



New Ross Town and Environs Development Plan 2011-2017

Appendix VI

Strategic Environment Assessment of the New Ross Town and Environs Development Plan 2011-2017



Final Environmental Report



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List of Acronyms

ACA	Architectural Conservation Area
AIA	Archaeological Impact Assessment
CSO	Central Statistics Office
EIA	Environmental Impact Assessment
EPA	Environmental Protection Agency
EPO	Environmental Protection Objective
DoCENR	Department of Communications, Energy and Natural Resources
DoEHLG	Department of Environment, Heritage and Local Government
GSI	Geological Survey of Ireland
HDA	Habitats Directive Assessment
IPPC	Integrated Pollution Prevention Control
NIAH	National Inventory of Architectural Heritage
NPWS	National Parks and Wildlife Service
NRA	National Roads Authority
NSS	National Spatial Strategy
OPW	Office of Public Works
pNHA	proposed Natural Heritage Area
RBMP	River Basin Management Plan
RPGs	Regional Planning Guidelines
RPII	Radiological Protection Institute of Ireland
RPS	Record of Protected Structures
SAC	Special Area of Conservation
SEA	Strategic Environmental Assessment
SERBD	South Eastern River Basin District
SFRA	Strategic Flood Risk Assessment
WFD	Water Framework Directive
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant

1.0 Non-Technical Summary

This is the Non-Technical Summary of the Environmental Report for the New Ross Town and Environs Development Plan 2011-2017.

1.1 Contents & Main Objectives of the Development Plan

The Development Plan is intended to provide for the proper planning and sustainable development of New Ross Town and Environs for the six-year period 2011–2017. The plan sets out a Core Strategy which seeks to ensure that the area develops as a sustainable balanced settlement with appropriate amounts of residential, economic, tourism and recreational development. The Development Plan sets out a number of key objectives designed to achieve this strategy. The key objectives are divided into five broad topics which are set out in Table 1 below.

Table 1: Key Objectives

Economic	Industry/Office <ul style="list-style-type: none">• Build on the existing industrial resource base in a sustainable fashion;• Provide necessary infrastructure to attract new business and investment to the town;• Provide sufficient suitably zoned land for these uses;• Reduce dependence on private transport, through the support of mixed use zones, and home based activity and the linking of industrial locations with the overall transport network;• Attract high technology industries with low environmental impact by ensuring that there is suitable zoned land and an adequate skills base.
	Retail Development <ul style="list-style-type: none">• Retain and increase the town's retail market share;

<p>Economic</p>	<ul style="list-style-type: none"> • Promote a self sufficient town centre better able to meet the shopping needs of its existing and future population and those of its catchment area; • Provide for a variety of floor spaces in the retail core, without compromising the architectural quality or heritage; • Provide modern floorspace in the town centre that is sufficient in size and quality to attract national and international retailers; • Continue to concentrate retail warehousing at Hewitsland and Portersland; • Require the sequential approach to the location of retail development in accordance with the Retail Planning Guidelines 2005; • Support the development of neighbourhood centres at Irishtown and Rosbercon to serve the day to day shopping needs of the local resident and working population. <p>Tourism</p> <ul style="list-style-type: none"> • Encourage the development of primary tourist attractions and secondary support facilities (such as transport/accommodation) to enhance these attractions; • Realise the tourism potential of existing archaeological and natural heritage features within the town, while also ensuring their protection; • Realise the full recreational potential of the town's riverside location adjacent to the River Barrow and its estuary.
<p>Transport</p>	<ul style="list-style-type: none"> • Build on existing strategic infrastructure, by seeking to develop good transport links with other urban centres in the Southeast region and within the plan area; • Encourage a modal shift from private modes of transport, to public transport, cycling and walking, in particular, encourage the re-opening of the New Ross-Waterford railway and support the expansion of bus services to/from New Ross; • Facilitate integration of land use and transportation by co-coordinating particular land uses with their accessibility requirements; • Facilitate ease of movement, minimise car journeys and CO2 emissions and provide a pedestrian friendly environment.

Environment	<ul style="list-style-type: none"> • Protect the natural and built environment; • Implement sustainable waste management strategies; • Manage flood risk by actively pursuing flood risk management strategies and sustainable urban drainage systems; • Prohibit development which would give rise to significant adverse impacts on the integrity of the River Barrow River Nore SAC unless imperative reasons of overriding public interest can be established and there are no feasible alternative solutions; • Seek to protect the landscape, character, quality and distinctiveness of New Ross; • Require existing developments that discharge directly into the River Barrow to connect to the town's wastewater treatment system.
Social	<ul style="list-style-type: none"> • Provide sufficient amounts of residential land to accommodate the projected population growth; • Seek to ensure the provision of sufficient community, educational and recreational facilities to serve the existing and future population of New Ross; • Protect the amenities of existing residents while creating new sustainable neighbourhoods and communities; • Promote and encourage young people to play an active role in the development of their communities; • Provide quality homes that are suitable for residents throughout their lives and are adaptable to people's changing circumstances; • Where possible develop green corridors and linkages between areas.
Urban Form	<ul style="list-style-type: none"> • Develop the plan area in a sustainable compact manner; • Protect and create a vibrant town centre; • Revitalise under-utilised brownfield and derelict sites; • Investigate methods to incentivise vibrancy in the town centre; • Create and maintain a sense of place through good urban design; • Maintain the character of the historic core and ensure that new development does not negatively impact on this character.

1.2 Current State of the Environment & Existing Environmental Problems

Section 5 of the Environmental report contains detailed baseline data and relevant information relating to the current state of the environment under a range of headings shown below. The information has been collated from statutory agencies, internal departments in the Council, local and national publications and planning applications. The data encompasses the environment as it is now, as well as the environment as it would be expected to change in the absence of implementing a development plan. Existing environmental problems are also identified in the baseline study.

1.2.1 Biodiversity, Flora and Fauna

Certain areas within and nearby New Ross Town are subject to a number of conservation designations. These include the River Barrow and River Nore Special Area of Conservation (SAC) (Site Code 002162), the Barrow River Estuary proposed Natural Heritage Area (pNHA) (Site Code 000698) and Oaklands pNHA (Site Code 000774). The latter lies to the south of the plan area. The recently designated Waterford Harbour Shellfish Area is also located to the south of the town. The baseline study documents the habitats, protected species and ornithology within these designated sites and identifies the following environmental problems:

- Untreated effluent has long been discharged to the River Barrow and has affected water quality in the area. This in turn has affected protected habitats and species. A new treatment plant is currently being commissioned in the town and will alleviate this problem over time, by treating wastewater from the public mains prior to it being discharged into the river. This will greatly reduce the impact on the receiving waters and thus on the River Barrow and River Nore SAC.
- The Water Quality Status of the New Ross Port and Barrow Nore Estuary Upper waterbodies significantly impacts upon the biodiversity, flora and fauna of the River Barrow River Nore SAC and the Barrow River Estuary

pNHA. The SAC is classified as a Protected Site under the Water Framework Directive (WFD) and it is an objective of the River Basin Management Plan (RBMP) for the South Eastern River Basin District (SERBD) to achieve high water quality status for this site to support its special habitats and species.

- The Water Quality Status of the New Ross Port and Barrow Nore Estuary Upper waterbodies impacts on the Waterford Harbour Shellfish Area downstream. The results of monitoring for this Shellfish Area have indicated faecal contamination and elevated levels of dissolved inorganic nitrogen. A Pollution Reduction Programme is currently underway to protect and improve water quality in the area and ensure compliance with the Quality of Shellfish Waters Regulations 2006.
- Increased development pressures in New Ross Town and Environs can impact upon the designated wildlife sites.
- Ecological corridors may be affected by the construction of roads or clearance of hedgerows for agricultural or development purposes. Buffer zones around a number of streams provide essential linkages and ensure ecological connectivity between all habitats, including designated wildlife sites.

1.2.2 Population and Human Health

The population and human health baseline data includes the population and age profile for the town and environs using the latest available census information. Population projections over the period of the plan are included as well as the latest available live register details. Human health is affected by provision and access to community facilities, amenities and infrastructure; employment status and access to education; and the interrelationship between health and water quality including drinking water, waste water treatment and surface water quality. There is also an interrelationship with air quality and climatic factors such as flood risk. Another environmental factor which can affect human health is noise.

The following environmental problems relating to population and human health are identified in the baseline study:

- The provision of community facilities, amenities and infrastructure to support new developments within and surrounding the town has been slow and has struggled to keep up with the pace at which development has occurred. This has negatively impacted on residential amenity and human health.
- Recurring flooding of low lying areas within the town as a result of increased river levels and surface water run-off is significantly impacting on human activities. With climate change the frequency and severity of flooding in the future is uncertain, but it is likely to increase and therefore poses a significant threat to human health.

1.2.3 Geology and Soil

The baseline information states that the geology of the area around New Ross generally comprises rocks of the Lower Palaeozoic era, dating from the Ordovician period from 510 to 438 million years ago. Soils and subsoils within the built up area of the town are classed as 'made' while the area to the east of the town is composed mainly of acid brown earths/brown podzolics soils and shale till lower palaeozoic subsoils. Alluvial soils are located along the floodplains of the River Barrow and at Marshmeadows.

Existing environmental problems relating to geology and soil include the following:

- Existing environmental problems relating to soil include the building upon and thereby sealing off of soil, with pollution and contamination of soil as a result of likely surface and ground water pollution.
- Land reclamation/filling of lands required to facilitate development on zoned lands at Annefield and Marshmeadows may affect soil quality.
- Flood risk can negatively impact on soil through increased run-off and siltation in alluvial areas. Eroded soil washed into rivers during heavy

rainfall causes an increase in nutrients which can lead to eutrophication of rivers and lakes. Flooding can also have a positive impact on soils bringing nutrients and silt which good soils are composed of.

1.2.4 Water

This section of the baseline study documents the hydrology and hydrogeology of the area while also outlining the objectives of the WFD in relation to the plan area. The section of the River Barrow which lies within the plan area encompasses two transitional waterbodies, namely New Ross Port and the Barrow Nore Estuary Upper. The former includes waters to the south of O'Hanrahan Bridge which are classified as having 'good' water quality status in the RBMP for the SERBD. The Barrow Nore Estuary Upper lies to the north of the bridge and is classified as having 'moderate' water quality status. Status is the general health of the water environment measured by the biology, chemistry and physical environment. The principle aim of the WFD is to achieve good water quality status in our rivers by 2015. Those classified as having moderate or lower status, if not improved, will fail to comply with the WFD.

The baseline study also provides information relating to drinking water, wastewater, abstractions and discharges, Integrated Pollution Prevention Control (IPPC) Licences, Major Accidents and Navigation, all of which affect or are affected by water quality in the plan area.

The following environmental problems are noted:

- In New Ross the key issues for water are the provision of adequate waste water treatment infrastructure, maintenance of good quality drinking water for protection of human health, protection of groundwaters, restoration and protection of surface water, and protection and restoration of water quality for water dependent habitats and species. These are all required measures to meet objectives set out under the Water Framework Directive's RBMP.

- Although the commissioning of the Wastewater Treatment Plant (WWTP) will improve water quality status in the River Barrow, the New Ross Port and Barrow Nore Estuary Upper waterbodies are identified as being at risk of not achieving good status by 2015.
- Water supply for the town has limited capacity. It is expected that there will be adequate capacity for new domestic use for the lifetime of the plan but non-domestic water usage will be planning led. An inadequate water supply could impact on job creation and human health through the elimination of new high and medium water user industries in the town. Increased pressure on water supply could also affect drinking water quality, thereby impacting on human health.

1.2.5 Air & Climatic Factors

New Ross Town and Environs is an unrestricted coal area and currently there is no smokeless ban in the town. The closest monitoring locations to New Ross are Waterford City, Wexford Town and Kilkenny City which are all shown to have very good air quality.

Currently there are no significant concerns with regard to air quality in the region. However air quality is adversely affected by smoke producing fuels and traffic fumes. Traffic congestion is becoming a major problem within the town centre due to a large number of individuals commuting to work and the increased levels of traffic generally on the N25/N30 National Routes which pass through the town. High levels of traffic such as this generate noise and emissions, which creates a harsh sensory environment for pedestrians and the people residing within the town itself. The proposed New Ross bypass, once completed, is likely to reduce traffic levels, associated emissions and noise levels with the town. New Ross is also identified as a High Radon Area with 10%-20% of homes estimated to be above the reference level.

1.2.6 Flooding & Climate Change

A Strategic Flood Risk Assessment (SFRA) has been carried out in conjunction with the preparation of the Development Plan and this Environmental Report and is contained in the appendix of the plan. The baseline data provides a brief overview of flooding in the plan area. There are nine incidents of flooding recorded on the OPW's flood database for New Ross, with the first recorded incident occurring in Rosbercon in November 1997. Areas of recurring floods include The Quay, Bridge Street, Rosbercon and Marshmeadows. An Interim Flood Relief Scheme has recently been carried out in conjunction with the Main Drainage Scheme along the Quays and provides limited protection from floods.

Existing problems associated with flooding and flood risk include:

- Recurring flooding gives rise to significant economic and social effects.
- Impacts of climate change present real challenges to future land use and location of development in the region. Predicted impacts from projected temperature rises include more concentrated periods of higher rainfall, more exposure to flood risk and lower river flows potentially affecting fish spawning and water supply.

1.2.7 Material Assets

Material assets are taken to include infrastructure and utilities including rail, road, water supply and wastewater treatment facilities. The following problems are identified in relation to material assets:

- Some key routes to the town are in need of upgrading, particularly the N30. In the time it takes to construct the New Ross Bypass existing roads will have deteriorated.
- The New Ross-Waterford railway line remains closed, contributing to increased car dependency.
- Although the WWTP will have a positive impact on water quality, some existing developments are still discharging directly to the River Barrow and other freshwater sources. These developments will be required to connect

to the public mains to optimise water quality status in accordance with the WFD.

1.2.8 Cultural Heritage

New Ross has a rich archaeological and architectural heritage. The town is recognized as a Zone of Archaeological Potential and is protected under the National Monuments Acts 1930-2004. Further monuments are identified within this zone ranging from effigies and graveslabs to Religious Houses and Town Defenses. New Ross also has a wealth of buildings that are listed for preservation. The Development Plan includes a total of 187 protected structures.

The following environmental problems are identified in relation to cultural heritage:

- As the historic town of New Ross is identified a zone of archaeological potential, any development in this area is likely to give rise to archaeological impacts. Archaeological Impact Assessments (AIA) are normally required for new developments in this area which involve the carrying out of sub-surface works. In some instances AIA is also required for above ground works.
- Works to protected structures may affect their character especially where they are not reversible. Often windows and other important features are removed and/or replaced without planning permission. This is in part due to a lack of public knowledge about the restrictions on exemptions which apply to protected structures. The replacement of features, such as windows, can have a detrimental impact on the character of a building as well as the overall streetscape.
- Upstanding parts of the town wall are neglected and at risk of endangerment. Dereliction is also affecting a number of protected structures in New Ross Town. At present there are 10 structures included on the Derelict Sites Register and five of these are included on the Record of Protected Structures. Works have recently been carried out on two of

these structures. New Ross Town Council served notice under section 11 of the Derelict Sites Act, 1990 on the owners/occupiers of the other eight structures in December 2009. The notice specifies the measures which the Council considers necessary in order to prevent the land from continuing to be a derelict site and specifies a period within which such measures are to be taken.

- The maintenance and conservation of the town's cultural heritage is key in order to maintain an irreplaceable resource, sense of identity for the town and as a source of visitor interest and tourism revenue. Key issues include the protection of built heritage and streetscapes, protection of archaeological sites and monuments and promotion and enhancement of access to these sites.

1.2.9 Landscape

The Landscape Character Assessment contained in the Wexford County Development Plan 2007-2013 identifies the area around New Ross as a Lowland Character Area. Within this lowland area the Barrow River Corridor is identified as a highly scenic landscape. The topographical nature of New Ross, with the river valley and steep sloping east and western sides of the river valley within the historic town centre core make for a landscape of High Visual Sensitivity. The medieval street pattern and historic buildings also provide a sense of place and contributes to the town's historic landscape. The undulating lands to the north and east of the town are deemed as landscapes of Moderate Sensitivity.

Existing environmental problems relating to landscape are as follows:

- There are a number of existing developments which detract from the enjoyment and amenity of the River Barrow, for example the location of the oil tanks on the quay. The public car parking area on the quayside is also restricting the provision of an attractive civic space to the east of the river. The New Ross Urban Design Waterfront Study 2006 contains objectives to improve the attractiveness of this area. There are also

- development opportunities on lands to the west of the river which could maximize the potential of the river as a visual landscape feature.
- Outfalls discharging into the river can impact on habitats, water quality and attractiveness of the river. Recent interim flood relief works along the quays have also detracted from the river landscape.

1.3 Environmental Protection Objectives

Section 6 of the Environmental Report sets out a number of Environmental Protection Objectives (EPOs) developed from international, national and regional policies which generally govern environmental protection. These are distinct from the objectives of the Development Plan. EPOs are used as standards against which the policies and objectives of the Development Plan can be evaluated in order to highlight those with the potential for environmental impact. They are used as a tool to cross check the policies and objectives of the Development Plan in order to maximise the environmental sustainability of the plan. The cross checking process helps to identify policies and objectives that are likely to result in significant adverse impacts, so that alternatives may be considered or mitigation measures may be put in place. The EPOs are shown in Table 7 below.

Table 7: Environmental Protection Objectives (EPOs)

B1	To avoid loss of habitats and flora and fauna in designated wildlife sites.
B2	To avoid significant adverse impacts, including direct, cumulative and indirect impacts, by development within and outside designated wildlife sites to habitats and flora and fauna within these sites.
P1	To ensure high quality residential, recreational and working environments for the town's population.
P2	To reduce the risk of flooding and harm to people, property and the environment.

P3	To improve travel choice and accessibility, reduce the need for travel by car and shorten the length and duration of journeys.
S1	To maintain the quality of soils.
S2	To maximise the sustainable re-use of brownfield lands and give preference to the re-use of brownfield lands, rather than developing greenfield lands.
W1	To improve the quality of surface waters.
W2	To prevent pollution and contamination of ground water.
W3	To promote sustainable water use based on long-term protection of available water resources.
W4	To mitigate the effects of floods and droughts.
A1	Reduce all forms of air pollution and reduce dependence on travel by private car.
A2	Promote energy conservation and the development of renewable energy sources in the plan area.
M1	Maintain the quality of, and access to, assets such as open spaces, water resources and all other physical and social infrastructure.
M2	Alleviate risk of flooding through siting, design and layout of new development.
C1	To promote the protection and conservation of the cultural heritage, including architectural and archaeological heritage.
L1	To conserve, maintain and enhance the status of the natural riverside landscape of New Ross as an attractive amenity, recreational and ecological resource.

1.4 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 development plan process three alternatives were considered and are detailed in section 7 the Environmental Report. The Development Plan is framed in the policy context of the Regional Planning Guidelines (RPGs) and the National Spatial Strategy (NSS) and, as such, strategic options are limited. Hence the alternatives considered generally focus on the location of new development.

1.4.1 Alternative Scenario 1 – Develop Lands to South of N25

The first option considered would see lands to the south of the N25 being zoned for residential and commercial uses which would spread the town in a more dispersed manner. Development of these lands would only be considered following the completion of the New Ross Bypass or the implementation of an acceptable traffic management plan on the N25 and the provision of necessary infrastructure in advance of, or in tandem with, new development. This scenario would not be consistent with the NSS or RPG framework. In the absence of a timeframe for the implementation of the New Ross Bypass future residents in this area would be physically and socially segregated from the town by a heavily trafficked national primary route.



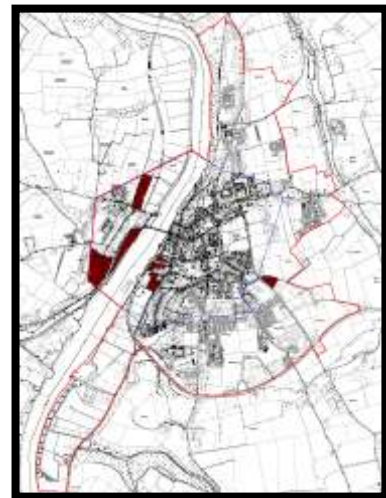
1.4.2 Alternative Scenario 2 – Develop Lands to East

The second scenario considered would see lands to the east of the town being zoned for residential and commercial uses, subject to the development of a compact urban core and the provision of appropriate infrastructure. These lands are serviceable and are located close to existing amenities, retail areas and employment centres. This scenario would utilise the existing structure with its series of radials and somewhat circular compact character and refine or consolidate this structure to increase efficiency and balance development.



1.4.3 Alternative Scenario 3 – Redevelopment of Brownfield Sites

The third scenario considered involves the redevelopment and renewal of brownfield sites within the town centre and surrounding area. The existing development boundary would not be altered. This is considered the most sustainable development strategy for the town and environs. It is consistent with national and regional guidelines and promotes the efficient use of infrastructure and services. It also targets derelict sites and aims to improve the overall townscape. This strategy promotes the development of a compact urban form that will maximise the efficient use of land while promoting a mix of uses to make best use of proximity to transport and services.



1.4.4 Preferred Alternative

A matrix was used to evaluate each of the development alternatives against the EPOs, in order to determine how the alternatives are likely to affect the status of the EPOs. It was considered that Scenario 3, the most sustainable option, would not provide sufficient lands to accommodate the projected growth during the plan period. The preferred development strategy for the Draft Development Plan was therefore a combination of Scenarios 2 and 3. This combined strategy gave preference to the development of brownfield sites but where these were considered unsuitable, or were unavailable for development, the strategy allowed for the sequential development of greenfield lands to the east of the town subject to the provision of appropriate infrastructure.

Following consultation with the DoEHLG on the Draft Development Plan, the adoption of the RPGs which include population targets for the county to 2016 and in light of the commencement of Section 7 of the Planning and Development Act 2010, which requires the Development Plan to contain a Core Strategy that is consistent with the NSS and RPGs, it was considered that the Draft Development Plan contained an overprovision of residential zoned land. The proposed amendments to the Draft Plan subsequently removed the zoned lands to the east of the town as shown in scenario 2 as these lands were identified as being unlikely to become available for development within the plan period.

The New Ross Town and Environs Development Plan 2011-2017, as adopted, is therefore based on alternative scenario 3 which involves the redevelopment and renewal of brownfield sites within the town centre and surrounding area. Limited greenfield development is facilitated to the south of the town at Chambersland and to the east/northeast of the town at Castelmoye. These lands are located adjacent to a range of community facilities and are within easy reach of the town centre. The development of these lands will be considered on a planned and phased basis subject to the provision of necessary infrastructure.

1.5 Significant Effects on the Environment

A matrix was used to identify conflicts or potential conflicts between the policies and objectives of the Development Plan and the EPOs. The likely significant environmental effects of the Development Plan were identified in this process. The findings of the evaluation were used to refine and refocus the policies and objectives in the plan. Where uncertain impacts have been identified the impacts will be determined at the project level. A summary of the likely significant effects on the environment of implementing the policies and objectives of the Development Plan is contained in section 8 of the Environmental Report. The key issues are as follows:

1.5.1 Biodiversity, Flora and Fauna

No significant adverse impacts were identified on EPOs relating to biodiversity, flora and fauna. Uncertain impacts have been identified from policies and objectives relating to strategic infrastructure projects such as ports, marinas and road developments, the development of the River Barrow for navigation and the zoning of land for commercial, industrial or residential use where such land adjoins or encroaches on the SAC and pNHA. Positive impacts have been identified from policies and objectives to protect the natural environment, reduce flood risk, develop green corridors and provide satisfactory wastewater treatment to facilitate the existing and future population of the plan area.

1.5.2 Population and Human Health

Environmental impacts of the policies and objectives contained in the plan would have mainly positive impacts on population and human health as the plan seeks to improve quality of life through the provision of a high quality living and working environment with improved travel choice, protection of heritage and environment and access to amenity and recreation. Positive impacts are also identified from policies and objectives which aim to improve water quality, reduce flood risk and provide infrastructure to attract new investment to the town. Positive and negative impacts on population and human health are identified from the policies and

objectives to support the implementation of the New Ross Bypass. The bypass will promote the use of the private car over public transport, but in terms of longer trips will reduce car journeys and at the local level will reduce congestion and associated emissions in the town centre.

1.5.3 Geology and Soil

Positive impacts on soil have been identified from waste management policy and spatial policy which prioritises brownfield development. Both positive and negative impacts on soil are identified from policies and objectives to reduce flood risk. Flooding can have negative impacts by washing away soil and leading to eutrophication in rivers and lakes. However it can also have positive impacts by depositing rich nutrients which are essential for good soil. Uncertain impacts on soil are identified in relation to policies to zone land which may require filling. This includes lands at Marshmeadows and Annefield which have been subjected to/are at risk of flooding.

1.5.4 Water

The impacts on water quality are mainly positive with the improvement of surface waters and prevention of pollution and contamination to ground waters a key consideration in the formulation of the policies and objectives of the plan. Positive impacts are identified from policies and objectives relating to wastewater treatment, flood risk management, provision of a sustainable water supply and the promotion of public awareness on the maintenance of water and its sustainable and economic use. Policies and objectives to provide sufficient zoned serviced land for residential development in the town and environs should also have positive impacts on water quality in the wider area by promoting development in the town and discouraging urban-generated one-off housing which can result in an increase in the number of septic tanks and potential contamination of ground and surface water.

1.5.5 Air & Climatic Factors

The Development Plan includes policies and objectives which will have significant beneficial impacts on air in terms of reducing CO₂ emissions. These mainly relate to traffic management and the development of the town in a sustainable compact manner with appropriate amounts of industry and retail uses, which will reduce the need for travel by car, reduce journey times and encourage a modal shift from private modes of transport, to public transport, cycling and walking. Policies supporting the implementation of the New Ross Bypass are identified as having both positive and negative impacts on air. The negative impacts of the bypass can be off-set or balanced out by objectives promoting the use of public transport, such as the objective to re-open the New Ross-Waterford railway line. Other policies and objectives which are identified as having significant beneficial impacts on air and climatic factors include policies relating to energy conservation and the requirement for new residential buildings to meet low energy performance targets.

1.5.6 Material Assets

No significant adverse impacts on material assets have been identified from the policies and objectives of the plan. Policies and objectives relating to reducing flood risk are identified as having positive impacts on the EPOs, as are the policies and objectives relating to the provision of new infrastructure. Provision of improved infrastructure will encourage new business and investment to the town, reducing the need for travel. The impacts on material assets are mainly inter-related with other environmental parameters, for example the wastewater treatment system will have impacts on water quality, biodiversity and human health, while flooding may impact on roads.

1.5.7 Cultural Heritage

The impacts on cultural heritage are mainly positive with policies and objectives formulated to ensure its protection. Development in areas of archaeological potential will require Archaeological Impact Assessment at the project level, while

development which could impact on the character of a protected structure or an architectural conservation area will require an Architectural Impact Assessment. There is an inter-relationship between the protection of natural heritage and biodiversity, flora and fauna. Any project which has the potential to damage the integrity of the River Barrow River Nore SAC will require an Appropriate Assessment to be carried out.

