environmental Report

Strategic Environmental Assessment (SEA) is a process to ensure that significant environmental effects arising from policies, plans and programmes are identified, assessed, mitigated, communicated to decision-makers, and monitored. The purpose of the environmental report is to identify, evaluate and describe the likely significant effects on the environment of implementing the Bunclody Local Area Plan 2009-2015. The environmental report is the primary element in the SEA process and is recognised as a key mechanism in promoting sustainable development. The purpose of this Non-technical Summary is to ensure that the key issues and findings of the Environmental Report can be readily understood.

Methodology

On the 21st February 2008 Wexford County Council commenced the preparation of the Bunclody Local Area Plan for the period 2009-2015, with the public notice advertisement in all local papers. This advertisement included the notification that a SEA was also being carried out in conjunction with the plan. The Planning and Development (SEA) Regulations 2004 require that SEA be carried out in respect of Town Development Plans where the population of the area is 10,000 persons or more. Where the population involved is less than 10,000, the EU Directive requires a screening of the Plan. The key in deciding if SEA will apply will be whether the plan would be likely to have significant effects on the environment. The decision should not be determined by the size of an area alone. It will also be influenced by nature

and extent of the development likely to be proposed in the plan and its location (e.g. close to or within an SAC, SPA or NHA), and its broad environmental effects. Following the screening process it was decided that an SEA would be required.

The SEA process involved consulting the relevant statutory agencies. This was an important first step in the SEA process in order to scope the extent and type of information that should be contained in the environmental report. Through the scoping exercise of the SEA for the Bunclody Local Area Plan the significant impacts predicted include those relating to;

Biodiversity

Flooding / Climatic Factors

Wastewater treatment capacity

Cultural Heritage

Other key issues include the following; water quality, landscape, townscape, riverscapes, waste management, traffic management, public transport, car parking, amenity open space and tourism. The baseline data collection stage involved the collation of currently available and relevant environmental data. The environmental report also considers the relationship between the Bunclody Local Area Plan and other plans and policies and assesses the impact of its objectives and strategies. The Bunclody Local Area Plan is considered to be compliant with National and Regional guidance such as the National Spatial Strategy 2002-2020 and the Regional Planning Guidelines 2004 – 2016.

Baseline Data

In order to identify, describe and evaluate the likely significant environmental effects of implementing the Bunclody Local Area Plan, relevant aspects of the environmental baseline, the current state of the environment, were identified and evaluated. This information has been derived from statutory agencies, internal departments in the Council, the internet, local and national publications and planning applications. No additional studies were

commissioned by the Council for the purposes of Strategic Environmental Assessment of the Plan. The detailed baseline description of the environment can be found under Chapter 3.

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 Bunclody Local Area Plan process a range of alternatives including the 'do-nothing' scenario were considered for the development of the Local Area Plan area and are detailed in the Environmental Report. These are discussed in further detail in Chapter 6.

Environmental Assessment

The environmental assessment of objectives of the Bunclody Local Area Plan are the central component of the Report (Chapter 7). The methodology used in the Report comprised of a series of matrixes which were used to refine and focus objectives used in the County Plan. In predicting likely significant impacts of the plan, existing data sources were used as baselines data.

Key Environmental Issues

Biodiversity

- Designated Wildlife Sites – The Water Quality Status of the River Slaney catchment in Bunclody is currently at a Q4 rating¹ – Good status, therefore any possibility of future pollution may significantly impact upon the biodiversity, flora and fauna of the Slaney River Valley (cSAC) & (pNHA). Increased development pressures as a result of the growth of Bunclody town may also impact upon the designated wildlife sites, significantly adversely impacting upon the ecological connectivity between these sites.

¹ <http://maps.epa.ie/InternetMapView/MapView.aspx>

- Terrestrial Biodiversity, Flora and Fauna - All habitats in Bunclody have been impacted upon to varying degrees by human beings over time.
- Aquatic Biodiversity, Flora & Fauna – The water quality status of the Slaney is likely to impact upon aquatic biodiversity, flora & fauna to the extent whether fish populations or macro-invertebrates can be supported as they are not tolerant to serious pollution.
- Ecological Networks – Buffer zones around a number of streams have not been uniformly maintained, which provide essential linkages and ensure ecological connectivity between all habitats, including designated wildlife sites.

Flooding / Climatic Factors

At present, flooding may be expected, on average, every 15 years though with Climate Change this becomes once in 7 years. At present when flooding does occur a number of residential properties and commercial properties are severely damaged. The problem is that a number of these are quite old building either terraced residential streets or protected structure in the historic town center core. Areas affected include Chapel Road, Ryland road, Slaney Bridge, the Bridge Meadow and lands adjoining the river.

Wastewater treatment capacity

Bunclody is served by an existing waste water treatment plant which is currently at capacity at 2,000 PE (Population Equivalent). An expected additional Population Equivalent loading of 4,500PE will be created through the Bunclody Main Drainage Scheme which should be completed by 2010.

It is considered that the proposed development will have a positive effect on water quality in the area. The expansion of the proposed WWTP and associated works for Bunclody town and environs will significantly improve water quality in the receiving waters in the River Slaney.

Cultural Heritage

Future development of the town could result in a change of Bunclody's well known historical character. Policies & Objectives have been included in the Plan to promote development which is in keeping with the historical nature of the Bunclody area. These guidelines should harmonize Bunclody's Architectural and Archaeological Protection Legislation. The proposed Architectural Conservation Area is also of vital importance as it is coming under increasing development pressure, and it should be protected from encroaching inappropriate developments.

Mitigation

It should be noted that the Strategic Environmental Assessment is an integral part of the development of the Plan and that its final iteration incorporates policies that have evolved to anticipate and avoid potentially adverse impacts on the environment. Remaining potentially adverse conflicts or impacts may be characterised as 'residual impacts'. These are unavoidable potential impacts that remain after all mitigation measures have been put in place. The majority of these are potential impacts which are likely to be capable of further mitigation (Chapter 8).

Monitoring

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 take remedial action. Monitoring and review, are key elements of the effective implementation of the Bunclody Local Area Plan. It ensures that social, economic and physical objectives are fulfilled and that quality of life issues can be assessed.

The purpose of monitoring is to cross check significant effects, which arise during the implementation stage of the development plan, against those predicted during the plan preparation stage. Monitoring is often based on

indicators, which measure changes in the environment, especially changes which are critical in terms of environmental quality. Indicators aim at simplifying complex interrelationships and providing information on environmental issues, which are relatively easy to understand.

Monitoring Indicators

Monitoring is based around the indicators, which were chosen early in the process (Chapter 4). These indicators allow quantitative measures of trends and progress over time relating to the Strategic Environmental objectives (SEO's) 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. Indicators and monitoring plan listed in Chapter 9.

Chapter 1. Introduction

This is a Strategic Environmental Assessment (SEA) Environmental Report for the Bunclody Local Area Plan 2009 - 2015. This section discusses the legal requirements of SEA, its implications for the Town & Environs Development Plan and its main findings to date. The purpose of the report is to provide the Elected Members and the public with a clear understanding of the likely environmental consequences of decisions regarding the future accommodation of growth in Bunclody.

Wexford County Council commenced the preparation of the new Bunclody Local Area Plan on the 21st Feb 2008. This plan will set out the spatial planning framework and overall strategy for the proper planning and sustainable development of the Bunclody area for the six year period 2009 – 2015.

In addition to the making of the Bunclody Local Area Plan, the Planning Authority is also obliged to carry out a Strategic Environmental Assessment (SEA) of the plan in parallel with its formulation.

1.1 Strategic Environmental Assessment

On the 5th June 2001, the European Council adopted the Directive 2001/42/EC on the Assessment of the Effects of Certain Plans and Programmes on the Environment (“the SEA Directive”) (EU, 2001), which took effect in the member states on the 21st July 2004. The Strategic Environmental Assessment Directive was passed into Irish law on the 14th July 2004 by means of the Planning and Development (Strategic Environmental Assessment) Regulations (S.I.435 & S.I.436). 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.

SEA aims to provide for more sustainable development through the methodical appraisal of policy options, considering alternative means of developing an area, by raising awareness of the environmental impacts of plans and the inclusion of quantifiable targets and indicators.

SEA is an important instrument to help to achieve sustainable development in public planning and policy making. The importance of SEA is widely recognised. Particular benefits of SEA include:

- To support sustainable development;
- To improve the evidence base for strategic decisions;
- To facilitate and respond to consultation with stakeholders;
- To streamline other processes such as Environmental Impact Assessments of individual development projects.

The SEA process for land-use plans includes:

- Preparing an Environmental Report where the likely significant environmental effects are identified and evaluated
- Consulting the public, environmental authorities, and any EU Member State affected, on the environmental report and plan
- Taking account of the findings of the report and the outcome of these consultations in deciding whether to adopt or modify the plan
- Making known the decision on adoption of the plan and how SEA influenced the outcome.

In accordance with Article 2 of the Directive, this assessment process must result in an environmental report which must identify, describe and evaluate the likely significant effects on the environment of implementing the plan and reasonable alternatives. In particular, the report must contain:

- An outline of the contents and main objectives of the plan, and of its relationship with other relevant plans and programmes;

- Description of the relevant aspects of the current state of the environment and the likely evolution of the environment without the implementation of the plan;
- A list of the environmental protection objectives at international, EU and national level, which are relevant to the plan and describe how they have been taken into account of, in the formulation of the plan;
- 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;
- Description of proposed monitoring measures;
- A non-technical summary of the information provided under the above headings.

The purpose of the environmental report is to identify, evaluate and describe the likely significant effects on the environment of implementing the Bunclody Local Area Plan.

The SEA process requires that baseline data be collected using the indicators described in the SEA Directive. These topics are biodiversity, fauna, flora, population, human health, soil, water, air/climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above. The impacts to be considered include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative.

Before impacts on the environment can be predicted, it is necessary to achieve an understanding of the relevant existing conditions. No primary research was carried out in the collection of baseline data, apart from existing data sources were used. Such sources ranged from the Central Statistics

Office (C.S.O.) Census statistics, Environmental Protection Agency, Wexford County Councils data on water, air, noise and traffic and information from environmental impact statements submitted as part of planning applications.

1.2 Plan and SEA Requirement

On the 21st Feb 2008 Wexford County Council commenced the preparation of the Bunclody Local Area Plan for the period 2009-2015, with the public notice advertisement in the local papers. This advertisement included the notification of a SEA also being carried out in conjunction with the plan.

The EU 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment provides that SEA is mandatory for Local Area Plans for areas with a population of 10,000 or more. Where the population involved is less than 10,000, the EU Directive requires a screening of the Plan. The key in deciding if SEA will apply will be whether the plan would be likely to have significant effects on the environment. The decision should not be determined by the size of an area alone. It will also be influenced by nature and extent of the development likely to be proposed in the plan and its location (e.g. close to or within an SAC, SPA or NHA), and its broad environmental effects. Following the screening process it was decided that an SEA would be required.

The Planning Authority have met the requirements of the Directive by preparing an SEA Environmental Report in parallel with the Bunclody Local Area Plan making process. Initial scoping took place in March 2008 with the prescribed environmental authorities, EPA, Department of the Environment, Heritage and Local Government and Department of Communication, Marine and Natural Resources. This Environmental Report relates to the consultative of the Bunclody Local Area Plan. Following consultation with the relevant agencies on both the Plan and this Environmental Report, the plan and SEA will be finalised.

Chapter 2. Methodology

2.1 Legislative Requirements

The methodology devised to carry out the SEA of the Bunclody Local Area Plan followed the requirements as set out in the SEA Directive and the Department of Environment, Heritage and Local Government SEA Guidelines 2004. Guidance provided by the Environmental Protection Agency was also instructive.

This report complies with the provision of the SEA Regulations and is written in accordance with Schedule 2B of the Planning & Development (SEA) Regulations 2004 (SI No. 436 of 2004). The production of the Environmental Report is an intrinsic component of the EU Directive.

The following is a reproduction of the checklist of information to be contained in the Environmental Report and includes the relevant section of this report which deals with these requirements.

- (A) Outline of the contents and main objectives of the plan, and of its relationship with other relevant plans and programmes; Chapter 4,5,6
- (B) Description of relevant aspects of the current state of the environment and evolution of that environment without implementation of the plan: Chapter 3
- (C) Description of the environmental characteristics of areas likely to be significantly affected: Chapter 3,4,7
- (D) Identification of any environmental problems which are relevant to the plan, particularly those relating to European protected sites: Chapter 3
- (E) List environmental protection objectives, established at international, EU or national level, which are relevant to the plan and described how those objectives and any environmental considerations have been taken into account when preparing the plan: Chapter 4, 7
- (F) Describe the likely significant effects on the environment: Chapter 7

- (G) Describe any measures envisaged to prevent, reduce and as fully as possible offset any significant adverse environmental effects implementing the plan: Chapter 8
- (H) Give an outline of the reasons for selecting the alternatives considered, and a description of how the assessment was undertaken (including any difficulties) : Chapter 2 & 6
- (I) A description of proposed monitoring measures: Chapter 9
- (J) A non-technical summary of the above information: At the start of this Report
- (K) Interrelationships between each Environmental topic: Addressed as it arises in each topic

2.2 Screening

The EU 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment provides that SEA is mandatory for Local Area Plans for areas with a population of 10,000 or more. Where the population involved is less than 10,000, the EU Directive requires a screening of the Local Area Plan. The key in deciding if SEA will apply will be whether the plan would be likely to have significant effects on the environment. The decision should not be determined by the size of an area alone. It will also be influenced by nature and extent of the development likely to be proposed in the plan and its location (e.g. close to or within an SAC, SPA or NHA), and its broad environmental effects.

Having regard to this and that the implementation of the Bunclody Local Area Plan 2009-2015 would be likely to have significant environmental effects thus requiring the Plan to undergo SEA.

2.3 Scoping

Through the scoping exercise of the SEA, for the Bunclody Local Area Plan the significant impacts predicted include those relating to;

Biodiversity

Flooding / Climatic Factors

Wastewater treatment capacity

Cultural Heritage

Other key issues include the following; water quality, Landscape, townscape, riverscapes, waste management, traffic management, public transport and car parking, amenity open space and tourism. Scoping of the SEA was continuous. Scoping helped the SEA to become focused upon the important issues, such as those relating to existing environmental problems, and avoid wasting resources on unnecessary data collection.

2.4 Consultation with Environmental Authorities

The SEA Directive specifies in Article 6(3) that ‘member states shall designate the authorities to be consulted’. The Environmental Protection Agency (EPA), Department of the Environment, Heritage and Local Government, and the Department of Communication, Marine and Natural Resources were all consulted in order to determine the scope of the SEA.

2.5 Baseline Study

Before impacts on the environment can be predicted, it is necessary to achieve an understanding of the relevant existing conditions. Primary research was carried out in the collection of baseline data apart from existing data sources. Such sources ranged from C.S.O. census statistics, Environmental Protection Agency, Wexford County Council’s data on water, air, noise and traffic and information from environmental impact statements submitted as part of planning applications.

Baseline environmental data should allow the state of the environment to be identified in objective terms. Often this will mean quantitative measures of environmental conditions, but will also include qualitative descriptions of environmental features. The data should encompass the environment as it is now, as well as the environment as it would be expected to change in the absence of the Plan (i.e. the do nothing approach) as required under the EU Directive.

2.6 Considerations 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 Bunclody Local Area Plan process a range of alternatives including the 'do-nothing' scenario were considered for the development of the Local Area Plan area and are detailed in the Environmental Report. These are discussed further in Sections 6.2, 6.3 and 6.4.

2.7 Environmental Assessment

The environmental assessments of objectives of the Plan are the central component of the Report. The methodology used in the Report comprised of a series of matrixes which were used to refine and focus objectives used in the Local Area Plan. In predicting likely significant impacts of the plan, existing data sources were used as baselines data. The development envisaged arising as a result of the implementation of this Local Area Plan is described using Alternative Scenarios in Chapter 6.

2.8 The Environmental Report

In this Environmental Report, which is submitted to the Elected Members alongside the Bunclody Local Area Plan, the likely significant effects of the plan and the alternatives are predicted and their significance evaluated with regard to the environmental baseline. The Environmental Report provides the decision makers, the Elected Members of Wexford County Council, who decide whether or not to adopt the plan, with a clear understanding of the likely environmental consequences of decisions regarding the proper land-use planning in Bunclody. Mitigation measures to prevent or reduce significant adverse effects posed by, and maximise any benefits offered by, the Bunclody Local Area Plan and the alternatives are also presented in this report as are the measures concerning monitoring.

The Environmental Report may be required to be updated in order to incorporate further environmental assessment should Elected Members

propose to adopt a Local Area Plan which includes new objectives which have not been evaluated by the SEA and which may be likely to have significant environmental effects.

2.9 Making the elected Members' Decision Public

When the Bunclody Local area Plan is adopted a document must be made public, referred to in the SEA Directive as the SEA Statement, *Information on the decision*, which is required to include information on; how environmental considerations have been integrated into the Plan, highlighting the main changes to the Plan which resulted from the SEA process; how the Environmental Report and consultations have been taken into account , summarising the key issues raised in consultations and in the Environmental Report and indicating what action, if any, was taken in response, and; the reasons for choosing the Local Area Plan in the light of the other alternatives, identifying the other alternatives considered, commenting on their potential effects and explaining why the Plan was selected.

The information to be included in the statement, which must be made public, including how environmental considerations have been integrated throughout the process and how the preferred alternative was chosen, introduces accountability, credibility and transparency into the strategic decision-making process.

Chapter 3. Environmental Baseline

3.1 Introduction

Ireland's landscape and natural habitats have been shaped by thousands of years of both natural and human processes. They are a living historical record of Ireland's past and could arguably be our most important resource for the future. The quality of our environment is fundamentally linked to our well being and the health of the Irish economy. Increasing development pressures and changes in agricultural practices have resulted in the implementation of measures designed to protect natural environments and to raise public awareness as to importance of these areas.