1.5.8 Landscape

The impacts on landscape are mainly positive. Policies and objectives relating to conservation and heritage provide for the protection of views and the historic character of the town. There is opportunity to maximise the potential of the riverscape through redevelopment and urban design, however the nature and extent of impacts on the landscape will largely be determined at the project level. Major infrastructure projects will be subject to Environmental Impact Assessment (EIA) involving assessment of impacts on landscape.

1.5.9 Interrelationships

There are a number of inter-relationships between the environmental parameters and the impacts of the policies and objectives of the plan. Examples of such inter-relationships include the following:

- Policies relating to flooding will have significant effects on water, biodiversity, flora and fauna, population and human health, soil and material assets;
- Policies relating to wastewater treatment will have significant impacts on water quality, biodiversity, flora and fauna, population and human health, and material assets;
- Policies relating to the implementation of New Ross Bypass, including a second bridge crossing, will have significant impacts on population and human health, soil, air, material assets, cultural heritage and landscape;
- Policies to reduce CO₂ emissions will have significant effects on air quality and population and human health;

- Policies relating to the protection of archaeology, architectural and natural heritage will have implications for cultural heritage and landscape.

1.6 Mitigation Measures

Section 9 of the Environmental Report outlines the mitigation measures for the preferred development strategy. Mitigation measures are measures envisaged to prevent, reduce and as fully as possible offset any significant adverse impacts on the environment of implementing the Development Plan. The mitigation measures have been formulated having regard to the impacts of the Development Plan on the status of the EPOs. Where there are significant negative effects, consideration is given in the first instance to preventing such effects or, where this is not possible, to lessening or offsetting those effects. The mitigation measures are shown in Table 12 below.

Table 12: Mitigation Measures

MM1	Include policies to retain existing hedgerows and trees where these are considered to provide important ecological networks associated with the River Barrow River Nore SAC and the Barrow River Estuary pNHA.
MM2	Exclude SAC and pNHA areas from industrial zoning at Marshmeadows; and zone SAC and pNHA areas at Mountgarrett and Annefield for open space and amenity uses which prohibit non-compatible developments.
MM5	Promote the implementation of the Joint Waste Management Plan for the South-East 2006-2011 together with any future Waste Management Plans. This includes waste prevention, minimisation, reuse, recycling and recovery as methods of managing waste.
MM6	Encourage the recycling of construction and demolition waste and the reuse of aggregate and other materials.
MM7	To give preference to the development of brownfield sites over greenfield development where possible.

MM8	Protect and improve the water quality of the River Barrow in accordance with the measures set out in the South Eastern River Basin Management Plan (2009-2015) and the Pollution Reduction Programme for the Waterford Harbour Shellfish Area.
MM9	Protect existing groundwater aquifers and surface waters from pollution.
MM10	Promote public awareness on the maintenance of water quality and economic and sustainable use.
MM11	Zone for compatible uses in areas identified as having high probability of flooding (Zone A) and mitigate the risk of flooding through layout and design of new developments.
MM12	Protect and improve natural drainage systems where possible and in the case of development works require the provision of acceptable mitigation measures in order to minimise the risk of flooding and negative impacts on water quality.
MM13	Facilitate the provision of suitable flood risk management infrastructure in the town.
MM14	Require the provision of adequate storm water retention facilities in all new developments, including the use of soft landscaping and sustainable drainage techniques.
MM15	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.
MM16	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.
MM17	Facilitate the development of renewable energy sources and supply within

	the plan area.
MM18	Require all new building developments to meet low energy performance targets.
MM19	Prohibit development that would negatively impact of the architectural, archaeological and natural heritage of the area.
MM20	Promote high-quality developments along the riverfront.

It should be noted that SEA is an integral part of the preparation of the development 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. Post-mitigation residual impacts are normally addressed through monitoring.

1.7 Monitoring Programme

Article 10 of the SEA Directive requires that monitoring be carried out in order to identify at an early stage any unforeseen adverse effects due to the implementation of the plan and to be able to undertake appropriate remedial action. Monitoring is a key element of the effective implementation of the New Ross Town and Environs Development Plan. Its purpose 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 can also be used to fill gaps identified at the baseline, impact prediction and evaluation stages. Monitoring is based on indicators which measure changes in the environment. Indicators aim at simplifying complex interrelationships and provide information on environmental issues which are relatively easy to understand. The full monitoring programme is contained in section 10 of the Environmental Report.

Section 15(2) of the Planning and Development Act 2000 requires the Planning Authority to carry out a review of the achievement of the objectives of the development plan not more than two years after the making of the plan. It is anticipated that the environmental indicators set out in section 10 of the Environmental Report will be used to monitor the predicted environmental impacts of implementing the plan and will be presented in the context of the 2 year plan review. Where existing monitoring is being carried out i.e. in relation to water and air quality, these data sets will be collated in the review.

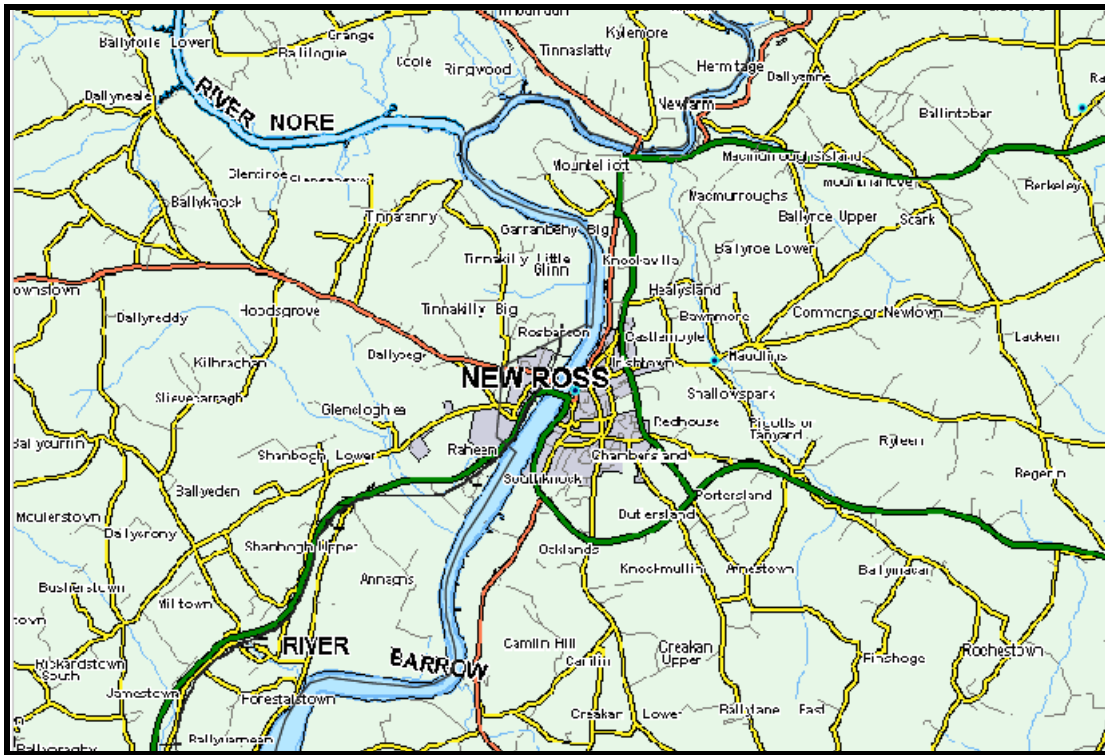
2.0 Introduction

This section provides a background to SEA and outlines the requirement for SEA in the development plan process. The plan sets out a spatial planning framework and overall strategy for the proper planning and sustainable development of the town and environs for the six year period 2011–2017. Due to the potential environmental impacts of implementing the plan, a SEA is required to be carried out in parallel with its formulation. The purpose of the Environmental Report is to provide the Elected Members with a clear understanding of the likely environmental consequences of implementing the plan and to make the environment a central focus of the decision-making process.

2.1 Context

The plan covers the New Ross Town and Environs area. Map 1 shows the location of New Ross Town in the context of its surrounds. New Ross is built around the River Barrow and has a strategic location on the N25 between Wexford Town and Waterford City. The N30 and R700 roads also connect the town with Enniscorthy and Kilkenny respectively.

Map 1: Location Map



2.2 Background to SEA

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

- European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. 435 of 2004); and
- Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. 436 of 2004).

The Directive requires all European Union member States to systematically evaluate the likely significant effects of implementing a plan or programme prior to its adoption. Land-use plans are assessed in accordance with the Planning

and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. 436 of 2004).

2.3 What is SEA?

SEA is a formal process that is carried out in parallel with the development plan process. It is a valuable tool that influences decision-making at each stage in the development plan process; to improve the environmental sustainability of the plan and to raise awareness of the potential environmental consequences of its implementation so that these consequences may be mitigated or avoided altogether. It also gives the public and other interested parties an opportunity to comment and to be kept informed on decisions that may impact on the environment.

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

- Supporting sustainable development;
- Improving the evidence base for strategic decisions;
- Facilitating and responding to consultation with stakeholders;
- Streamlining 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 with 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.

2.4 The SEA Process

The Planning and Development (SEA) Regulations 2004 require that SEA be carried out in respect of development plans where the population of the area is 10,000 persons or more. Where the population is less than 10,000 a SEA must be carried out where it is considered that the plan would be likely to have significant effects on the environment. A screening process is carried out to determine whether the plan would have likely significant environmental effects.

Where it is determined that an SEA is required a scoping exercise is subsequently carried out to identify the likely significant environmental effects of implementing the plan. Such effects are considered under the following headings: biodiversity, population, human health, flora and fauna, soil, water, air, climatic factors, material assets, cultural heritage (including architectural and archaeological heritage), landscape and the interrelationship between the above. The likely significant effects are explored in more detail in the Environmental Report. The impacts to be considered include secondary, cumulative, synergistic, short, medium and long-term, permanent and temporary, positive and negative. The purpose of this is to inform the Members of the environmental consequences of making the plan and to make the environment a central focus of the decision-making process.

The purpose of the Environmental Report is to identify, evaluate and describe the likely significant environmental effects of implementing the plan. The contents of the report are specified in Article 5 and Annex 1 of the Directive and include the following:

- An outline of the contents and main objectives of the plan, and of its relationship with other relevant plans and programmes;
- A description of relevant aspects of the current state of the environment and the evolution of the environment without implementation of the plan;
- A description of the environmental characteristics of areas likely to be significantly affected;

- Identification of any existing environmental problems which are relevant to the plan, particularly those relating to European protected sites;
- A list of the environmental protection objectives at international, EU and national level, which are relevant to the plan and a description of how they have been taken into account in the formulation of the plan;
- A description of the likely significant effects on the environment (biodiversity, human health, cultural heritage, air, soil, water etc);
- Mitigation measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment caused by implementing the plan;
- An outline of the reasons for selecting the alternatives considered and a description of how the assessment was undertaken including any difficulties;
- A description of proposed monitoring measures;
- A non-technical summary of the above information.

The Environmental Report must be reviewed where amendments are made to the plan. Following adoption of the plan a SEA Statement must be prepared in accordance with the SEA Directive. The Statement will give a summary of how the environmental considerations and the Environmental Report were factored into the plan, how submissions and consultations were taken into account and the reasons for choosing the plan as adopted in light of other reasonable alternatives considered. It will also outline a list of monitoring measures to be carried out during the plan period. The purpose of the SEA Statement is to provide accountability, by informing the public of how environmental effects were considered in the decision-making process.

2.5 Development Plan & SEA Requirements

On the 8th October 2008 Wexford County Council and New Ross Town Council commenced the preparation of the Draft New Ross Town and Environs

Development Plan 2010-2016 by the insertion of a public notice in local newspapers. The public notice stated that an Environmental Report would be prepared in conjunction with the new plan. Submissions were invited from the public in relation to the contents of the Draft Plan and Environmental Report.

The Planning Authority has met the requirements of the SEA Directive by preparing an Environmental Report in parallel with the Plan. Initial scoping took place in May 2009 with the prescribed environmental authorities: the Environmental Protection Agency (EPA), the Department of the Environment, Heritage and Local Government (DoEHLG) and the Department of Communication, Energy and Natural Resources (DoCENR). Two submissions were received from the EPA and DoEHLG in relation to the scope of the Environmental Report. The Environmental Report was subsequently prepared in conjunction with the Draft Plan.

Following approval from the Members of New Ross Town Council and Wexford County Council the Draft New Ross Town and Environs Plan 2010-2016 and Environmental Report were placed on public display for a ten-week period from 21st July 2010 to 1st October 2010. 40 submissions and observations were received on the Draft Plan and Environmental Report during this period. Following consideration of the submissions received the Members decided to amend the Draft Plan. The proposed amendments were screened in accordance with the SEA Regulations to determine if they would have any likely significant effect on the environment not previously identified or addressed in the Environmental Report. The screening process concluded that the proposed amendments would not have any likely significant effects in addition to those already identified in the Environmental Report for the Draft Plan.

The proposed amendments and a copy of the SEA screening report were placed on public display for a five-week period from 22nd December 2010 to 28th January

2011. During this period ten submissions were received on the proposed amendments. Following consideration of the submissions received the Members decided to make the Development Plan with the proposed amendments with the exception of proposed amendment no. 10 which referred to a proposed protected structure.

This Environmental Report will form an appendix to the New Ross Town and Environs Development Plan 2011-2017, as adopted by New Ross Town Council on 7th February 2011 and by Wexford County Council on 14th February 2011. An SEA Statement will also be prepared in accordance with the SEA Regulations and will be made available to the public.

3.0 Methodology

3.1 Legislative Requirements

The methodology devised to carry out the SEA of the New Ross Town and Environs Development Plan follows the requirements as set out in the SEA Directive and the Department of Environment, Heritage and Local Government SEA Guidelines 2004. This report complies with SEA Regulations and is written in accordance with Schedule 2B of the Planning and Development (SEA) Regulations 2004 (SI No. 436 of 2004). The production of the Environmental Report is an intrinsic component of the EU Directive.

3.2 Screening

The Planning and Development (SEA) Regulations 2004 require a SEA be carried out in respect of development plans where the population of the area is 10,000 persons or more. Where the population is less than 10,000 a SEA must be carried out where it is considered that the plan would be likely to have significant environmental effects. This is determined through a screening process. Given the population of 7,550 persons for New Ross Town and Environs (2006 Census), a screening process was undertaken to determine if the plan was likely to have significant environmental effects. The screening process concluded that the plan would be likely to have significant environmental effects and therefore required a SEA to be carried out in parallel with its formulation.

3.3 Scoping

Scoping of the SEA was continuous and helped the SEA to become focused upon the important issues such as those relating to existing environmental problems, thus avoiding wasting resources on unnecessary data collection. An initial scoping report was carried out for the Draft Development Plan in May 2009. The Report highlighted a number of key environmental issues including biodiversity, flooding/climatic factors, wastewater treatment capacity, human

health, cultural heritage, housing and roads and transport infrastructure. These issues are explored in more detail in this Environmental Report.

3.4 Consultation with Environmental Authorities

Article 5(4) of the Directive requires that the prescribed Environmental Authorities be consulted when deciding on the scope and level of detail to be included in the Environmental Report. The scoping report was forwarded to statutory Environmental Authorities, namely the EPA, DoEHLG and DoCENR on 12th May 2009. A four week consultation period followed in which submissions were received from the EPA and DoEHLG on the scope of the Environmental Report. These submissions have been considered and incorporated into this report.

3.5 Baseline Study

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. Available data sources were used to collate existing data. Such sources ranged from the Office of Public Works (OPW), C.S.O. Census statistics, EPA, National Parks and Wildlife (NPWS), the National Monuments Service, Council data on water, air, noise and traffic, as well as 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.

3.6 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 development plan process three alternatives were considered for the development of the Town and Environs area and are detailed in the Environmental Report.

3.7 The Environmental Report

In this Report the likely significant effects of the preferred development strategy, and any alternatives considered, are predicted and their significance evaluated having regard to the environmental baseline. The methodology used in the Report comprises of a series of matrices which were used to refine and focus the policies and objectives in the plan.

The Environmental Report provides the Elected Members of New Ross Town Council and Wexford County Council with a clear understanding of the likely environmental consequences of decisions regarding the proper land-use planning in New Ross Town and Environs. Mitigation measures to prevent or reduce significant adverse effects posed by, and to maximise any benefits offered by, the New Ross Town and Environs Development Plan and the alternatives are also presented in this report, as are the measures concerning monitoring.

3.8 Making the Decision Public

Following adoption of the New Ross Town and Environs Development Plan 2011-2017 a SEA Statement must be prepared and made available to the public. The SEA Statement is required to include information on; how environmental considerations have been integrated into the plan, 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 plan in the light of the other alternatives considered. The information to be included in the statement, including how environmental considerations have been integrated throughout the process, provides accountability, credibility and transparency in the decision-making process.

4.0 Development Plan

4.1 Introduction

The New Ross Town and Environs Development Plan 2011-2017, which should be read in conjunction with this report, has been prepared in accordance with the Planning and Development Acts 2000-2010. The plan is intended to provide for the proper planning and sustainable development of New Ross Town and Environs for the six-year period 2011–2017. 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 and objectives to be followed by New Ross Town Council and Wexford County Council, as well as the policies recommended to guide planning decisions and the activities of the Planning Authorities over the plan period.

4.2 Structure of Development Plan

The New Ross Town and Environs Development Plan 2011-2017 consists of a Written Statement, a set of maps and a set of Appendices. The Written Statement is the main document of the plan. It is divided into 15 chapters and sets out the aims and objectives for the town and environs under the headings of: Core Strategy; Economic Development; Transportation Strategy; Infrastructure; Housing Strategy; Community & Education; Recreation & Open Space; Tourism, Arts & Culture; Conservation & Heritage; and Major Accidents Directive. It also contains development management standards and urban design guidance. The set of maps give visual representation to the policies and objectives of the plan.

The Volume of Appendices contains supporting and background data/documents that help to inform and clarify the broad context of the Written Statement. The Appendices include: Retail Strategy; Housing Strategy; Record of Protected Structures; New Ross Town Walls Conservation Plan; Strategic Flood Risk Assessment; Strategic Environmental Assessment; Appropriate Assessment; and

a Statement of how the planning authority has implemented Ministerial Guidelines.

The Development Plan is led by higher tier national and regional plans including the National Spatial Strategy (NSS) and the Regional Planning Guidelines for the South-East Region 2010-2022 (RPGs). The policies and objectives of the Development Plan give direct effect to the RPGs.

4.3 Core Strategy of the Plan

The Development Plan sets out a Core Strategy for the sustainable development of the town and environs over the plan period. The Core Strategy is based on the vision statement for the town and environs:

“To create a compact town which has a distinctive character, a vibrant culture and a diverse economy. The town will be socially inclusive with good linkages between neighbourhoods, open spaces, town centre and areas of employment. It will be an attractive place where people will seek to live, work and experience as a matter of choice.”

The Core Strategy seeks to ensure that the area develops as a sustainable balanced settlement with appropriate amounts of residential, economic, tourism and recreational development. The Core Strategy sets out a spatial strategy that is based on consolidating the existing built urban area through planned redevelopment and infill development in the town centre and by the sequential development of greenfield lands. This gives direct effect to the policies and strategy of the Regional Planning Guidelines 2010-2022.

The Core Strategy identifies the location, quantum and phasing of residential development during the plan period and also identifies areas where significant development is envisaged. This includes brownfield sites within the town centre where existing infrastructure is in place and also greenfield areas at the edge of

the town centre which are required to be developed to ensure the compact and co-ordinated expansion of the town centre in accordance with national and regional guidelines.

4.4 Key Objectives of the Plan

The Development Plan sets out a number of key objectives designed to improve the quality of life for the population of New Ross Town and Environs and which the Councils will endeavour to implement during the period of the plan. The key objectives are divided into five broad topics and are set out in Table 1 below.

Table 1: Key Objectives

<p>Economic</p>	<p>Industry/Office</p> <ul style="list-style-type: none"> • Build on the existing industrial resource base in a sustainable fashion; • Provide necessary infrastructure to attract new business and investment to the town; • Provide sufficient suitably zoned land for these uses; • Reduce dependence on private transport, through the support of mixed use zones, and home based activity and the linking of industrial locations with the overall transport network; • Attract high technology industries with low environmental impact by ensuring that there is suitable zoned land and an adequate skills base. <p>Retail Development</p> <ul style="list-style-type: none"> • Retain and increase the town's retail market share; • Promote a self sufficient town centre better able to meet the shopping needs of its existing and future population and those of its catchment area; • Provide for a variety of floor spaces in the retail core, without compromising the architectural quality or heritage; • Provide modern floorspace in the town centre that is sufficient in size and quality to attract national and international retailers;
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<p>Economic</p>	<ul style="list-style-type: none"> • Continue to concentrate retail warehousing at Hewitsland and Portersland; • Require the sequential approach to the location of retail development in accordance with the Retail Planning Guidelines 2005; • Support the development of neighbourhood centres at Irishtown and Rosbercon to serve the day to day shopping needs of the local resident and working population. <p>Tourism</p> <ul style="list-style-type: none"> • Encourage the development of primary tourist attractions and secondary support facilities (such as transport/accommodation) to enhance these attractions; • Realise the tourism potential of existing archaeological and natural heritage features within the town, while also ensuring their protection; • Realise the full recreational potential of the town's riverside location adjacent to the River Barrow and its estuary.
<p>Transport</p>	<ul style="list-style-type: none"> • Build on existing strategic infrastructure, by seeking to develop good transport links with other urban centres in the Southeast region and within the plan area; • Encourage a modal shift from private modes of transport, to public transport, cycling and walking, in particular, encourage the re-opening of the New Ross-Waterford railway and support the expansion of bus services to/from New Ross; • Facilitate integration of land use and transportation by co-coordinating particular land uses with their accessibility requirements; • Facilitate ease of movement, minimise car journeys and CO2 emissions and provide a pedestrian friendly environment.

Environment	<ul style="list-style-type: none"> • Protect the natural and built environment; • Implement sustainable waste management strategies; • Manage flood risk by actively pursuing flood risk management strategies and sustainable urban drainage systems; • Prohibit development which would give rise to significant adverse impacts on the integrity of the River Barrow River Nore SAC unless imperative reasons of overriding public interest can be established and there are no feasible alternative solutions; • Seek to protect the landscape, character, quality and distinctiveness of New Ross • Require existing developments that discharge directly into the River Barrow to connect to the town's wastewater treatment system.
Social	<ul style="list-style-type: none"> • Provide sufficient amounts of residential land to accommodate the projected population growth; • Seek to ensure the provision of sufficient community, educational and recreational facilities to serve the existing and future population of New Ross; • Protect the amenities of existing residents while creating new sustainable neighbourhoods and communities; • Promote and encourage young people to play an active role in the development of their communities; • Provide quality homes that are suitable for residents throughout their lives and are adaptable to people's changing circumstances; • Where possible develop green corridors and linkages between areas.
Urban Form	<ul style="list-style-type: none"> • Develop the plan area in a sustainable compact manner; • Protect and create a vibrant town centre; • Revitalise under-utilised brownfield and derelict sites; • Investigate methods to incentivise vibrancy in the town centre; • Create and maintain a sense of place through good urban design; • Maintain the character of the historic core and ensure that new development does not negatively impact on this character.

4.5 Relationship with Other Relevant Plans

The Development Plan is at the lower end of a tier of national and regional plans which include the National Development Plan 2007-2013, The National Spatial Strategy 2002-2020, the Regional Planning Guidelines for the South-East Region 2010-2022, the South East River Basin Management Plan 2009-2015, the Joint Waste Management Plan for the South-East 2006-2011 and the Waterford Harbour Pollution Reduction Programme. The policies and objectives of the Development Plan are consistent with these higher tier plans.

Part of the environs of New Ross is located within County Kilkenny which is covered by the New Ross Environs Local Area Plan 2005. It is possible that the policies and objectives of the plan may have transboundary effects in terms of traffic creation, provision of schools, water and wastewater treatment infrastructure and employment. Wexford County Council and New Ross Town Council liaised with Kilkenny County Council during the preparation of the Development Plan to discuss potential transboundary issues and to ensure compatibility of adjoining land uses. The Councils acknowledge the co-operation and assistance provided by Kilkenny County Council in the preparation of the Development Plan and are committed to full co-operation and co-ordination with Kilkenny County Council with regard to the implementation, monitoring and review of this plan.

5.0 Current State of the Environment

5.1 Introduction

This section provides an overview of the current state of the environment for the plan area. The environmental baseline 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. Existing environmental problems are also identified and a description of the likely effects upon each environmental component under a 'do-nothing scenario' i.e. the likely evolution of the environment without the implementation of a development plan, is also included.

5.2 Biodiversity, Flora & Fauna

5.2.1 Designated Sites

Certain areas within and nearby New Ross Town are subject to a number of conservation designations. These include the River Barrow and River Nore Special Area of Conservation (SAC) (Site Code 002162), the Barrow River Estuary proposed Natural Heritage Area (pNHA) (Site Code 000698) and Oaklands pNHA (Site Code 000774). The latter lies to the south of the plan area. The recently designated Waterford Harbour Shellfish Area is also located to the south of the town.

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) (amended by 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

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. In cases where SAC and NHA boundaries overlap, the SAC designation always takes precedence. The designated sites in and nearby New Ross Town are shown on Map 2. Full site synopses for these sites can be found in the Appendix.

The map displays the New Ross area, highlighting various protected regions. The legend identifies four types of areas: Special Protection Areas (indicated by red hatching), Proposed Natural Heritage Areas (indicated by blue hatching), Natural Heritage Areas (indicated by green hatching), and Special Areas of Conservation (indicated by orange hatching). The map also shows the Grid 10K (indicated by a black outline). The map includes a scale bar and a north arrow.

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Waterford Harbour Shellfish Area was designated in 2009 in accordance with the EU Shellfish Waters Directive (2006/113/EC) and the European Communities (Quality of Shellfish Waters) Regulations 2006 (SI No 268 of 2006). A Pollution Reduction Programme is underway to protect and improve water quality in the designated shellfish growing areas. The key pressures affecting the Waterford Harbour Shellfish Area are urban wastewater systems, on-site wastewater treatment systems and agriculture. Although New Ross Town is located outside of the catchment identified for the Designated Shellfish Area the wastewater discharge from the town has an impact on water quality in Waterford Harbour. Secondary pressures are also identified from port activities and marine traffic en route to New Ross. Local Authorities must perform their functions in a manner that will promote compliance with the objectives of the pollution reduction programme.