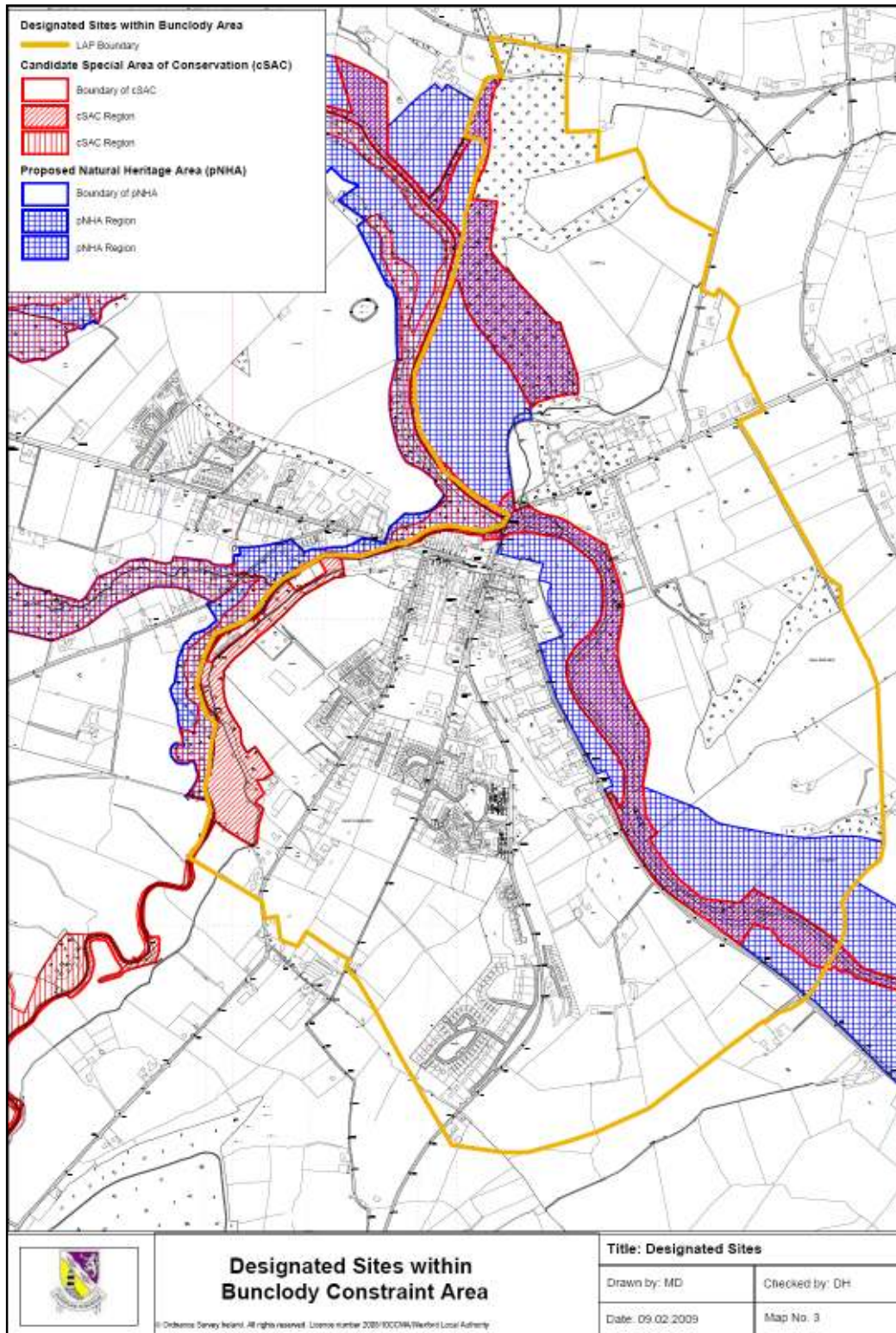
The environmental baseline in and around Bunclody is described in this section. The environmental baselines and Strategic Environmental Objectives, which are outlined in Chapter 4, are used in order to identify, describe and evaluate the likely significant environmental effects of implementing the Bunclody Local Area Plan 2009-2015 and the alternatives and in order to determine the required monitoring measures. The environmental baselines is described in line with the legislative requirements, encompassing the following components: biodiversity, flora and fauna, population, human health, soil, water, air and climatic factors, material assets, cultural heritage, landscape and the interrelationship between these components. A description of the likely effects upon each environmental component under a do-nothing scenario, the likely evolution of the environment without the implementation of a Local Area Plan for Bunclody, is also included.

Map 1 shows the location of Bunclody in its context of its surrounds in County Wexford. Bunclody is an inland town divided in by the Slaney and Clody Rivers. Bunclody is approximately 42km from Wexford town.

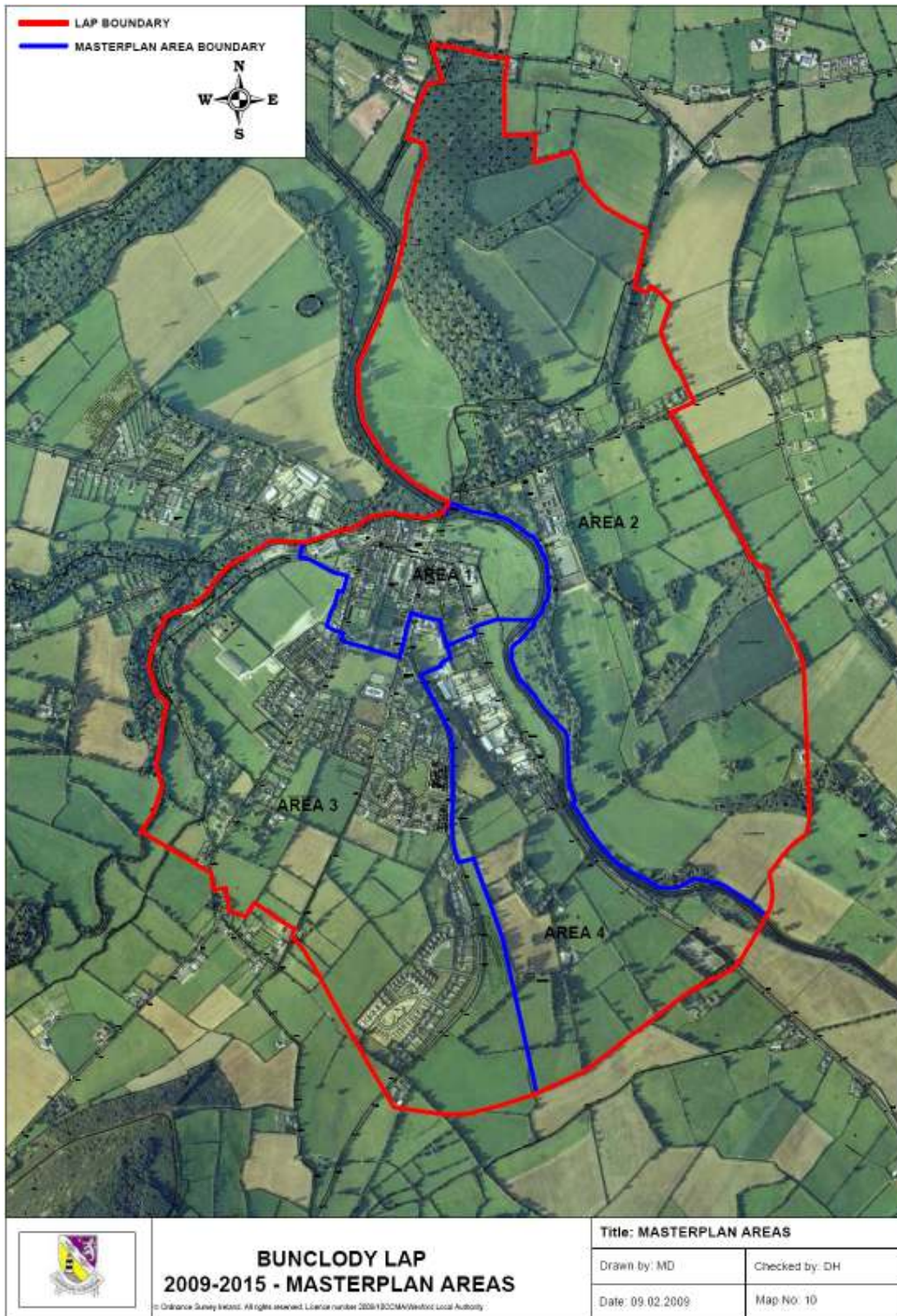
Map 1: Bunclody town and environs



Map 2: Bunclody town – Designated sites within Local Area Plan Area



Map 3: Aerial Photo of Bunclody town with boundary illustrated



3.2 Biodiversity Flora & Fauna

Designated Wildlife Sites

Certain areas near and within Bunclody town are subject to a number of conservation designations. These designations are shown on Map no. 3 in the appendix.

SAC's are areas of conservation value for habitats and/or species of importance in the European Union, the designation and protection of which are internationally mandated under the Habitats Directive 1992 (92/43/EEC) enacted into Irish Law by the European Communities (Natural Habitats) Regulations 1997 (SI 94/1997) (which have been amended twice with SI 233/1998 and SI 378/2005). SAC's form part of the Irish contribution to the EU Natura 2000 network, within which Member States are required to establish ecologically important sites under the EU Habitats Directive(92/43/EEC). The Directive lists priority habitats and species, which must be conserved.

Natural Heritage Areas (NHA's) are sites of national importance for their flora, fauna, geological or physiographic interest, the designation and protection of which are nationally mandated under the Wildlife (Amendment) Act 2000. Although SAC and NHA boundaries do not overlap entirely, where SAC and NHA boundaries overlap the SAC designation effectively takes precedence.

Slaney River Valley (cSAC) Code 000781

The site is a candidate SAC selected for alluvial wet woodlands, a priority habitat on Annex I of the E.U. Habitats Directive. The site is also selected as a candidate SAC for floating river vegetation, estuaries, tidal mudflats and old oak woodlands, all habitats listed on Annex I of the E.U. Habitats Directive. The site is further selected for the following species listed on Annex II of the same directive - Sea Lamprey, River Lamprey, Brook Lamprey, Freshwater Pearl Mussel, Twaité Shad, Atlantic Salmon and Otter. The presence of wet and broad-leaved woodlands increases the overall habitat diversity and the

occurrence of a number of Red Data Book plant and animal species adds further importance to the Slaney River site.

Floating river vegetation is found along much of the freshwater stretches within the site. Species present here include Pond Water-crowfoot (*Ranunculus peltatus*), Water-crowfoot (*Ranunculus* spp.), Canadian Pondweed (*Elodea canadensis*), Broad-leaved Pondweed (*Potamogeton natans*), Water Milfoil (*Myriophyllum* spp.), Common Club-rush (*Scirpus lacustris*), Water-starwort (*Callitriche* spp.), Hemlock Water-dropwort, Fine-leaved Water-dropwort (*Oenanthe aquatica*), Common Duckweed (*Lemna minor*), Yellow Water-lily (*Nuphar lutea*), Unbranched Bur-reed (*Sparganium emersum*) and the moss *Fontinalis antipyretica*. Two rare aquatic plant species have been recorded in this site: Short-leaved Water-starwort (*Callitriche truncata*), a very rare, small aquatic herb found nowhere else in Ireland; and Opposite-leaved Pondweed (*Groenlandia densa*), a species that is legally protected under the Flora Protection Order, 1999.

Agriculture is the main landuse. Arable crops are important. Improved grassland and silage account for much of the remainder. The spreading of slurry and fertilizer poses a threat to the water quality of this salmonid river and to the population of Annex II animal species within it. Run-off is undoubtedly occurring, as some of the fields slope steeply directly to the river bank. In addition, cattle have access to the site in places. Fishing is a main tourist attraction along stretches of the Slaney and its tributaries and there are a number of Angler Associations.

Proposed Natural Heritage Area (pNHA)

The Slaney River valley is also a proposed Natural Heritage Area under the current County Development Plan 2007. Development which would damage or threaten the integrity of such sites is prohibited unless there is no alternative solution and there are strong reasons of over-riding public interest in favour of the development.

Flora

North of Bunclody, the river valley has a number of dry woodlands though these have mostly been managed by the estates with the introduction of Beech and occasional conifers.

The steeper sides are covered in a thick scrub from which taller trees protrude. At the southern end of the site, the Red Data Book species Yellow Archangel (*Lamiastrum galeobdolon*) occurs. Three more Red Data Book species have also been recorded from the site: Basil Thyme (*Acinos arvensis*), Blue Fleabane (*Erigeron acer*) and Small Cudweed (*Filago minima*). A nationally rare species Summer Snowflake (*Leucojum aestivum*) is also found within the site.

Mixed woodlands occur at Carrickduff and Coolaphuca in Bunclody. Oak trees, which make up the greater part of the canopy, were originally planted and at the present time are not regenerating actively. In time, if permitted, the woodland will probably go to Beech. A fair number of Yew (*Taxus baccata*) trees have also reached a large size and these, together with Holly give to the site the aspect of a south-western Oak wood.

The cSAC designation for the mid and lower reaches of the Slaney highlights the river as a very good example of the extreme upper reaches of an estuary.

Rare and Protected Species

Two rare aquatic plant species are also noted within the cSAC designation: short-leaved water-starwort (*Callitriche truncate*) a very rare, small aquatic herb found nowhere else in Ireland, and opposite-leaved pondweed (*Groenlandia densa*), both species are legally protected under the Flora Protection Order, 1999.

Habitats

Upstream and downstream from Bunclody the floodplain is predominantly neutral grassland with a fringe of tall herbs and willows overhanging the river. There is also evidence of more intensive use with the presence of arable

crops (*Iolium pasture*) on each side of the bank to the south of Bunclody. Stream water crowfoot (*Ranunculus penicilatus*) is present within a riffle; this is one of the several *Ranunculus* species that comprise the 'floating river vegetation' habitat named within the cSAC designation. Several narrow fringes of tree covered ground align sections of the eastern and western side of the river consisting of mixed woodland including oak, beech and sycamore.

The site supports populations of several species listed on Annex II of the EU Habitats Directive including the three Lampreys - Sea Lamprey (*Petromyzon marinus*), River Lamprey (*Lampetra fluviatilis*) and Brook Lamprey (*Lampetra planeri*), Otter (*Lutra lutra*), Salmon (*Salmo salar*), and small numbers of Freshwater Pearl Mussel (*Margaritifera margaritifera*). The Slaney is primarily a spring salmon fishery and is regarded as one of the top rivers in Ireland for early spring fishing. The upper Slaney and tributary headwaters are very important for spawning.

Protected Mammal Species

The cSAC designation identifies several mammal species occurring between Tullow and Ferrycarrig including otter, which is listed in Annex II of the EU Habitats Directive and several species listed in the Irish Red Data Book including pine marten (*Martes martes*), badger (*Meles meles*), Irish hare (*Lepus timidus*) and Daubenton's bat (*Myotis daubentonii*). Common frog (*rana temporaria*), another Red Data Book species, also features within the designation.

Badger

The OPW survey work in July 2003 identified no badger activity along or immediately adjacent to the River Slaney within their study area. However it is unlikely that badgers would be present along the river within the left stretch of the River Slaney north through Bunclody since badgers typically create setts in secluded areas away from disturbance, possible setts may be located on the right hand side however.

Otter

There are anecdotal sightings of otter in the urban stretches of the Slaney that suggest that the otter is fairly widespread throughout the River Slaney in the Bunclody area. The otter is listed in the Bern Convention and the Convention International Trade of Endangered Species (CITES) as well as being listed in Annex II of the EU Habitats Directive.

Bats

Several areas were identified as potentially supporting bats in the OPW survey. A riffle, which already attracts several insectivorous species including sand martins (*Riparia riparia*), was also considered to potentially support *Daubenton's bat* (an Irish Red Data Book species and part of the cSAC designation). All bats are afforded protection under Annex IV of the EU Habitats Directive and are also protected under the Wildlife Act, 1976, whereby it is an offence to intentionally kill, disturb, handle or keep bats without licence.

Ornithology

Downstream of Bunclody the right bank contains a small colony of sand martins, which are listed in the amber list (medium conservation concern) of Bird Watch Ireland's priority bird species. As the bank is of sandy material it could also support kingfisher (*Alcedo atthis*). A kingfisher was seen on the main channel at the same site and is also listed on Bird Watch Ireland's amber list of bird species. A single yellowhammer (*Emberiza citronella*) (a red list species – of high conservation concern) was also spotted at this site.

The cSAC designation highlights important numbers of birds for the mid and lower reaches of the Slaney in winter. Little egret (*Egretta garzetta*) are found annually along the river. This bird is only now beginning to gain a foothold in Ireland and the south-east appears to be its stronghold. Nationally important numbers of black-tailed godwit (*Limosa limosa*), teal (*Anas crecca*), tufted duck (*Aythya fuliguli*), mute swan (*Cygnus olor*), little grebe (*Tachybaptus ruficollis*) and black-headed gull (*Larus ridibundus*) are found along the estuarine stretch of the river.

Fish

The Slaney is an important spring salmon (*Salmo salar*) fishery with large numbers of multi sea winter (msw) fish returning from the sea between February and April. The majority of these fish swim upstream to spawning grounds in the headwaters, where spawning takes place in early winter. After hatching, the juvenile fish remain within the gravel for up to six weeks; between 1 and 4 years old (usually 2 years) the fish are ready to migrate to sea as smolts and run to sea between April and June.

The River Slaney is a wide strong flowing river punctuated with slower flowing areas and pools in some stretches. The river between Enniscorthy and Bunclody is wide and fast flowing. From Bunclody to Tullow the banks are generally clear and the river is wide, with a strong fast current. However, there are a good number of weirs punctuated by pools with some slower flowing areas.