Map 3: Waterford Harbour Shellfish Area



Source: www.environ.ie

5.2.2 Habitats

The River Barrow and River Nore is a candidate SAC selected for alluvial wet woodlands and petrifying springs, priority habitats on Annex I of the E.U. Habitats Directive. The site is also selected as a candidate SAC for old oak woodlands, floating river vegetation, estuary, tidal mudflats, *Salicornia* mudflats, Atlantic salt meadows, Mediterranean salt meadows, dry heath and eutrophic tall herbs, all habitats listed on Annex I of the E.U. Habitats Directive. The site is also selected for the following species listed on Annex II of the same directive – Sea Lamprey, River Lamprey, Brook Lamprey, Freshwater Pearl Mussel, Nore Freshwater Pearl Mussel, Crayfish, Twaite Shad, Atlantic Salmon, Otter, *Vertigo moulinsiana* and the plant Killarney Fern.

5.2.3 Protected Species

The following information is taken from the Site Synopsis for the River Barrow and River Nore candidate SAC (site code 002162) which was last updated by National Parks and Wildlife in October 2006. It should be noted that the species listed below represent findings over the entire SAC and are not specific to the New Ross area. The Pearl Mussel *M. m. durrovensis* for example, is not known to have been found in the New Ross area.

Seventeen Red Data Book plant species have been recorded within the River Barrow and River Nore SAC. These are Killarney Fern (*Trichomanes speciosum*), Divided Sedge (*Carex divisa*), Clustered Clover (*Trifolium glomeratum*), Basil Thyme (*Acinos arvensis*), Hemp nettle (*Galeopsis angustifolia*), Borrer's Saltmarsh Grass (*Puccinellia fasciculata*), Meadow Barley (*Hordeum secalinum*), Opposite-leaved Pondweed (*Groenlandia densa*), Autumn Crocus (*Colchicum autumnale*), Wild Sage (*Salvia verbenaca*), Nettle-leaved Bellflower (*Campanula trachelium*), Saw-wort (*Serratula tinctoria*), Bird Cherry (*Prunus padus*), Blue Fleabane (*Erigeron acer*), Fly Orchid (*Ophrys insectifera*), Broomrape (*Orobanche hederæ*) and Greater Broomrape (*Orobanche rapum-genistæ*). Of these the first nine are protected under the Flora Protection Order

1999. Divided Sedge (*Carex divisa*) was thought to be extinct but has been found in a few locations in the site since 1990.

In addition plants which do not have a very wide distribution in the country are found in the site including Thin-spiked Wood-sedge (*Carex strigosa*), Field Garlic (*Allium oleraceum*) and Summer Snowflake (*Leucojum aestivum*). Six rare lichens, indicators of ancient woodland, are found including *Lobaria laetevirens* and *L. pulmonaria*. The rare moss *Leucodon sciuroides* also occurs.

The site is very important for the presence of a number of EU Habitats Directive Annex II animal species including Freshwater Pearl Mussel (*Margaritifera margaritifera* and *M. m. durrovensis*), Freshwater Crayfish (*Austropotamobius pallipes*), Salmon (*Salmo salar*), Twait Shad (*Alosa fallax fallax*), three Lamprey species - Sea (*Petromyzon marinus*), Brook (*Lampetra planeri*) and River (*Lampetra fluviatilis*), the marsh snail *Vertigo moulinsiana* and Otter (*Lutra lutra*). This is the only site in the world for the hard water form of the Pearl Mussel *M. m. durrovensis* and one of only a handful of spawning grounds in the country for Twait Shad. The freshwater stretches of the River Nore main channel is a designated salmonid river. The Barrow/Nore is mainly a grilse fishery though spring salmon fishing is good in the vicinity of Thomastown and Inistioge on the Nore. The upper stretches of the Barrow and Nore, particularly the Owenass River, are very important for spawning.

The site supports many other important animal species. Those which are listed in the Irish Red Data Book include Daubenton's Bat (*Myotis daubentoni*), Badger (*Meles meles*), Irish Hare (*Lepus timidus hibernicus*) and Frog (*Rana temporaria*). The rare Red Data Book fish species Smelt (*Osmerus eperlanus*) occurs in estuarine stretches of the site. In addition to the Freshwater Pearl Mussel, the site also supports two other freshwater Mussel species, *Anodonta anatina* and *A. cygnea*.

5.2.4 Ornithology

The River Barrow River and River Nore SAC is of ornithological importance for a number of E.U. Birds Directive Annex I species including Greenland White-fronted Goose, Whooper Swan, Bewick's Swan, Bartailed Godwit, Peregrine and Kingfisher. Nationally important numbers of Golden Plover and Bar-tailed Godwit are found during the winter. Wintering flocks of migratory birds are seen in Shanahoe Marsh and the Curragh and Goul Marsh, both in Co. Laois and also along the Barrow Estuary in Waterford Harbour. There is also an extensive autumnal roosting site in the reedbeds of the Barrow Estuary used by Swallows before they leave the country.

5.2.5 Hedgerows & Trees

Hedgerows and wooded areas also form important habitats and ecological networks for flora and fauna. They often provide stepping stone habitats or ecological corridors linking sites of prime conservation value. Maintenance of these ecological corridors is key to supporting the conservation value of the designated sites.

5.2.6 Existing Environmental Problems

- Untreated effluent has long been discharged to the River Barrow and has affected water quality in the area. This in turn has affected protected habitats and species. A new treatment plant is currently being commissioned in the town and will alleviate this problem over time, by treating wastewater from the public mains prior to it being discharged into the river. This will greatly reduce the impact on the receiving waters and thus on the River Barrow and River Nore SAC.
- The Water Quality Status of the New Ross Port and Barrow Nore Estuary Upper waterbodies significantly impacts upon the biodiversity, flora and fauna of the River Barrow River Nore SAC and the Barrow River Estuary pNHA. The SAC is classified as a Protected Site under the Water Framework Directive (WFD) and it is an objective of the River Basin

Management Plan for the South Eastern River Basin District (SERBD) to achieve high water quality status for this site to support its special habitats and species.

- The Water Quality Status of the New Ross Port and Barrow Nore Estuary Upper waterbodies impacts on the Waterford Harbour Shellfish Area downstream. The results of monitoring for this Shellfish Area have indicated faecal contamination and elevated levels of dissolved inorganic nitrogen. A Pollution Reduction Programme is currently underway to protect and improve water quality in the area and ensure compliance with the Quality of Shellfish Waters Regulations 2006.
- Increased development pressures in New Ross Town and Environs can impact upon the designated wildlife sites.
- Ecological corridors may be affected by the construction of roads or clearance of hedgerows for agricultural or development purposes. Buffer zones around a number of streams provide essential linkages and ensure ecological connectivity between all habitats, including designated wildlife sites.

5.2.7 Evolution of Biodiversity, Flora & Fauna in the absence of a Development Plan

- In the absence of implementing a development plan housing development would be likely to continue to the east and west of the River Barrow SAC and pNHA. The effects of wastewater generated as a result of future developments, if unmitigated, could cause the deterioration of the quality of surface water within the designated sites and adversely impact upon biodiversity, flora & fauna.
- In the absence of implementing a development plan, biodiversity, flora & fauna would be likely to continue to be adversely impacted upon by the water quality status of New Ross Port and Barrow Nore Estuary Upper.
- In the absence of implementing a development plan, development would be likely to adversely impact 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.

5.3 Population & Human Health

5.3.1 Population

The Census shows that New Ross Town and Environs had a population of 7,550 persons in 2006, an increase of 17.6% since 2002. The population of New Ross Urban area decreased by 8.4% during this period, while the population of Rosbercon and New Ross Environs increased by 57.6% and 78.2% respectively. This reflects the recent national trend of movement out of inner urban areas to the environs and outskirts of towns. It may also be a reflection of the proportion of small terraced dwellings within the town centre.

Table 2: Population of New Ross 2002-2006

Towns	2006	2002	Change	% Change
New Ross Urban	4,034	4,402	-368	-8.4%
Rosbercon Urban	643	408	+235	+57.6%
New Ross Environs	2,873	1,612	+1,261	+78.2%
Total	7,550	6,422	+1,128	+17.6%

Source: CSO Statistics, 2006

The age profile for the town and environs shows an above average of 15-24 and 25-44 year olds when compared to the County and the State. 10.5% of the population are aged 65 or over while 20.2% of the population is made up of 0-14 year olds. The 25-44 group form the largest proportion of the population at 32.4% or one third of the total population.

Table 3: Age Profile for New Ross, County and State

Age	0-14	15-24	25-44	45-64	65+	Total
New Ross	1,560 20.2%	1,220 15.8%	2,494 32.4%	1,630 21.1%	805 10.5%	7,709 100%
Co. Wexford	29,238 22.2%	17,530 13.3%	39,919 30.3%	29,738 22.6%	15,324 11.6%	131,749 100%
State	864,449 20.4%	632,732 14.9%	1,345,873 31.8%	928,868 21.9%	467,926 11.0%	4,239,848 100%

Source: CSO Statistics, 2006

5.3.2 Population Projections

The population of New Ross Town and Environs is projected to increase over the next 6 years to 9,018 persons. The population projections are based on a number of key factors including existing planning approvals, the fact that New Ross is identified as a key commuting area in close proximity to Waterford City, and the availability of zoned lands and increased sewerage capacity in the Town and Environs. Population projections are also based on the assumption that there will be an improvement in the housing market within the lifetime of the plan and on the completion of the New Ross bypass. The population projections are consistent with the population targets in the RPGs.

Table 4: New Ross Population Estimation to 2019

	2002	2006	2009	2011	2016	2019
New Ross Town	4810	4677	4612	4580	4548	4516
New Ross Environs	1612	2873	3993	4209	4470	4631
Total Town and Environs	6422	7550	8606	8789	9018	9147

5.3.3 Live Register

Table 5 below shows that the number of persons on the live register in New Ross has increased dramatically over the past year. The figures represent the broader electoral area of New Ross are not available for the town and environs area

alone. Nevertheless, the figures are indicative of the current scale of unemployment and economic challenges facing the town. 2006 Census information relating to socio-economic and occupational status for New Ross Town and Environs is discussed further in section two of the Development Plan.

Table 5: Live Register for New Ross

Office of Registration	Jun '09	Dec '09	Jun '10	Dec '10
Enniscorthy	4,323	4,333	4,617	4,718
Gorey	3,635	3,847	4,099	4,164
New Ross	3,185	3,347	3,554	3,504
Wexford	6,249	6,629	6,642	6,892

Source: CSO – Live Register Additional Tables

5.3.4 Human Health

Human health can be impacted upon by the lack of provision of community facilities, amenities and infrastructure to support new development in New Ross. A shortfall in amenities and infrastructure to serve the local community, including safe walking and cycling routes, playgrounds, childcare facilities and new primary and secondary schools can all go towards decreasing the perceived health of the general population. Human health can also be affected by employment status and access to education. Another key area for the consideration of human health is the interrelationship between health and water quality including drinking water, waste water treatment and surface water quality. There is also an interrelationship with air quality and climatic factors such as flood risk.

Another environmental factor which can affect human health is noise. Under EU Directive 2002/49/EC relating to the assessment and management of environmental noise and the Environmental Noise Regulations 2006, which give direct effect to the Directive, Local Authorities are required to prepare a Noise Action Plan to manage the existing noise environment and protect the future noise environment within the action plan area.

While no Noise Action Plan has been prepared for the plan area to date, the National Roads Authority (NRA) has mapped traffic sound levels for roads which carry more than six million vehicles per annum. This includes a section of the N25 to the west of the River Barrow. The noise zones have implications for new development which will be required to demonstrate that they have incorporated appropriate noise reduction procedures to reduce noise impact.

5.3.5 Existing Environmental Problems

- The provision of community facilities, amenities and infrastructure to support new developments within and surrounding the town has been slow and has struggled to keep up with the pace at which development has occurred. This has negatively impacted on residential amenity and human health.
- Recurring flooding of low lying areas within the town as a result of increased river levels and surface water run-off is significantly impacting on human activities. With climate change the frequency and severity of flooding in the future is uncertain, but it is likely to increase and therefore poses a significant threat to human health.

5.3.6 Evolution of Population and Human Health in the absence of a Development Plan

- In the absence of a development plan, there would be a continued demand for housing in New Ross which would be likely to be satisfied in a piecemeal fashion with the location of developments determined by individual applications with no specific guidance as to where development should take place. This would be likely to result in an increase in unsustainable one-off linear type development, which in turn would lead to problems relating to infrastructural provision and more significant environmental impacts such as those relating to biodiversity, flora, fauna and 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.
- In the absence of a Strategic Flood Risk Assessment, which forms part of the development plan, continuing flooding of the Quays and other areas within the town and surrounding areas would continue to pose a significant threat to human health.

5.4 Geology and Soil

5.4.1 Geology

The Geological Survey of Ireland (GSI) Maps show that the geology of the area around New Ross generally comprises rocks of the Lower Palaeozoic era, dating from the Ordovician period from 510 to 438 million years ago.¹ Most of the development boundary area lies on the Oaklands Formation which comprises of green, red-purple, buff slate and siltstone. However parts of the plan area including Mountgarrett and Rosbercon are located on the Ballylane Formation which comprises of green and grey slate with thin siltstone. Igneous rock is also present to the south of the plan area at Oaklands.²

5.4.2 Soil

Soil can be considered as a non-renewable natural resource because it develops over very long timescales. Soil is defined as the top layer of the earth's crust. It is formed by mineral particles, organic matter, water, air and living organisms. Soil has a role as a habitat and gene pool, serves as a platform for human activities, landscape and heritage and acts as a provider of raw materials. These functions are worthy of protection because of their socio-economic as well as environmental importance.³

¹ <http://www.gsi.ie/Education/Geology+for+Everyone/Age+of+the+Earth.htm>

² <http://www.gsi.ie/Mapping.htm>

³ http://ec.europa.eu/environment/soil/index_en.htm

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. The EPA has also published a document 'Towards Setting Environmental Quality Objectives for Soil' which recommends the development of a Soil Protection Strategy for Ireland, including the development of a National Soil Quality Monitoring Programme and the selection of a set of indicators which are representative of soil quality.⁴ The protection of other resources such as water has positive implications for soil, the quality of which is directly linked to that of ground and surface waters.

EPA Maps (<http://maps.epa.ie>) identify a range of soils within the study area which support various habitats and land uses. Soils and subsoils within the built up area of the town are classed as 'made' while the area to the east of the town is composed mainly of acid brown earths/brown podzolics soils and shale till lower palaeozoic subsoils. Alluvial soils are located along the floodplains of the River Barrow and at Marshmeadows.

There are a number of potentially contaminated sites within the plan area. Current Asbestos regulations require the HSA to be notified prior to the removal of asbestos materials. Current planning policy (New Ross Town and Environs Development Plan 2004) provides that a Waste Management Plan must be carried out for demolition and construction of commercial/industrial and other large scale developments. Planning registration NR06/32 (former Albatross Fertiliser Plant) includes such a condition, requiring the preparation of a Project Construction and Demolition Waste Management Plan prior to demolition of any buildings or placement of topsoil on the site. The plan must include a pre-demolition survey to identify any hazardous materials including, but not limited to, asbestos and asbestos containing materials, and recommend steps to manage the risk and remove or treat the hazardous material.

⁴ www.epa.ie

5.4.3 Historic Landfills

All historic landfills now have to be authorised by the EPA. A Ministerial Direction (WIR 04/05) was issued on the 3rd May 2005 under Section 60 of the Waste Management Acts 1996 to 2005. It informs local authorities of their obligations, under Section 22 of the Waste Management Act, 1996 to 2005 and it refers to an inventory and risk assessment of all non-licensed closed landfills (i.e. historic unregulated waste disposal sites).⁵ One historic landfill is located in the plan area at Marshmeadows (Nolan Transport site) and it is likely that remedial action will be required for this site.

5.4.4 Quarries

The GSI website identifies one quarry adjacent to the plan area. Oaklands Quarry was noted to be active in 2001 but is no longer in operation. Nolan Transport now operates a vehicle park facility at this location (planning register 20090793).

5.4.5 Existing Environmental Problems

- Existing environmental problems relating to soil include the building upon and thereby sealing off of soil, with pollution and contamination of soil as a result of likely surface and ground water pollution.
- Land reclamation/filling of lands required to facilitate development on zoned lands at Annefield and Marshmeadows may affect soil quality.
- Flood risk can negatively impact on soil through increased run-off and siltation in alluvial areas. Eroded soil washed into rivers during heavy rainfall causes an increase in nutrients which can lead to eutrophication of rivers and lakes. Flooding can also have a positive impact on soils bringing nutrients and silt which good soils are composed of.

⁵ <http://www.epa.ie/whatwedo/advice/waste/cop/>

5.4.6 Evolution of Soil in the absence of a Development Plan

The Development Plan includes a Strategic Flood Risk Assessment (SFRA) which deals with flood risk management and development of sites that are located in the flood zone. In the absence of implementing the development plan, development would be likely to occur on flood plains resulting in the loss of natural flood plain storage and increased surface water run-off. Increased flood risk could affect the protection of soil causing run off and siltation in alluvial areas.

5.5 Water

5.5.1 Hydrology

The River Barrow has the second longest main river channel in the country and covers an area of approximately 2983 km². It rises in the Slieve Bloom mountains and flows through the towns of Portarlinton, Monasterevin, Athy, Carlow, Leighlinbridge, Bagenalstown, Grauigenamangh and New Ross, to its confluence with the River Suir at Cheekpoint. The Barrow is joined by the Nore approximately 4 km upstream of New Ross. The main tributaries joining the left bank (east side) are the Cushina, Figile and Slate which form one tributary at Monasterevin and the Tully, Greese, Lerr, Burren, Mountain and Poulmounty, while on the right bank (west side) it is joined by the Owenass, Triogue, Stradbally, Douglas, Fushogue, Gowran, Powerstown and Duiske tributaries.⁶

5.5.2 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 GSI rates the aquifers of Ireland according to their productivity and their vulnerability to pollution. The majority of the plan area is located on a locally important aquifer which follows the boundary of the Oaklands Formation, while

⁶ <http://www.srfb.ie/cm/catchmentmanagement.html>

areas along the Ballylane Formation are classified as poor aquifer.⁷ Groundwater vulnerability in the area is generally shown to be extreme with some areas having rock near the surface or karst. The GSI are currently preparing a Ground Water Protection Scheme for the entire County which is expected to be completed in 2010.

5.5.3 Water Framework Directive

The EU Water Framework Directive (WFD) was adopted in 2000. It requires governments to manage all of their waters: rivers, canals, lakes, reservoirs, groundwaters, wetlands, estuaries and coastal waters. Member States must ensure that their waters achieve at least 'good status' by 2015 and that their status doesn't deteriorate. The Directive requires the preparation of a management plan for all of the waters in an area called a River Basin District. There are eight River Basin Districts in Ireland; one of which is the South Eastern River Basin District.

The River Basin Management Plan (RBMP) for the South Eastern River Basin District (SERBD) includes an outline of the existing condition of waters in the SERBD and a list of sustainable objectives to achieve good water status. A list of mandatory measures (set out under the WFD) is outlined and a list of supplementary measures is also identified. Supplementary measures are those which are considered necessary when the basic measures alone are not sufficient to achieve the objectives. A timescale for objectives is also outlined.

5.5.4 Protected Areas

The WFD requires each Member State to establish a register of protected areas. These areas are considered to need greater protection because they contain sensitive habitats or wildlife species or the need to protect human health including drinking water sources, shellfish growing areas and bathing areas. The

⁷ <http://www.gsi.ie/Mapping.htm>

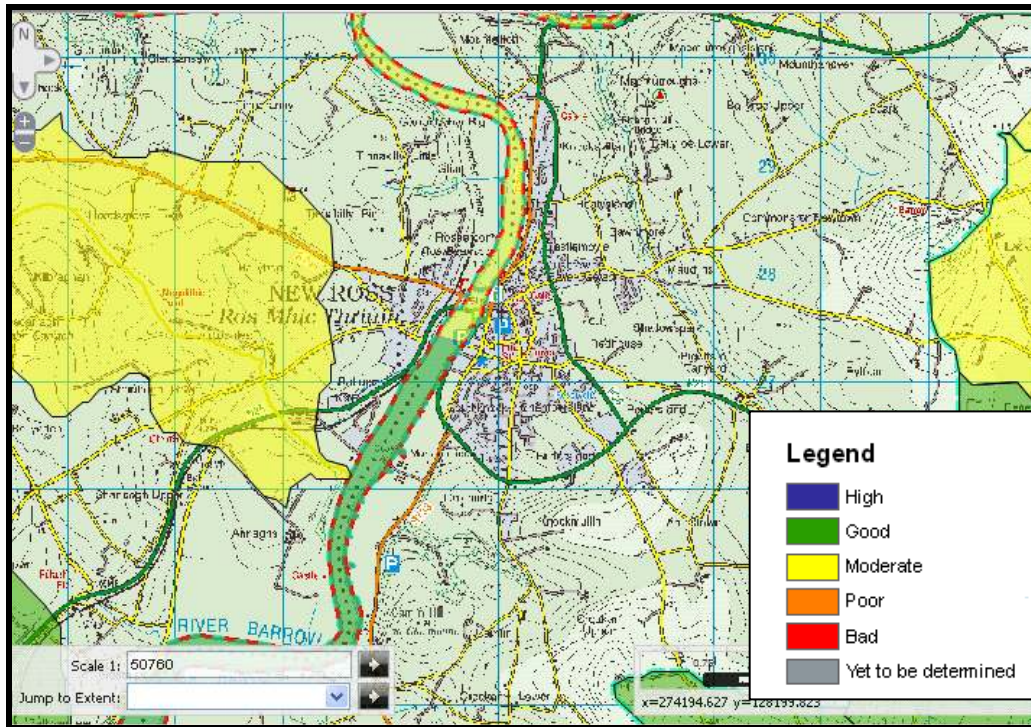
River Barrow is identified as a protected area due to its designation for special habitats and species (SAC). The deterioration or loss of high quality and protected areas is often due to their sensitivity to land use changes in surrounding catchments, such as agriculture, forestry, peat harvesting and rural development activities. It is an objective of the RBMP to prioritise the protection of such areas and to prevent any further deterioration. Protected areas must, without exception, achieve good or high status to support their designations, with specific targets for protection of priority species.

5.5.5 Water Quality

Surface Water

The section of the River Barrow which lies within the plan area encompasses two transitional waterbodies, namely New Ross Port and the Barrow Nore Estuary Upper. The former includes waters to the south of O'Hanrahan Bridge which are classified as having 'good' water quality status in the RBMP for SERBD. The Barrow Nore Estuary Upper lies to the north of the bridge and is classified as having 'moderate' water quality status. Status is the general health of the water environment measured by the biology, chemistry and physical environment. The principle aim of the WFD is to achieve good water quality status in our rivers by 2015. Those classified as having moderate or lower status, if not improved, will fail to comply with the WFD.

Map 4: Water Quality Status



Source: Watermaps www.wfdireland.ie

The overall objectives for the two waterbodies are to maintain good status in New Ross Port and to restore good status in the Barrow Nore Estuary Upper by 2015. Both the New Ross Port and Barrow Nore Estuary Upper waterbodies are at risk of not achieving good status by 2015. The RBMP identifies alternative/extended timescales in instances where the objectives are not achieved by 2015.

Supplementary measures are also identified in addition to the basic mandatory measures required to improve water quality status. These include the monitoring of point and diffuse sources such as wastewater and industrial discharges.

Groundwater

The groundwaters of the South Eastern District include several important aquifers including volcanic rocks in Waterford and Wexford and limestones underlying

lowland areas.⁸ Groundwaters are classified as having either good or poor status. The groundwater classification scheme measures water quantity and chemical status. Groundwater chemical status is described by general components and certain pollutants and parameters, in particular conductivity. The thresholds set for groundwater quantity and quality are derived from the standards required to support the plants and animals in surface waters and wetlands and for human consumption.

All areas of County Wexford and County Kilkenny within proximity to New Ross are classified as having good status groundwaters. The overall objective set out in the RBMP is to protect these groundwaters by limiting pollution inputs and reversing increasing pollution trends.

A Groundwater Protection Scheme (GPS) for County Wexford has recently been undertaken by the GSI. A set of maps have been compiled for the county while the written document to accompany the maps is expected to be completed in late 2011. The overall aim of the groundwater protection scheme is to preserve the quality of groundwater, particularly for drinking water purposes.

5.5.6 Drinking Water

The European Communities (Drinking Water) Regulations (No. 2) 2007 came into force in March 2007. Since then, the EPA have published 'The Provision and Quality of Drinking Water in Ireland - A Report for the Years 2007-2008'. This report assesses the safety and security of drinking water supplies covered by the Regulations. County Wexford was shown to have an overall rate of compliance of 95.3% which was below the national average during 2007, though this did improve from 94.2% in 2006. There are currently 3 public water supplies operated by Wexford County Council on the Remedial Action List (RAL⁸³) of public water supplies, one of which is the New Ross Water Supply Scheme.

⁸ Draft River Basin Management Plan for South East River Basin District, December 2008

The water supply for New Ross town is currently sourced from the Aughmanagh and Pollmounty Rivers and is stored in a raw water tank at Ballyleigh on the northern outskirts of New Ross. From here water is supplied by gravity to the public Water Treatment Plant (WTP) at Castlemoyle where water is treated by Dissolved Air Flotation and Filtration through a single 'Flofilter' treatment unit. An upgrade to the Water Treatment Plant is expected be completed by 2011. This upgrade will improve existing river sources and the overall quality of the water supply itself.

An assessment of water needs in New Ross is also being carried out. Preliminary reports show that existing demand for the New Ross Water Supply Scheme is 3,100 – 3,500m³/day depending on time of year and it is estimated that the unaccounted for water (UFW) for the overall scheme is 48.5%⁹. In the context of the development plan there would appear to be adequate capacity for new domestic use for the lifetime of the plan but non-domestic water usage will be planning led (i.e. development contributions will be required to increase supply).

In the longer term the preliminary report states that future demand for the scheme is estimated at approximately 6,700m³/day for the year 2025. It is proposed to satisfy future demand through the retention of the existing sources together with a new groundwater development at Adamstown. It is expected that the Adamstown development will provide an additional 4,700m³/day and will include a collection and treatment facility. Pipeline augmentation in New Ross is also proposed to cater for higher flows. These proposals are at the preliminary stages only.

⁹ Preliminary Report for New Ross Water Supply Scheme – Stage 2

It should also be noted that the Council are actively pursuing a leakage reduction policy. A detailed water conservation project is underway to reduce the current levels of unaccounted for water throughout the county.

5.5.7 Wastewater

The recent introduction of the *Urban Wastewater Discharge Regulations* requires that urban wastewater discharges be authorised by the EPA. Larger villages and towns, with populations of over 500, must be licensed. Wexford County Council applied to the EPA for a licence for the New Ross Wastewater Treatment Plant in December 2007. The application is still under assessment by the EPA (Registration Number D0036-01).

Until recently all effluent from the Town and Environs area was being discharged to the River Barrow untreated, with significant implications for water quality. A new wastewater treatment plant (WWTP) and a pumping station have been completed and are currently being commissioned. The WWTP has a design capacity of 16,000 P.E., with possible future expansion to 24,000 P.E. Estimated existing load for the town and environs (including Kilkenny County Council area) is 10,625 P.E. Of this approximately 8,209 P.E. is for domestic use and approximately 2,416 P.E. is for non-domestic uses. The WWTP will have a positive impact on water quality in the River Barrow. However, a number of existing developments are still discharging directly to the River Barrow and other freshwater sources. These developments will be required to connect to public mains to optimise water quality status in accordance with the WFD.