Limited salmon and trout fishing are available using traditional fly method only. Day permits are solely available from the Millrace Hotel, Bunclody. Salmon permits are available from 7th April and trout permits are available from the Tuesday following the June Bank holiday until the 31st August.

The Slaney is also an important sea trout (*Salmo trutta*) fishery with large numbers returning to the Slaney from mid June to August. These fish swim upstream to spawning grounds where spawning occurs in early winter. After hatching, the juvenile fish remain within the gravel for up to six weeks; between 1 and 4 years old (usually 2 years) the fish are ready to migrate to sea as smolts and run to sea between April and June.

Brown trout (*Salmo trutta*) are also found throughout the catchment and are present through much of the study area. Brown trout are a purely freshwater species but will follow the spawning and life stages as sea trout. Lampreys are also considered to spawn within the study area.

Existing Environmental Problems

- **Designated Wildlife Sites** – The Water Quality Status of the River Slaney catchment in Bunclody and the possibility of future pollution may significantly impact upon the biodiversity, flora and fauna of the Slaney River Valley (SAC) & (pNHA). Increased development pressures as a result of the growth of Bunclody Town may also impact upon the designated wildlife sites, significantly adversely impacting upon the ecological connectivity between these sites.
- **Terrestrial Biodiversity, Flora and Fauna** - All habitats in Bunclody have been impacted upon to varying degrees by human beings over time. The clearing of vegetation from Bunclody's land centuries ago resulted in the replacement of natural habitats with semi-natural, low biodiversity habitats. This replacement was accentuated with the intensification of agriculture in the 20th century.
- **Aquatic Biodiversity, Flora & Fauna** – The water quality status of the Slaney is likely to impact upon aquatic biodiversity, flora & fauna to the extent whether fish populations or macro-invertebrates can be supported as they are not tolerant to serious pollution.
- **Ecological Networks** – Buffer zones around a number of streams should be maintained, these provide essential linkages and ensure ecological connectivity between all habitats, including designated wildlife sites.

Evolution of Biodiversity, Flora & Fauna in the absence of a Town & Environs Plan

Designated Wildlife Sites – In the absence of implementation of a Local Area Plan housing development would be likely to continue to the west of Bunclody and to the east on the edges of the SAC and NHA. The effects of wastewater generated as a result of future developments could, if not mitigated against, deteriorate the quality of the surface and ground waters within these designated sites and adversely impact upon biodiversity, flora & fauna.

Also one-off housing development on the edges of the designated wildlife sites has the potential to cumulatively reduce the ecological connectivity between the sites and surrounding terrestrial habitats.

Terrestrial Biodiversity, Flora & Fauna – In the absence of implementation of a Local Area Plan for Bunclody, terrestrial biodiversity, flora & fauna would be likely to continue to be adversely impacted due to deterioration of water quality status of the Slaney and other tributaries or catchments. Ecological connectivity within Bunclody and its surrounds would be likely to continue to be adversely impacted upon by development along the various linking streams which does not take notice of appropriate buffers.

Ecological Networks – In the absence of implementation of a Local Area Plan, development would be likely to continue as it has done in the past thereby further adversely impacting upon ecological networks as a result of the loss of ecological corridors such as hedgerows, stone walls and buffer zones along streams as well as the loss of lengths of streams as a result of channeling and ponding.

Aquatic Biodiversity, Flora & Fauna - In the absence of implementation of a Local Area Plan, pollution of surface waters would be possible which would reduce the biodiversity levels in Bunclody's surface waters.

3.3 Population & Human Health

Population

The town of Bunclody covers and includes the following townlands, Newtownbarry, Clohamon, Carhill, Ballinapark, Bunclody and also the adjoining townland of Carrigduff, the following population statistics and calculations therefore include the population of the adjoining townlands. The 2002 Census showed a population of 1,361 including town and suburbs. The results of the 2002 census indicated a population increase of 9.6% since 1996. This increase coincides with a period of unprecedented economic growth in Ireland, there is evidence of a migration of Dublin based workers to the town to purchase affordable housing and have a better quality of life.

Demographic and Socio-economic analysis

The population of Bunclody/Carrigduff has increased by 36.9% (Census 2006) since 2002, with a number of new housing estates constructed to the outer edge of the town reflecting the trend of movement out of the inner urban areas to the environs and outskirts of towns.

Population of Towns with legally defined boundaries 2006

Town	2006	2002	Change 2002-2006	% Increase
Bunclody/Carrigduff	1,863	1,361	502	36.9%

Source: CSO 2006

Population Projections

The population of Bunclody is projected to increase over the next 6 years to a population of 2,319.

Age profile

The age profile of the Bunclody urban area has a high representation of people under 25-44 year age bracket at 31% of the urban areas population. This has important implications in terms of housing provision with many people in the area approaching first time buyer age and also employment generation.

Human Health

Human health can be impacted upon by the lack of provision of community facilities, amenities and infrastructure to support new development in Bunclody. A shortfall in amenities and infrastructure to serve the local community, including safe walking and cycling routes, playgrounds, amenity park, and new primary school can all go towards decreasing the perceived health of the general population of Bunclody. Human health can also be affected by employment status and access to education.

Employment

Approximately 6.75% of Bunclody's workforce was registered as unemployed at the time of the 2006 Census. This represents a slightly higher level than the national average which is 5% (CSO 2006).

There are high numbers employed in the Manufacturing and Service sectors at 36.6% of the workforce. There are quite low numbers employed in the Agriculture and Transport sectors, while relatively high percentages of the workforce 12.4% are employed in the Construction industry and 14.75% are employed in the Services sector.

Travel Patterns

A total of 1080 people in Bunclody were surveyed on travel patterns by the CSO in 2006 and the results are demonstrated in figure 2.3 above. The preferred mode of transport (as can be seen) is the private car with 59% travelling as car driver or car passenger. This high level of car usage is probably due to the proximity of Carlow town (30.9 km) Enniscorthy (20.1km) and Wexford town (42.3km) and the lack of a well developed transport system.

The next most popular mode of travel is foot with 29% of those surveyed choosing this mode; this would suggest a significant proportion of the population work or attend school close to their places of residence.

The most common distance travelled is 1 kilometre with 2 to 4 kilometres next most travelled, this suggests a large number of residents travelling to work or school are within easy commuting distance, the majority of these either work or attend school in Bunclody/Carrigduff.

This 'distance travelled' figure illustrates the opportunity for encouraging non car travel by the provision of improved pedestrian and cycle routes.

Existing Environmental Problems

The provision of community facilities, amenities and infrastructure to support new developments within and surrounding the town center has been slower and has struggled to keep up with the pace at which development is

happening particularly on the eastern side of the town. There is a necessity to provide for the proper residential and associated infrastructural development of Bunclody and this can be done through the Local Area Plan.

Human health has the potential to be adversely impacted upon by the pollution of the River Slaney as a result of inappropriately treated sewage or agricultural effluent within the larger river catchment.

Evolution of Population and Human Health in the absence of the Bunclody Local Area Plan

In the absence of a Local Area Plan for Bunclody, there would be a continued demand for housing in Bunclody which would be likely to be satisfied in a piecemeal fashion with the location of developments determined by individual applications with no specific guidance for Bunclody as to where development should take place. This would be likely to lead to increase in unsustainable one-off linear type development leading to problems relating to infrastructure provision or wide areas and more significant environmental impacts such as those relating to biodiversity, flora, fauna, surface water quality.

The prohibitive cost of securing land in the area for community facilities and amenities would be likely to remain thus preventing community gain.

Human health would also be likely to be affected through contact with potentially polluted streams and river in the absence of a Local Area Plan for Bunclody which would provide some environmental controls.

3.4 Soil

Soil can be considered as a non-renewable natural resource because it develops over very long timescales. To date, there is no legislation which is specific to the protection of soil resources however an EU Directive on soil is currently proposed which will set out common principles for protecting soils across the EU. Soil is encompassed in both the description of the environment in the SEA Directive to which this report relates and in the EIA Directive. The protection of other resources such as water under the Water Framework

Directive has positive implications for soil, the quality of which is directly linked to that of ground and surface waters.

The Water Framework Directive risk category for the River Slaney is 1a i.e. “At risk of failing to meet good status by 2015”.

The Water Framework Directive risk category for the groundwater in the Plan area is 2a i.e. “Probably not at risk of failing to meet good status by 2015”. This Risk category infers that a more detailed risk assessment may be required to confirm whether or not the water body is at significant risk.

The Irish Geological Survey map for Carlow – Wexford (sheet 19) shows that the geology of the area around Bunclody generally comprises rocks of Lower Palaeozoic age, dating from the Ordovician period between 525 million and 440 million years ago.

Geology

The geology of County Wexford is a record of more than 400 million years of the earth’s 4,600 million year history. The bulk of the geology of the county comprises Ordovician slates and volcanics dating back to a vanished ocean bed, which was approximately 450 million year old. Overlying the Ordovician there is a succession of Devonian sandstones (ORS) passing up into Carboniferous Limestones and up into the Permo-Trias rocks.

The Leinster Chain, with its granite core and margin of mica-schist, bounds the county on the west. From this, Silurian ground stretches to the sea, like a platform with a hummocky surface, numerous intrusive and contemporaneous felsitic lavas, and some diorites occurring along the strike in continuation of the Waterford series. A granite outlier rises south-east of Enniscorthy; and granite, in part gneissic, forms Carnsore Pt. From near Courtown to Bannow Bay, greenish slates like the Oldhamian series of Wicklow form a broad band, with Old Red Sandstone and Carboniferous Limestone above them near

Wexford. Silurian beds appear again towards Carnsore. The surface of the county is much modified by glacial drift, and by the presence of sands and gravels of preGlacial and possibly late Pliocene age. These interesting beds are used for liming the fields, under the name of "manure gravels," on account of the fossil shells that they contain.

Existing Environmental Problems

Existing environmental problems relating to soil include the building upon and thereby sealing off of, soil altogether with pollution and contamination of soil as a result of likely surface and ground water pollution.

Evolution of Soil in the absence of a Town & Environs Plan

In the absence of implementation of the Bunclody Local Area Plan soil would be sealed off in line with development and the quality of soil would depend on the quality of surface and ground water.

3.5 Water

Hydrology

The Clody, Borris and Glasha rivers are the principal tributaries of the Slaney in relation to the Study Area. The River Clody and Glasha River both drain the eastern flanks of the Blackstairs Mountains and discharge into the River Slaney in Bunclody and approximately 5km downstream of Bunclody respectively. The River Boris drains an area south east of Bunclody and discharges into the Slaney 5km south of Bunclody.

Hydrogeology

Groundwater is stored in the void spaces in underground layers of rock, or aquifers. These aquifers are permeable allowing both the infiltration of water from the soils above them and the yielding of water to surface and coastal waters.

The Geological Survey of Ireland rates the aquifers of Ireland according to their productivity and their vulnerability to pollution.

The Aquifer Map of Ireland produced by the Geological Survey of Ireland classifies the Bunclody Area as a locally important aquifer – bedrock which is moderately productive in local zones, the area to the south of the town falls into the poor aquifer category – this bedrock is generally unproductive except for local zones.

Ground water Quality

In County Wexford 40% of our drinking water comes from groundwater in two major aquifers:

1. The volcanic aquifer that runs from south west Wexford to northeast Wexford
2. The limestone aquifer in Fardystown

Water Quality

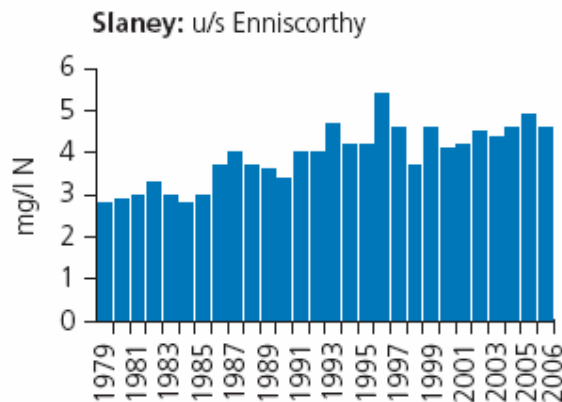
The water quality of the Slaney is considered to be in satisfactory condition in reaches upstream of Tullow, which have biological quality ratings (Q values) typically around 4-5 and 5, which are classified as unpolluted. Downstream, towards Enniscorthy, there is an indication of increased ecological stress (excessive algal growths and heavy siltation) particularly in the reach immediately below Tullow and again at Kilcarry, Clohamon and Ballycarney (EPA 2004). In these reaches, Q values recorded between 3 and 3-4 are typical which are classed as slightly to moderately polluted.

Name	River Station Code	Q Value		Location	RBD
		2001	2004		
Slaney	12S021600	3-4	3-4	Kilcarry Bridge	SERBD
Slaney	12SO21530			W of Ballinastraw	SERBD
Douglas	12D030200	3	3-4	Sragh Bridge	SERBD

The high flows of 1998 have been of considerable benefit to the Slaney. This is particularly apparent below Tullow and Clohamon where the estimated

length of slightly polluted channel has been reduced to five and thirteen kilometers, respectively. This is in marked contrast to the 1995 situation when the entire 49 kilometer freshwater reach from Tullow to below Enniscorthy was assessed as slightly polluted/eutrophic. The upper Tinnacross Stream was devoid of sensitive species, was very heavily silted and had a significantly reduced DO content in early September 1998. It then recovered over the next 7km to reach a satisfactory level of quality at station 0600.

The chart below demonstrates the Annual Median Nitrate Values (mg N/litre) in the Slaney river from 1979-2006, levels of nitrates are significantly higher in the south east of the country due to the higher level of agricultural activity.



Abstractions & Discharges

There is one abstraction licence issued for this stretch of the Slaney for Wexford County Council at Clonhaston, and one active discharge consent for Roadstone Provinces for treated effluent resulting from the washing of chippings, washing down of trucks and machines etc.

Navigation

The River Slaney is not navigable north beyond Enniscorthy.

Source: EPA [River Water Quality in Co Wexford – 2006](#)

Existing Environmental Problems

- **Surface Water** – The River Slaney (See Water Quality)
- **Ground Water** – There is a gap relating to the availability of data on groundwater quality in the Bunclody area. Since groundwater moved slowly through the subsurface, the impact of anthropogenic activities may last for a relatively long time, which means that pollution that occurred some decades ago, whether from agriculture, industry or other human activities, may still be threatening groundwater quality today. Secondly since surface water systems receive a continuous discharge of inflowing groundwater, a deteriorated groundwater quality will ultimately be reflected in the quality of surface waters. Finally groundwater is a ‘hidden resource’ which is quantitatively much more significant than surface water and for which pollution prevention and quality monitoring and restoration are even more difficult than for surface waters mostly due to its inaccessibility. Recent reports show that pollution from domestic, agriculture and industrial sources is, despite progress in some fields, still a major concern, wither directly through discharges (effluents) or indirectly from the spreading of nitrogen fertilizers and pesticides.

3.6 Flooding & Climate Change

Environmental Baseline data relating to flooding has been obtained from the Office of Public Works reports. At present, flooding may be expected, on average, every 15 years though with Climate Change this becomes once in 7 years. At present when flooding does occur a number of residential properties and commercial properties are severely damaged. The problem is that a number of these are quite old building either terraced residential streets or protected structure in the historic town center core. Areas affected include Chapel Road, Ryland road, Slaney Bridge, the Bridge Meadow and lands adjoining the river.

Historical Flooding dates

Flooding occurs periodically (roughly 3-4 year intervals) at Slaney Bridge and Island Road (Bunclody), and at Clohamon Bridge, resulting in flooding and closures of the N80. The local road at Scarawalsh Bridge was flooded and closed to traffic in November 2000.

River Slaney - Bunclody Ryland Road - recurring flood. Flood ID 2990. The main road entering the town was blocked periodically, Houses were flooded along Chapel Road and Ryland road, the Slaney Bridge and the Bridge Meadow and lands adjoining the river were also flooded. The street flooding was mainly caused by the backing up of drains from the River Slaney - after heavy rainfall. A hydrometric station is located at Bunclody along the River Slaney catchment with a station number - 12033 it is currently active and has an NRG no. S913570.

Source: OPW – National Flood Hazard Mapping

Evolution of Flooding in the Absence of a Local Area Plan

Present conditions in the southeast of Ireland would be significantly impacted if the expected 2050 Climate Change Scenario actually occurs. Due to the change in climate the fear is that the frequency of flooding will not only increase but also the level of that flooding. There would also be an increased likelihood of very severe events. This implies a corresponding increase in both the frequency and magnitude of extreme flow velocities both within the river and along the flood plain. Without a Local Area Plan for the area the problem may not be significantly addressed.

The Local Area Plan incorporates best practice and advice contained in the Planning Guidelines 'The Planning System & Flood Risk Management'. Through the inclusion of a policy to address this guidelines in the Local Area Plan, any concerns regarding flooding in the area can be assessed and dealt with accordingly.

3.7 Air & Climatic Factors

There is now a scientific consensus that global warming is happening, that it is directly related to man-made greenhouse gas emissions, and that we have little time remaining to stabilise and reduce these emissions if we are to avoid devastating impacts on our environment. There is also an economic consensus that the costs of inaction will greatly outweigh the costs of action.

In relation to Bunclody the Council is responsible for certain local regulation and monitoring for such concerns and for enforcement of air quality under the Air Pollution Act. The Environmental Protection Agency (EPA) is also responsible for control of the more significant potential polluting activities on a national basis.

Existing Environmental Problems

Air Quality in Bunclody is affected by smoke producing fuels and traffic fumes. Traffic congestion is becoming a problem within the town centre due to a large majority of individuals who live in Bunclody, commuting to work. At rush hour peaks higher levels of traffic generate noise and emissions, which creates a harsh sensory environment for pedestrians and the people residing within the town itself.

Evolution of air and climatic Factors in the Absence of a Local Area Plan

In the near future it is likely that traffic congestion within the town is going to greatly increase as the new Gorey Bypass has recently been opened. This will attract a large number of people to commute via car to work in Dublin as their travel time will now be greatly decreased. The implementation of a Local Area Plan for Bunclody could examine ways of reducing this congestion and also seek to minimise noise by ensuring that the design of future developments incorporate measures to prevent or mitigate the transmission of noise and vibration, where appropriate.

3.8 Material Assets

Waste Water

The vast majority of the Town is served by public sewer which transports wastewater to the town Waste Water Treatment Plant located south of the town on the western side of the Slaney on Ryland road.

Existing Environmental Problems

Bunclody is served by an existing waste water treatment plant which is currently at capacity at 2,000 PE. The current WWTP consists of primary treatment only with no secondary or tertiary treatment. An expected additional Population Equivalent loading of 4,500PE will be created through the Bunclody Main Drainage Scheme which should be completed by 2010. The new WWTP will include tertiary treatment and so reduce the level of contamination in the effluent entering into the River Slaney.

It is considered that the proposed development will have a positive effect on water quality in the area. The expansion of the proposed WWTP and associated works for Bunclody town and environs will significantly improve water quality in the receiving waters in the River Slaney.

Evolution of Material Assets in Absence of a Local Area Plan

It is considered that the proposed development will have a positive effect on water quality in the area.

3.9 Cultural Heritage

Introduction

County Wexford has a distinctive and valuable architectural heritage. The historic buildings contribute to the distinctive character of settlements and of the rural landscape. It is important to ensure that Bunclody retains its built heritage and that the architectural and historical character of the town and the quality of its townscape is preserved. Under the Local Government (Planning and Development Act 1999, the protection of these structures of special

architectural, historical and archaeological heritage is fundamental under specific legislation.

Archeological Heritage

The National Monuments Acts 1930-2004 provide for the protection of the Archaeological heritage in Bunclody. Archaeological heritage is a unique and special resource and needs to be conserved sensibly. Areas of Archaeological potential are designated under the record of monuments and places (RMP) which was established under Section 12 of the National Monuments Act 1994. Monuments are any artificial or partly artificial building, structure, or erection. Monument protected under the Act include prehistoric monuments and any monuments and place associated with commercial, cultural, economic, industrial, military, religious or social history.

Architectural Heritage

Bunclody has a 5 buildings that are listed for preservation. The record of protected structures (RPS) included in the Wexford County council's Development Plan are legislated for under section 51 of the Planning and Development Act 2000 and include structures which form part of the architectural heritage and which are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest. Such features are listed for protection in **Part 3 – Section 6** of the Bunclody Local Area Plan. The listing includes the items specified e.g. façade, elevation, shopfront etc. and where no such specification is made the listing shall include the whole envelope of the buildings / structures listed. There are five entries in the Bunclody region which are included in the County Development Plan. These include the Church of Ireland Church (RPS No. WCC0848), The Bridge over the Slaney (RPS No. WCC0851), J. Furlong (RPS No. WCC0850), Newtownbarr House (RPS No. WCC0702) and Slaney Lodge (RPS No. WCC0717).

The Slaney and Clody Rivers

Bunclody derives its name from the river Clody and the River Slaney. Clody in Irish signifies a mountain torrent and bun is butt. The town is built at the junction of the River Clody and the Slaney and received its name accordingly.

Existing Environmental Problems

Future development of the town could result in a change of Bunclody's historical character. Policies and objectives are included in the plan which provide guidance to promote development which is in keeping with the historical nature of Bunclody.

Evolution of Cultural Heritage in the Absence of the Plan

In the Absence of a Local Area Plan for Bunclody, the evolution of the cultural heritage in the town would be at severe risk. If a plan is not put into action any future development in the town could damage and interfere with Bunclody's original features and townscape.

3.10 Landscape

Landscapes are areas which are perceived by people and are made up of a number of layers, landform, which results from geological and geomorphological history, landcover, which includes vegetation, water, human settlements and human values which are the result of historical, cultural religious and other understandings and interactions with landform and landcover. For the purposes of this report the landscape in Bunclody includes the River Slaney, the River Clody, the lands surrounding the meanders of the Slaney to the east and north of the town and the woodlands scattered at the edges of the settlement.

Landscapes of Special Sensitivity and High Sensitivity

The river landscape of the Slaney is subject to a number of wildlife designations, including being a cSAC and pNHA.

Landscapes of Moderate Sensitivity

The lands to the east and northeast of the town which include Carhill and Ballinapark are mainly comprised of agricultural lands and lands of moderate visual amenity.

Scenic areas, protected views

The town of Bunclody and its surrounding environs has a number of views, which contribute considerably to its unique character. It is important as the town is developed that certain important views and vistas be first of all protected and secondly enhanced where possible. Inevitably as towns within Ireland develop they change and certain buildings within a streetscape are lost, Bunclody is in the unique position of having retained most of its original streetscape. This is one of the towns greatest assets.

Existing Environmental Problems

Protecting the landscape surrounding Bunclody will be a major challenge, the meadows and woodland adjoining the river will have to be protected from encroaching development, and the environmental effects of any proposed development will have to be carefully considered.

Evolution of landscape in the absence of the Local Area Plan

Developments would be likely to locate in sensitive areas in the absence of a Local Area Plan, areas such as close to the river bank and in elevated areas such as those located uphill to the west of the town to avail of fine views of the town and would cumulatively and adversely significantly impact upon this special landscape of medium and high sensitivity. Town centre development which runs parallel to the river would be likely to negatively impact upon the character of the town and riverscape views.

Chapter 4. Development of Strategic Environmental Objectives

Strategic Environmental Objectives (SEO's) are methodological measures against which the environmental effects of the Local Area Plan can be tested. If complied with in full, SEO's would result in an environmentally neutral impact from implementation of the plan. The SEO's are set out under a range of topics and are used as standards against which the development strategies, policies and objectives of the Local Area Plan can be evaluated in order to help identify areas in which significant adverse impacts are likely to occur, if unmitigated.

SEOs are distinct from the objectives of the Local Area Plan, although they will often overlap and are developed from international, national and county policies which generally govern environmental protection objectives. Such policy includes that of various European Directives which have been transposed into Irish law, relevant other Irish environmental legislation and County Policy taken from the Wexford County Development Plan, all of which are intended to be implemented at the local level in the Bunclody area.

The SEA Directive requires that the evaluation of plans be focused upon the relevant aspects of the environmental characteristics of areas likely to be significantly affected. Most attention has been given to environmental components which are likely to be impacted as a result of implementation of the Local Area Plan. A number of SEO's are linked to indicators which facilitate the monitoring of the Local Area Plan as well as to targets which the Local Area Plan can help work towards. The primary source used in formulating the SEOs was Table 4B of the SEA Guidelines (DEHLG, 2004). This list has been amended to give affect to objectives that are considered relevant to this Local Area Plan. The use of SEOs, 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 Biodiversity, Flora & Fauna

SAC's are designated and protected under the Habitats Directive 1992 (92/43/EEC) transposed into Irish law by the European Communities (Natural Habitats) Regulations 1997 (SI 94/1997) (which have been amended twice with SI 233/1998 and SI 378/2005). NHA's are designated and protected under the Wildlife (Amendment) Act 2000.

The habitats and species occurring in SAC's are protected from effects of development occurring outside their boundaries under Section 18 'Prohibition or works on lands outside a European Site' of the European Communities (Natural Habitats) Regulations 1997. The Regulations require that where a development is proposed to be carried out, on any land that is not within a protected site and is liable to have an adverse impact on the protected site in question, including direct, cumulative and indirect impacts, an appropriate assessment, of the proposed development on the site is undertaken. Depending on the conclusions of that assessment such development may be refused planning permission.

Policies & Objectives of Bunclody Local Area Plan 2009-2015 relating to Biodiversity, flora & fauna include;

H5 – Ensure any mature hedgerow, trees or old stone walls are retained insofar as possible in new developments.

AR01 - In partnership with the relevant landowners, seek to develop a new walking route along the River Slaney and River Clody, and improve on existing walkways in the area of Lucy's Wood subject to ecological assessments.

TO1 - Investigate the development of a pedestrian amenity route throughout the town and environs areas so as to link the Wicklow Way and Leinster Way walking routes, this link would encompass the special landscape and built heritage features of the historic settlement while promoting Bunclody's tourist potential. Any proposed route will be subject to an ecological assessment.

Town Centre Policies

No. 4 - Encourage amenity and environmental improvements in the town centre, so as to reinforce and enhance the special townscape of Bunclody.

NH1 – protect the character, appearance and quality of the habitats and semi-natural features in Bunclody Local Area Plan such as woodlands, hedgerows, wetlands and artificial waterways of historic or ecological importance.

NH2 – protect the sites identified as the candidate Special Areas of Conservation and the proposed Natural Heritage Area as identified on Map 3.

NH3 - To protect riparian zones in undeveloped sections of the river by maintaining an adequate buffer zone (minimum 5-10m back from the riverbank) along all watercourses, with no infilling or removal of vegetation within these buffer zones.

NH4 – To encourage potential developers to consult with relevant agencies as early as possible to ensure that heritage concerns are considered early in the planning process and so that the final planning application can be appropriately informed.

SEO – B1: To avoid loss of habitats and flora and fauna in designated wildlife sites

Indicator B1: Percentage of habitat or percentage of species lost in designated wildlife sites
--

Target B1: No losses of habitat or species in designated wildlife sites during lifespan of the Local Area Plan.

SEO – 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
--

Indicator B2: Number of significant impacts by development within and outside designated wildlife sites to habitats and flora & fauna within these sites.

Target B2: No significant impacts by development within and outside designated wildlife sites to habitats and flora and fauna within these sites during lifespan of the Plan.

4.2 Population & Human Health

The prohibitive cost of securing land in Bunclody for community facilities, amenities and infrastructure presents a serious barrier and in some places a shortfall in the development of sports & recreational facilities, primary & secondary schools, amenity parks, and playgrounds, to serve the local communities. The LAP identifies lands which will be zoned for community use only, therefore making these lands economically accessible for the development of community & social infrastructure.

Human Health has the potential to be adversely impacted upon by pollution of surface water streams and rivers. Human Health has the potential to positively be impacted upon through improvement and provision of recreational amenities and open space.

Issues relating to traffic levels have been evaluated and considered at other land-use planning levels with regard to the development of outer circulations routes to connect the existing radial routes, and also the possible Bunclody By-Pass, both of which are likely to reduce traffic levels and associated emissions and noise in the town centre.

Policies of Bunclody Local Area Plan relating to population & human health include;

H4 - Actively promote the provision of community, educational, social and recreational facilities in parallel with future housing development.

Community Facility Policies

No. 1 - To facilitate and co-operate with other organisations in the provision of services for the community including, in particular, schools, crèches and other education and childcare facilities in parallel with future housing.

No. 2 - Facilitate the provision of health services and social facilities, nursing homes and sheltered housing at suitable locations in the town.

No. 3 - Encourage the development of youth centre facilities.

E1.Ensure the provision of additional school facilities on appropriate sites within the town, these appropriate sites can be seen on the accompanying Zoning Map (Community & Educational Uses).

Amenity, Recreational & Open Space Policies

No. 2 - To have regard to the open space standards as set out in the consultation guidelines for planning authorities 'Sustainable Residential Development in Urban Area' DoEH&LG December 2008.

ARO1 – Ensure that proposals for new recreational facilities provide good accessibility to local residents, pedestrians, cyclists and those affected by reduced mobility and do not detract from the character of the surrounding area, particularly residential areas.

SEO P1: To provide for appropriate community facilities, amenities and infrastructure to support new and existing developments within and surrounding the Town.

Indicator P1: Provision of community facilities, amenities and infrastructure including safe walking and cycling routes, a riverside walk, playgrounds, sports and recreational facilities, new primary and secondary schools, and other such facilities.

Target P1a: All necessary community facilities including a community center, safe walking & cycling routes, a riverside walk, playgrounds, sports and recreational facilities, new primary & secondary schools and other facilities as identified by the Bunclody Local Area Plan 2009-2015.

Target P1b: Sites and/or facilities for new primary & secondary schools, riverside walk, playgrounds and sports areas to be identified and secured or provided during life span of Plan.

4.3 Soil

Soil can be considered a non-renewable resource because it develops over very long timescales. To date there is no specific legislation for the protection of soil resources however an EU Directive on soil is currently proposed, which will set out common principles for protecting soil across the EU.

Existing environmental problems relating to soil include the obliteration and removal of topsoil and/or loss of soil profile by compaction due to building upon soil together with the pollution and contamination of soil as a result of surface and ground water pollution and contamination.

Policies of the Bunclody Local area Plan 2009-2015 relating to soil include;

Housing Land Supply Policies

No. 2 - Use a sequential approach to residential development, firstly through in-fill opportunities followed by brownfield sites and where these previous sites are not viable only then will new residential lands be considered.

SEO S1: To maintain the quality of soil
SEO S2: To maximize the sustainable re-use of brownfield lands where possible
Indicator S2: Area of brownfield land available
Target S2: No brownfield land to be available at the end of the Plan's lifespan.

4.4 Water

The principle legislation governing water quality in Ireland is the European Communities (Water Policy) Regulations 2003 (SI No. 722 of 2003) which transposes the Water Framework Directive (2000/60/EC). The Water Framework Directive sets out that all member states shall implement the necessary measures to prevent deterioration of the status of all waters-surface, ground, estuarine, and coastal, and shall protect, enhance and

restore all waters with the aim of achieving good status by 2015. Also, all public bodies, including Wexford County Council, are required to coordinate their policies and operations so as to maintain the good status of water bodies which are currently unpolluted and bring polluted water bodies up to good status by 2015. Good status as defined by the Water Framework Directive equates to approximately Q4 in the national scheme of biological classification of surface waters as set out by the EPA. River quality in Ireland is also governed by the Phosphorous Regulations, prepared under Article 4(4) of the local Government (Water Pollution) Act 1977. The Phosphorous Regulations require that river quality be maintained or improved with regard to phosphorous levels and identify that phosphorous should be less than or equal to 30µg per litre for rivers to be of good water quality status. Phosphorous is a major limiting vegetative growth factor in fresh surface waters and high levels can lead to an accelerated growth of algae resulting in reduced dissolved oxygen levels and placing pressures on fish populations.

Policies & Objectives of Bunclody Local Area Plan 2009-2015, relating to water quality;

Wastewater Treatment & Water Supply Policies

1. Encourage sustainable and environmentally friendly drainage systems such as Sustainable Urban Drainage Systems (SUDS) into larger developments.
2. Protect existing groundwater aquifers and surface waters from pollution;
3. Protect the water quality of the River Slaney and ensure that the water quality of the river is maintained at a satisfactory level in accordance with the EU Water Framework Directive and EU Directive Number 78/659 that lists the river as a salmonoid river.

WW1 – Upgrade the existing wastewater treatment plant by an additional 4,500 PE by late 2010.

SEO W1: To improve the quality of surface waters
Indicator W1a: μg of Phosphorous per litre of surface water
Target W1a: To reduce the amount of phosphorous in surface waters over the lifespan of the Plan.
Target W1a(i): To achieve a level of less than $30\mu\text{g}$ of phosphorous per litre of surface water, in line with the requirement to achieve good water status under the Water Framework Directive, by 2015
Indicator W1b: Biotic Quality Rating (Q value)
Target W1b: To achieve a biotic quality rating of Q 4, in line with the requirement to achieve good water status under the Water Framework Directive, by 2015
SEO W2: To prevent pollution and contamination of ground water

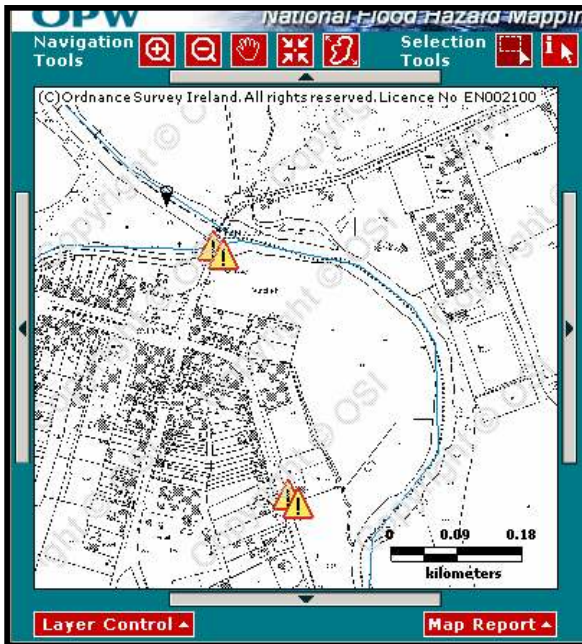


Figure 4.5 – Areas Liable to Flooding -OPW

4.5 Flooding

Flooding occurs periodically (roughly 3 – 4 year intervals) at Slaney Bridge and Island Road (Bunclody) and to the south of the town at Clohamon Bridge, this has previously resulted in closure of the N80.

Where flooding has occurred a number of residential properties and commercial properties were severely damaged. Areas affected include Chapel Road, Ryland road, Slaney Bridge, the Bridge Meadow and lands adjoining the river.

There are two main areas in Bunclody which are identified by the Office of Public works as comprising ‘ areas liable to flooding’ as can be seen from figure 4.5.

Policies & Objectives of the Bunclody Local Area Plan relating to flooding;

1. 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. Developers and the planning authority will have to have regard to the new government guidelines for planning authorities ‘The Planning System and Flood Risk Management’, September 2008 in regard to any new development.

SEO F1: To mitigate the effects of floods
Indicator F1: Number and types of developments granted permission in areas liable to flooding.
Target F1: No development to be granted in flood plain areas, apart from redevelopment of existing structures and new developments within the town center core which are designed to withstand the 100 yr flood.

4.6 Air & Climatic Factors

Air quality issues have been determined to be more appropriately assessed at higher levels in the land use and environmental protection hierarchies, at a regional level by the EPA, as well as at relevant individual project levels.