5.5.8 Abstractions & Discharges

An Abstraction Order permits the Council to abstract 4,545m³/day from the Pollmounty River to the north of New Ross Town. Active discharge licences (trade effluent) in the plan area are shown in Table 6 below. Approved discharge licences which are not active at present include Michael P. Roche (factory) at

McMurrough's Island to the north of the town (SS/W003/78) and The Hillside Bar at Camlin to the south of the town (SS/W097/99).

Table 6: Active Discharge Licences

Discharge No.	Name	Discharge Location	Description	Date Granted
SS/W082/95	Stafford Shipping Services	Strafford Wharf	Ship loading facility for lead and zinc ore	29/02/1996
SS/W057/86	Esso Ireland	Marshmeadows	Oil Depot	21/09/1987

Licence holders must ensure that discharges do not exceed the levels specified in the licence. Audits are carried out by the Council on a priority basis to monitor compliance of existing licences against their permitted discharge allowance. Licence holders are also required to carry out sampling on a regular basis and submit the relevant details to the Council.

5.5.9 IPPC Licences

Operators of certain industrial installations are required to obtain an authorisation (environmental permit) from the EPA. The permit conditions include emission limit values; soil, water and air protection measures; and waste management measures; and must be based on Best Available Techniques.

Green Biofuels (IPPC Licence No. PO829-01), located at Marshmeadows, converts renewable resources such as rapeseed, tallow and used vegetable cooking oils to a biodegradable fuel (biodiesel) as an alternative to petroleum diesel.¹⁰ The IPPC Licence for this facility requires annual monitoring of surface water and groundwater along with other environmental parameters. Where non-compliance is observed, corrective actions are required. The Annual

¹⁰ Annual Environmental Report for Green Biofuels Ireland Ltd. available at www.epa.ie

Environmental Report for 2008 shows that measures were required to pump surface water more frequently to deal with contamination issues. Monitoring of groundwater took place for the first time and as such this will provide the baseline for future monitoring. Discharge to sewer is also required to be monitored annually.

5.5.10 Major Accidents

The Seveso II Directive (European Directive 96/82/EC) and the European Communities (Control of Major Accident Hazards Involving Dangerous Substances) Regulations, 2000 (S.I. No. 476 of 2000) apply to companies where dangerous substances are present in quantities equal to or above specified thresholds. There are two thresholds, a lower one of 50 tonnes ("Lower-tier sites") and a higher one of 200 tonnes ("Top-tier sites"). Lower tier sites are required to have a Major Accidents Prevention Policy and a Safe Work Systems Plan. Top tier sites are required to carry out, in conjunction with the local competent authority (which includes the Health Service Executive, the Local Authority, An Garda Síochána and in the case of New Ross, New Ross Port Company) a Major Accidents External Emergency Plan. Emergency plans must take full account of objectives established for nearby waters in river basin plans. Seveso regulations also impose planning restrictions both within and adjacent to seveso sites.

Lower-tier Seveso sites within the plan area include Green Biofuels, Esso Ireland Ltd., Campus Oil and Barrow Storage Co. Ltd. all of which are located at Marshmeadows.¹¹ Gouldings Chemicals Ltd. is also located approximately 1km to the southwest of the plan area. This is the only top tier Seveso site in the county and an External Emergency Plan for Major Accidents is in place at this site. Wexford County Council has recently been notified of another top-tier site

¹¹ http://www.hsa.ie/eng/FAQs/Chemical/Seveso_II_Notified_Sites.pdf

which is located adjacent to the plan area. Nitrofert Ltd. is located at Raheen Port, New Ross which is within the jurisdiction of Kilkenny County Council.

5.5.11 Navigation

New Ross is Ireland's only inland port, located on the River Barrow some 32 km from the sea. New Ross Port is located at Marshmeadows with the Harbour Masters office located on The Quay. A berth is located to the rear of the Harbour Masters Office but is rarely used. In 2009 approximately 527,000 tonnes passed through the port at Marshmeadows. Emo Oil, located on The Quay, has not received a shipment in approximately three years. Stafford's Shipping Company is also located to the west of the River Barrow at Rosbercon and Stokestown Port Services is located approximately 2km to the southwest of the town.

Aside from commercial traffic, the River Barrow attracts a significant number of pleasure craft. The Three Sisters Marina is located opposite the town park and permission has been granted for a 42 floating berth marina (Planning Register NR07/16) to the north of Hanrahan Bridge on the east side of the River. Further north of the town the 65km stretch of the River Barrow from St. Mullins to Athy forms part of the Waterways Ireland network.

5.5.12 Existing Environmental Problems & Pressures

- In New Ross the key issues for water are the provision of adequate waste water treatment infrastructure, maintenance of good quality drinking water for protection of human health, protection of groundwaters, restoration and protection of surface water, and protection and restoration of water quality for water dependent habitats and species. These are all required measures to meet objectives set out under the Water Framework Directive's RBMP.
- Although the commissioning of the WWTP will improve water quality status in the River Barrow, the New Ross Port and Barrow Nore Estuary Upper waterbodies are identified as being at risk of not achieving good

status by 2015.

- Water supply for the town has limited capacity. It is expected that there will be adequate capacity for new domestic use for the lifetime of the plan but non-domestic water usage will be planning led. An inadequate water supply could impact on job creation and human health through the elimination of new high and medium water user industries in the town. Increased pressure on water supply could also affect drinking water quality, thereby impacting on human health.

5.5.13 Evolution of Water in the absence of a Development Plan

- In the absence of implementing a development plan, there would likely be continued deterioration of water quality in the area. The development plan will include policies and objectives that are consistent with the WFD and other European and national legislation for the protection of water quality.
- In the absence of implementing a development plan, there could be an inadequate water supply for the existing and future population of the town and environs. An inadequate water supply would restrict industrial and economic growth, thus affecting employment opportunities and human health.
- In the absence of implementing of a development plan, flood risk would likely be increased through appropriate development on flood plains, the removal of natural flood plain storage and the absence of adequate drainage systems in new developments. Increased flood risk would pose a significant threat to water quality and human health.

5.6 Air & Climatic Factors

No specific air quality data is available for New Ross town. However, the EPA has developed four zones to represent all of the potential 'types' of air quality background that are likely to exist in Ireland. These four zones are stated in the Air Quality Regulations (2002) and are as follows:

- Zone A:** Dublin Conurbation;
- Zone B:** Cork Conurbation;
- Zone C:** Other Cities and Large Towns comprising Galway, Limerick, Waterford, Clonmel, Kilkenny, Sligo, Drogheda, Wexford, Athlone, Ennis, Bray, Naas, Carlow, Tralee and Dundalk (usually towns with populations greater than 15,000 people); and
- Zone D:** Rural Ireland, i.e. the remainder of the State excluding Zones A, B & C.

New Ross is located in Zone D. It is an unrestricted coal area and currently there is no smokeless ban in the town. The Brandon House Hotel is identified as a CGPP (Cleaner Greener Production) Hotel on the EPA maps.

The EPA has set up a number of air quality monitoring stations at various locations around the country. They measure the levels of a number of atmospheric pollutants including ozone, nitrogen dioxide, PM10 and sulphur dioxide using an air quality index. Five bands are used in the Irish index: Very good, Good, Fair, Poor and Very Poor. The closest monitoring locations to New Ross are Waterford City (approx. 20km as crow flies), Wexford Town (approx. 33km as crow flies) and Kilkenny City (approx. 35km as crow flies) which are all located in C zones and have very good air quality. Current monitoring stations are also located at Carnsore Point and Johnston Castle (D zones) which both show good air quality.

An IPPC Licence for Green Biofuels (Licence No. P0829-01) requires monitoring of air emissions from the plant at Marshmeadows. Any emergency at the facility which could pose a threat of pollution to the environment must be reported to the EPA. This includes any release to atmosphere of environmental significance or any emission which does not comply with the requirements of the licence.¹²

¹² <http://www.epa.ie/terminalfour/ippc/ippc-view.jsp?regno=P0829-01>

The Radiological Protection Institute of Ireland (RPII) has carried out a National Radon Survey which identifies New Ross as a High Radon Area, with 10% - 20% of homes estimated to be above the reference level.¹³ Radon is a radioactive gas which produces tiny radioactive particles. When inhaled, these particles are deposited in the airways and on the tissue of the lung. This results in a radiation dose that can cause lung cancer. Home owners can apply to the RPII to have their home tested to determine the average level of radon in their home and seek advice on ways to reduce radon levels. This includes methods of radon remediation such as sealing floors and walls, increasing indoor and under-floor ventilation, positive pressurisation and installing a radon sump. Homes in High Radon Areas built after the 1st July 1998 are required to be fitted with a radon barrier and a standby radon sump in accordance with Building Regulations.

5.6.1 Existing Environmental Problems

Currently there are no significant concerns with regard to air quality in the region. However air quality is adversely affected by smoke producing fuels and traffic fumes. Traffic congestion is becoming a major problem within the town centre due to a large number of individuals commuting to work and the increased levels of traffic generally on the N25/N30 National Routes which pass through the town. High levels of traffic such as this generate noise and emissions, which creates a harsh sensory environment for pedestrians and the people residing within the town itself. The proposed New Ross bypass, once completed, is likely to reduce traffic levels, associated emissions and noise levels with the town. However New Ross faces an additional problem in relation to flooding and traffic flows within the town. New Ross is also identified as a High Radon Area with 10%-20% of homes estimated to be above the reference level.

¹³ <http://www.rpii.ie/radon-map.aspx>

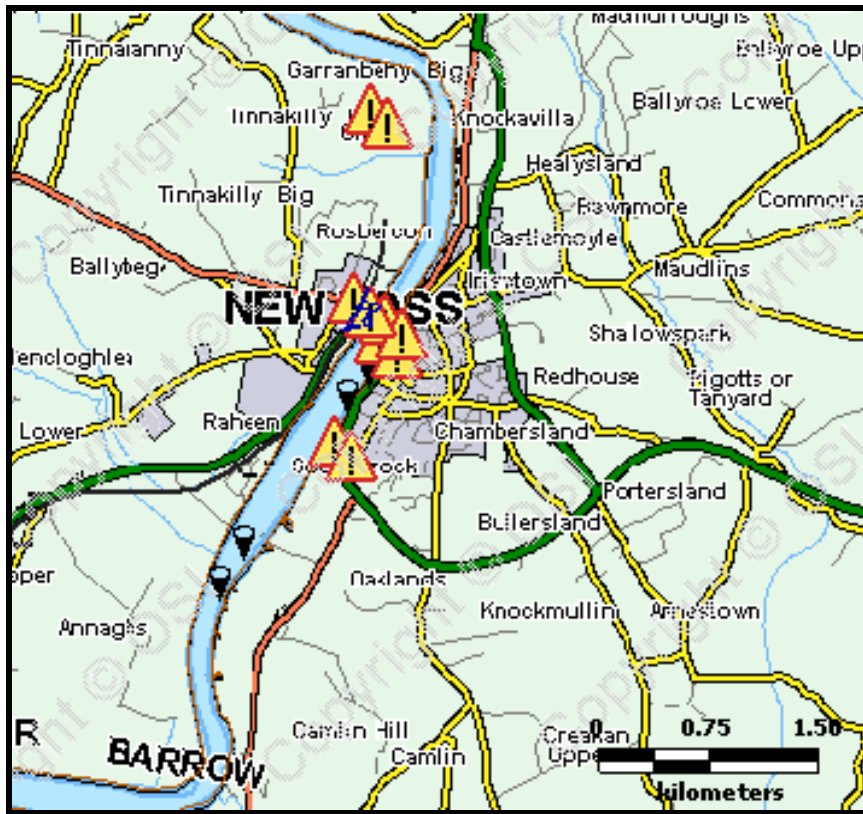
5.6.2 Evolution of Air & Climatic Factors in the absence of a Development Plan

Preceding the completion of the New Ross Bypass it is important for the above concerns to be addressed in this Development Plan. Localised air pollution incidences and noise pollution are both likely to occur when traffic is queuing for long periods of time. Congestion is particularly bad approaching the town from Waterford on the N25. The implementation of the Development Plan for New Ross 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.

5.7 Flooding & Climate Change

With climate change the pattern, frequency and severity of flooding is uncertain. There are nine incidents of flooding recorded on the OPW's flood database for New Ross, with the first recorded incident occurring in Rosbercon in November 1997. Areas of recurring floods include The Quay, Bridge Street, Rosbercon and Marshmeadows. An Interim Flood Relief Scheme has recently been carried out in conjunction with the Main Drainage Scheme along the Quays. However this is an Interim Flood Relief Scheme and provides limited protection from floods. A detailed Strategic Flood Risk Assessment has been carried out and is contained in the Appendix of the plan.

Map 5: Recorded Flood Locations



Source: www.floodmaps.ie

5.7.1 Existing Environmental Problems

- Recurring flooding gives rise to significant economic and social effects.
- Impacts of climate change present real challenges to future land use and location of development in the region. Predicted impacts from projected temperature rises include more concentrated periods of higher rainfall, more exposure to flood risk and lower river flows potentially affecting fish spawning and water supply.

5.7.2 Evolution of Flooding and Climate Change in the absence of a Development Plan

- In the absence of implementing a development plan flood risk would likely be increased through inappropriate development on flood plains, the removal of natural flood plain storage and the absence of adequate

drainage systems in new developments. Increased flood risk could pose a significant threat to water quality and human health.

5.8 Material Assets

Material assets are taken to include infrastructure and utilities including rail, road, water supply and wastewater treatment facilities.

5.8.1 Rail

A railway line previously ran from Macmine Junction (north of Wexford town on the main Dublin-Rosslare line) to Waterford via New Ross. Passenger services on the Macmine Junction line ceased in 1963, but the section from Waterford to New Ross remained in use for cement and fertiliser traffic until 1995. Today, the line remains in situ but very much derelict and overgrown in some sections.¹⁴

The New Ross – Carlow railway line closed in 1963 but remained in use for freight as far as New Ross until the early 1990s. This line was once used to transport coal from New Ross Port to the sugar factory in Carlow.¹⁵ The Limerick - Rosslare Europort via Waterford passes through Campile some 13km to the south of New Ross town.

5.8.2 Roads

The proposed New Ross Bypass, which includes a second bridge crossing to the southwest of the town, has been approved by An Bord Pleanála. Existing routes connecting New Ross to other urban centres in the southeast include the N25 to Wexford (37km), the N25 to Waterford (24km), the N30 to Enniscorthy (32km) and the R700 to Kilkenny (43km). The R733 also connects the town to the scenic Hook Peninsula. The N30 links with the N11 Wexford-Dublin national primary route at Enniscorthy. Both the N11 and N25 form part of the developing

¹⁴ <http://www.eiretrains.com/>

¹⁵ The Bagenalstown & Wexford Railway Revisited. J.M.Feeley & J.Sheehan (available online)

Euroroutes (E01 Larne-Belfast-Dublin-Rosslare Harbour and E30 Rosslare Harbour – Wexford – New Ross – Waterford - Cork) respectively.

5.8.3 Water Supply

The water supply for New Ross town is sourced from the Aughmanagh and Pollmounty Rivers and is stored in a raw water tank at Ballyleigh on the northern outskirts of New Ross. From here water is supplied by gravity to the public Water Treatment Plant (WTP) at Castlemoyle where water is treated by Dissolved Air Flotation Filtration through a single 'Flofilter' treatment unit. An upgrade to the Castlemoyle WTP is expected to be completed by 2011. The implications of the WTP upgrade for receiving waters are discussed in the water quality section above.

5.8.4 Wastewater Treatment Facilities

A Wastewater Treatment Plant (WWTP) and pumping station have been completed and are currently being commissioned. The new plant has a design loading of 16,000 P.E. which will be able to deal with the pressure from development in the town well past the life time of this plan. The implications of the WWTP and associated works for receiving waters are discussed in the water quality section above.

5.8.5 Existing Environmental Problems

- Some key routes to the town are in need of upgrading, particularly the N30. In the time it takes to construct the New Ross Bypass existing roads will have deteriorated.
- The New Ross-Waterford railway line remains closed, contributing to increased car dependency.
- Although the WWTP will have a positive impact on water quality, some existing developments are still discharging directly to the River Barrow and other freshwater sources. These developments will be required to connect

to the public mains to optimise water quality status in accordance with the WFD.

5.8.6 Evolution of Material Assets in the absence of a Development Plan

- The long term objective to reopen the railway line would be lost. The development plan will contain objectives to ensure that new development does not encroach on this railway line.
- There would be no policies and objectives for the provision/upgrading of junctions, footpaths and public lighting along existing routes and for the provision of new link roads which are necessary to serve new greenfield development and to improve permeability and accessibility in the area. New and improved routes are necessary to maintain competitiveness in the town. Permeability is also linked with good urban design and quality of life.
- Future demand for additional water supply and associated infrastructure would be difficult to determine in the absence of industrial zoning objectives. The zoning objectives give an idea of the likely future uses and their location. Adequate water supply and the provision of necessary infrastructure to deliver this supply are vital to attract new industry to the town.
- The objectives of the WFD and the RBMP may not be achieved with continued discharge of untreated effluent to River Barrow SAC. The development plan will contain policies and objectives regarding new development and availability of wastewater infrastructure.

5.9 Cultural Heritage

5.9.1 Archaeology

The National Monuments Acts 1930-2004 provide for the protection of the Archaeological heritage in New Ross. Areas of Archaeological potential are designated under the Record of Monuments and Places (RMP) which was established under Section 12 of the National Monuments (Amendment) Act 1994.

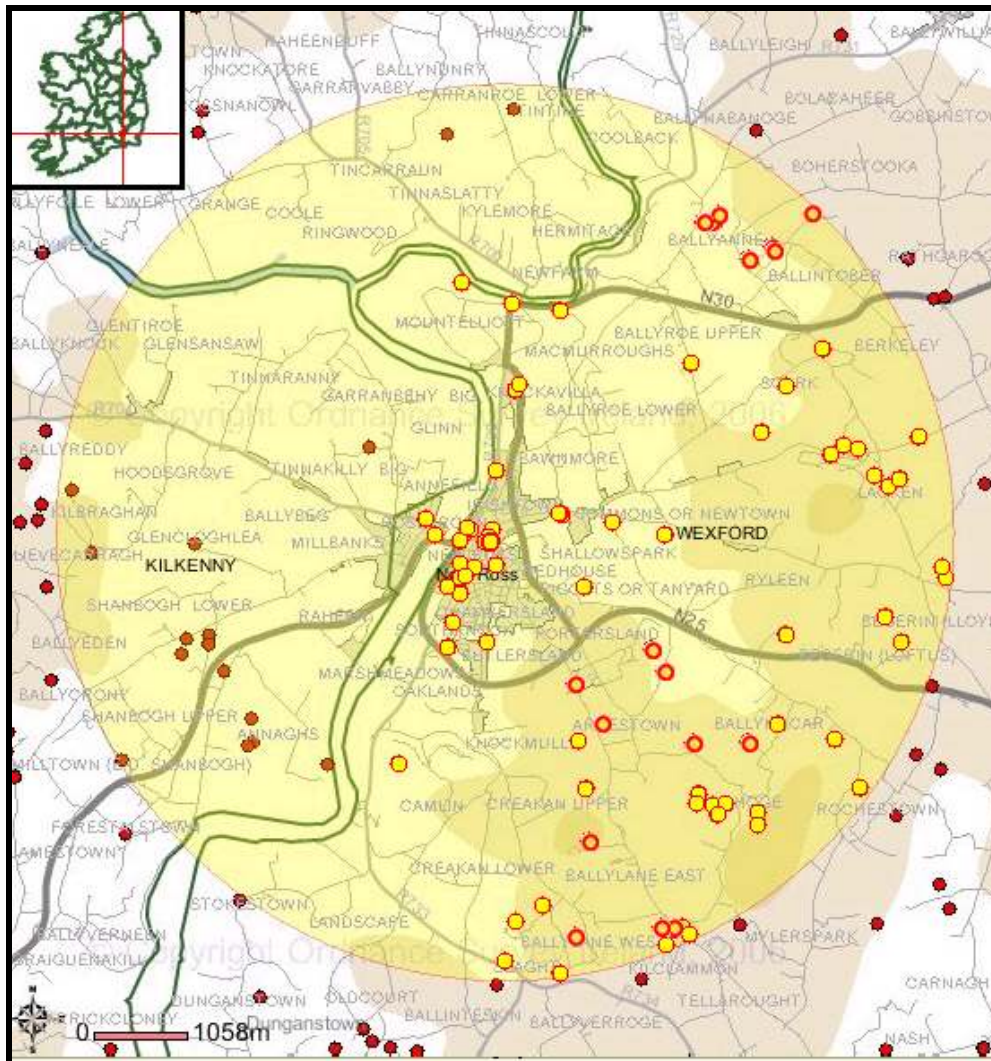
Archaeological heritage is a unique and special resource and needs to be conserved sensibly.

The town of New Ross (RMP No. WX029-013) is recognized as a Zone of Archaeological Potential. It encompasses the medieval town centre and the later medieval extension to the town (Irishtown). Further monuments are identified within this zone and within the overall development boundary of New Ross Town and Environs. These range from effigies and graveslabs to Religious Houses and Town Defenses. The location of Recorded Monuments are shown in Map 6 below. The classification of each monument is available on the monuments database at www.archaeology.ie.

St. Mary's Church is the only monument in New Ross which is in State Guardianship (RMP No. WX029-013002- & National Monument No. 443). Any direct impacts on national monuments in State or Local Authority care or subject to a preservation order require the consent of the Minister for the Environment, Heritage and Local Government under Section 14 of the National Monuments Act 1930, as amended by Section 5 of the National Monuments (Amendment) Act 2004.

Information on individual archaeological testing and monitoring carried out in the New Ross area is available at www.excavations.ie. An Archaeological Inventory of County Wexford was also published in 1996.

Map 6: National Monuments



Source: www.archaeology.ie

5.9.2 Architectural Heritage

New Ross has a wealth of buildings that are listed for preservation. A Record of Protected Structures (RPS) is included in the Appendix of the Development Plan. The RPS includes structures which are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest. The listing includes the items specified (e.g. façade, elevation, shopfront) and where no such specification is made the listing shall include the whole envelope of the structures listed. The Development Plan includes a total of 187 protected structures. Four Architectural Conservation Areas (ACAs) are also included.

These are areas identified for their collective streetscape. They encompass John Street, North Street, South Street, Quay Street and part of Mary Street.

The National Inventory of Architectural Heritage (NIAH) for New Ross Town was completed in 2008. It includes a total of 306 structures which are recommended by the minister for inclusion on the RPS.

Aside from protected structures and ACAs, the built form and physical environment of New Ross also forms part of its architectural heritage and contributes to its sense of place. The built fabric of New Ross is influenced by its rich medieval history. The town was first established as a port during the 13th century and the old town wall was built in 1265. Sections of the wall remain standing, their original line still largely defining the urban core. North Street, South Street and Priory Street have remained the main commercial streets since the 13th century. Following the Rebellion of 1798 much of the town was destroyed and had to be rebuilt. As a result many of the buildings in the town are post – 1798, with many fine architectural structures dating from the Georgian period. The medieval street pattern is still evident however.

The New Ross Town Walls Conservation Plan, and associated Management Plan, was adopted in 2008. The plan contains policies and objectives for the maintenance of the remaining upstanding sections of the town wall. The plan also recommends the establishment of a management group to implement the policies and objectives of the plan.

Another notable architectural feature in New Ross is its original shopfronts. Following the closure of the Albatross Fertilizer plant, the primary employer in the area, in the 1980s, New Ross experienced considerable economic decline. A by-product of this period of depression was the downturn in development in the town resulting in the survival of a remarkable number of very fine nineteenth- and early

twentieth-century shopfronts which continue to enhance the streetscape value at street level to the present day.¹⁶

5.9.3 Existing Environmental Problems

- As the historic town of New Ross is identified a zone of archaeological potential, any development in this area is likely to give rise to archaeological impacts. Archaeological Impact Assessments (AIA) are normally required for new developments in this area which involve the carrying out of sub-surface works. In some instances AIA is also required for above ground works.
- Works to protected structures may affect their character especially where they are not reversible. Often windows and other important features are removed and/or replaced without planning permission. This is in part due to a lack of public knowledge about the restrictions on exemptions which apply to protected structures. The replacement of features, such as windows, can have a detrimental impact on the character of a building as well as the overall streetscape.
- Upstanding parts of the town wall are neglected and at risk of endangerment. Dereliction is also affecting a number of protected structures in New Ross Town. At present there are 10 structures included on the Derelict Sites Register and five of these are included on the Record of Protected Structures. Works have recently been carried out on two of these structures. New Ross Town Council served notice under section 11 of the Derelict Sites Act, 1990 on the owners/occupiers of the other eight structures in December 2009. The notice specifies the measures which the Council considers necessary in order to prevent the land from continuing to be a derelict site and specifies a period within which such measures are to be taken.

¹⁶ www.buildingsofireland.ie

- The maintenance and conservation of the town's cultural heritage is key in order to maintain an irreplaceable resource, sense of identity for the town and as a source of visitor interest and tourism revenue. Key issues include the protection of built heritage and streetscapes, protection of archaeological sites and monuments and promotion and enhancement of access to these sites.

5.9.4 Evolution of Cultural Heritage in the absence of a Development Plan

- In the absence of a development plan the evolution of the cultural heritage in the town would be at severe risk. If a plan is not put into place any future development in the town could damage and interfere with the original features and townscape of New Ross.

5.10 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.

New Ross is located along the River Barrow, which is Ireland's second longest river, almost 192 km from its source in the Slieve Bloom Mountains to where it enters the sea at Waterford Harbour. It joins the River Nore to the north of New Ross Town and joins the River Suir at Cheekpoint. The town settlement of New Ross rises either side of the River Barrow. The Blackstairs Mountains are located some distance to the northeast of the town. A no. of oak woodlands are also present in the Barrow River Valley to the north and south of the town. These woodlands form part of the River Barrow River Nore SAC. To the south of the town a woodland area surrounds Oaklands Lake. This area is designated as a pNHA. At present there are no protected views specified in the Development Plan. There are also no tree preservation orders in the area.

5.10.1 Sensitive Landscapes

The Landscape Character Assessment contained in the Wexford County Development Plan 2007-2013 identifies the area around New Ross as a Lowland Character Area. Within this lowland area the Barrow River Corridor is identified as a highly scenic landscape.

The topographical nature of New Ross, with the river valley and steep sloping east and western sides of the river valley within the historic town centre core make for a landscape of High Visual Sensitivity. The medieval street pattern and historic buildings also provide a sense of place and contributes to the town's historic landscape. The undulating lands to the north and east of the town are deemed as landscapes of Moderate Sensitivity.