Policies & Objectives of the Bunclody Local Area Plan 2009-2015 relating to air and climatic factors;

Retail and Commercial Policies

1. To ensure that new retail/commercial developments are designed to the highest standard and located to ensure safe, sustainable and convenient access.

E2 - Ensure new sites maximise opportunities to walk or cycle to school and also ensure that post primary schools (which may serve larger catchment areas) are within walking distance of a bus route and ensure adequate pedestrian access and safe routes to school are available.

ARO1 – Ensure that proposals for new recreational facilities provide good accessibility to local residents, pedestrians, cyclists and those affected by reduced mobility and do not detract from the character of the surrounding area, particularly residential areas

Tourism

2. Facilitate tourism activities including eco-tourism, health centres, fishing, horse-riding, walking and cycling and facilities that relate to the special qualities of the surrounding natural environment.

TC2 -Encourage uses that support pedestrian activity along the Main Street, the Mall, the Market Square and adjoining side streets.

Movement and Access Policies

1. Promote local access routes and pedestrian movement corridors that encourage a strong network of linkages and enhanced permeability as displayed on Map 1.
2. Encourage the development of a safe and efficient movement and accessibility network that will cater for the needs of all users and to encourage priority for town centre access, walking and cycling, public transport provision and accident reduction.

Pedestrian Accessibility Policies

1. Seek to re-ensure that footpaths are provided as a connected network within the town.

SEO A1: Reduce all forms of air pollution and reduce dependance on travel by private car

Indicator F1: Change in Air Quality

Target F1: Maintain/improve air quality within Air Quality index bands

4.7 Material Assets

The treatment of wastewater is governed by the Urban Waste Water Treatment Directive (91/271/EEC) (amended by Directive 98/15/EEC) transposed into Irish law by the Urban Waste Water Treatment Regulations 2001 (S.I. 254 of 2001). The Directive aims to protect the environment from the adverse effects of the wastewater discharges by ensuring that wastewater is appropriately treated before it is discharges to the environment. Also the treatment of wastewater is relevant to the Water Framework Directive which requires all public bodies, to so-ordinate their policies and operations so as to maintain the good status of water bodies which are currently unpolluted and bring polluted water bodies up to good status by 2015.

Policies of the Bunclody Local Area Plan 2009-2015 relating to material assets;

WW1 – Upgrade the existing wastewater treatment facilities by an additional 4,500 PE by late 2010.

SEO M1: To protect the environment from adverse effects of the wastewater discharges by ensuring that wastewater is appropriately treated before it is discharged to the environment

Indicator M1a: μg of Phosphorous per litre of wastewater discharge

Target M1a: To aim towards achieving a level of less than $30\mu\text{g}$ of Phosphorous per litre of wastewater discharge from new and upgraded wastewater treatment systems.

4.8 Cultural Heritage

Implementation of the Plan has the potential to impact upon cultural heritage, archaeological and architectural.

Policies & Objectives of the Bunclody Local Area Plan relating to cultural heritage are contained in Section 6 of the Plan;

Protected Structures Policies

It is the policy of the Councils to:

Preserve the integrity and features of Protected Structures as set out in the Wexford County Development Plan 2007-2013 by:

1. Resisting development which would adversely affect the setting of a Protected Structure.
2. Promote the maintenance and appropriate reuse of Protected Structures and older buildings of architectural heritage merit that make a positive contribution to the character, appearance and quality of local streetscapes and the sustainable development of the County and Town.

Aim

To protect the special character of the proposed designated Architectural Conservation Area in Bunclody and to ensure future development will enhance the character and contribute to the creation of a distinctive sense of place.

HT1 - Seek the improvement of public areas throughout the town, particularly in the vicinity of the Mall and the River Slaney in order to improve the setting of historic and cultural landmarks;

HT2 - Facilitate the appropriate reuse of derelict or underutilised historic and other buildings throughout the town in order to improve the visual appearance and general provision of community, service and other land uses of the town;

Archaeological Heritage Policies

1. Have regard to the Record of Monuments and Places (RMP) & Sites & Monuments Record (SMR), when dealing with planning applications for development or threats to recorded items.
2. Ensure development shall be controlled in the vicinity of a recorded feature where it detracts from the setting of the feature or where it is a feature seriously injurious to its cultural or educational value. In all such cases the Councils shall consult with the National Monuments Section of the Department of Environment, Heritage and Local Government (DoEHLG).
3. Promote public awareness of the rich archaeological heritage in the area.

SEO C1: To promote the protection and conservation of the cultural, including architectural and archaeological, heritage

Indicator C1: Number of planning applications for works to protected structures

Target C1: Maintain or increase number of protected structures contained in the RPS of the Plan

4.9 Landscape

Ireland signed and ratified the European Landscape Convention on 22 March 2002 with the Convention entering into force in Ireland from 1st March 2004. The convention fills the legal vacuum caused by the absence at European level, of a specific, comprehensive reference text devoted entirely to the conservation, management and improvement of European landscapes in the international legal instruments on the environment regional planning and cultural heritage. The aims of the Convention include: to conserve and maintain the significant or characteristic features of a landscape, justified by its heritage value derived from its natural configuration and/or from human

activity; to harmonise changes in the landscape which are brought about by social, economic and environmental processes, and to enhance landscapes.

Policies & Objectives of the Bunclody Local Area Plan 2009-2015, relating to landscapes;

Existing & Future Housing Policies

6. To maintain the demesne landscape, woodlands and river floodplains free from development such that the special landscape character and visual context of the town is protected.

TO1 - Investigate the development of a pedestrian amenity route throughout the town and environs areas so as to link the Wicklow Way and Leinster Way walking routes, this link would encompass the special landscape and built heritage features of the historic settlement while promoting Bunclody's tourist potential. Any proposed route will be subject to an ecological assessment.

NH1 – protect the character, appearance and quality of the habitats and semi-natural features in Bunclody Local Area Plan such as woodlands, hedgerows, wetlands and artificial waterways of historic or ecological importance.

<p>SEO L1: To conserve, maintain and enhance the status of Bunclody's natural river side landscape & historic landscape as an attractive amenity, historical, recreational and ecological resource.</p>
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<p>Indicator C1: Number of planning applications along riverside</p>
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<p>Target C1: No developments to be conspicuously located within the Slaney riverside</p>

Chapter 5. A Local Area Plan for Bunclody

The Bunclody Local Area Plan, with which this report should be read in conjunction with, has been prepared in response to the development pressures facing Bunclody and the need to provide a positive framework for the future development of the town that is consistent with the policies and objectives contained in the County Wexford Development Plan 2007-2013 and that satisfies the needs for the local community.

The Plan is intended to provide for the proper planning and sustainable development for Bunclody for a duration of 6 years 2009 – 2015. The Plan addresses a range of development pressures and needs that are facing the Town during the period of the plan and beyond. In doing so, it sets out the goals, policies and objectives to be followed by Wexford County Council, as well as the policies recommended to guide planning decisions and the activities of the Planning Authorities over the period of the Plan.

The Local Area Plan is divided into 3 Parts with a total of 6 sections, these are as follows:

Part 1

- Section 1 Introduction
- Section 2 Strategic Assessment
- Section 3 Urban Character Assessment

Part 2

- Section 4 Core strategy
- Section 5 Policies & Objectives

Part 3

- Section 6 Conservation Proposals

5.1 Purpose of the Local Area Plan

The purpose of this Local Area Plan is to take a long term view of the future development of Bunclody in order to manage change in the town's physical environment and provide for new development that contributes to, and enhances the existing qualities of the town. This shall be done by ensuring that development is planned in a comprehensive and co-ordinated manner. Though the development policies and objectives set out in this Plan are for the next six years, the Development Strategy provides the foundations that will shape the future development of the Bunclody area beyond 2014.

5.2 Plan Area

Wexford County Council established a development area boundary for Bunclody in the Bunclody & Environs Local Area Plan 2002.

The development boundary of the town has been amended following consideration of the following factors:

- Consistency with strategic policies at national, regional and local level;
- Anticipated population growth target for Bunclody
- The existing urban structure of the town;
- Need for economic growth in the area;
- The proper planning and sustainable development of the area;
- Proximity of the site to cSAC and pNHA;
- The likely future development needs, given the increased pressure for development in Bunclody in recent years.

5.3 Core Strategy

The Councils Strategy for Bunclody and the town environs is to ensure that this area develops as a sustainable balanced settlement with appropriate amounts of residential, economic, tourism and recreational development.

Vision for Bunclody:

To build on Bunclody's current strengths and develop the area by promoting:

- A desirable place to live with an adequate mix of housing;
- Convenience for the local community in relation to provision services and ancillary requirements;
- A vibrant and unique community;
- A walkable and pedestrian friendly environment;
- A degree of self sufficiency;
- Encouraging the protection of its Built and Natural Environment.

The main aims of the Bunclody Local Area Plan;

- To facilitate the sustainable economic and social development of the town, through the promotion of a positive climate for development initiative within the plan area
- Supports and protect the environment, heritage, character and amenity of the town including the River Slaney and its environs (cSAC)
- To upgrade and expand the towns physical infrastructure to accommodate existing and projected needs
- Provide for a range of community facilities and amenities to serve the local community, including the educational, recreational, religious, civic needs of children, adolescents, adults and the elderly
- Promote a strong sense of community spirit, civic pride and social inclusion
- Has a vibrant and accessible village centre with a well developed public realm
- To conserve the natural and built environment of the town where it is recognised as having special value
- To strengthen the urban structure in the County through the planned orderly development of Bunclody.

Chapter 6. Development Alternatives

This section identifies and describes different development alternatives of how to achieve the various parts of the vision which is set out for the Bunclody Local Area Plan 2009-2015, taking into account the Wexford County Development Plan 2007 to 2013 as well as the geographical scope of the Plan. These development alternatives are evaluated in Section 6 resulting in the identification of a preferred development alternative. This preferred development alternative is accompanied by mitigation measures in Section 7. Mitigation measures attempt to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the Plan. The preferred development alternative together with the mitigation measures are included in the Bunclody Local Area Plan which is submitted, with this environmental report, to the Elected Members.

Development of Alternatives

Firstly, a conventional land use zoning approach whereby lands are zoned by strict boundaries determining specific land uses was considered. Through this approach sufficient areas of land would be zoned for residential development and for community facilities, amenities and infrastructure. Development alternatives relating to the locations of development to be provided for under the Local Area Plan were explored.

It is noted that the density of development has been given consideration during the formulation of the Plan.

6.1 The 'do-nothing' alternative Option

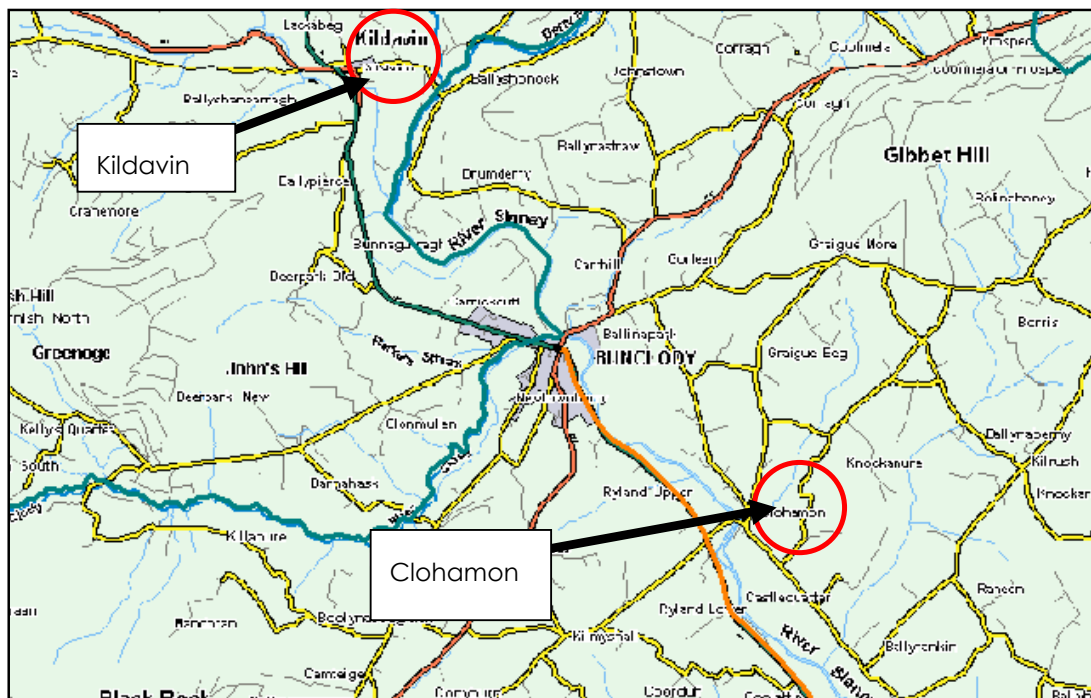
Examining the continuation of existing trends, and identifying the likely effects this will have on needs and on the environment. Although the do nothing alternative is not one of the reasonable alternatives which are required to be considered under the SEA Directive where plans or programmes are legally required to be made this alternative has been described in Section 3.

Notwithstanding the requirement for a Development Plan as set out in the Planning & Development Acts 2000 – 2006, it was determined that there is a need for a Plan for Bunclody in order to accommodate growth allocated to the town under the Settlement Strategy under the County Development Plan 2007-2013 and for community facilities, amenities and infrastructure, commercial, tourism and other uses in a way that prevents any future environmental problems.

6.2 Option A- Diffusion

Bunclody could select a strategy where population expansion would no longer be concentrated in the town itself. Instead expansion might be absorbed by surrounding villages and settlements. These villages might develop as satellite communities while the existing town edge would remain essentially as it is, without pressure for further extension.

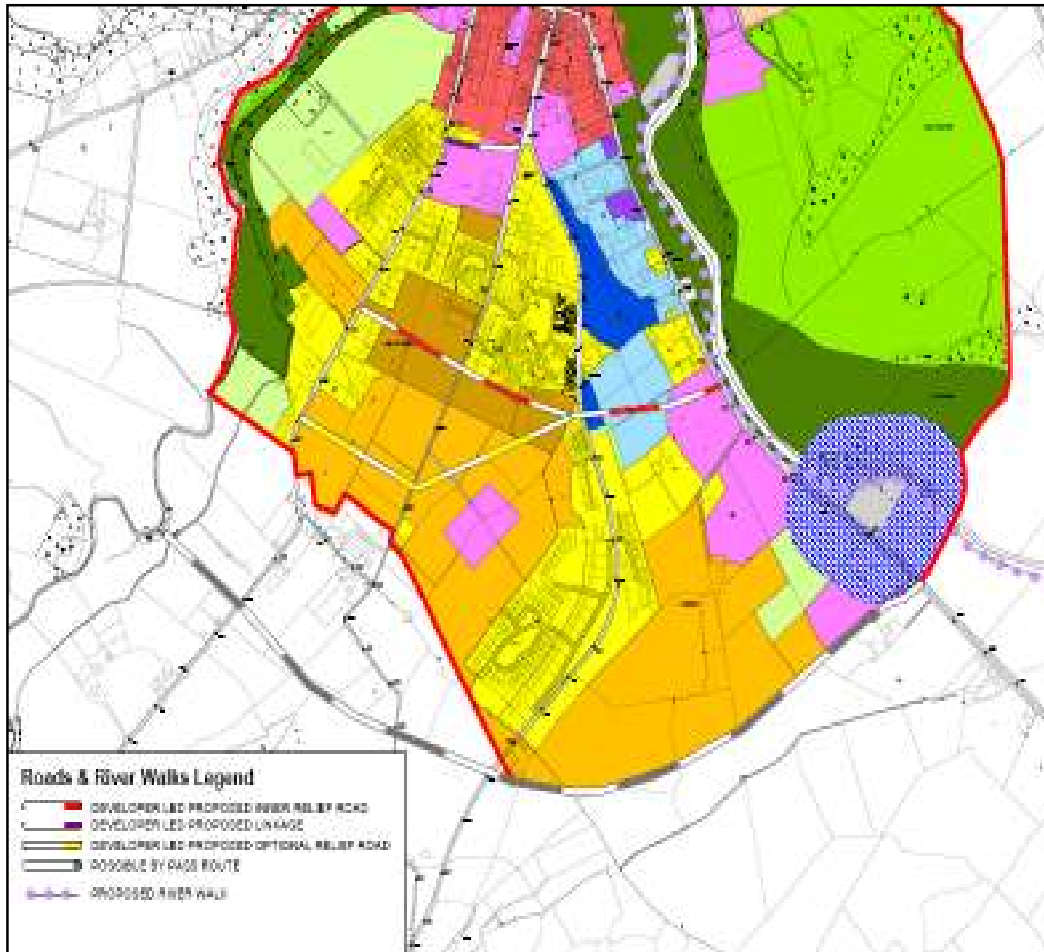
There are two reasons however for not pursuing such a strategy. Firstly this type of development would be unsustainable as the villages and settlements surrounding the town do not supply the level of critical mass which would allow for the development of social & physical infrastructure. Therefore in turn



a larger amount of commuting would occur between the smaller settlements and the town of Bunclody, which would put a greater strain on the transport links surrounding the town. Secondly the social character and infrastructure of the surrounding villages are not ready to accept the imposition of sudden and radial population increase due to out migration from Bunclody.

6.3 Option B - Diffusion within Possible Relief Road

Another option, which Bunclody might pursue, is that of using the possible relief road at the southern end of the town boundary as an expansion limit, with long term policy of developing residential neighbourhoods against the relief road with a large area of open space (green parkland) separating this new development from the existing town edge (town centre and existing residential developments). This would draw pressure away from the town edge and spread the existing town in a more dispersed manner enabling greater scope for residential development. This proposed option of dispersal would be similar to a dispersal of the population to the outer settlements as discussed under 'Diffusion', except that here the settlements would be purpose-built within the town's environs. One disadvantage of this strategy however is the uncertainty in relation to the relief road and even if it is to be built, the time frame for commencement or completion of the relief road and traffic congestion and associated problems that would exist in the interim. Also this strategy would put further reliance on the use of the car, as distances to town center uses and services would be too far for walking or cycling in the absence of safe pedestrian and cycle links. Also it is a policy in the Local Area Plan that the sequential test be used in all future residential development in the town. By using this option haphazard development may occur which would not be consistent with the proper planning and sustainable development of the area. Also by placing a large area of green space in-between the new residential and old residential the sequential test would again be compromised, smaller usable areas of green space may be more appropriate.