5.10.2 Vulnerable Landscapes

The River Barrow can be described as a vulnerable landscape as it is a conspicuous feature of the natural landscape to which the eye is drawn. The landscape in this area is considered to be of value because of its low lying situation and the enclosure created by its valley sides and adjacent woodland. The river landscape of the Barrow is subject to a number of wildlife designations, including a SAC and pNHA. The river also has industrial functions through New Ross Port and is an important resource for recreational activities.

5.10.3 Existing Environmental Problems

- There are a number of existing developments which detract from the enjoyment and amenity of the River Barrow, for example the location of the oil tanks on the quay. The public car parking area on the quayside is also restricting the provision of an attractive civic space to the east of the river. The New Ross Urban Design Waterfront Study 2006 contains objectives to improve the attractiveness of this area. There are also development opportunities on lands to the west of the river which could maximize the potential of the river as a visual landscape feature.

- Outfalls discharging into the river can impact on habitats, water quality and attractiveness of the river. Recent interim flood relief works along the quays have also detracted from the river landscape.

5.10.4 Evolution of Cultural Heritage in the absence of a Development Plan

- Future uncoordinated development along the quays would be likely to negatively impact upon the character of the town and riverscape views.

5.11 Difficulties Encountered in Compiling the Information

This section outlines the difficulties encountered in compiling the baseline information (technical or lack of know how). The SEA Guidelines produced by the DoEHLG in 2004 state that the SEA process “does not require major new research”. As such, the Environmental Report was prepared and informed by many already available data sources. Data sources that were used include; research that was carried out within Wexford County Council, by the Central Statistics Office (CSO), the Office of Public Works (OPW), the Environmental Protection Agency (EPA) and also the Heritage Data that has been collated by the DoEHLG and Wexford County Council.

Specific problems encountered in compiling individual baseline parameters include the following:

- Information on discharges is limited. Audits are carried out by the Council on a priority basis to monitor compliance of existing licences against their permitted discharge allowance;
- Population projections are based on a number of assumptions including the assumption that there will an increase in the housing market during the lifetime of the plan;
- There is no monitoring of air quality in the plan area and the information provided is based on monitoring at other urban centres;

- It is uncertain that the New Ross Bypass, which could have significant positive and negative environment effects both during the construction and operation phases, will be completed within the lifetime of the plan.

6.0 Environmental Protection Objectives

6.1 Introduction

Environmental Protection Objectives (EPOs) are distinct from the objectives of the Development Plan, although they will often overlap. They are developed from international, national and regional policies which generally govern environmental protection (a list of relevant legislation, plans, policies and programmes is outlined in Appendix 2). EPOs are used as standards against which the policies and objectives of the Development Plan can be evaluated in order to highlight those with the potential for environmental impact. They are used as a tool to cross check the policies and objectives of the Development Plan in order to maximise the environmental sustainability of the Plan. The cross checking process helps to identify policies and objectives that are likely to result in significant adverse impacts, so that alternatives may be considered or mitigation measures may be put in place.

The primary source used in formulating the EPOs was Table 4B of the SEA Guidelines (DoEHLG, 2004). This list has been amended to give affect to objectives that are considered relevant to the Development Plan. The use of EPOs fulfils obligations set out in Schedule 2B of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004).

6.2 Environmental Protection Objectives

6.2.1 Biodiversity, Flora & Fauna

- B1: To avoid loss of habitats and flora and fauna in designated wildlife sites.
- B2: To avoid significant adverse impacts, including direct, cumulative and indirect impacts, by development within and outside designated wildlife sites to habitats and flora and fauna within these sites.

6.2.2 Population & Human Health

- P1: To ensure high quality residential, recreational and working environments for the town's population.
- P2: To reduce the risk of flooding and harm to people, property and the environment.
- P3: To improve travel choice and accessibility, reduce the need for travel by car and shorten the length and duration of journeys.

6.2.3 Soil

- S1: To maintain the quality of soils.
- S2: To maximise the sustainable re-use of brownfield lands and give preference to the re-use of brownfield lands, rather than developing greenfield lands.

6.2.4 Water

- W1: To improve the quality of surface waters.
- W2: To prevent pollution and contamination of ground water.
- W3: To promote sustainable water use based on long-term protection of available water resources.
- W4: To mitigate the effects of floods and droughts.

6.2.5 Air & Climatic Factors

- A1: Reduce all forms of air pollution and reduce dependence on travel by private car.
- A2: Promote energy conservation and the development of renewable energy sources in the plan area.

6.2.6 Material Assets

- M1: Maintain the quality of, and access to, assets such as open spaces, water resources and all other physical and social infrastructure.

M2: Alleviate risk of flooding through siting, design and layout of new development.

6.2.7 Cultural Heritage

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

6.2.8 Landscape

L1: To conserve, maintain and enhance the status of the natural riverside landscape of New Ross as an attractive amenity, recreational and ecological resource.

6.3 Use of Environmental Protection Objectives

The EPOs are used to carry out the SEA in accordance with the legislation. They provide a standard against which the policies of the development plan are measured for their environmental sustainability. A cross-checking process is used whereby the development plan policies are proofed against the EPOs so that any policies with the potential for significant adverse or positive environmental impacts are identified. Alternative strategic options are considered and mitigation measures proposed to counteract any adverse environmental effects identified, thereby maximising the environmental sustainability of the development plan.

7.0 Alternatives Considered

7.1 Introduction

Article 5 of the of the SEA Directive requires the Environmental Report to consider reasonable alternatives taking into account the objectives and the geographical scope of the plan. Each of the alternatives considered must also be evaluated for its likely significant environmental effects. This section identifies the alternative development strategies considered for the New Ross Town and Environs Development Plan 2011-2017, taking into account higher level strategic policy and the geographical scope of the plan area. The alternative development strategies are evaluated in this section and the preferred development strategy is subsequently outlined. The New Ross Town and Environs Development Plan 2011-2017 is based upon this preferred development strategy.

7.2 The ‘do-nothing’ scenario

The ‘do-nothing’ scenario is not one of the reasonable alternatives which is required to be considered under the SEA Directive but forms the basis of comparison against which the environmental effects of the plan will be measured. The do-nothing scenario involves the continuation of existing trends, and identifying the likely effects that this will have on needs and on the environment. The likely evolution of the environment without the implementation of a development plan for New Ross has already been discussed in section 5.

Notwithstanding the requirement for a development plan as set out in the Planning and Development Act 2000, as amended, it was determined that there is a need for a plan in order to accommodate growth allocated to the town under the NSS, RPGs and the County Development Plan 2007-2013, as well as to provide for necessary community facilities, amenities and infrastructure, commercial, tourism and other uses in a way that prevents any future environmental problems.

7.3 Development 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. The alternatives should be reasonable, realistic and capable of implementation. They should achieve the SEA objectives, be able to solve existing environmental problems and aim to avoid or mitigate potential environmental issues. In some cases the preferred strategy will combine elements from the various alternatives considered.

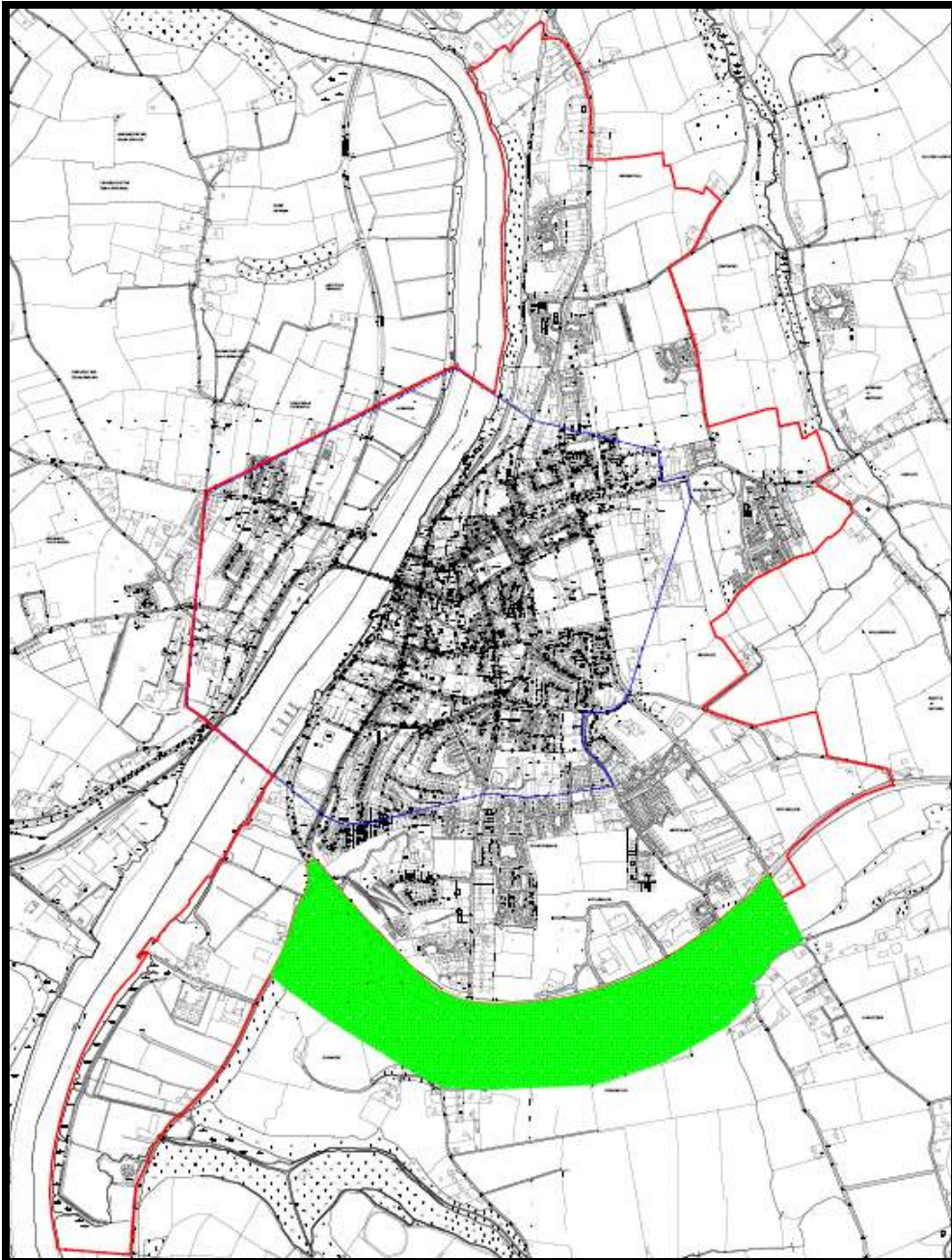
The Development Plan is framed in the policy context of the RPGs and NSS and, as such, strategic options are limited. Hence the alternatives that were considered for the plan generally focus on the location of new development. The density of new development was also given consideration during the formulation of the plan, which includes development standards with regard to density for residential development. Various population growth scenarios were also considered as part of the Core Strategy of the Development Plan. The preferred growth scenario in this instance is the medium growth scenario which follows the population projections for the region.

7.3.1 Alternative Scenario 1 – Develop Lands to South of N25

The first option considered is shown in Map 7 below. This option would see lands to the south of the N25 being zoned for residential and commercial uses. This would spread the town in a more dispersed manner enabling greater scope for the development of extensive open space within the suburbs. The N25 however is a strategic road in the national primary road network. The zoning of these lands could generate significant levels of traffic negatively impacting on the strategic role of this national route. Development of these lands would therefore only be considered following the completion of the New Ross Bypass or the implementation of an acceptable traffic management plan on the N25, as well as

the provision of necessary infrastructure in advance of, or in tandem with, new development.

Map 7: Alternative Scenario 1



One disadvantage of this strategy is the uncertain timeframe for the commencement and completion of the bypass and the traffic congestion and

associated problems that would exist in the interim. Also this strategy would put further reliance on the use of the private car, as distances to town centre and community services would be too far for walking or cycling in the absence of safe pedestrian and cycle links. Opportunities for infill development and renewal of derelict sites in the town centre would not be taken up as greenfield development would be likely pursued. There would also be significant and widespread deterioration of the character of the edges of the town as large areas of agricultural land become blighted by low density developments.

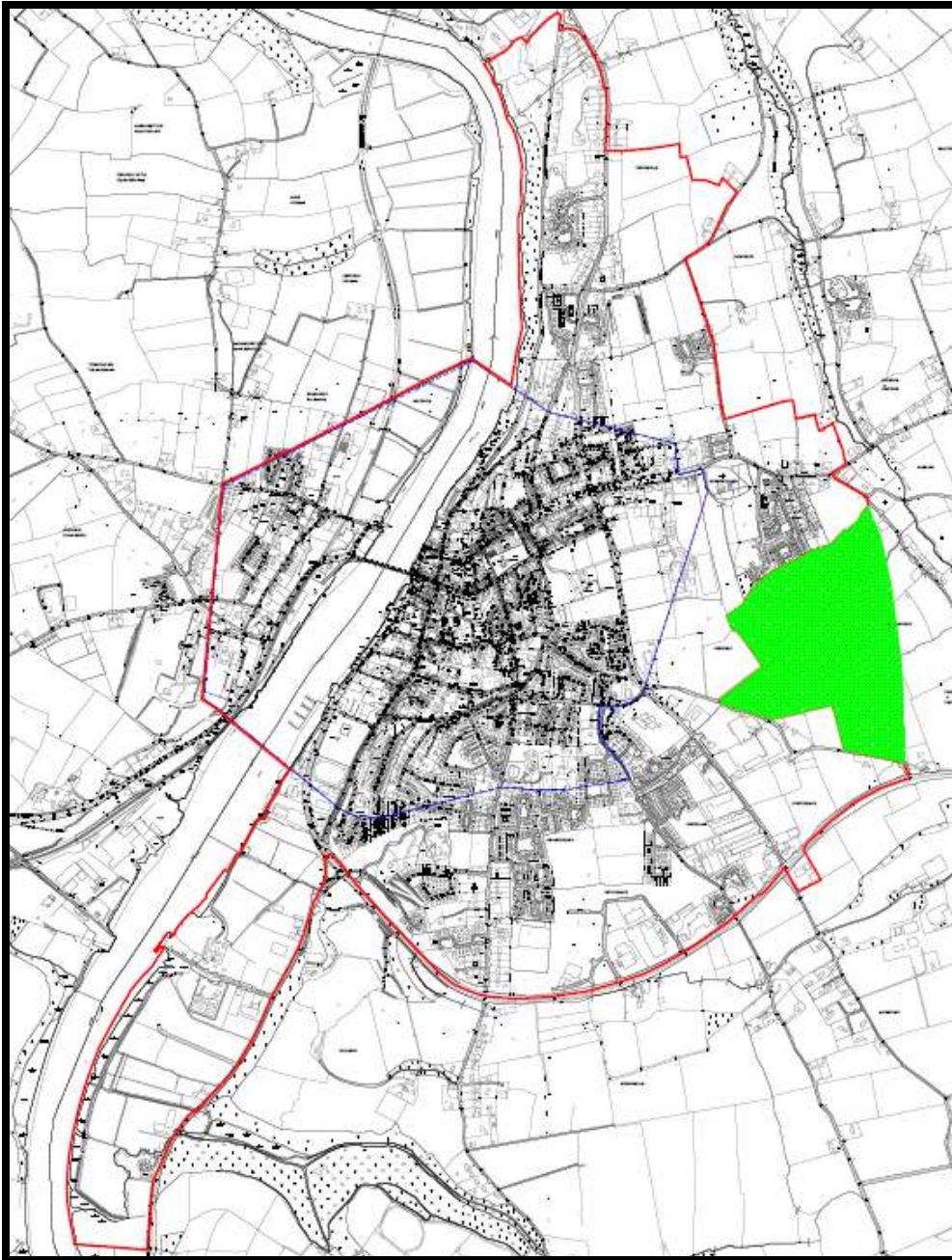
This scenario would not be consistent with the NSS or RPG framework. In the absence of a timeframe for the completion of the New Ross Bypass future residents in this area would be physically and socially segregated from the town by a heavily trafficked national primary route.

7.3.2 Alternative Scenario 2 – Develop Lands to East

The second option considered is shown in Map 2 below. This option would see lands to the east of the town being zoned for residential and commercial uses, subject to the development of a compact urban core and the provision of appropriate infrastructure. These lands are serviceable and are located close to existing amenities, retail areas and employment centres.

This scenario would utilise the existing structure with its series of radials and somewhat circular compact character and refine or consolidate this structure to increase efficiency and balance development. Existing circulation routes on the outer edges of the town would be connected by a small number of new linking routes. The existing shell of the older residential areas around the centre would remain unpenetrated, maintaining a pedestrian scale of contact between the older inner suburbs and the centre. This strategy would extend in an easily adjustable fashion on the existing and recently developing structure of the town.

Map 8: Alternative Scenario 2

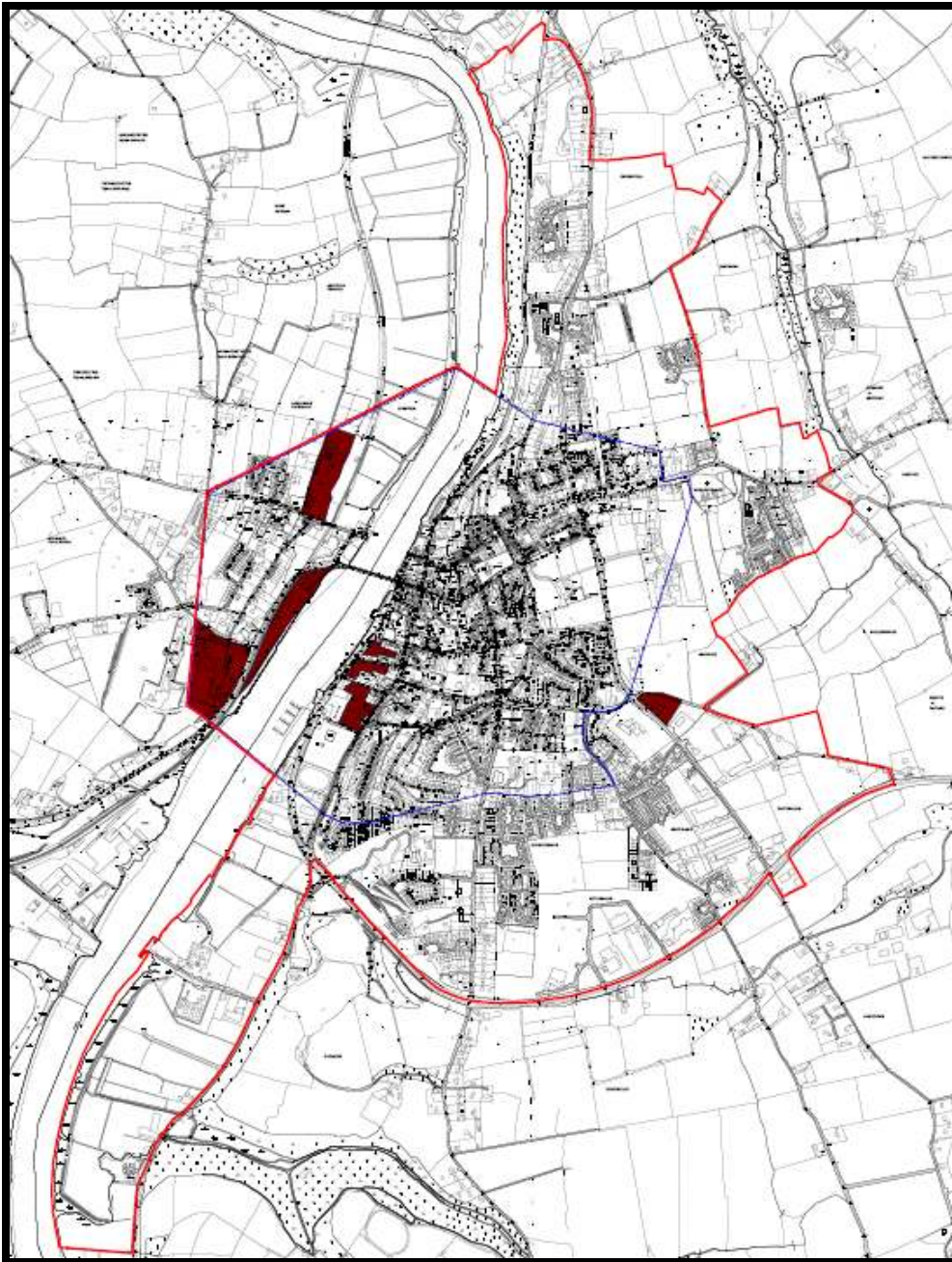


7.3.3 Alternative Scenario 3 – Redevelopment of Brownfield Sites

The third option considered is shown in Map 9 below. This option involves the redevelopment and renewal of brownfield sites within the town centre and surrounding area. The existing development boundary would not be altered. This is considered the most sustainable development strategy for the town and

environs. It is consistent with national and regional guidelines and promotes the efficient use of infrastructure and services. It also targets derelict sites and aims to improve the overall townscape. This strategy promotes the development of a compact urban form that will maximise the efficient use of land while promoting a mix of uses to make best use of proximity to transport and services.

Map 9: Alternative Scenario 3



The drawback with this scenario is the availability and adequacy of these lands to accommodate a major employer if they looked to set up in the town. In addition these sites are more suited to mixed use developments and apartment schemes. This scenario could therefore result in an inadequate supply of suitable and available land for new housing and commercial developments envisaged for the town.

7.4 Outline of the Reasons for Selecting the Alternatives

New Ross is identified in the RPGs as a Larger Town which has the capacity for growth. The population of the town and environs is projected to increase to 9,147 persons by 2019 and it is the responsibility of the Planning Authority to ensure that sufficient land is zoned to accommodate this growth. In addition adequate lands should be made available for future industrial and economic growth. Lands to the west of the town are in the jurisdiction of Kilkenny County Council and there is limited growth opportunity to the north of the town due to topographical constraints. Hence the options to develop to the south and east were considered as alternatives. These lands are serviced by the national primary road network.

There are some large tracts of under-utilised and derelict areas within the town centre of New Ross. National and regional guidelines prescribe that towns should develop in a consolidated manner and renewal of under-utilised sites should be encouraged. For this reason the redevelopment of brownfield sites was considered as a third alternative.

7.5 Evaluation of Alternatives

The EPOs set out in Chapter 5 were used to evaluate each of the three alternatives considered. Table 7 below brings together all those EPOs, which have been developed from international, national and regional policies which generally govern environmental protection objectives. The development alternatives were evaluated with compatibility criteria in order to determine how the alternatives would likely affect the status of the EPOs. This evaluation was

carried out in matrix format and is shown in Table 8 below. Use was made of the description of the environmental baseline in order to determine whether or not the development of alternatives would be likely to affect the status of the EPOs.

Where the appraisal identifies, for example a likely conflict with the status of an EPO, the relevant EPO code is entered into the conflict column. All potential conflicts and impacts identified in Table 8 below are those which will occur if unmitigated. Where such conflicts or impacts occur then Chapter 8 provides mitigation measures to avoid or reduce the impacts arising from the selected development alternative.

Table 7: Environmental Protection Objectives (EPOs)

B1	To avoid loss of habitats and flora and fauna in designated wildlife sites.
B2	To avoid significant adverse impacts, including direct, cumulative and indirect impacts, by development within and outside designated wildlife sites to habitats and flora and fauna within these sites.
P1	To ensure high quality residential, recreational and working environments for the town's population.
P2	To reduce the risk of flooding and harm to people, property and the environment.
P3	To improve travel choice and accessibility, reduce the need for travel by car and shorten the length and duration of journeys.
S1	To maintain the quality of soils.
S2	To maximise the sustainable re-use of brownfield lands and give preference to the re-use of brownfield lands, rather than developing greenfield lands.
W1	To improve the quality of surface waters.
W2	To prevent pollution and contamination of ground water.
W3	To promote sustainable water use based on long-term protection of

	available water resources.
W4	To mitigate the effects of floods and droughts.
A1	Reduce all forms of air pollution and reduce dependence on travel by private car.
M1	Maintain the quality of, and access to, assets such as open spaces, water resources and all other physical and social infrastructure.
M2	Alleviate risk of flooding through siting, design and layout of new development.
C1	To promote the protection and conservation of the cultural heritage, including architectural and archaeological heritage.
L1	To conserve, maintain and enhance the status of the natural riverside landscape of New Ross as an attractive amenity, recreational and ecological resource.

Table 8: Summary of Alternatives Assessed Against EPOs

	No Significant Impact	Potential Positive Impact	Potential Negative Impact	Uncertain Impact
Alternative Scenario 1	P2, W4, M1, M2, C1, L1	W1	B1, B2, P1, P3, S2, A1	S1, W2, W3
Alternative Scenario 2	P2, W4, M1, M2, C1, L1	P1, W1	B1, B2, P3, S2, A1	S1, W2, W3
Alternative Scenario 3	B1, B2, S1, W2, M1	P1, P3, S2, W1, W4, A1, M2, L1	P2	W3, C1

7.6 Reason for Choosing the Preferred Alternative

It was considered that Scenario 3, the most sustainable option, would not provide sufficient lands to accommodate the projected growth during the plan period. The preferred development strategy for the Draft Development Plan was therefore a combination of Scenarios 2 and 3. This combined strategy gave preference to the

development of brownfield sites but where these were considered unsuitable, or were unavailable for development, the strategy allowed for the sequential development of greenfield lands to the east of the town subject to the provision of appropriate infrastructure.

Following consultation with the DoEHLG on the Draft Development Plan, the adoption of the RPGs which include population targets for the county to 2016 and in light of the commencement of section 7 of the Planning and Development Act 2010 which requires the Development Plan to contain a Core Strategy which is consistent with the NSS and RPGs, it was considered that the Draft Development Plan contained an overprovision of residential zoned land. The proposed amendments to the Draft Plan subsequently removed the zoned lands to the east of the town as shown in scenario 2 as these lands were identified as being unlikely to become available for development within the plan period.

The New Ross Town and Environs Development Plan 2011-2017, as adopted, is therefore based on alternative scenario 3 which involves the redevelopment and renewal of brownfield sites within the town centre and surrounding area. Limited greenfield development is facilitated to the south of the town at Chambersland and to the east/northeast of the town at Castelmoye. These lands are located adjacent to a range of community facilities and are within easy reach of the town centre. The development of these lands will be considered on a planned and phased basis subject to the provision of necessary infrastructure.

This approach is consistent with the Urban Consolidation Priorities for large towns outlined in the RPGs which states that under-utilised, derelict or undeveloped lands within the built-up area should be identified and opportunities realised. Where sufficient development opportunities within the urban area are not available, appropriate extension options may be considered having regard to infrastructural constraints and the availability of community services.

This strategy forms the basis for the Development Plan. The likely significant impacts of implementing the strategy are considered in Chapter 7. Where likely significant adverse effects have been identified the policies and objectives of the Development Plan have been refined and mitigation measures have been considered to avoid or reduce these effects.

8.0 Likely Significant Effects of Implementing the Plan

8.1 Introduction

SEA legislation requires the Environmental Report to include the likely significant effects on the environment of implementing the plan. This includes secondary, cumulative, synergistic, short, medium and long-term, permanent and temporary, positive and negative effects. The effects should be shown on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above. The following section provides a summary of the effects on the environment of implementing the policies and objectives of New Ross Town and Environs Development Plan 2011-2017. A full assessment is shown in Appendix 1.

8.2 Methodology for Assessment and Determination of Significance of Effects

A matrix is used to identify conflicts or potential conflicts between the policies and objectives of the Development Plan and the Environmental Protection Objectives (EPOs). The likely significant effects that the Development Plan will have on the environment are identified in this process. Each policy and objective proposed in the Development Plan is assessed against the SEA objectives identified in Section 6. The assessment of each is assigned a symbol:

- + Significant beneficial impact
- ? Uncertain impact
- X Significant Adverse impact
- O No relationship, or insignificant impact

Evaluation of significance requires consideration of various questions, which establish the importance, or “significance”, of the predicted impact:

1. Will the policies and objectives in the Development Plan, individually or cumulatively, lead to a risk of environmental standards being breached?

2. Could it lead to failure to achieve environmental policies or targets?
3. Will it affect environmental resources, which are protected by laws or policies, e.g. Natura 2000 habitats, species, landscapes, water resources and cultural heritage sites?
4. Could it lead to impacts on environmental resources, which, although not legally protected, are important or valuable?

The findings of “uncertain” impacts in the SEA matrix will be determined at a lower level of environmental assessment. These assessments will involve application of Habitats Directive Assessment, landscape appraisal, archaeological and architectural heritage appraisal and flood risk assessment at the project level to accurately determine impacts under the environment headings detailed above.

8.3 Likely Significant Effects

Assessment of the key objectives in the Development Plan shows that, in the main, these objectives will not have a significant adverse impact on the environment. Many of the objectives are considered positive, setting out to manage and protect aspects of the environment such as landscape, water, human health, heritage resources and management of flood risk. A full assessment of each policy and objective of the Development Plan is shown in Appendix 1. A summary of this assessment is provided below.

8.3.1 Biodiversity, Flora, Fauna

No significant adverse impacts were identified on EPOs relating to biodiversity, flora and fauna. Uncertain impacts have been identified from policies and objectives relating to strategic infrastructure projects such as ports, marinas and road developments including the construction of bridges. Uncertain impacts are also identified for the development of the River Barrow for navigation. This is a regional objective which will be subject to an Appropriate Assessment at the project level. Uncertain impacts have also been identified from objectives to zone

land for commercial, industrial or residential use. Mitigation measures are included to exclude such zoning from the SAC and pNHA areas or to zone them for open space and/or amenity uses which would not significantly impact on conservation objectives.

Positive impacts have been identified from policies and objectives to protect the natural environment, reduce flood risk and maintain natural floodplains and land drains. Flooding can have a significant impact on water quality which in turn can impact on biodiversity, flora and fauna in the designated sites. Positive impacts have also been identified for objectives to develop green corridors as these could provide ecological networks between designated sites.

Positive impacts have been identified from objectives in the plan to provide satisfactory wastewater treatment to facilitate the existing and future population of the plan area. This has significant beneficial impacts for the receiving waters and aquatic life. It is also a key objective of the plan to require existing developments that discharge directly into the River Barrow to connect to the town's wastewater treatment plant which will have positive implications for water quality and the designated sites.

8.3.2 Population and Human Health

Environmental impacts of the policies and objectives contained in the plan would have mainly positive impacts on population and human health as the plan seeks to improve quality of life through the provision of a high quality living and working environment, with improved travel choice, protection of heritage and environment and access to amenity and recreation. Positive impacts are also identified from policies and objectives which aim to improve water quality and reduce flood risk, while the provision of infrastructure to attract new investment to the town should reduce live register figures and may reduce journeys to other towns and employment centres.

Positive and negative impacts on population and human health are identified from the policies and objectives to support the implementation of the New Ross Bypass. The bypass will promote the use of the private car over public transport, but in terms of longer trips will reduce car journeys and at the local level will reduce congestion and associated emissions in the town centre. The negative impacts of the bypass are off-set or balanced out by objectives promoting the use of public transport. Policies and objectives relating to noise will have positive implications for population and human health. New development will be required to have regard to any Noise Action Plan relating to the site location in accordance with the EU Directive on Assessment and Management of Environmental Noise.

8.3.3 Geology and Soil

Policies and objectives in the plan to prioritise brownfield development will have mainly positive impacts on soil. One of the key objectives of the plan is to attract new business and investment to the town, which is identified as having both positive and negative impacts on soil. This is because brownfield sites in the town centre may not be suitable to cater for the space required for certain types of development. Where brownfield sites are not suitable or available, consideration may be given to the sequential development of greenfield sites which will be subject to environmental assessment through the planning process.

Positive and negative impacts on soil are identified from policies and objectives relating to flooding. Flooding can have negative impacts by washing away soil and leading to eutrophication in rivers and lakes. However it can also have positive impacts by depositing rich nutrients which are essential for good soil. Uncertain impacts on soil are identified in relation to policies to zone land which may require filling. This includes lands at Marshmeadows and Annefield which have been subjected to/are at risk of flooding. Other policies relating to the protection of soil include policies and objectives for the proper and safe disposal of waste. Waste management policy will have positive implications for soil.

8.3.4 Water

The impacts on water quality are mainly positive with the improvement of surface waters and prevention of pollution and contamination to ground waters a key consideration in the formulation of the policies and objectives of the plan.

Improved water quality will result from the recent commissioning of a wastewater treatment plant in the town. It is a key objective of the plan to require existing developments that discharge directly into the River Barrow to connect to this plant. It is also policy to require existing developments at Mountgarrett, which are currently served by private wastewater treatment facilities, to connect to the public wastewater treatment system. The provision of flood defences and other measures to reduce flooding, including the requirement for sustainable urban drainage systems (SuDS) and the protection of natural flood plains and land drains, will have positive impacts on water quality.

A key objective of the plan is to provide necessary infrastructure to attract new business and investment to the town. This includes the provision of a sustainable water supply. Water supply to the town is limited but adequate to provide for new residential and light water user industries over the lifetime of the plan. The plan includes policies and objectives for water conservation through the maintenance of mains and elimination of leaks which will have a positive impact on water supply. Policies and objectives to promote public awareness on the maintenance of water and its sustainable and economic use will help to conserve and protect existing water supplies.

Policies and objectives to provide sufficient zoned serviced land for residential development in the town and environs should have positive impacts on water quality in the wider area by promoting development in the town and discouraging urban-generated one-off housing which can result in an increase in the number of septic tanks and potential contamination of ground water and surface water.

8.3.5 Air & Climatic Factors

The Development Plan includes policies and objectives which will have significant beneficial impacts on air in terms of reducing CO₂ emissions. These mainly relate to traffic management and the development of the town in a sustainable compact manner, which will reduce the need for travel by car, reduce journey times and encourage a modal shift from private modes of transport, to public transport, cycling and walking. The attraction of new industry and investment to the town will have positive impacts in terms of providing employment close to people's homes. The provision of a range of shops and ancillary uses in the town centre could also have positive impacts by reducing the need to travel by car and allowing for multiple errands in single trips.

Policies supporting the implementation of the New Ross Bypass are identified as having both positive and negative impacts on air. The bypass may serve to promote continued and increasing use of the private car and thus increase carbon emissions in the region, however it will reduce journey times and reduce congestion at the local level. The negative impacts of the bypass can be off-set or balanced out by objectives promoting the use of public transport, such as the medium-long term objective to re-open the New Ross-Waterford railway line. Other policies and objectives which are identified as having significant beneficial impacts on air and climatic factors include policies relating to energy conservation, implementation of the National Climate Strategy and the requirement for new residential buildings to meet low energy performance targets.

Development within the Seveso areas will involve consultation with the Health and Safety Authority. Seveso developments, and developments subject to IPPC licences, are monitored at the project level for release of substances which could potentially threaten air quality.

8.3.6 Material Assets

No significant adverse impacts on material assets have been identified from the policies and objectives of the plan. Policies and objectives relating to reducing flood risk are identified as having positive impacts on the EPOs, as are the policies and objectives relating to the provision of new infrastructure. Provision of improved infrastructure will encourage new business and investment to the town, reducing the need for travel. The impacts on material assets are mainly inter-related with other environmental parameters, for example the wastewater treatment system will have impacts on water quality, biodiversity and human health, while flooding may impact on roads.

8.3.7 Cultural Heritage

The impacts on cultural heritage are mainly positive with policies and objectives formulated to ensure its protection. Development in areas of archaeological potential will require Archaeological Impact Assessment at the project level, while development which could impact on the character of a protected structure or an architectural conservation area will require an Architectural Impact Assessment. There is an inter-relationship between the protection of natural heritage and biodiversity, flora and fauna. Any project which has the potential to damage the integrity of the River Barrow and River Nore SAC will require an Appropriate Assessment to be carried out.

8.3.8 Landscape

The impacts on landscape are mainly positive. Policies and objectives relating to conservation and heritage provide for the protection of views and the historic character of the town. There is opportunity to maximise the potential of the riverscape through redevelopment and urban design, however the nature and extent of impacts on the landscape will largely be determined at the project level. Major infrastructure projects will be subject to Environmental Impact Assessment (EIA) involving assessment of impacts on landscape.

8.3.9 Interrelationships

There are a number of inter-relationships between the environmental parameters and the impacts of the policies and objectives of the plan. Examples of such inter-relationships include the following:

- Policies relating to flooding will have significant effects on water, biodiversity, flora and fauna, population and human health, soil and material assets;
- Policies relating to wastewater treatment will have significant impacts on water quality, biodiversity, flora and fauna, population and human health, and material assets;
- Policies relating to the implementation of New Ross Bypass, including a second bridge crossing, will have significant impacts on population and human health, soil, air, material assets, cultural heritage and landscape;
- Policies to reduce CO₂ emissions will have significant effects on air quality and population and human health;
- Policies relating to the protection of archaeology, architectural and natural heritage will have implications for cultural heritage and landscape.

Table 9 below provides a summary of inter-relationships between the various environmental parameters.

Table 9: Inter-relationships

Biodiversity, Flora & Fauna	√							
Population & Human Health	√	√						
Soils & Geology	√	√	√					
Water	√	√	√	√				
Air & Climatic Factors	√	√	√	√	√			
Material Assets	X	√	√	√	X	√		
Cultural Heritage	√	√	X	√	X	√	√	
Landscape	√	√	√	√	X	√	√	√
	Biodiversity, Flora & Fauna	Population & Human Health	Soils & Geology	Water	Air & Climatic Factors	Material Assets	Cultural Heritage	Landscape

8.3.10 Cumulative and Indirect Impacts

In order to identify cumulative and indirect effects it is necessary to consider if the policies and objectives of the Plan will have potential cumulative effects/ in-combination effects in relation to other Plans/ Programmes/ Strategies and major projects.

The policies and objectives of the Development Plan have been formulated having regard to the Regional Planning Guidelines for the South East 2010-2022, the Joint Waste Management Plan for the South East 2006-2011, the South Eastern River Basin Management Plan 2009-2015 and the Wexford County Development Plan 2007-2013. The Plan seeks to implement the objectives of these higher tier plans and as such it is envisaged that there will be positive cumulative /in-combination effects in relation to those Plans.

Together with the New Ross Environs Local Area Plan 2005, adopted by Kilkenny County Council, it is considered that the implementation of the New Ross Town and Environs Development Plan will have positive cumulative impacts for the town. The built-up area of New Ross Town within the jurisdiction of Kilkenny County Council is connected to the town's wastewater treatment plant, with Kilkenny County Council having contributed towards the cost of the plant. The policies and objectives in the Development Plan to improve this infrastructure will apply to both jurisdictions and will have positive cumulative impacts for water quality, biodiversity and human health. Similarly, the implementation of both plans will have positive cumulative impacts for human health in terms of providing transport, water, waste, telecommunications and energy infrastructure, community services and amenities for the existing and future population of the town and its environs.

It is considered that the flood control policy in the Plan will have positive cumulative/in-combination impacts on water quality, biodiversity and human health. The flood control policy seeks to ensure that all new development avoids or mitigates against flooding in the town and surrounding areas. The policy provides that development will not be approved where it would cause or exacerbate flooding elsewhere, either within or outside of the plan boundary. The policy also requires the provision of adequate storm water retention facilities in new developments and seeks to ensure that all proposed surface water drainage systems are consistent with Sustainable Urban Drainage Systems (SuDS) techniques. This will have cumulative impacts throughout the plan area in terms of reducing/mitigating against flood risk.

The New Ross Bypass Scheme is a major project located outside of the Plan area. The potential cumulative impacts of the bypass on air quality are both positive and negative. The bypass will promote the use of the private car over public transport but it will also reduce journey times and relieve traffic congestion and associated emissions within the plan area. This also has cumulative impacts

for human health. Positive cumulative impacts are also envisaged on air quality and human health from the transportation policy which seeks to promote alternative modes of transport to the private car.

The natural heritage policy will have significant positive cumulative impacts on biodiversity both inside and outside of the plan boundary through the protection of designated sites and ecological corridors. The plan policy aims to protect the River Barrow/River Nore SAC and the Waterford Harbour Shellfish Area through the reduction/elimination of untreated discharge to the river and reduced flooding. The Plan also seeks to avoid development in the protected areas located within the plan area.

9.0 Mitigation Measures

9.1 Introduction

Mitigation measures are measures envisaged to prevent, reduce and as fully as possible offset any significant adverse impacts on the environment of implementing the Development Plan. Where there are significant negative effects, consideration is given in the first instance to preventing such effects or, where this is not possible, to lessening or offsetting those effects.

Mitigation measures can be roughly divided into those that:

- a) Avoid effects;
- b) Reduce the magnitude or extent, probability, and/or severity of effects;
- c) Repair effects after they have occurred, and
- d) Compensate for effects, balancing out negative impacts with other positive ones.

Depending on the level of significance, which is determined based on the scale and cumulative nature of the potential impact and the sensitivity/importance of the receiving environment, measures to offset or mitigate significant negative environmental effects are provided. For those with a higher level of significance, a recommendation is made to remove or alter the policy so as to prevent or reduce the impact if possible. Where positive impacts have been identified, for example on landscape, mitigation measures are designed to maximise the positive impacts.

The mitigation measures have been incorporated into the plan and the policies and objectives refined and refocused where necessary. Post-mitigation residual impacts will be addressed through monitoring.

9.2 Biodiversity, Flora & Fauna

The preferred development strategy is identified as having potentially conflicting interaction with EPOs B1 and B2, as the River Barrow River Nore SAC and the Barrow River Estuary pNHA are partially located in the town and are also located close proximity to the northeast and south of the town. Development of greenfield lands could potentially destroy ecological network corridors to these areas through loss of hedgerows and trees. In addition development of lands at Marshmeadows, Mountgarrett and Annefield could encroach on the SAC and pNHA.

EPO B1	To avoid loss of habitats and flora and fauna in designated wildlife sites.
EPO 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.

MM1	Include policies to retain existing hedgerows and trees where these are considered to provide important ecological networks associated with the River Barrow River Nore SAC and the Barrow River Estuary pNHA.
MM2	Exclude SAC and pNHA areas from industrial zoning at Marshmeadows; and zone SAC and pNHA areas at Mountgarrett and Annefield for open space and amenity uses which prohibit non-compatible developments.

9.3 Population and Human Health

The implementation of the Development Plan would have positive impacts for population and human health in terms of improved water quality and a provision of high quality residential, recreational and working environments. Potential adverse impacts have been identified in relation to EPOs P2 and P3. There is a risk of flooding through redevelopment of brownfield sites in the town centre

which have been subject to recurring floods in the past. Development of lands to the east of the town could also increase the number and length of car journeys to the town centre. On the other hand, the lands to the east of the town are in walking distance of schools and employment centres and could therefore have a positive impact by reducing the need for travel by car.

EPO P1	To ensure high quality residential, recreational and working environments for the town's population.
EPO P2	To reduce the risk of flooding and harm to people, property and the environment.
EPO P3	To improve travel choice and accessibility, reduce the need for travel by car and shorten the length and duration of journeys.

MM3	To mitigate the risk of flooding through layout and design of new developments on sites which have been subject to recurring flooding.
MM4	Include policies which aim to reduce the number and length of car journeys for example by encouraging cycling, walking, car pooling and use of public transport.

9.4 Soil

The preferred development alternative prioritises the redevelopment of brownfield sites over greenfield development and therefore has a positive impact on EPO S2. Any further development of land on greenfield sites will seal off and further compact 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 the measures outlined below.

EPO S1	To maintain the quality of soils.
EPO S2	To maximise the sustainable re-use of brownfield lands and give preference to the re-use of brownfield lands, rather than developing greenfield lands.

MM5	Promote the implementation of the Joint Waste Management Plan for the South-East 2006-2011 together with any future Waste Management Plans. This includes waste prevention, minimisation, reuse, recycling and recovery as methods of managing waste.
MM6	Encourage the recycling of construction and demolition waste and the reuse of aggregate and other materials.
MM7	To give preference to the development of brownfield sites over greenfield development where possible.

9.5 Water

The preferred development alternative is identified as having a positive impact on EPO W1 and an uncertain impact on EPO W2. There is likely to be a positive impact on surface water quality in the area due to the new Wastewater Treatment Plant (WWTP) which will adequately treat wastewater from the town and environs area prior to discharging it to the River Barrow. Also proposals are underway to upgrade the Castlemoyle Water Treatment Plant (WTP) which will improve the quality of drinking water. All new development will be required to connect to the WWTP. Non-contamination of ground water is dependent on the provision of adequate wastewater infrastructure and surface water drainage systems to serve new development. Potential cumulative impacts on groundwater quality are mitigated through the measures outlined below.

EPO W3 aims to promote sustainable water use based on long-term protection of available water resources. The policies and objectives of the Development Plan do not conflict with this objective. It is a policy to promote water-based activities on the River Barrow. This is a regional objective and the relevant appropriate

assessments will be carried out where required. The water supply for New Ross town is currently sourced from the Aughmanagh and Pollmounty Rivers. It is not envisaged that any more water will be abstracted than at present. It is proposed to satisfy future demand through the retention of the existing sources together with a new groundwater development at Adamstown. To strengthen EPO W3 mitigation measures are provided for water conservation, maintenance of water quality and economic and sustainable use.

The preferred development alternative is identified as having potential negative impact on EPO W4. The implementation of the Development Plan, if unmitigated, is likely to increase the effects of flood risk in the town. Development of brownfield sites which have been subject to recurring flooding in the past, together with development of lands at Annefield which are located on a floodplain, are likely to result in increased flood risk. Flood risk can be mitigated by incorporating the measures below into the Development Plan. The mitigation measures for flood risk are consistent with the recommendations set out in the Strategic Flood Risk Assessment.

EPO W1	To improve the quality of surface waters.
EPO W2	To prevent pollution and contamination of ground water.
EPO W3	To promote sustainable water use based on long-term protection of available water resources.
EPO W4	To mitigate the effects of floods and droughts.

MM8	Protect and improve the water quality of the River Barrow in accordance with the measures set out in the South Eastern River Basin Management Plan (2009-2015) and the Pollution Reduction Programme for the Waterford Harbour Shellfish Area.
MM9	Protect existing groundwater aquifers and surface waters from pollution.
MM10	Promote public awareness on the maintenance of water quality and

	economic and sustainable use.
MM11	Zone for compatible uses in areas identified as having high probability of flooding (Zone A) and mitigate the risk of flooding through layout and design of new developments.
MM12	Protect and improve natural drainage systems where possible and in the case of development works require the provision of acceptable mitigation measures in order to minimise the risk of flooding and negative impacts on water quality.
MM13	Facilitate the provision of suitable flood risk management infrastructure in the town.
MM14	Require the provision of adequate storm water retention facilities in all new developments, including the use of soft landscaping and sustainable drainage techniques.
MM15	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.

9.6 Air & Climatic Factors

Impacts on air quality arising from travel by car have been discussed under population and human health above.

EPO A1	Reduce all forms of air pollution and reduce dependence on travel by private car.
EPO A2	Promote energy conservation and the development of renewable energy sources in the plan area.

MM16	Facilitate the development of renewable energy sources and supply within the plan area.
MM17	Require all new building developments to meet low energy performance targets.

9.7 Material Assets

The preferred development alternative is identified as having no significant, or positive, impacts on EPO M1 and M2. Siting, layout and design of new development to mitigate against risk of flooding has been discussed under population and water above.

EPO M1	Maintain the quality of, and access to, assets such as open spaces, water resources and all other physical and social infrastructure.
EPO M2	Alleviate risk of flooding through siting, design and layout of new development.

MM18	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.
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9.8 Cultural Heritage

The preferred development strategy is identified as having no significant, or uncertain impacts on EPO C1. It is not envisaged that new greenfield development to the east of the town will negatively impact on heritage. However new development in the town centre could potentially impact on the architectural, archaeological and natural heritage of the area. New development will be required to respect the character of the existing built environment. Archaeological Impact Assessments will be required to be carried out for significant works within the Zone of Archaeological Potential, while Appropriate Assessments will be required to be carried for any proposed works which could affect the integrity of the River Barrow SAC. An Architectural Heritage Impact Assessment will also be required to be carried out where significant works to a protected structure are proposed.

EPO C1	To promote the protection and conservation of the cultural heritage, including architectural and archaeological heritage.
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MM19	Prohibit development that would negatively impact of the architectural, archaeological and natural heritage of the area.
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9.9 Landscape

The preferred development strategy is identified as having potentially positive impacts on EPO L1. Redevelopment of a number of under-utilised and derelict sites along the quayfront and at Rosbercon would improve the townscape, along the riverside in particular.

EPO L1	To conserve, maintain and enhance the status of the natural riverside landscape of New Ross as an attractive amenity, recreational and ecological resource.
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MM20	Promote high-quality developments along the riverfront.
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9.10 Incorporation of Mitigation Measures in Development Plan

Table 10 below identifies the policies in the Development Plan which have been influenced by the mitigation measures contained in this Environmental Report. Post-mitigation or 'residual' impacts will be addressed through monitoring during the implementation of the Development Plan.

Table 10: Incorporation of Mitigation Measures in the Development Plan

Environmental Topic	Mitigation Measure	Relevant Development Plan Policy
Biodiversity, Flora & Fauna	MM1	NH05
	MM2	Zoning Map and Land Use Zoning Matrix contained in Section 13.2
Population & Human Health	MM3	SW01, SW03, SW04, SW05
	MM4	TM01, TM03, TM05, TM06, TM07, TM10
Soil	MM5	WM01, WM02, WM04
	MM6	WM02
	MM7	OPS01, R04
Water	MM8	WS01, WS04, WW02, NH07
	MM9	NH06
	MM10	WS03
	MM11	Zoning Map and Land Use Zoning Matrix contained in Section 13.2 SW01, SW02, SW03, SW05
	MM12	SW02, SW05
	MM13	SW04
	MM14	SW05
	MM15	SW03
Air & Climatic Factors	MM16	RE01, RE02
	MM17	EN01, EN0, EN03, EN04, EN05
Material Assets	MM18	SW05
Cultural Heritage	MM19	UF01, UF02, TW02, GY01, AH01, AH02, AH03, AH04, AH05, AH06, AH07, AH08, BH01, BH02, BH07, BH08, BH11, ACA02, NH01, NH02, NH03
Landscape	MM20	L01, L04, PV01

10.0 Monitoring Programme

10.1 Introduction

Article 10 of the SEA Directive requires that monitoring be carried out in order to identify at an early stage any unforeseen adverse effects due to the implementation of the plan and to be able to undertake appropriate remedial action. Monitoring is a key element of the effective implementation of the New Ross Town & Environs Development Plan. Its purpose 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 can also be used to fill gaps identified at the baseline, impact prediction and evaluation stages. Monitoring is based on indicators which measure changes to the environment. Indicators aim at simplifying complex interrelationships and provide information on environmental issues which are relatively easy to understand.

Section 15(2) of the Planning and Development Act 2000 requires the Planning Authority to carry out a review of the achievement of the objectives of the Development Plan not more than two years after the making of the plan. It is anticipated that the environmental indicators set out below will be used to monitor the predicted environmental impacts of implementing the plan and will be presented in the context of the two-year plan review. Where existing monitoring is being carried out i.e. in relation to water and air quality, these data sets will be collated in the review.

10.2 Monitoring Indicators

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 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. The indicators allow quantitative measures of trends and progress over time relating to the EPOs used in the evaluation. Focus is given to indicators which are relevant to the likely significant environmental effects of implementing the plan and existing monitoring arrangements are used in order to monitor the selected indicators where possible.