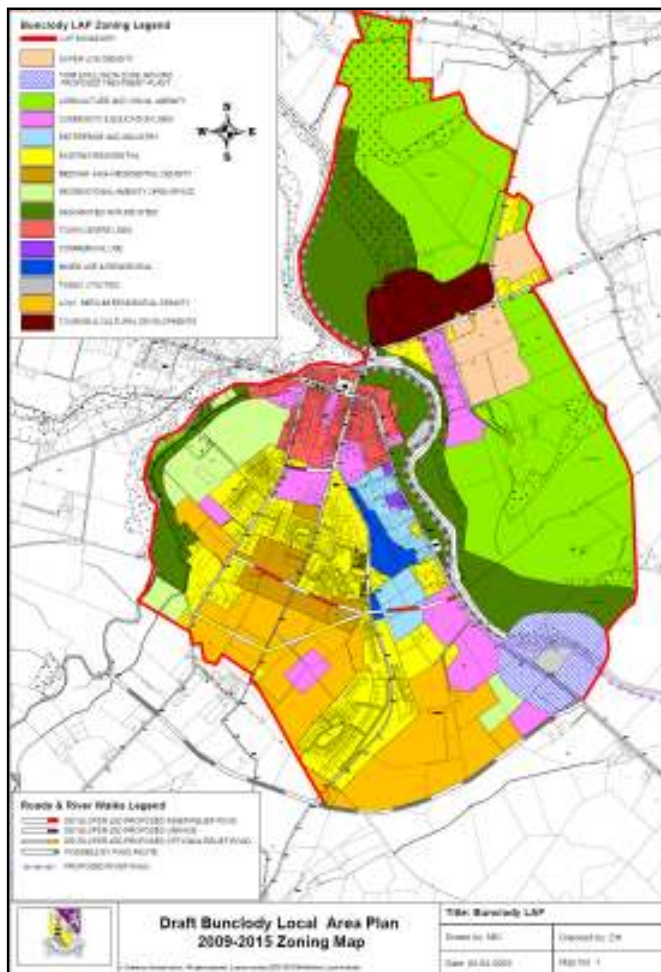


6.4 Option C - Preferred Option, Consolidation of Radial Structure

The final Strategy considered is one, which might use the existing structure with its series of radial routes to refine or consolidate the town to increase its efficiency and balance development on the southern and northern sides. The town is constrained on western side by the River Clody which is also the County Boundary, and on the eastern side by the River Slaney and also elevated landscape.

Using this Option a number of radial routes have been selected and inter-linked by proposed linkages close to the town centre and also proposed linkages close to the southern town edge and the possible relief road. The existing shell of the older residential areas around the center would remain unbroken by new major routes (apart from one connection between Irish

street and Church Street) maintaining a pedestrian scale of contact between the older inner suburbs and the center. This strategy would be highly sustainable and would extend in an easily adjustable fashion the existing and recently developing structure of the town as well as the services in the town. It



would represent the concept of supply-based planning.

This option incorporates relevant National, Regional & County Strategies while also providing a vision that will realistically accommodate continued urban growth. The town can therefore be developed in a sequential and sustainable manner, firstly along the radial routes closest to the town and then expanding outwards while remaining within the town boundary.

This scenario is generally believed to have the lowest environmental impacts, providing that the mitigation measures proposed are adopted.

Chapter 7. Evaluation of Development Alternatives

Strategic Environmental Objectives are used in order to evaluate each of the development alternatives described and mapped in Chapter 6. The table overleaf brings together all those SEO's, which have been developed from international, national and county policies, which generally govern environmental protection objectives.

The development alternatives are evaluated with compatibility criteria in order to determine how the alternatives are likely to affect the status of these SEO's. A matrix is used for this evaluation. Use has been made of the description of the environmental baseline in order to determine whether or not the development of alternatives will affect the status of SEO's.

Likely to Improve status of SEO's	Probable Conflict with Status of SEO's unlikely to be mitigated	Potential Conflict with status of SEO's likely to be mitigated by policies, strategies and objectives integrated into the Plan.	Uncertain Interaction with status of SEO's	Neutral interaction with status of SEO's	No Likely interaction with status of SEO's
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Where the appraisal identifies, for example a likely conflict with the status of an SEO the relevant SEO code is entered into the conflict column. All potential conflicts and impacts identified below are those, which will occur if unmitigated against. Where such potential conflicts or impacts occur then Chapter 8 provides a recommendation on how to mitigate this potential impact for the chosen Development Alternative.

SEO Code & Description
SEO – B1: To avoid loss of habitats and flora and fauna in designated wildlife sites
SEO – 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
SEO P1: To provide for appropriate community facilities, amenities and infrastructure to support new and existing developments within and surrounding the Town.
SEO S1: To maintain the quality of soil
SEO S2: To maximize the sustainable re-use of brownfield lands where possible
SEO W1: To improve the quality of surface waters
SEO W2: To prevent pollution and contamination of ground water
SEO F1: To mitigate the effects of floods
SEO A1: Reduce all forms of air pollution and reduce dependence on travel by private car
SEO M1: To protect the environment from adverse effects of the wastewater discharges by ensuring that wastewater is appropriately treated before it is discharged to the environment
SEO C1: To promote the protection and conservation of the cultural, including architectural and archaeological, heritage
SEO L1: To conserve, maintain and enhance the status of Bunclody's natural river side landscape as an attractive amenity, historical, recreational and ecological resource.

7.1 Evaluation of Development Alternatives A, B, & C

Development Alternative	Likely to Improve status of SEO's	Probable Conflict with Status of SEO's unlikely to be mitigated	Potential Conflict with status of SEO's likely to be mitigated by policies, strategies and objectives integrated into the Plan.	Uncertain Interaction with status of SEO's	Neutral interaction with status of SEO's	No Likely interaction with status of SEO's
Option A Diffusion		P1, B2, A1	B1, S1, W1, W2,	S2, L1, C1		

			F1, M1,			
Option B Diffusion within Possible Relief Road		L1, B2, P1	B1, S1, W1, W2, F1, A1, M1,	S2, C1		
Option C Consolidation of radial routes	P1, S2, A1, C1		B1, B2, S1, W1, W2, F1, M1,		L1	

7.2 Assessment of Policies & Objectives

This chapter is composed of a Working Paper which contains a systematic appraisal of every Aim, Objective and Policy proposed by the Plan presented to the elected members. However as has already been noted, the Local Area Plan will develop in response to comments received during the course of consultation. This updating of the Local Area Plan will be accompanied by a review of relevant parts of this environmental report.

1. Likely to **improve** status of environment 2. Likely to **conflict** status of environment 3. **Uncertain** interactions with environment 4. **Neutral** interaction with status of environment 5. **No Likely** interactions with environment

STRATEGIC OBJECTIVE	improve	conflict	Uncertain	Neutral	No Likely
Ensure full compliance with the requirements of Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment – The SEA Directive and the associated Planning and Development (Strategic Environmental Assessment) Regulations, 2004.	√				
Ensure any plan or project not directly connected with or necessary to the management of the site (Natura 2000 sites) but likely to have 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 sites conservation objectives.	√				
Section 5.1 Population & Zoned Land					
Zone sufficient lands for future development consistent with the Wexford County Development Plan 2007-2013	√				

STRATEGIC OBJECTIVE	improve	conflict	Uncertain	Neutral	No Likely
and the Regional Planning Guidelines.					
<p>PZL - Seek to facilitate the release of new residential development, giving priority to locations that enhance the existing urban structure (sequential test) and which can be integrated into existing public services.</p> <p>Development of Greenfield sites will therefore be encouraged to occur in a sequential manner with the lands nearest the town centre being developed first.</p>	√				
<p>Section 5.2.1 Housing land supply based on population projections</p>					
<p>Zone sufficient land to allow for the probability that some centrally located sites will not become available in the lifetime of the plan.</p>			√		
<p>Use a sequential approach to residential development, firstly through in-fill opportunities followed by brownfield sites and where these previous sites are not viable only then will new residential lands be considered.</p>	√				
<p>Section 5.2.2 Existing & Future Residential</p>					
<p>Provide sufficient and suitably located land to meet the housing target and satisfy local housing needs.</p>	√				
<p>Encourage a mix of housing type, tenure and size in order to meet changing household size and composition and to provide a social and demographic balance in the town.</p>	√				
<p>Require that in the case of Wexford County Council 20% of land zoned for residential development or for mix of residential and other uses, shall be made available for the provision of social and affordable housing.</p>	√				
<p>To consolidate the existing settlement pattern by encouraging a sequential approach whereby new developments in close proximity to the existing built-up area are developed through in-fill development having</p>	√				

STRATEGIC OBJECTIVE	improve	conflict	Uncertain	Neutral	No Likely
regard to the need also to provide open space, car parking and other appropriate planning and environmental criteria.					
To permit appropriate higher densities in residential developments in accordance with the 'Sustainable Residential Development in Urban Areas –Guidelines for Planning Authorities' DoEH&LG December 2008.	√				
To maintain the demesne landscape, woodlands and river floodplains free from development such that the special landscape character and visual context of the town is protected.					√
H1 - Ensure the implementation of the Housing Strategy and to integrate housing provided under Part V of the Planning and Development Act 2000-2006 into private development in a layout that prevents segregation and promotes good design and layout.	√				
H2 - Carry out the Council responsibilities under the Housing Acts and to provide Local Authority dwellings, affordable units, voluntary co-operative housing and private sites as the need arises and as finances permit.			√		
H3 - Ensure the necessary infrastructural investment to facilitate the overall level of housing output required to meet the current and anticipated levels of demand in a planned and coherent fashion.			√		
H4 - Actively promote the provision of community, educational, social and recreational facilities in parallel with future housing development.			√		
H5 – Ensure any mature hedgerow, trees or old stone walls are retained insofar as possible in new developments.				√	

STRATEGIC OBJECTIVE	improve	conflict	Uncertain	Neutral	No Likely
Section 5.2.4 Infill Housing & Development of Backlands					
To encourage infill housing & backland developments on appropriate sites where the proposals respect the existing scale and character of the area.	√				
Section 5.2.5 Traveller Accommodation					
Facilitate the provision of appropriate accommodation for the local traveller community in Bunclody in accordance with the Draft Traveller Accommodation Programme 2008-2013 adopted by Wexford County Council.	√				
Ensure the design and layout of accommodation has regard to The Housing (Travelling Accommodation) Act, 1998 and reflect the “Revised Guidelines for Residential Caravan Parks for Travellers”.			√		
Section 5.3 Retail & Commercial					
Maintain and foster the role of Bunclody as an important service centre for the surrounding rural hinterland.			√		
Encourage the expansion of retail and commercial services and facilities sufficient to meet existing and proposed local needs.		√			
Ensure that the retail development proposals conform to the requirements of the County Retail Strategy for the respective County.				√	
To ensure that new retail/commercial developments are designed to the highest standard and located to ensure safe, sustainable and convenient access.	√				
RC1 – Encourage development of infill sites, laneways of the town centre streets and backlands within the town centre and adjoining area as locations for retail, commercial and residential uses, having regard to the	√				

STRATEGIC OBJECTIVE	improve	conflict	Uncertain	Neutral	No Likely
surrounding building uses in the area.					
Section 5.4 Employment & Economic Development					
Facilitate and encourage the setting up of small and medium sized enterprises in close proximity to the town centre and the expansion of existing businesses.			√		
Co-operate with state and semi-state employment agencies and local organisations in promoting Bunclody as a location for employment activities.			√		
Ensure that future development does not comprise the viability of existing facilities.			√		
To provide sufficient & suitably located zoned land to promote economic activity in the area.	√				
EM1 – Promote economic development in the town and facilitate the development of office based and light industry such as information technology, & research and development in co-operation with relevant agencies and organisations.			√		
EM2 - Facilitate home-based employment activities subject to the protection of the amenities of residential areas.	√				
EM3 - Ensure that existing residential area and areas of sensitive environmental character are safeguarded from inappropriate new or expanded employment uses..	√				
EM4 - Encourage the redevelopment of backland areas for employment uses between Ryland Road and Irish Street and also between Irish Street and Church Street to create a more compact and sustainable form in close proximity to the services and facilities available within the town centre.	√				

STRATEGIC OBJECTIVE	improve	conflict	Uncertain	Neutral	No Likely
Section 5.5 Community Facilities					
To facilitate and co-operate with other organisations in the provision of services for the community including, in particular, schools, crèches and other education and childcare facilities in parallel with future housing.	√				
Facilitate the provision of health services and social facilities, nursing homes and sheltered housing at suitable locations in the town.	√				
Encourage the development of youth centre facilities.	√				
Section 5.6 Education					
Facilitate the development of educational facilities and any additional specialist accommodation to meet the required needs of both current and future populations in co-operation with the Department of Education and Science and local school management boards.	√				
The Council shall restrict new developments adjacent to existing schools where such development may have the potential to restrict the expansion of that school.	√				
Facilitate educational developments that are consistent with the Department's guidelines 'The Provision of Schools and the Planning System: A code of practice for Planning (Department of Education and Science DoEH&LG - July 2008)'					
E1 - Ensure the provision of additional school facilities on appropriate sites within the town, these appropriate sites can be seen on the accompanying Zoning Map (Community & Educational Uses).	√				

STRATEGIC OBJECTIVE	improve	conflict	Uncertain	Neutral	No Likely
E2 - Ensure new sites maximise opportunities to walk or cycle to school and also ensure that post primary schools (which may serve larger catchment areas) are within walking distance of a bus route and ensure adequate pedestrian access and safe routes to school are available.	√				
E3 - No substantial residential development should proceed without an assessment of existing schools capacity or the provision of new school facilities in tandem with the development.				√	
Section 5.7 Childcare					
Require the provision of appropriate childcare facilities in accordance with the 'Childcare Facilities – Guidelines for Planning Authorities 2001', the Wexford County Development Plan 2007-2013	√				
CH1: Facilitate the development of childcare facilities where demand arises subject to satisfying applicable planning and engineering criteria.			√		
CH2: Ensure the provision of appropriate childcare facilities on site in or within close proximity to new developments with convenient and safe access for all. Where possible such facilities should be located adjacent to or close by other facilities i.e. employment or neighbourhood centres.	√				
Section 5.8 Amenity, Recreation & Open Space					
1. Co-operate with sports clubs, schools and community organisations in the provision of sports and recreational facilities and to encourage the development of Youth Clubs and Organisations in the town'			√		
2. To have regard to the open space standards as set out in the consultation guidelines for planning authorities 'Sustainable Residential Development in Urban Area' DoEH&LG December 2008.	√				

STRATEGIC OBJECTIVE	improve	conflict	Uncertain	Neutral	No Likely
3. Ensure that the public open spaces identified within the Land Use Zoning Map are protected and if required sensitively developed.	√				
4. To secure the protection of significant views into and out of the settlement through the strict control of development on the urban fringe with particular regard to the vistas formed by historic street patterns, traditional building alignments and that of Mount Leinster.				√	
ARO1 – Ensure that proposals for new recreational facilities provide good accessibility to local residents, pedestrians, cyclists and those affected by reduced mobility and do not detract from the character of the surrounding area, particularly residential areas.	√				
AR02 – in partnership with the relevant landowners, seek to develop a new walking route along the River Slaney and River Clody, and improve on existing walkways in the area of Lucy’s wood subject to screening for an Appropriate Assessment.		√			
Section 5.9 Tourism					
1. Develop and maximise the tourism potential of Bunclody.		√			
2. Facilitate tourism activities including eco-tourism, health centres, fishing, horse-riding, walking and cycling and facilities that relate to the special qualities of the surrounding natural environment.		√			
3. Improve the signposting of scenic walks, riverside trails and heritage features.	√				

STRATEGIC OBJECTIVE	improve	conflict	Uncertain	Neutral	No Likely
<p>TO1 – Investigate the development of a pedestrian amenity route throughout the town and environs areas so as to link the Wicklow Way and Leinster way walking routes. This link would encompass the special landscape and built heritage features of the historic settlement while promoting Bunclody’s tourist potential. Any proposed route will be subject to screening for an Appropriate Assessment.</p>		√			
<p>Section 5.10 Town Centre</p>					
<p>1. Maintain the mixed use character of the town centre.</p>			√		
<p>2. Encourage the integration of residential areas with the town centre.</p>	√				
<p>3. Provide for anticipated car parking and commercial delivery demands within the town centre.</p>	√				
<p>4. Encourage amenity and environmental improvements in the town centre, so as to reinforce and enhance the special townscape of Bunclody.</p>	√				
<p>5. To ensure that proposals for development within the town centre area respect the general height, scale, building line, plot width, architectural quality and streetscape.</p>			√		
<p>6. To encourage refurbishment and in-fill development such that the existing character of the streetscape is maintained.</p>	√				
<p>7. Encourage greater linkage between the Main Street and the usable backlands in order to enhance the vitality and viability of both.</p>	√				