Monitoring Sources

WCC – Wexford County Council

NRTC – New Ross Town Council

CDB – County Development Board

NPWS – National Parks & Wildlife Service

EPA – Environmental Protection Agency

GSI – Geological Survey of Ireland

DoES – Department of Education and Science

DoEHLG – Department of Environment, Heritage and Local Government

CSO – Central Statistics Office

NRA – National Roads Authority

WI - Waterways Ireland

Table 11: List of Monitoring Indicators and Targets

Biodiversity, Flora and Fauna			
Environmental Objectives	Indicators	Targets	Monitoring Source
B1: To avoid loss of habitats and flora and fauna in designated wildlife sites.	Conservation status of habitats and species as assessed under Article 17 of the habitats Directive.	Maintenance of favourable conservation status for all habitats and species protected under national and international legislation.	NPWS, WCC, NRTC
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.	Number of significant impacts by development within and outside designated wildlife sites to habitats and flora & fauna within these sites.	No significant impacts by development within and outside designated wildlife sites to habitats and flora and fauna within these sites during lifetime of the plan.	NPWS, WCC, NRTC
Population and Human Health			
Environmental Objectives	Indicators	Targets	Monitoring Source
P1: To ensure high quality residential, recreational and working environments for the town's population.	Provision of community facilities, amenities and infrastructure including safe walking routes, playgrounds, sports and recreational facilities, primary and secondary schools, and other such facilities.	Sites and/or facilities for new primary & secondary schools, safe walking routes, playgrounds and sports areas to be identified and secured or provided during lifetime of plan.	WCC, CDB, NRTC, DoES,
P2: To reduce the risk of flooding and harm to people, property and the environment.	Properties at risk of flooding; New development in Flood Zones A and B, as defined in DoEHLG Guidelines on Planning and Flood Risk Management.	Reduction in incidents of flood damage to properties; No highly vulnerable development to be permitted in flood zones A and B or where such development is permitted, to be mitigated through siting, layout and design.	WCC, NRTC

P3: To improve travel choice and accessibility, reduce the need for travel by car and shorten the length and duration of journeys.	Average daily motor vehicle flows; Proportion of travel by mode; Monetary investment in bus and rail travel, and walking routes.	Reduce road traffic in line with <i>Smarter Travel - A Sustainable Transport Future</i> ; Increased investment in walkways.	WCC, NRTC, NRA, CSO
Soil			
Environmental Objectives	Indicators	Targets	Monitoring Source
S1: To maintain the quality of soils.	Waste permit licences; Historic Landfills; Contaminated sites.	Filling of lands for development to be accompanied by waste permit licences where required; Historic landfill in Marshmeadows to be authorised by EPA and any necessary remedial actions to be carried out; Waste management plans to be carried out for large developments and/or demolition of structures which are likely to contain hazardous material.	EPA, WCC, NRTC
S2: To maximise the sustainable re-use of brownfield lands and give preference to the re-use of brownfield lands, rather than developing greenfield lands.	Area of brownfield land available.	All brownfield land to be redeveloped by the end of the plan period.	WCC, NRTC

Water			
Environmental Objectives	Indicators	Targets	Monitoring Source
<p>W1: To improve the quality of surface waters.</p> <p>W2: To prevent pollution and contamination of ground water.</p> <p>W3: To promote sustainable water use based on long-term protection of available water resources.</p>	<p>Water quality monitoring results by the EPA for:</p> <ul style="list-style-type: none"> • Surface Water • Ecological and Chemical Status. • Groundwater Quality. • Drinking Water Quality. <p>Public Water Supplies on EPA Remedial Action List (Castlemoyle Water Treatment Plant);</p> <p>Number of Discharge Licences granted by WCC and the EPA;</p> <p>Ground Water Protection Scheme for County Wexford.</p>	<p>Protect and Restore areas identified in the River Basin Management Plan required to achieve “good” status i.e. 4+ for water quality by 2015, in line with the Water Framework Directive objectives.</p> <p>Improvement in levels of compliance with drinking water quality standards.</p>	EPA, GSI, WCC, NRTC
W4: To mitigate the effects of floods and droughts.	<p>Properties at risk of flooding;</p> <p>New development in Flood Zones A and B, as defined in DoEHLG Guidelines on Planning and Flood Risk Management.</p>	<p>Reduction in incidents of flood damage to properties;</p> <p>No highly vulnerable development to be permitted in flood zones A and B or where such development is permitted, to be mitigated through siting, layout and design.</p>	WCC, NRTC

Air & Climatic Factors			
Environmental Objectives	Indicators	Targets	Monitoring Source
A1: Reduce all forms of air pollution and reduce dependence on travel by private car.	Change in Air Quality; Average daily motor vehicle flows; Proportion of travel by mode; Monetary investment in bus and rail travel, and walking routes.	Maintain/improve air quality within Air Quality index bands; Reduce road traffic in line with <i>Smarter Travel - A Sustainable Transport Future</i> ; Increased investment in walkways.	EPA, WCC, NRTC, NRA, CSO
Material Assets			
Environmental Objectives	Indicators	Targets	Monitoring Source
M1: Maintain the quality of, and access to, assets such as open spaces, water resources and all other physical and social infrastructure.	Access to public amenities.	Increased access to town walls; Increased usage of River Barrow for recreation and amenity.	WCC, NRTC, WI
M2: Alleviate risk of flooding through siting, design and layout of new development.	New development in Flood Zones A and B, as defined in DoEHLG Guidelines on Planning and Flood Risk Management.	New development in flood zones A and B to be mitigated through siting, layout and design.	WCC, NRTC

Cultural Heritage			
Environmental Objectives	Indicators	Targets	Monitoring Source
C1: To promote the protection and conservation of the cultural heritage, including architectural and archaeological heritage.	<p>Number of protected structures in relation to Ministerial Recommendations arising from NIAH County Inventories;</p> <p>Number of planning applications for works to protected structures or structures located within an Architectural Conservation Area;</p> <p>Number of Monuments in the RMP and areas of archaeological potential which have been recorded or subject to exploration as a result of development;</p> <p>Number of protected structures or archaeological monuments damaged due to development.</p> <p>Implementation of New Ross Town Walls Conservation Plan and Management Plan.</p>	<p>To increase the number of Protected Structures in line with ministerial recommendations arising from the NIAH survey for New Ross Town;</p> <p>To increase the number of ACAs to conserve the townscape;</p> <p>To maintain and increase the number of archaeological features recorded and protected;</p> <p>No damage occurring to structures or monuments due to development.</p>	WCC, NRTC, DoEHLG
Landscape			
Environmental Objectives	Indicators	Targets	Monitoring Source
L1: To conserve, maintain and enhance the status of the natural riverside landscape of New Ross as an attractive amenity, recreational and ecological resource.	Number of planning applications along riverside.	<p>No new development to be conspicuously located along the riverside;</p> <p>Brownfield sites along riverside to be redeveloped and enhanced.</p>	WCC, NRTC

Appendix 1: Full Assessment of Policies & Objectives

This appendix is a working paper containing a systematic appraisal of every policy and objective of the Development Plan. The following matrix evaluates each policy and objective of the plan against the Environmental Protection Objectives (EPOs) identified in Section 5 of the Environmental Report and summarised in Table 7 below. Use has been made of the environmental baseline for this purpose. The interactions between EPOs and the policies and objectives of the Plan determine the effects of implementing the Plan. These effects include secondary, cumulative, synergistic, short, medium and long-term, permanent and temporary, positive and negative effects.

Potential effects in each box are categorised as follows:

- + Significant beneficial impact
- ? Uncertain impact
- X Significant Adverse impact
- O No relationship, or insignificant impact

The findings of “uncertain” impacts in the SEA matrix will be determined at a lower level of environmental assessment largely through Environmental Impact Assessment (EIA) at project level. These assessments will involve application of Habitats Directive Assessment, landscape appraisal, archaeological and architectural heritage appraisal and flood risk assessment to accurately determine the impacts under the range of environmental headings detailed above.

Table 7: Environmental Protection Objectives (EPOs)

B1	To avoid loss of habitats and flora and fauna in designated wildlife sites.
B2	To avoid significant adverse impacts, including direct, cumulative and indirect impacts, by development within and outside designated wildlife sites to habitats and flora and fauna within these sites.
P1	To ensure high quality residential, recreational and working environments for the town's population.
P2	To reduce the risk of flooding and harm to people, property and the environment.
P3	To improve travel choice and accessibility, reduce the need for travel by car and shorten the length and duration of journeys.
S1	To maintain the quality of soils.
S2	To maximise the sustainable re-use of brownfield lands and give preference to the re-use of brownfield lands, rather than developing greenfield lands.
W1	To improve the quality of surface waters.
W2	To prevent pollution and contamination of ground water.
W3	To promote sustainable water use based on long-term protection of available water resources.
W4	To mitigate the effects of floods and droughts.
A1	Reduce all forms of air pollution and reduce dependence on travel by private car.
A2	Promote energy conservation and the development of renewable energy sources in the plan area.
M1	Maintain the quality of, and access to, assets such as open spaces, water resources and all other physical and social infrastructure.
M2	Alleviate risk of flooding through siting, design and layout of new development.
C1	To promote the protection and conservation of the cultural heritage, including architectural and archaeological heritage.
L1	To conserve, maintain and enhance the status of the natural riverside landscape of New Ross as an attractive amenity, recreational and ecological resource.

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
Core Strategy Key Objectives																		
Industry/Office																		
Build on the existing industrial resource base in a sustainable fashion	O	O	+	O	+	O	O	O	O	O	O	+	O	O	O	O	O	P3 & A1 – increasing the industrial resource base will increase employment opportunities in the town and may reduce the number of people commuting to other employment centres.
Provide necessary infrastructure to attract new business and investment to the town	?	?	+	O	+	O	+X	+	+	+	+	O	+	+	O	O	O	<p>B1 & B2 – Where possible, roads should be constructed to avoid clearance of traditional field boundaries, ponds and small woods which provide ecological corridors for species between designated sites.</p> <p>S2 – Brownfield sites are central and are already serviced but may be restricted in terms of parking provision and space required for some</p>

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
																		<p>developments. Where brownfield sites are not suitable or available consideration may be given to sequential development of greenfield sites.</p> <p>W1-W4 – Infrastructure includes wastewater and water supply infrastructure and flood defences.</p>
Provide sufficient suitably zoned land for these uses	?	?	+	O	+	O	?	O	O	O	O	+	O	O	O	O	O	<p>B1 & B2 - Where possible zoning should avoid SAC and proposed NHA areas</p> <p>S2 – Sequential/phased approach should apply to development with brownfield sites developed prior to greenfield development</p>
Reduce dependence on private transport, through the support of mixed use zones, and home based activity and the linking of industrial locations with the overall transport network	O	O	+	O	+	O	O	O	O	O	O	+	+	O	O	O	O	

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
Attract high technology industries with low environmental impact by ensuring that there is suitable zoned land and an adequate skills base.	O	O	+	O	+	O	O	O	O	O	O	+	+	O	O	O	O	P3 & A1 – increasing the industrial resource base will increase employment opportunities in the town and may reduce the number of people commuting to other employment centres.
Retail Development																		
Retain and increase the town's retail market share	O	O	+	O	+	O	+	O	O	O	O	O	+	O	O	O	O	A2 – promoting energy conservation by reducing the need to travel
Promote a self sufficient town centre better able to meet the shopping needs of its existing and future population and those of its catchment area	O	O	+	O	+	O	+	O	O	O	O	O	+	O	O	O	O	
Provide for a variety of floor spaces in the retail core, without compromising the architectural quality or heritage	O	O	+	O	+	O	+	O	O	O	O	O	+	O	O	O	O	
Provide modern floorspace in the town centre that is sufficient in size and quality to attract national and international retailers	O	O	+	O	+	O	+	O	O	O	O	O	+	O	O	O	O	

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
Continue to concentrate retail warehousing at Hewitsland and Portersland	O	O	+	O	+	O	O	O	O	O	O	O	O	O	O	O	O	
Require the sequential approach to the location of retail development in accordance with the Retail Planning Guidelines 2005	O	O	+	O	+	O	O	O	O	O	O	O	O	O	O	O	O	
Support the development of neighbourhood centres at Irishtown and Rosbercon to serve the day to day shopping needs of the local resident and working population	O	O	+	O	+	O	O	O	O	O	O	O	O	O	O	O	O	
Tourism																		
Encourage the development of primary tourist attractions and secondary support facilities (such as transport/accommodation) to enhance these attractions	?	?	+	O	+	O	+	O	O	O	O	O	O	O	O	?	O	B1 & B2 & C1 - Development of River Barrow for water-based activities will be subject to Appropriate Assessment
Realise the tourism potential of existing archaeological and natural heritage features within the town, while also ensuring their protection	?	?	+	O	O	O	O	O	O	O	O	O	O	O	O	?	O	B1 & B2 & C1 - Development of River Barrow for water-based activities will be subject to Appropriate Assessment

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
Realise the full recreational potential of the town's riverside location adjacent to the River Barrow and its estuary	?	?	+	O	O	O	O	O	O	O	O	O	O	O	O	?	O	B1 & B2 & C1 - Development of River Barrow for water-based activities will be subject to Appropriate Assessment
Transport																		
Build on existing strategic infrastructure, by seeking to develop good transport links with other urban centres in the Southeast region and within the plan area	O	O	O	O	+	O	O	O	O	O	O	+	+	O	O	O	O	
Encourage a modal shift from private modes of transport, to public transport, cycling and walking, in particular, encourage the re-opening of the New Ross-Waterford railway and support the expansion of bus services to/from New Ross	O	O	O	O	+	O	+	O	O	O	O	+	+	O	O	O	O	
Facilitate integration of land use and transportation by co-ordinating particular land uses with their accessibility requirements	O	O	+	O	+	O	+	O	O	O	O	+	+	O	O	O	O	

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
Facilitate ease of movement, minimise car journeys and CO2 emissions and provide a pedestrian friendly environment	O	O	+	O	+	O	+	O	O	O	O	+	+	O	O	O	O	
Environment																		
Protect the natural and built environment	+	+	+	O	O	O	+	+	+	+	+	O	O	O	O	+	O	S2 – Some brownfield sites include protected structures. The re-use of these structures will help to maintain them and they should be incorporated into the design of proposed developments.
Implement sustainable waste management strategies	O	O	O	O	O	+	O	+	+	+	O	O	+	O	O	O	O	
Manage flood risk by actively pursuing flood risk management strategies and sustainable urban drainage systems	+	+	O	+	O	+X	O	+	+	+	+	O	O	O	+	O	+	B1 & B2 – Flood risk poses a threat to water quality which in turn affects biodiversity, flora and fauna in the designated sites S1 – Flooding can have positive and negative

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
																		impacts on soil
Prohibit development which would give rise to significant adverse impacts on the integrity of the River Barrow and River Nore SAC unless imperative reasons of overriding public interest can be established and there are no feasible alternative solutions	+	+	O	+	O	O	O	+	+	+	+	O	O	+	+	+	+	
Seek to protect the landscape, character, quality and distinctiveness of New Ross	+	+	+	+	O	O	+	O	O	O	O	O	O	+	+	+	+	
Require existing developments that discharge directly into the River Barrow to connect to the town's wastewater treatment system.	+	+	+	O	O	+	O	+	+	+	O	O	O	+	O	+	+	
Social																		
Provide sufficient amounts of residential land to accommodate the projected population growth	?	?	+	?	O	O	+	O	O	O	O	O	O	O	O	O	O	B1 & B2 - Where possible zoning should avoid SAC and proposed NHA areas P2 - Residential Zoning should avoid areas at high and moderate risk of

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
																		flooding S2 – Brownfield sites zoned for mixed use development will incorporate residential uses
Seek to ensure the provision of sufficient community, educational and recreational facilities to serve the existing and future population of New Ross	O	O	+	O	O	O	O	O	O	O	O	O	O	+	O	O	O	
Protect the amenities of existing residents while creating new sustainable neighbourhoods and communities	O	O	+	O	+	O	+	O	O	O	O	O	O	O	O	O	O	
Promote and encourage young people to play an active role in the development of their communities;	O	O	+	O	O	O	O	O	O	O	O	O	O	+	O	O	O	
Provide quality homes that are suitable for residents throughout their lives and are adaptable to people's changing circumstances	O	O	+	O	O	O	O	O	O	O	O	O	O	O	O	O	O	
Where possible develop green corridors and linkages between areas	+	+	+	O	+	O	O	O	O	O	O	O	O	+	O	O	O	B1 & B2 - Green corridors could provide new ecological networks between the designated

[illegible]

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
Maintain the character of the historic core and ensure that new development does not negatively impact on this character	O	O	+	O	O	O	+	O	O	O	O	O	O	O	O	+	O	
Economic Development																		
Policy ED01 - To ensure that sufficient and appropriately located lands are zoned for industrial and commercial development.	?	?	+	O	+	?	O	O	O	O	O	O	+	O	O	O	O	B1 & B2 - Zoned lands should not encroach on the SAC S1 – Lands at Marshmeadows may require filling which could impact on soil
Policy ED02 - To ensure the provision of necessary infrastructure such as roads, sanitary services, housing, telecommunications, energy supply and generation and the clearance of derelict land where feasible to facilitate new enterprises and existing enterprises wishing to expand. The Councils shall seek to ensure the provision of adequate and appropriate wastewater	O	O	+	O	+	O	+	+	+	+	+	O	+	+	O	O	O	W1-W4 – Infrastructure includes wastewater and water supply infrastructure and flood defences.

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
treatment, water supply, surface and storm water drainage, transport, waste management, community services and amenities on a planned and phased basis in advance of new development where feasible.																		
Policy ED03 - To facilitate the provision, in conjunction with other agencies, of enterprise centres and training infrastructure related to small and medium sized enterprises (SME's).	O	O	+	O	O	O	O	O	O	O	O	O	O	+	O	O	O	
Policy ED04 - To ensure the zoning of adequate residential lands and the creation of an attractive urban environment to facilitate residency of the projected labour force.	?	?	+	O	+	?	+	O	+	O	O	O	O	O	O	O	O	<p>B1 & B2 - Zoned lands should not encroach on the SAC</p> <p>W2 – Residential development on zoned serviced lands could prevent urban sprawl which would result in an increase in septic tanks and potential contamination of ground water.</p>

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
Policy ED05 - To develop the public realm and amenities of New Ross so that the quality of life of employees and residents can be improved.	O	O	+	O	O	O	+	O	O	O	O	O	O	O	O	O	O	
Policy ED06 - To ensure the provision of an adequate and efficient transportation system.	O	O	+	O	+	O	+	O	O	O	O	+	+	+	O	O	O	
Policy ED07 – To facilitate the provision of an accessible and free WiFi zone in the town centre.	O	O	+	O	O	O	O	O	O	O	O	O	O	+	O	O	O	
Policy IN01 - To ensure that sufficient land is zoned within the functional areas of the planning authorities to meet the differing requirements of industries.	?	?	+	O	+	?	O	O	O	O	O	O	O	O	O	O	O	B1 & B2 - Zoned lands should not encroach on SAC S1 – Lands at Marshmeadows may require filling which could impact on soil
Policy IN02 - To encourage and facilitate the development of warehousing and distribution uses on the lands zoned for industrial use.	O	O	+	O	+	?	O	O	O	O	O	O	O	O	O	O	O	S1 – Lands at Marshmeadows may require filling which could impact on soil

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
Policy IN03 - To seek to ensure that the impacts of any industry on adjoining uses and the environment are minimised.	+	+	+	O	O	+	O	+	+	+	+	+	O	O	O	O	O	
Policy IN04 - To encourage and facilitate the industries located in the town centre to move to land that is zoned for industrial development so as to free up town centre lands for more appropriate mixed commercial and residential uses.	O	O	+	O	+	O	+	O	O	O	O	O	O	O	O	O	O	
Policy IN05 - To support New Ross Port Authority in developing the commercial port by facilitating the future development of the port at Marshmeadows, including the facilitation of an additional wharf and construction of warehousing and open storage, subject to the findings of an Appropriate Assessment in compliance with Article 6 of the Habitats Directive. Any development of the port and/or	?	?	+	O	+	?	O	O	O	O	O	O	O	+	O	O	O	B1 & B2 – Additional Wharf would be subject to Appropriate Assessment P3 – Reduction in HGVs? S1 – Lands at Marshmeadows may require filling which could impact on soil

[illegible]

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
retail core.																		
Objective OPS01 - Planning applications for office developments on lands zoned for Commercial and Light Industry and Office shall be accompanied by a sequential analysis which clearly demonstrates that there are no alternative/suitable sites available for the proposed development in the Town Centre.	O	O	+	O	+	O	+	O	O	O	O	O	O	O	O	O	O	
Policy R01 - To ensure that the majority of retail development shall be located within the town centre. The areas designated as Primary and Secondary Retail frontages shall be retained as key locations for retail development	O	O	+	O	+	O	+	O	O	O	O	+	O	O	O	O	O	
Policy R02 - On Primary Shopping Frontages permission will be favourably considered for banks and other professional services, office uses, restaurants, bars, off licences, takaways and other	O	O	+	O	+	O	+	O	O	O	O	+	O	O	O	O	O	P3 & A1 – Retail and other everyday services in the town centre may reduce car journeys by allowing multiple errands in single trips.

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
entertainment uses provided.....																		
Policy R03 - On Primary Shopping Frontages, applications for planning permission which will result in net loss of convenience and comparison shopping floorspace at ground level will be resisted as this would affect the vitality and viability of these streets.	O	O	+	O	?	O	O	O	O	O	O	?	O	O	O	O	O	P3 – Bulky retail goods on the edge of town may generate car journeys but everyday goods and services are located in the centre
Policy R04 - To prioritise the reuse of vacant and derelict buildings in the town centre for uses including retail development.	O	O	+	O	O	O	+	O	O	O	O	O	O	O	O	O	O	
Policy R05 - To encourage the use of ground floors of buildings fronting onto The Quay for retail and related uses. Proposals which result in uses other than retail and related uses at ground floor level will be resisted. New buildings should integrate such uses at ground floor level and provide for active frontages.	O	O	+	?	O	O	O	O	O	O	O	O	O	O	?	O	O	P2 & M2 – The Quay has been subject to flooding in the past and any new development should mitigate against flood risk

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
neighbourhood centres shall be for convenience goods with suitable comparison goods open for consideration to provide for the day to day shopping needs of the local community.																		
Objective R01 - To provide for and encourage high levels of access and good quality pedestrian facilities to connect neighbourhood centres to their surrounding neighbourhoods. Facilities for cycling shall also be provided.	O	O	+	O	+	O	O	O	O	O	O	+	O	+	O	O	O	
Transportation Strategy																		
Policy TM01 - Develop a safer, more efficient and integrated transport system within New Ross with improvements to the road network, public transport which will encompass accessible public transport, cycle ways and to create a pedestrian friendly environment.	O	O	+	O	+	O	O	O	O	O	O	+	+	+	O	O	O	
Policy TM02 - Support the	?	?	+	O	+ X	O	O	O	O	O	O	+ X	O	+	O	O	O	B1 & B2 – Construction of

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
implementation of the New Ross Bypass Scheme.																		<p>the proposed bridge crossing could have potential impacts on the SAC</p> <p>P3 & A1 – New Ross Bypass could promote use of car over public transport but in terms of longer trips will reduce car journeys and reduce congestion and associated emissions in the town centre.</p>
Policy TM03 - Guide development to ensure that it is positioned in a location which minimises the need to travel and co-ordinates particular land uses with their accessibility requirements.	O	O	+	O	+	O	+	O	O	O	O	+	+	O	O	O	O	
Policy TM04 - Seek to improve parking provision in the town centre and require all new developments to provide adequate parking, including parking for persons with a disability, in accordance with the	O	O	+	O	?	O	O	O	O	O	O	O	O	O	O	O	O	<p>P3 – Parking will encourage use of car but improve accessibility, especially in the absence of any rail services in the town.</p>

[illegible]

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
Safety Audit for developments with the potential to create significant additional demands on the traffic network by virtue of the nature of their activity, the number of employees, their location or a combination of these factors and for significant developments affecting national roads.																		
Policy TM09 - Support New Ross Port Authority in developing the commercial port by facilitating the future development of the port at Marshmeadows, including the facilitation of an additional wharf and construction of warehousing and open storage, subject to the findings of an Appropriate Assessment in compliance with Article 6 of the Habitats Directive. Any development of the port and/or wharf shall ensure the protection of the Waterford Harbour Shellfish Area and shall be monitored and assessed to ensure compliance	?	?	+	O	+	?	O	O	O	O	O	O	O	+	O	O	O	B1 & B2 – Additional Wharf would be subject to Appropriate Assessment P3 – Reduction in HGVs? S1 – Lands at Marshmeadows may require filling which could impact on soil

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
with the Water Framework Directive.																		
Policy TM10 - Encourage and facilitate the reopening of the existing railway line. Development which would prejudice the reopening of this line will be prohibited, however temporary uses may be considered where appropriate.	O	O	+	O	+	O	O	O	O	O	O	+	+	+	O	O	O	
Policy TM11 – Support the provision of charging points for Electric Vehicles at appropriate locations.	O	O	+	O	+	O	O	O	O	O	O	+	+	+	O	O	O	
Policy TM12 - To support the implementation of the National Climate Change Strategy and any Regional Climate Change Action Plan or Climate Change Strategy adopted for the County.	O	O	O	O	+	O	O	O	O	O	O	+	+	O	O	O	O	
Objective TM01 - To upgrade the existing ring road, including the provision of accessible footpaths	O	O	+	O	+	O	O	O	O	O	O	O	+	+	O	O	O	P3 – Improved accessibility

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
and energy efficient public lighting.....																		
Objective TM02 - To provide traffic control/junction improvements at the Junction of N25/R733 to facilitate the development of the Port-Related Activity and Industry Use Zonings on the R733. The Council shall apply a special levy to applications on these lands as the works are required to facilitate the development of these lands.	O	O	+	O	+	O	O	O	O	O	O	O	O	+	O	O	O	P3 – Improved accessibility
Objective TM03 - To provide roundabouts/junction improvements at the following locations.....	O	O	+	O	+	O	O	O	O	O	O	O	O	+	O	O	O	P3 – Improved accessibility
Objective TM04 - To upgrade the following road sections.....	O	O	+	O	+	O	O	O	O	O	O	O	O	+	O	O	O	P3 – Improved accessibility
Objective TM05 - To provide signal controlled pedestrian facilities, which have an audible signal and dished kerbs with tactile paving to assist visually and mobility-	O	O	+	O	+	O	O	O	O	O	O	O	O	+	O	O	O	P3 – Improved accessibility

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
impaired persons in crossing roads.																		
Objective TM06 - To improve and expand coach/bus parking facilities adjacent to the town centre and provide parking for buses including disabled access.	O	O	+	O	+	O	O	O	O	O	O	O	O	+	O	O	O	P3 – Improved accessibility
Objective TM07 - To provide additional public and private car parking in the town centre.	O	O	+	O	+	O	O	O	O	O	O	O	O	O	O	O	O	P3 – Parking will encourage use of private car but improve accessibility, especially in the absence of any rail services in the town.
Objective TM08 - To provide a new link road between Irishtown/ Morrissysland and Redhouse as shown on Map No. 10.	O	O	+	O	+	O	O	O	O	O	O	O	O	O	O	O	O	P3 – Improved accessibility and potentially shorter journeys
Objective TM09 - Facilitate the construction of a river crossing between Marshmeadows and Raheen, as indicated on Map 10 subject to the findings of an Appropriate Assessment in compliance with Article 6 of the Habitats Directive.	?	?	O	O	+	?	O	O	O	O	O	O	O	+	O	?	?	B1 & B2 – Construction of the proposed bridge crossing could have potential impacts on the SAC P3 – Improved accessibility and potentially shorter

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
																		journeys L1 – Visual impacts of bridge on River Barrow will depend on design
Objective TM10 - To facilitate, in co-operation with public transport providers, the provision of accessible bus shelters on all routes.	O	O	+	O	+	O	O	O	O	O	O	+	O	+	O	O	O	
Objective TM11 - To carry out a Footpath Audit which will identify the areas where existing footpaths require completion/upgrading and new footpaths are required.	O	O	+	O	+	O	O	O	O	O	O	+	O	+	O	O	O	
Objective TM12 - To carry out an audit which will identify areas where cycling facilities can be developed and inform a programme for promoting and encouraging cycling in the plan area.	O	O	+	O	+	O	O	O	O	O	O	+	O	+	O	O	O	
Objective TM13 - To improve cycling facilities in the town to	O	O	O	O	+	O	O	O	O	O	O	+	O	O	O	O	O	

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
enable New Ross to be linked to the National Cycle Network.																		
Policy N01 - To seek to ensure that new development does not cause an unacceptable increase in noise levels affecting surrounding properties.	O	O	+	O	O	O	O	O	O	O	O	O	O	O	O	O	O	
Objective N01 – In considering planning applications to have regard to any Noise Action Plan prepared for the area in accordance with the EU Directive on Assessment and Management of Environmental Noise.	O	O	+	O	O	O	O	O	O	O	O	O	O	O	O	O	O	
Infrastructure																		
Policy WS01 - Ensure an adequate, sustainable and economic supply of good quality water for domestic, commercial and industrial needs for the lifetime of this plan, subject to the findings of an Appropriate Assessment in compliance with Article 6 of the	?	?	+	O	O	O	O	+	+	+	+	O	O	+	O	O	O	B1 & B2 – Future supply of water is dependent on the provision of an increased supply to the town