STRATEGIC OBJECTIVE	improve	conflict	Uncertain	Neutral	No Likely
8. Facilitate the provision of functional public civic space linking the Main Street and the proposed link road to the rear of main street.	√				
9. Strictly control advertising and encourage the removal of signage which is visually obtrusive or out of scale with the character of the town.	√				
TC1 - Encourage residential use of upper floor space within the town centre.	√				
TC2 -Encourage uses that support pedestrian activity along the Main Street, the Mall, the Market Square and adjoining side streets.	√				
TC3 - Discourage office use at ground floor level on the Main Street.			√		
TC4 - Ensure the protection of the streetscape value, civic quality and distinct urban space at Market Square through specification of an appropriate in-fill development space on the vacant site on the northern extremity of the square.			√		
TC5 - Ensure sensitive and appropriate design within the proposed Architectural Conservation Area.				√	
Section 5.11.1 Transport & Infrastructure					
1. Promote local access routes and pedestrian movement corridors that encourage a strong network of linkages and enhanced permeability as displayed on Map 1.			√		

STRATEGIC OBJECTIVE	improve	conflict	Uncertain	Neutral	No Likely
2. Encourage the development of a safe and efficient movement and accessibility network that will cater for the needs of all users and to encourage priority for town centre access, walking and cycling, public transport provision and accident reduction.	√				
3. Reduce traffic in the town centre by providing alternative routes and constructing new distributor roads and link roads around the town.			√		
4. All roads within the development boundary should allow for expansion of roads and provision of footpaths and lighting.		√			
5. Improve the visual approach road to the town along the Ryland Road (N80) through the new development of footpaths, lighting and planting.		√			
1. Allow for the long term construction of local distributor roads linking future developments. These shall be developer led and shall be the subject of planning applications on development lands.			√		
2. Undertake during the lifetime of this Local Area Plan a feasibility assessment of an orbital relief road around the town.			√		
3. Reserve land for a proposed link road to the direct south of the town between the Church Street and Irish Street and prohibit development on land reserved for the preferred route, or in a location that would compromise the construction of such a route.			√		
4. A Transport Assessment shall be carried out for all new road linkages within the Local Area Plan area. These assessments will address land use and access proposals/options as well as any other issues that may arise at planning application stage	√				

STRATEGIC OBJECTIVE	improve	conflict	Uncertain	Neutral	No Likely
<p>5. The County Council shall investigate the provision of Traffic Calming measures along the section of the R746 from the Slaney Bridge entrance to Newtownbarry House, to the crossroads on the eastern side of the FCJ Secondary School. These measures will assist in alleviating the speed and vehicle turning problems in this area.</p>			√		
<p>Section 5.11.2</p>					
<p>1. Seek to re-ensure that footpaths are provided as a connected network within the town.</p>	√				
<p>2. Seek to improve road safety for all road users by improving road and footpath surfaces, markings and lighting, and relieving traffic congestion in the town.</p>	√				
<p>3. Ensure that all footpaths have ramps at kerb corners for pram and wheelchair access and tactile ground indicator tiles for vision impaired pedestrians at crossing points.</p>				√	
<p>4. Ensure that the location of street furniture does not obstruct footpaths.</p>				√	
<p>5. Ensure that pedestrian links from and between existing and new developments to local services are direct, have adequate street lighting and passive surveillance.</p>			√		
<p>5.11.3 Car parking</p>					
<p>To introduce a parking management system which will free up short stay parking by reducing the amount of long term parking in the town centre. The Council recognise that for this to be successful, alternative long term parking facilities must be provided. The Council will investigate the possibility of locating such facilities along Ryland Road and will consult with CIE to investigate possibility of locating a pick up/drop off point at this</p>			√		

STRATEGIC OBJECTIVE	improve	conflict	Uncertain	Neutral	No Likely
location.					
CP1 – Facilitate the development of additional car parking facilities at suitable locations;			√		
CP2 – Introduce a new system of parking metres/2 hr maximum stay on Main Street which will encourage short term parking.		√			
CP3 - Facilitate an additional CIE bus stop to a suitable location at edge of town centre or out of centre close to any proposed long term parking facility;	√				
CP4 - Encourage new off-street parking wherever practicable and facilitate improvements to the existing off-street parking in the town centre;			√		
CP5 – Ensure that new developments provide for adequate off-street parking in accordance with the parking standards contained in the Wexford County Development Plans for the area;			√		
5.12 Wastewater Treatment Capacity & Water Supply					
1. Encourage sustainable and environmentally friendly drainage systems such as Sustainable Urban Drainage Systems (SUDS) into larger developments.	√				
2. Protect existing groundwater aquifers and surface waters from pollution, and also ensure the protection of associated habitats and species in the Plan area.	√				
3. Protect the water quality of the River Slaney and ensure that the water quality of the river is maintained at a	√				

STRATEGIC OBJECTIVE	improve	conflict	Uncertain	Neutral	No Likely
satisfactory level in accordance with the EU Water Framework Directive and EU Directive Number 78/659 that lists the river as a salmonoid river.					
4. Encourage the introduction of lifetime water consumption minimisation methods in buildings by the fitting of low-water use equipment and grey water recycling and also promote the installment of rainwater harvesting mechanisms in both new and existing residential areas, to accommodate individual residential units and group schemes	√				
WW1 – Upgrade the existing wastewater treatment plant by an additional 4,500 PE by late 2010.	√				
WW2 - The development of a wastewater leak detection programme shall be developed in conjunction with the upgrade of the existing Wastewater Treatment Plant. The use of a strategic metering system to aid in leak detection shall be considered.	√				
5.13 Flooding & Climatic Factors					
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. Developers and the planning authority will have to have regard to the new government guidelines for planning authorities 'The Planning System and Flood Risk Management', September 2008 in regard to any new development.	√				
Section 6.3 Architectural Heritage					
It is the policy of the Councils to: Preserve the integrity and features of Protected Structures as set out in the Wexford County Development Plan					

STRATEGIC OBJECTIVE	improve	conflict	Uncertain	Neutral	No Likely
2007-2013 by:					
1. Resisting development which would adversely affect the setting of a Protected Structure.				√	
2. Promote the maintenance and appropriate reuse of Protected Structures and older buildings of architectural heritage merit that make a positive contribution to the character, appearance and quality of local streetscapes and the sustainable development of the County and Town.				√	
Section 6.4					
Aim To protect the special character of the proposed designated Architectural Conservation Area in Bunclody and to ensure future development will enhance this character and contribute to the creation of a distinctive sense of place.				√	
HT1 - Seek the improvement of public areas throughout the town, particularly in the vicinity of the Mall and the River Slaney in order to improve the setting of historic and cultural landmarks;			√		
HT2 - Facilitate the appropriate reuse of derelict or underutilised historic and other buildings throughout the town in order to improve the visual appearance and general provision of community, service and other land uses of the town;	√				

STRATEGIC OBJECTIVE	improve	conflict	Uncertain	Neutral	No Likely
Section 6.5 Archeological Heritage					
1. Have regard to the Record of Monuments and Places (RMP) & Sites & Monuments Record (SMR), when dealing with planning applications for development or threats to recorded items.				√	
2. Ensure development shall be controlled in the vicinity of a recorded feature where it detracts from the setting of the feature or where it is a feature seriously injurious to its cultural or educational value. In all such cases the Councils shall consult with the National Monuments Section of the Department of Environment, Heritage and Local Government (DoEHLG).				√	
3. Promote public awareness of the rich archaeological heritage in the area.			√		
Section 6.6 Natural Heritage					
NH1 – protect the character, appearance and quality of the habitats and semi-natural features in Bunclody Local Area Plan such as woodlands, hedgerows, wetlands and artificial waterways of historic or ecological importance.	√				
NH2 – protect the sites identified as the candidate Special Areas of Conservation and the proposed Natural Heritage Area as identified on Map 3.	√				
NH3 - To protect riparian zones in undeveloped sections of the river by maintaining an adequate buffer zone (minimum 5-10m back from the riverbank) along all watercourses, with no infilling or removal of vegetation within these buffer zones.	√				

STRATEGIC OBJECTIVE	improve	conflict	Uncertain	Neutral	No Likely
<p>NH4 – To encourage potential developers to consult with relevant agencies as early as possible to ensure that heritage concerns are considered early in the planning process and so that the final planning application can be appropriately informed.</p>	√				
<p>NH5 – If deemed necessary by the Planning Authority where the site of a development borders a designated nature site, a buffer zone of an agreed width shall be provided between the new development and the designated nature site to ensure that the habitats and species are not placed under risk of deterioration (habitats) or reduction in population size (species)</p>	√				
<p>NH6 - "With regard to the proposed recreation/amenity and open space zoning along the river cSAC, any proposals for amenity usage/improvements shall be so designed to eliminate any potential impact on the cSAC. Any development in this areas shall be subject to 'Appropriate Assessment' under the EU Habitats Directive 92/43/EEC".</p>	√				

Chapter 8. Mitigation Measures

Mitigation measures are measures envisaged to prevent, reduce and as fully as possible offset any significant adverse impacts on the environment of implementing the Local Area Plan. Chapter 7 identified the Plan's significant positive and negative effects on the Strategic Environmental Objectives.

Mitigation involves improving significant negative effects and enhancing positive ones. Where there are significant negative effects, consideration is given in the first instance to preventing such effects or, where this not possible, to lessening or offsetting those effects. Mitigation measures can be roughly divided into those that:

1. avoid effects; reduce the magnitude or extent, probability, and/or severity of effects;
2. repair effects after they have occurred, and
3. compensate for effects, balancing out negative impacts with other positive ones.

8.1 Biodiversity, Flora & Fauna

The preferred development alternative 'Option C, Consolidation of Radial Routes' was identified as having a potentially conflicting interaction with SEO B1 & B2, as the Slaney SAC runs through the center of the town and south adjacent to main route through the town the N80. MM1 & MM2 avoids any significant adverse impacts as a result of this interaction.

SEO – B1: To avoid loss of habitats and flora and fauna in designated wildlife sites

SEO – 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
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MM1 - To ensure that appropriate measures for conservation and enhancement of the natural and built environment are incorporated into all relevant plans and programmes of Wexford County Council.

MM2 – the zoning of the SAC and NHA areas and additional land adjoining as open space & amenity which prohibits non-compatible developments.

8.2 Soil

The preferred development alternative 'Option C, Consolidation of Radial Routes' was identified as having a potentially conflicting interaction with SEO S1, as any further development of land on greenfield sites will seal off and compact further top soils. Also as the town expands and population increases there will be an increased demand for the disposal of waste. Potential cumulative adverse impacts as a result of this interaction are mitigated by MM3, MM4, MM5, MM6, MM7. The preferred development alternative was identified as having a beneficial interaction with SEO S2 any impacts of which are enhanced by MM8.

SEO S1: To maintain the quality of soil
SEO S2: To maximize the sustainable re-use of brownfield lands where possible

MM 3- To promote the implementation of the Waste Management Plan (2006) for Wexford together with any future Waste Management Plans.

MM4 - To encourage waste prevention, minimisation, reuse, recycling and recovery as methods of managing waste. Where waste management is not being carried out properly, the Waste Management Acts, 1996 to 2001 will be used as a means to ensuring specific national policies and regulations are adhered to.

MM 5 - To encourage the recycling of construction and demolition waste and the reuse of aggregate and other materials.

MM 6 - To promote the 'polluter pays principle'.

MM7 - To promote and facilitate communities to become involved in environmental awareness activities and community-based recycling initiatives or environmental management initiatives that will lead to local sustainable waste management practices.

MM8 - To survey obsolete and renewal areas and to encourage and facilitate the reuse and regeneration of derelict land and buildings in Bunclody.

8.3 Water

The preferred development alternative 'Option C, Consolidation of Radial Routes' was identified as having a potentially conflicting interaction with SEO W1 & W2, as further development will put pressure on the existing wastewater treatment works which discharges into the Slaney. The development of a new WWTP will facilitate future expansion of the town as enhanced in option C whilst improving the water quality of the River Slaney. Potential cumulative significant adverse impacts as a result of these interactions are avoided through MM 9, 10 & 11 and also those mitigation measures listed under Material Assets.

SEO W1: To improve the quality of surface waters

SEO W2: To prevent pollution and contamination of ground water

MM 9 - Promote public awareness on the maintenance of water quality and economic and sustainable use.

MM 10 - Protect existing groundwater aquifers and surface waters from pollution;

MM 11 - Protect the water quality of the River Slaney and continue to implement the Water Quality Management Plan for the River Slaney, and to ensure that the water quality of the river is maintained at a satisfactory level in accordance with EU Directive Number 78/659 that lists the river as a salmonoid river;

8.4 Flooding

The preferred development alternative 'Option C, Consolidation of Radial Routes' was identified as having a potentially conflicting interaction with SEO F1 as the town center is within the flood zone, and further development within the town center will conflict with this. Potential cumulative significant adverse impacts as a result of these interactions are avoided through MM12, 13, 14, 15, 16.

SEO F1: To mitigate the effects of floods
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MM12- Prevent the alteration of natural drainage systems 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;

MM13 - Promote storm water retention facilities for new developments and existing catchment areas

MM14- 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.

MM15- Preserve and protect the water quality of the natural wetlands and flood plains of the River Slaney where these help to regulate stream flow, recharge ground water and screen pollutants.

MM16 – Control development in any flood plain. Development will only be permitted when the Council's are satisfied that new and existing developments are not exposed to increased risk of flooding and that any loss of flood storage is compensated for elsewhere in the river catchment.

8.5 Material Assets

The preferred development alternative 'Option C, Consolidation of Radial Routes' was identified as having a potentially conflicting interaction with SEO M1 as a result of inappropriately treated wastewater from new developments.

Potential cumulative significant adverse impacts as a result of these interactions are avoided through MM17.

SEO M1: To protect the environment from adverse effects of the wastewater discharges by ensuring that wastewater is appropriately treated before it is discharged to the environment

MM17 - Collect the foul sewerage from within the town and environs and to discharge it after treatment in a safe and sustainable manner;

MM18 - Provide satisfactory wastewater treatment facilities to serve existing and future populations;

MM19 - Separate foul and surface water drainage systems where feasible in order to reduce the volume of material entering the treatment plant and to ensure that all new developments provide separate on-site foul and surface water drainage systems.

Chapter 9. Monitoring Measures

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 take remedial action. Monitoring and review are key elements of the effective implementation of the Bunclody Local Area Plan 2009-2015. It ensures that social, economic and physical objectives are fulfilled and that quality of life issues can be assessed.

The purpose of monitoring is to cross check significant effects, which arise during the implementation stage of the development plan, against those predicted during the plan preparation stage. Monitoring is often based on indicators, which measure changes in the environment, especially changes which are critical in terms of environmental quality. Indicators aim at simplifying complex interrelationships and providing information on environmental issues, which are relatively easy to understand.

Several kinds of indicators may be used to fulfil particular functions and measure the quality/quantity of environmental resources:

- State of the environment indicators reflect environmental quality, or quantity of physical and biological or chemical phenomenon.
- Stress indicators reflect development effects
- Performance indicators may be used to evaluate long-term achievements in environmental management and protection; and
- Sustainable development indicators introduce a new dimension to the provision of information in that they seek to describe and measure key relationships between economic, social and environmental factors.

In all cases, indicators should both quantify and simplify information, thereby making it more accessible to policy-makers and the public.

The following list of indicators is indicative only and is for discussion purposes only. The list may be amended following on from discussions with the Environmental Authorities, the availability of resources and relevance of the indicators to monitor the environmental baseline.

9.1 Monitoring Indicators

Monitoring is based around the indicators which were chosen earlier in the process. These indicators allow quantitative measures of trends and progress over time relating to the SEO's 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.

Environmental Component	Selected Indicator	Selected Target	Monitoring Source
Biodiversity, Flora & Fauna	Indicator B1: Percentage of habitat or percentage of species lost in designated wildlife sites	Target B1: No losses of habitat or species in designated wildlife sites during lifespan of the Bunclody Local Area Plan.	WCC, NPWS
	Indicator B2: Number of significant impacts by development within and outside designated wildlife sites to habitats and flora & fauna within these sites.	Target B2: No significant impacts by development within and outside designated wildlife sites to habitats and flora and fauna within these sites during lifespan of the Plan.	WCC, NPWS
Population & Human Health	Indicator P1: Provision of community facilities, amenities and infrastructure including safe walking and cycling routes, a riverside walk, playgrounds, sports and recreational facilities, new primary and secondary schools, and other such facilities.	<p>Target P1a: All necessary community facilities including a community center, safe walking & cycling routes, a riverside walk, playgrounds, sports and recreational facilities, new primary & secondary schools and other facilities as identified by the Bunclody Local Area Plan 2009-2015.</p> <p>Target P1b: Sites and/or facilities for new primary & secondary schools, riverside walk, playgrounds and sports areas to be identified and secured or provided during life span of Plan.</p>	WCC
Soil	Indicator S2: Area of brownfield land available	Target S2: No brownfield land to be available at the end of the Plan's lifespan.	WCC

Environmental Component	Selected Indicator	Selected Target	Monitoring Source
Water	<p>Indicator W1a: μg of Phosphorous per litre of surface water</p> <p>Water Quality</p>	<p>Target W1a: To reduce the amount of phosphorous in surface waters over the lifespan of the Plan.</p> <p>Target W1a(i): To achieve a level of less than $30\mu\text{g}$ of phosphorous per litre of surface water, in line with the requirement to achieve good water status under the Water Framework Directive, by 2015</p> <p>Target W1b: To achieve a biotic quality of Q4, in line with the requirements to achieve good water status under the Water Framework Directive by 2015.</p>	WCC, EPA
	Indicator W1b: Biotic Quality Rating (Q value)	Target W1b: To achieve a biotic quality rating of Q 4, in line with the requirement to achieve good water status under the Water Framework Directive, by 2015	WCC, EPA
Flooding	Indicator F1: Number and types of developments granted permission in areas liable to flooding	Target F1: No development to be granted in flood plain areas, apart from redevelopment of existing structures and new developments within the town center core which are designed to withstand the 100 yr flood.	WCC
Air & Climatic Factors	Indicator F1: Change in Air Quality	Target F1: Maintain/improve air quality within Air Quality index bands	EPA
Material Assets	Indicator M1a: μg of Phosphorous per litre of wastewater discharge	Target M1a: To aim towards achieving a level of less than $30\mu\text{g}$ of Phosphorous per litre of wastewater discharge from new and upgraded wastewater treatment systems.	WCC

Environmental Component	Selected Indicator	Selected Target	Monitoring Source
Cultural Heritage	Indicator C1: Number of planning applications for works to protected structures	Target C1: Maintain or increase number of protected structures contained in the RPS of the Plan	WCC
Landscape	Indicator C1: Number of planning applications along riverside.	Target C1: No developments to be conspicuously located within the Slaney riverside.	WCC

Monitoring Sources

WCC – Wexford County Council

NPWS – National Parks & Wildlife

EPA – Environmental Protection Agency

9.2 Summary of Monitoring

It is intended that a monitoring report on the implementation of the Bunclody Local Area Plan would be prepared every 2 years. Section 19 of the Planning and Development Act (Amended) 2000 -2006, requires that the Local Area Plan be reviewed/amended every 6 years. The Council will ensure that the above-mentioned surveys and analysis are undertaken in time for the Plan review.

It is recommended that a dedicated multi-disciplinary in-house team be identified to drive the monitoring process forward to ensure its implementation. Indicators may be reduced or added to depending on availability of resources and relevance and quality of indicators to monitor the environmental baseline.

Appendix

Glossary of Terms & Acronyms

WCC – Wexford County Council

DOEHLG – Department of the Environment, Heritage and Local Government

C.S.O – Central Statistics Office

SEO – Strategic Environmental Objectives

EPA – Environmental Protection Agency

SEA – Strategic Environmental Assessment

AA – Appropriate Assessment

SAC – Special Area of Conservation - Special Areas of Conservation (SACs) are strictly protected sites designated under the EC Habitats Directive.

cSAC – candidate Special Area of Conservation

SPA – Special Protection Area - Special Protection Areas (SPAs) are strictly protected sites classified in accordance with Article 4 of the EC Directive on the conservation of wild birds (79/409/EEC), also known as the Birds Directive, which came into force in April 1979. They are classified for rare and vulnerable birds, listed in Annex I to the Birds Directive, and for regularly occurring migratory species.

NHA – Natural Heritage Area - The basic designation for wildlife is the Natural Heritage Area (NHA). This is an area considered important for the habitats present or which holds species of plants and animals whose habitat needs protection.

pNHA – proposed Natural Heritage Area

SEO – Strategic Environmental Objective – methodological measures against which the environmental effects of the Local Area Plan can be tested.

NPWS – National Parks and Wildlife Service

WCC – Wexford County Council

(SAC) & (pNHA)Slaney River Valley

SITE NAME: Slaney River Valley

SITE CODE: 000781

This site comprises the freshwater stretches of the Slaney as far as the Wicklow Mountains; a number of tributaries the larger of which include the Bann, Glasha, Clody, Derry, Derreen, Douglas and Carrigower Rivers; the estuary at Ferrycarrig and Wexford Harbour. The site flows through the counties of Wicklow, Wexford and Carlow. Towns along the site but not in it are Baltinglass, Hacketstown, Tinahely, Tullow, Bunclody, Camolin, Enniscorthy and Wexford. The river is up to 100 m wide in places and is tidal at the southern end from Edermine Bridge below Enniscorthy. In the upper and central regions almost as far as the confluence with the Derry River the geology consists of granite. Above Kilcarry Bridge, the Slaney has cut a gorge into the granite plain. The Derry and Bann Rivers are bounded by a narrow line of uplands which corresponds to schist outcrops. Where these tributaries cut through this belt of hard rocks they have carved deep gorges, more than two miles long at Tinahely and Shillelagh. South of Kildavin the Slaney flows through an area of Ordovician slates and grits.

The site is a candidate SAC selected for alluvial wet woodlands, a priority habitat on Annex I of the E.U. Habitats Directive. The site is also selected as a candidate SAC for floating river vegetation, estuaries, tidal mudflats and old oak woodlands, all habitats listed on Annex I of the E.U. Habitats Directive. The site is further selected for the following species listed on Annex II of the same directive - Sea Lamprey, River Lamprey, Brook Lamprey, Freshwater Pearl Mussel, Twaite Shad, Atlantic Salmon and Otter.

Floating river vegetation is found along much of the freshwater stretches within the site. Species present here include Pond Water-crowfoot (*Ranunculus peltatus*), Water-crowfoot (*Ranunculus* spp.), Canadian Pondweed (*Elodea canadensis*), Broad-leaved Pondweed (*Potamogeton natans*), Water Milfoil (*Myriophyllum* spp.), Common Club-rush (*Scirpus lacustris*), Water-starwort (*Callitriche* spp.), Hemlock Water-dropwort, Fine-leaved Water-dropwort (*Oenanthe aquatica*), Common Duckweed (*Lemna minor*), Yellow Water-lily (*Nuphar lutea*), Unbranched Bur-reed (*Sparganium emersum*) and the moss *Fontinalis antipyretica*. Two rare aquatic plant species have been recorded in this site: Short-leaved Water-starwort (*Callitriche truncata*), a very rare, small aquatic herb found nowhere else in Ireland; and Opposite-leaved Pondweed (*Groenlandia densa*), a species that is legally protected under the Flora Protection Order, 1999.

Good examples of wet woodland are found associated with Macmine marshes, along banks of the Slaney and its tributaries and within reed swamps. Grey Willow (*Salix cinerea*) scrub

and pockets of wet woodland dominated by Alder (*Alnus glutinosa*) have become established in places. Ash (*Fraxinus excelsior*) and Birch (*Betula pubescens*) are common in the latter and the ground flora is typical of wet woodland with Meadowsweet (*Filipendula ulmaria*), Angelica (*Angelica sylvestris*), Yellow Iris, Horsetail (*Equisetum* spp.) and occasional tussocks of Greater Tussock-sedge (*Carex paniculata*). These woodlands have been described as two types: one is quite eutrophic, is dominated by Willow and is subject to a tidal influence. The other is flushed or spring-fed subject to waterlogging but not to flooding and is dominated by Alder and Ash.

Old oak woodlands are best represented at Tomnafinnoge though patches are present throughout the site. At Tomnafinnoge the wood is dominated by mature, widely spaced Sessile Oak (*Quercus petraea*), which were planted around 1700, with some further planting in 1810. There is now a varied age structure with overmature, mature and young trees; the open canopy permits light to reach the forest floor and encourages natural regeneration of Oak. As well as Oak, the wood includes the occasional Beech (*Fagus sylvatica*), Birch (*Betula* sp.), Rowan (*Sorbus aucuparia*) and Scots Pine (*Pinus sylvestris*).

The shrub layer is well-developed with Hazel (*Corylus avellana*) and Holly (*Ilex aquifolium*) occurring. The ground layer consists of Great Wood-rush (*Luzula sylvatica*) and Bilberry (*Vaccinium myrtillus*), with some Bracken (*Pteridium aquilinum*) and Brambles (*Rubus fruticosus* agg.). Herbaceous species in the ground layer include Primrose (*Primula vulgaris*), Wood-sorrel (*Oxalis acetosella*), Common Cow-wheat (*Melampyrum pratense*) and Bluebell (*Hyacinthoides non-scripta*). Many of the trees carry an epiphytic flora of mosses, Polypody Fern (*Polypodium vulgare*), and lichens such as *Usnea comosa*, *Evernia prunastri*, *Ramalina* spp. and *Parmelia* spp.

Tomnafinnoge Wood is a remnant of the ancient Shillelagh Oak woods, and it appears that woodland has always been present on the site. In the past, the wood was managed as a Hazel coppice with Oak standards, a common form of woodland management in England but not widely practised in Ireland. The importance of the woodland lies in the size of the trees, their capacity to regenerate, their genetic continuity with ancient woodland and their historic interest. The nearest comparable stands are at Abbeyleix, Co. Laois and Portlaw, Co. Waterford.

Below Enniscorthy there are several areas of woodland with a mixed canopy of Oak, Beech, Sycamore (*Acer pseudoplatanus*), Ash and generally a good diverse ground flora. Near the mouth of the river at Ferrycarrig is a steep south facing slope covered with Oak woodland. Holly and Hazel are the main species in the shrub layer and a species-rich ground flora typical of this type of Oak woodland has abundant ferns - *Dryopteris filix-mas*, *Polystichum*

setiferum, *Phyllitis scolopendrium* - and mosses - *Thuidium tamariscinum*, *Mnium hornum*, *Eurynchium praelongum*.

North of Bunclody, the river valley still has a number of dry woodlands though these have mostly been managed by the estates with the introduction of Beech and occasional conifers. The steeper sides are covered in a thick scrub from which taller trees protrude. At the southern end of the site, the Red Data Book species Yellow Archangel (*Lamiastrum galeobdolon*) occurs. Three more Red Data Book species have also been recorded from the site: Basil Thyme (*Acinos arvensis*), Blue Fleabane (*Erigeron acer*) and Small Cudweed (*Filago minima*). A nationally rare species Summer Snowflake (*Leucojum aestivum*) is also found within the site.

Mixed woodlands occur at Carrickduff and Coolaphuca in Bunclody. Oak trees, which make up the greater part of the canopy, were originally planted and at the present time are not regenerating actively. In time, if permitted, the woodland will probably go to Beech. A fair number of Yew (*Taxus baccata*) trees have also reached a large size and these, together with Holly give to the site the aspect of a south-western Oak wood.

The site is considered to contain a very good example of the extreme upper reaches of an estuary. Tidal reedbeds with wet woodland are present in places. The fringing reed communities support Sea Club-rush (*Scirpus maritimus*), Grey Club-rush (*S. tabernaemontani*) and abundant Common Reed (*Phragmites australis*). Other species occurring are Bulrush (*Typha latifolia*), Reed Canary-grass (*Phalaris arundinacea*) and Branched Bur-reed (*Sparganium erectum*). The reed-swamp is extensive around Macmine, where the river widens and there are islands with swamp and marsh vegetation.

Further south of Macmine are expanses of intertidal mudflats and sandflats and shingly shore often fringed with a narrow band of salt marsh and brackish vegetation. Narrow shingle beaches up to 10 m wide occur in places along the river banks and are exposed at low tide. Upslope the shingle is sometimes colonised by Saltmarsh Rush (*Juncus gerardi*), Townsend's Cord-grass (*Spartina townsendii*), Common Saltmarsh-grass (*Puccinellia maritima*), Sea Aster (*Aster tripolium*), Hemlock Water-dropwort (*Oenanthe crocata*) and Himalayan Balsam (*Impatiens glandulifera*).

Other habitats present within the site include species-rich marsh in which sedges such as *Carex disticha*, *Carex riparia* and *Carex vesicaria* are common. Among the other species found in this habitat are Yellow Iris (*Iris pseudacorus*), Water Mint (*Mentha aquatica*), Purple Loosestrife (*Lythrum salicaria*) and Soft Rush (*Juncus effusus*). Extensive marshes occur to the west of Casltebridge associated with the tidal areas of the River Sow.

The site supports populations of several species listed on Annex II of the EU Habitats Directive including the three Lampreys - Sea Lamprey (*Petromyzon marinus*), River Lamprey (*Lampetra fluviatilis*) and Brook Lamprey (*Lampetra planeri*), Otter (*Lutra lutra*), Salmon (*Salmo salar*), small numbers of Freshwater Pearl Mussel (*Margaritifera margaritifera*) and in the tidal stretches, Twaité Shad (*Alosa fallax fallax*). A survey of the Derreen River in 1995 estimated the population of Freshwater Pearl Mussel at about 3,000 individuals. This is a significant population, especially in the context of eastern Ireland. The Slaney is primarily a spring salmon fishery and is regarded as one of the top rivers in Ireland for early spring fishing. The upper Slaney and tributary headwaters are very important for spawning.

The site supports important numbers of birds in winter. Little Egrets are found annually along the river. This bird is only now beginning to gain a foothold in Ireland and the south-east appears to be its stronghold. Nationally important numbers of Black-tailed Godwit, Teal, Tufted Duck, Mute Swan, Little Grebe and Black-headed Gull are found along the estuarine stretch of the river. The mean of the maximum counts over four winters (1994/98) along the stretch between Enniscorthy and Ferrycarrig is: Little Egret (6), Golden Plover (6), Wigeon (139), Teal (429), Mallard (265), Tufted Duck (171), Lapwing (603), Shelduck (16), Black-tailed Godwit (93), Curlew (81), Red-breasted Merganser (11), Black-headed Gull (3030), Goldeneye (45), Oystercatcher (19), Redshank (65), Lesser Black-backed Gull (727), Herring Gull (179), Common Gull (67), Grey Heron (39), Mute Swan (259) and Little Grebe (17). Wexford Harbour provides extensive feeding grounds for wading birds and Little Terns, which are listed on Annex I of the E.U. Birds Directive have bred here in the past.

The Reed Warbler, which is a scarce breeding species in Ireland, is regularly found in Macmine Marshes but it is not known whether or not it breeds in the site. The Dipper also occurs on the river. This is a declining species nationally.

The site supports many of the mammal species occurring in Ireland. Those which are listed in the Irish Red Data Book include Pine Marten, Badger, Irish Hare and Daubenton's Bat. Common Frog (*Rana temporaria*), another Red Data Book species, also occurs within the site.

Agriculture is the main land use. Arable crops are important. Improved grassland and silage account for much of the remainder. The spreading of slurry and fertiliser poses a threat to the water quality of this salmonid river and to the populations of Annex II animal species within it. Run-off is undoubtedly occurring, as some of the fields slope steeply directly to the river bank. In addition, cattle have access to the site in places. Fishing is a main tourist attraction along stretches of the Slaney and its tributaries and there are a number of Angler Associations,

some with a number of beats. Fishing stands and styles have been erected in places. Both commercial and leisure fishing takes place. There are some gravel pits along the river below Bunclody and many of these are active. There is a large landfill site adjacent to the river close to Hacketstown and at Killurin. Boating, bait-digging and fishing occur in parts of Wexford Harbour.

Waste water outflows, runoff from intensive agricultural enterprises, a meat factory at Clohamon and a landfill site adjacent to the river and further industrial development upstream in Enniscorthy and in other towns could all have potential adverse impacts on the water quality unless they are carefully managed. The spread of exotic species is reducing the quality of the woodlands.

The site supports populations of several species listed on Annex II of the EU Habitats Directive, and habitats listed on Annex I of this directive, as well as important numbers of wintering wildfowl including some species listed on Annex I of the EU Birds Directive. The presence of wet and broad-leaved woodlands increases the overall habitat diversity and the occurrence of a number of Red Data Book plant and animal species adds further importance to the Slaney River site.

Irish Habitats and Species of European Importance

A number of Irish habitats and species have been identified as being of fundamental European importance and ear-marked for special conservation.

The **Red List** includes the following 18 species, along with their matching criteria of

Declining breeders (D),

Historically declining (H) and

Global conservation concern (G):

Black-Necked Grebe	(H)	Red-Necked Phalarope	(H)
Common Scoter	(D), (H)	Roseate Tern	(D), (H)
Hen Harrier	(D)	Barn Owl	(D)

Red Grouse	(D)	Nightjar	(D), (H)
Grey Partridge	(D), (H)	Ring Ouzel	(H)
Quail	(H)	Chough	(D)
Corncrake	(D), (H), (G)	Twite	(D), (H)
Lapwing	(D)	Yellowhammer	(D)
Curlew	(D)	Corn Bunting	(D), (H)

The Amber List includes the following 77 species, along with their matching criteria of:

Breeding species (B) , with moderate decline, rare/sporadic breeding and/or international important or localised.

Wintering/Passage species (W) which are internationally important or recognised European conservation concern (E)

Red-throated Diver	(B), (E)	Knot	(W), (E)
Black-throated Diver	(E)	Dunlin	(W), (E)
Great Crested Grebe	(B), (W)	Jack Snipe	(E)
Cory's Shearwater	(W), (E)	Snipe	(B)
Great Shearwater	(W)	Woodcock	(B), (E)
Sooty Shearwater	(W)	Black-tailed Godwit	(B), (W), (E)
Manx Shearwater	(B), (E)	Bar-tailed Godwit	(W), (E)
Storm Petrel	(B), (E)	Redshank	(B), (W),(E)
Leach's Petrel	(B), (E)	Little Gull	(W), (E)
Gannet	(B), (E)	Mediterranean Gull	(B)
Cormorant	(B)	Black-headed Gull	(B)
Little Egret	(B)	Common Gull	(E)

Bewick's Swan	(W), (E)	Sandwich Tern	(B), (E)
Whooper Swan	(B), (E)	Common Tern	(B)
Greenland White-fronted Geese	(W)	Arctic Tern	(B)
Greylag Goose	(W)	Little Tern	(B), (E)
Barnacle Goose	(W)	Guillemot	(E)
Brent Goose	(W)	Razorbill	(B)
Skelduck	(W)	Black Guillemot	(E)
Wigeon	(B)	Puffin	(B), (E)
Gadwall	(E)	Stock Dove	(B)
Teal	(B)	Cuckoo	(B)
Pintail	(B), (W),(E)	Short-eared Owl	(B), (E)
Garganey	(B), (E)	Kingfisher	(B), (E)
Pochard	(B), (W)	Skylark	(B), (E)
Tufted Duck	(W)	Sand Martin	(E)
Scaup	(B), (W), (E)	Swallow	(E)
Elder	(W)	Yellow Wagtail	(B)
Goldeneye	(W)	Redstart	(B), (E)
Red-breasted Merganser	(W)	Whinchat	(B)
Goosander	(B)	Stonechat	(E)
Goshawk	(B)	Grasshopper Warbler	(B)
Merlin	(B)	Reed Warbler	(B)
Peregrine	(E)	Lesser Whitethroat	(B)
Water Rail	(B)	Wood Warbler	(B)

Spotted Crake	(B)	Spotted Flycatcher	(B), (E)
Coot	(B), (W)	Pied Flycatcher	(B)
Golden Plover	(B)	Redpoll	(B)
Grey Plover	(W)		