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
Habitats Directive, where appropriate.																		
Policy WS02 - Conserve supplies though the maintenance of the mains and the elimination of leakages.	O	O	+	O	O	O	O	O	O	+	+	O	O	+	O	O	O	
Policy WS03 - Promote public awareness on the maintenance of water quality and economic and sustainable use.	O	O	+	O	O	O	O	+	+	+	O	O	O	O	O	O	O	
Policy WS04 - Ensure that existing developments that are still discharging directly to the River Barrow and other freshwater sources are connected to public mains as soon as possible to optimise water quality status in accordance with the Water Framework Directive (WFD) and the environmental standards and	+	+	+	O	O	O	O	+	+	+	O	O	O	+	O	+	+	

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
objectives of the South Eastern River Basin Management Plan 2009-2015.																		
Policy WW01 - To provide optimum Wastewater Treatment facilities and infrastructure to serve the existing and future population of New Ross Town and Environs, whilst ensuring waste water discharge effluent standards are in line with the Urban Waste Water Treatment Regulations, 2001 and functioning of the facilities are in compliance with EPA Waste Water Discharge Licence conditions.	+	+	+	O	O	O	O	+	+	O	+	O	O	+	O	O	O	W4 – Main drainage scheme includes interim flood relief works.
Policy WW02 - To require and facilitate the connection of existing developments in the Mountgarrett area that are served by private wastewater treatment facilities to connect to the town's wastewater treatment system.	+	+	+	O	O	+	O	+	+	+	O	O	O	+	O	+	+	
Objective WW01 - To provide a gravity sewer along the R733 to	+	+	+	O	O	O	O	+	O	O	O	O	O	+	O	O	O	B1 & B2 - Gravity sewer will allow developments at

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
service industrial zoned lands at Marshmeadows.																		Marshmeadows to connect to WWTP
Objective WW02 - To maintain a 'sterilisation zone' around the Wastewater Treatment Plant as shown on Map 10. No residential development will be permitted within 150 metres of the Treatment Plant.	O	O	+	O	O	O	O	O	O	O	O	O	O	O	O	O	O	
Policy SW01 - To safeguard floodplains from inappropriate development. By retaining open spaces for storage and conveyance of floodwater, flood risk to both upstream and downstream areas can be more effectively managed without reliance on flood defences.	+	+	+	+	O	+X	O	+	+	+	+	O	O	O	+	O	O	S1 – Flooding can positively and negatively impact soils
Policy SW02 - To carefully consider 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	+	+	+	+	O	+X	O	+	+	+	+	O	O	O	+	O	+	S1 – Flooding can positively and negatively impact soils L1 – Flooding can negatively impact on water quality which in turn can affect the ecological status of the river

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
impacts on water quality.																		
Policy SW03 - Proposals for new developments in Flood Zone A and B for developments that are vulnerable to flooding shall be accompanied by an appropriate site specific flood risk assessment carried out in accordance with The Planning System and Flood Risk Management Guidelines for Planning Authorities (DoEHLG, OPW November 2009). The assessment must detail how the Development Management Justification Test has been met.	+	+	+	+	O	O	O	+	+	+	+	O	O	O	+	O	O	
Policy SW04 - To facilitate the provision of suitable flood risk management infrastructure, for example flood defences, by the OPW, the local authority or private developers subject to the findings of an Appropriate Assessment in compliance with Article 6 of the Habitats Directive, where	+	+	+	+	O	+X	O	+	+	+	+	O	O	O	+	O	+	S1 – Flooding can positively and negatively impact soils

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
appropriate.																		
Policy SW05 - To require the provision of adequate storm water retention facilities in new developments, including the use of soft landscaping and sustainable drainage techniques. The Councils will seek to ensure that all proposed drainage systems are consistent with Sustainable Urban Drainage Systems (SuDS) and will ensure that the rate of discharge into the public surface water system are restricted in line with stormwater management policy.	+	+	+	+	O	O	O	+	+	+	+	O	O	O	+	O	O	
Policy SW06: Any proposal for new development on lands zoned for Port-Related Activities at Marshmeadows for developments that are vulnerable to flooding must be accompanied by an appropriate Site-Specific Flood Risk Assessment	+	+	+	+	O	O	O	+	+	+	+	O	O	O	+	O	O	

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
domestic and commercial developments within the town and environs area.																		
Policy TE01 – To support the improvement of energy generation and transmission infrastructure and to ensure the security of energy supply for the existing and future population of the town and environs.	O	O	+	O	O	O	O	O	O	O	O	O	O	+	O	O	O	
Policy TE02 - To locate services, including electricity, telephone and TV cabling underground, where possible, with future capacity considered and appropriate ducting put in place.	O	O	+	O	O	O	O	O	O	O	O	O	O	O	O	O	O	
Policy TE03 - To provide orderly development of telecommunications infrastructure throughout the town in accordance with the requirements of the “Telecommunications Antennae and Support Structures, Guidelines	O	O	+	O	O	O	O	O	O	O	O	O	O	+	O	O	O	

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
for Planning Authorities” July 1996.																		
Policy TE04 - To maximise the use of existing masts by sharing installations for antennae support structures.	O	O	+	O	O	O	O	O	O	O	O	O	O	O	O	O	O	
Policy TE05 - To support the development of wide access to high speed broadband.	O	O	+	O	O	O	O	O	O	O	O	O	O	+	O	O	O	
Policy TE06 - To adopt a presumption against the erection of antennae in proximity to residential areas, schools or community facilities, structures of historical or architectural interest and areas and sites of archaeological importance.	O	O	+	O	O	O	O	O	O	O	O	O	O	+	O	O	O	
Policy TE07 – To facilitate the development of an accessible WiFi zone in the town centre.	O	O	+	O	O	O	O	O	O	O	O	O	O	+	O	O	O	
Policy RE01 - To promote energy conservation, decrease dependency on fossil fuels and support environmentally friendly	O	O	+	O	O	O	O	O	O	O	O	O	+	+	O	O	O	

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
methods of producing energy.																		
Policy RE02 - To facilitate the continual development of renewable energy sources having regard to residential amenities, biodiversity and landscape sensitivities.	+	+	+	O	O	O	O	O	O	O	O	O	+	+	O	+	+	
Policy RE03 - To encourage the participation of local residents, community and schools groups in sustainable energy projects and awareness campaigns.	O	O	+	O	O	O	O	O	O	O	O	O	+	O	O	O	O	
Policy RE04 - To engage in consultation with other agencies regarding the development of an Energy Master Plan for the town to allow for a maximisation of energy efficiency.	O	O	+	O	O	O	O	O	O	O	O	O	+	+	O	O	O	
Policy RE05 - To support the implementation of the South-East Region Bio-Energy Implementation Plan 2008-2013.	O	O	O	O	+	O	O	O	O	O	O	+	+	O	O	O	O	

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
Policy RE06 - To support the implementation of the National Climate Change Strategy and any Regional Climate Change Action Plan or Climate Change Strategy adopted for the County.	O	O	O	O	+	O	O	O	O	O	O	+	+	O	O	O	O	
Objective RE01 – To promote the extension of the Natural Gas network to New Ross Town and Environs.	O	O	+	O	O	O	O	O	O	O	O	O	+	+	O	O	O	
Objective RE02 - To investigate the potential for small-scale wind energy developments within the urban and industrial areas.	O	O	+	O	O	O	O	O	O	O	O	O	+	+	O	O	O	
Policy EN01 – Require all new building developments to meet low energy performance targets. Each buildings energy performance, as calculated by the Building Energy Rating (BER), will have a minimum energy efficiency that meets the requirements of Part L of the Building Regulations 2008 and any	O	O	+	O	O	O	O	O	O	O	O	+	+	O	O	O	O	

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
subsequent amendment to those regulations. New buildings should incorporate renewable energy technologies in order to help achieve the rating required.																		
Policy EN02 - Promote the prioritisation of energy efficiency and the use of renewable energy in the design, layout and operation of new developments.	O	O	+	O	O	O	O	O	O	O	O	+	+	O	O	O	O	
Policy EN03 - Promote innovative housing design and layout solutions that address concerns of environmental sustainability with regard to matters such as energy efficiency and use of materials.	O	O	+	O	O	O	O	O	O	O	O	+	+	O	O	O	O	
Policy EN04 - Encourage the integration of micro renewable energy sources into the design and construction of single and multiple housing developments.	O	O	+	O	O	O	O	O	O	O	O	+	+	O	O	O	O	
Policy EN05 - Have regard to the Guidelines on Sustainable	O	O	+	O	O	O	O	O	O	O	O	+	+	O	O	O	O	

[illegible]

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
as need arises and as finances permit.																		
Objective HS03 - To 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.	O	O	+	O	O	O	O	O	O	O	O	O	O	+	O	O	O	
Objective HS04 - To actively promote the provision of community, educational, social and recreational facilities in parallel with future housing development.	O	O	+	O	+	O	O	O	O	O	O	O	O	+	O	O	O	
Policy HS04 - To ensure that there is a sufficient amount of zoned land within New Ross Town and Environs to meet residential needs up to 2019.	?	?	+	O	+	O	O	O	+	O	O	O	O	O	O	O	O	<p>B1 & B2 - Zoned lands should not encroach on the SAC</p> <p>P3 – Promoting high-quality housing on zoned lands in towns and villages can discourage urban-generated one-off housing which can result in a greater no. and</p>

[illegible]

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
and to integrate housing provided under Part V of the Planning and Development Act 2000, as amended, into private developments in small schemes so as to prevent segregation and promote good design and layout.																		
Policy HS07 - To ensure that 20% of any land zoned solely for residential use or for a mixture of residential and other uses shall be reserved for the provision of social and affordable housing in accordance with the requirements of Part V of the Planning and Development Act 2000, as amended, and the County Housing Strategy 2007-2013.	O	O	+	O	O	O	O	O	O	O	O	O	O	O	O	O	O	
Policy HS08 - To support and facilitate the expansion of the role, played by the Voluntary Sector in meeting social housing need.	O	O	+	O	O	O	O	O	O	O	O	O	O	O	O	O	O	
Objective HS05 - To regenerate the Councils current housing stock as	O	O	+	O	+	O	O	O	O	O	O	O	O	O	O	O	O	P3 – Current housing stock includes housing in town

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
required.																		centre
Policy HS09 - To provide for Traveller accommodation in halting sites, individual dwellings or in-group housing schemes in accordance with the Traveller Accommodation Programme 2009-2013 and any subsequent programme adopted by the Councils.	O	O	+	O	O	O	O	O	O	O	O	O	O	O	O	O	O	
Policy HS10 - 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.	O	O	+	O	+	O	O	O	O	O	O	O	O	+	O	O	O	
Policy HS11 - To facilitate the provision of additional primary and second level schools in appropriate locations where residential expansion is planned.	O	O	+	O	+	O	O	O	O	O	O	O	O	+	O	O	O	
Policy HS12 - To ensure that the	O	O	+	O	+	O	O	O	O	O	O	O	O	+	O	O	O	

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
provision of recreational areas and the development of residential areas (where both form part of the same development boundary), are undertaken concurrently.																		
Policy HS13 - To require the provision of Childcare Facilities in new residential developments in accordance with Childcare Facilities: Guidelines for Planning Authorities 2001 and We Like This Place: Guidelines for Best Practice in the Design of Childcare Facilities 2005. The indicative standard is one childcare facility, accommodating 20 children, for approximately 75 dwellings. This standard may be modified in any particular case where there are significant reasons for doing so. Criteria that may be taken into account in such an assessment include the existing geographical distribution of childcare facilities and the emerging demographic	O	O	+	O	+	O	O	O	O	O	O	O	O	+	O	O	O	

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
meets the necessary standards of accessible health, sanitation and design, and are carried out generally in accordance with principles of good design.																		
Policy HS19 - To encourage strong frontages onto the main thoroughfares creating definite building lines and continuity of the town structure.	O	O	+	O	O	O	O	O	O	O	O	O	O	O	O	O	O	
Policy HS20 - To encourage equal access housing in accordance with the standards set out in section 15 of this plan.	O	O	+	O	O	O	O	O	O	O	O	O	O	O	O	O	O	
Policy HS21 - To encourage infill development on appropriate sites where the proposals respect the existing scale and character of the area.	O	O	+	O	+	O	O	O	O	O	O	O	O	O	O	O	O	
Community and Education																		
Policy C01 - To promote the development of sustainable	O	O	+	O	+	O	+	O	O	O	O	O	O	+	O	O	O	

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
communities on the basis of a high quality of life where people can live, work and enjoy access to a wide range of community, cultural, health and educational facilities suitable for all ages and needs.																		
Policy C02 - To support and facilitate the provision of new and the improvement of existing community, health and educational facilities. The Councils will where possible protect and improve cultural assets in the interests of public enjoyment and for the education of residents and visitors alike.	O	O	+	O	+	O	O	O	O	O	O	O	O	+	O	O	O	
Policy C03 - To facilitate the provision of adequate community facilities in accordance with the County Development Board strategy as outlined in the document "Remodelling the Model County 2002 – 2012", and any future revision of this document, in relation to the provision of	O	O	+	O	+	O	O	O	O	O	O	O	O	+	O	O	O	

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
childcare, play, sports and the arts.																		
Objective C01 - To carry out within the lifetime of the plan, a 'Social Audit' which will identify the areas within the town where community and social facilities are lacking and the facilities which require further development/expansion.	O	O	+	O	O	O	O	O	O	O	O	O	O	+	O	O	O	
Policy C04 - To encourage and assist the formation, development, direction and co-ordination of community organisations, local interests and self help groups, with an emphasis on areas of special needs within the town.	O	O	+	O	O	O	O	O	O	O	O	O	O	O	O	O	O	
Objective C02 - To co-operate with private and commercial interests, community and voluntary groups and state agencies in ensuring an equitable distribution of facilities at locations convenient to where people live and work.	O	O	+	O	+	O	O	O	O	O	O	O	O	+	O	O	O	
Policy C05 - To support the	O	O	+	O	O	O	O	O	O	O	O	O	O	+	O	O	O	

[illegible]

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
the policies and principles contained in Sustainable Residential Development in Urban Areas: Guidelines for Planning Authorities and its companion document Urban Design Manual (DoEHLG, 2008).																		
Objective C03 - To carry out within the lifetime of the plan a 'Town Accessibility Audit' which will identify the physical obstacles to accessibility and inform a programme for achieving greater accessibility for all members of the community.	O	O	+	O	O	O	O	O	O	O	O	O	O	+	O	O	O	
Policy C09 - To require the provision of Childcare Facilities in new residential developments in accordance with Childcare Facilities: Guidelines for Planning Authorities 2001 and We Like This Place: Guidelines for Best Practice in the Design of Childcare Facilities 2005. The indicative standard is one childcare facility,	O	O	+	O	+	O	O	O	O	O	O	O	O	+	O	O	O	

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
accommodating 20 children, for approximately 75 dwellings. This standard may be modified in any particular case where there are significant reasons for doing so. Criteria that may be taken into account in such an assessment include the existing geographical distribution of childcare facilities and the emerging demographic profile of the area.																		
Policy C10 - To encourage and facilitate the provision of crèches and play-schools where feasible within new or existing places of work or in proximity thereof, e.g. in light industrial estates.	O	O	+	O	+	O	O	O	O	O	O	O	O	+	O	O	O	
Policy C11 - To facilitate the development of childcare facilities where demand arises subject to satisfying applicable planning and engineering criteria.	O	O	+	O	+	O	O	O	O	O	O	O	O	+	O	O	O	
Objective C04 - To work with and support the Wexford County	O	O	+	O	O	O	O	O	O	O	O	O	O	+	O	O	O	

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
Childcare Committee in developing a programme for the development of childcare services and facilities in New Ross.																		
Policy EC01 - To facilitate the provision of education facilities by zoning suitable lands.	O	O	+	O	+	O	O	O	O	O	O	O	O	+	O	O	O	
Policy EC02 - To consult with the Department of Education regarding the location and provision of adequate educational facilities and identification of suitable sites.	O	O	+	O	O	O	O	O	O	O	O	O	O	+	O	O	O	
Policy EC03 - To restrict new development adjacent to existing schools where such development may have the potential to restrict the expansion of that school.	O	O	+	O	+	O	O	O	O	O	O	O	O	+	O	O	O	
Objective EC01 - To consider the future development of educational facilities at Castlemoyle.	O	O	+	O	+	O	O	O	O	O	O	O	O	+	O	O	O	

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
Recreation and Open Space																		
Policy OS01 - To ensure that adequate amenity and recreational open space and facilities, including community facilities and centres, are available for all groups of the population at a convenient distance from their homes and places of work.	O	O	+	O	+	O	O	O	O	O	O	O	O	+	O	O	O	
Policy OS02 - To facilitate the continued enhancement of the quayside and riverfront areas in accordance with the New Ross Urban Design Waterfront Study 2006 adopted by New Ross Town Council, subject to the findings of an Appropriate Assessment in compliance with Article 6 of the Habitats Directive, where appropriate.	O	O	+	O	O	O	+	O	O	O	+	O	O	+	+	O	+	W4 & M2 – Works along the Quay include flood defences
Policy OS03 - To ensure that a detailed landscaping plan accompanies all applications for	O	O	+	O	O	O	O	O	O	O	+	O	O	+	O	O	O	W4 – Soft landscaping can be used to reduce surface water run-off.

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
housing estates and significant industrial and commercial developments.																		
Policy OS04 - To avoid loss of public and private recreational open space unless alternative recreational facilities are provided in a suitable location.	O	O	+	O	O	O	O	O	O	O	O	O	O	+	O	O	O	
Policy OS05 - To support the implementation of the New Ross Allotments Programme in conjunction with the RAPID scheme.	O	O	+	O	O	O	O	O	O	O	O	O	O	+	O	O	O	
Policy OS06 - To seek to enhance existing areas of public open space.	O	O	+	O	O	O	O	O	O	O	O	O	O	+	O	O	+	
Objective OS01 - To carry out, in conjunction with the County Development Board, an Open Space, Sports and Recreation Study for New Ross Town and Environs.	O	O	+	O	O	O	O	O	O	O	O	O	O	+	O	O	O	

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
Objective OS02 - To examine the feasibility of providing a walkway adjacent to the disused railway line between Rosbercon and Annefield. The long-term objective to re-open this railway line should not be jeopardised.	?	?	+	O	O	O	O	O	O	O	O	O	O	+	O	O	O	B1 & B2 – Traditional field boundaries should be retained where possible to mitigate impacts on ecological corridors
Objective OS03 – To examine the feasibility of providing a walkway/green corridor adjacent to the east of the R733 Road linking the Town Park with Oaklands Lake and the surrounding area.	O	O	+	O	O	O	O	O	O	O	O	O	O	+	O	O	O	B1 & B2 – Traditional field boundaries and woods should be retained where possible to mitigate impacts on ecological corridors
Objective OS04 - To examine the feasibility of providing a woodland walk along the eastern bank of the river to north of the town and to facilitate the development of new pedestrian linkages from Craywell Road to the proposed woodland walk subject to the findings of an Appropriate Assessment in compliance with Article 6 of the Habitats Directive, where	O	O	+	O	O	O	O	O	O	O	O	O	O	+	O	O	O	B1 & B2 – Traditional field boundaries and woods should be retained where possible to mitigate impacts on ecological corridors

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
Policy PRW01 - To protect and preserve those existing rights of way which contribute to general amenity.	O	O	+	O	O	O	O	O	O	O	O	O	O	+	O	O	O	
Policy PRW02 - To create new rights-of-way in the interest of amenity as opportunities or need arise.	O	O	+	O	O	O	O	O	O	O	O	O	O	+	O	O	O	
Policy PRW03 - To promote the development of river-side walking routes and foster the enjoyment of the natural amenities of the area including the River Barrow whilst protecting areas of ecological value and ensuring that any development take cognisance of the aims and objectives of the Water Framework Directive and achieving “good status” by 2015 and that all development is undertaken in compliance with Articles 6 and Article 10 of the Habitats Directive.	?	?	+	O	+	O	O	O	O	O	O	O	O	+	O	O	+	B1 & B2 – Traditional field boundaries and woods should be retained where possible to mitigate impacts on ecological corridors
Policy PRW04 - To encourage the	O	O	+	O	O	O	O	O	O	O	O	O	O	+	O	O	O	

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
provision of access routes to amenity areas in co- operation with landowners and protect amenity areas from infringement by inappropriate development.																		
Policy PRW05 - To protect and enhance, through the development management process, existing town centre laneways which add to the character and permeability of the town. Regard shall be had to the New Ross Laneway Study 1999 and any future amendments/revisions of this document.	O	O	+	O	O	O	O	O	O	O	O	O	O	+	O	+	O	
Objective PRW01 - To examine existing rights of way, paths and access points to the river and other amenity areas to determine where public rights-of-way exist and where public-rights-of-way should be created, either by agreement or by compulsion, for the provision of walking routes.	O	O	+	O	+	O	O	O	O	O	O	O	O	+	O	O	O	

[illegible]

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
recreational centres, bird watching and boating clubs.																		
Objective T01 - To promote and upgrade the historic walking trail to include interpretative signs and information boards at important sites of archaeological interest, heritage and nature conservation.	O	O	+	O	O	O	O	O	O	O	O	O	O	+	O	+	+	
Objective T02 - To improve the attractiveness of the riverside area in accordance with the New Ross Urban Design Waterfront Study 2006 and to carry out other environmental improvements to the town centre.	O	O	+	O	O	O	+	O	O	O	+	O	O	+	O	O	+	W4 – Works along the Quay include flood defences
Objective T03 – To develop the potential of the River Barrow for inland navigation and appropriate facilities, such as a river taxi, in association with Waterways Ireland, the Harbour Master and any other relevant authorities. Any such development should take cognisance of the aims and	?	?	+	O	+	O	O	?	O	O	O	O	O	+	O	?	+	B1 & B2, C1 & W1 - Development of River Barrow for water-based activities will be subject to Appropriate Assessment

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[illegible]

[illegible]

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	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
Conservation Areas within the life time of the Development Plan. Prepare detailed statements for the area, in consultation with stakeholders and local interest groups, including guidance regarding new development and exempted development relevant to the specific character of the area.																		
Policy ACA04 - To ensure that all proposed developments are carried out to the highest architectural standards within designated areas.	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	+	O	
Policy ACA05 - To ensure a high standard of urban design within proposed Architectural Conservation Areas.	O	O	+	O	O	O	O	O	O	O	O	O	O	O	O	+	O	
Policy ACA06 – To promote improvements to the streetscape and the spaces between buildings to enhance the quality of these areas.	O	O	+	O	O	O	O	O	O	O	O	O	O	O	O	+	O	
Policy NH01 - To secure the	+	+	O	O	O	O	O	+	+	+	O	O	O	O	O	+	+	

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
conservation and the sustainable use of natural heritage in New Ross Town and Environs and ensure that it is taken into account at the earliest possible stage in the development process.																		
Policy NH02 - To conserve and protect the ecological integrity of designated sites of international and national importance, and sites proposed for designation, in particular, European sites (including Natura 2000 sites), and Ramsar sites, NHAs and statutory nature reserves.	+	+	O	O	O	O	O	+	+	+	O	O	O	O	O	+	+	
Policy NH03 - To carry out an Appropriate Assessment, in accordance with 'Appropriate Assessment of Plans and Projects in Ireland: Guidelines for Planning Authorities' (DoEHLG, 2010), for any plan or project which has the potential to damage the integrity of the River Barrow and River Nore	+	+	O	O	O	O	O	+	+	+	O	O	O	O	O	+	+	

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
SAC.																		
Policy NH04 - To protect riparian zones and natural land drains by maintaining an appropriately sized buffer zone (minimum 5-10m) along all watercourses and land drains, with no infilling or removal of vegetation within these buffer zones.	+	+	O	O	O	O	O	+	O	O	O	O	O	O	O	+	+	
Policy NH05 - To retain, where possible, and protect traditional field boundaries, ponds or small woods which provide important ecological networks.	+	+	O	O	O	O	O	O	O	O	O	O	O	O	O	+	+	
Policy NH06 - To protect and enhance surface water and groundwater resources and associated habitats and species which are essential to ensure the highest water quality into the future, as set out in the Water Framework Directive with the aim of achieving "good status" by 2015.	+	+	O	O	O	O	O	+	+	+	+	O	O	O	O	+	+	

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
Policy NH07 - Implement the Programme of Measures and strive to achieve the objectives of the South-Eastern River Basin Management Plan 2009-2015 to achieve high water quality status for the River Barrow River Nore SAC and to support the favourable conservation status of habitats and species contained within the designated site.	+	+	O	O	O	O	O	+	+	+	+	O	O	O	O	+	+	
Policy NH08 –To ensure the continued reduction in pollution of the New Ross Port and Barrow Nore Estuary Upper waterbodies, through the Pollution Reduction Programme, to improve water quality in this area of the River Barrow and River Nore SAC and ensure protection of the designated Waterford Harbour Shellfish Area downstream of New Ross through compliance with the Quality of Shellfish Waters Regulations 2006.	+	+	O	O	O	O	O	+	+	+	+	O	O	O	O	+	+	

[illegible]

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
Objective L01 - Implement the impending National Landscape Strategy and any Ministerial Guidelines concerning the protection, management and planning of the landscape.	O	O	+	O	O	O	O	O	O	O	O	O	O	O	O	+	+	
Objective L02 - Require that any necessary assessments, including visual impact assessments, are made when undertaking, authorising or approving applications for significant development.	O	O	+	O	O	O	O	O	O	O	O	O	O	O	O	+	+	
Policy PV01 - To ensure that important views and vistas are protected and enhanced where possible.	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	+	+	
Major Accidents Directive																		
Policy MA01 - To co-operate with the Health and Safety Authority and to have full regard to technical advice received from that	O	O	+	O	O	O	O	O	+	O	O	+	O	O	O	O	O	

	EPOs																	
Plan Policies & Objectives	B1	B2	P1	P2	P3	S1	S2	W1	W2	W3	W4	A1	A2	M1	M2	C1	L1	Comments
organisation.																		
Objective MA01 - To consult with the Health & Safety Authority when any development, referred to in Schedule 8 of the Planning & Development Regulations 2001, is proposed within 300m of the ESSO Joint Fuels Terminal.	O	O	+	O	O	O	O	O	+	O	O	+	O	O	O	O	O	
Objective MA02 - To consult with the Health & Safety Authority when any development, referred to in Schedule 8 of the Planning & Development Regulations 2001, is proposed within 400m of the Campus Fuels Terminal.	O	O	+	O	O	O	O	O	+	O	O	+	O	O	O	O	O	
Objective MA03 - To consult with the Health & Safety Authority when any development, referred to in Schedule 8 of the Planning and Development Regulations 2001, is proposed within a distance specified by the Health and Safety Authority of any future seveso sites	O	O	+	O	O	O	O	O	+	O	O	+	O	O	O	O	O	

[illegible]

Appendix 2: Relevant Legislation, Plans, Policies & Programmes

EU Legislation, Plans, Policies and Programmes

Topic	Title	Summary of Objectives
Biodiversity	EU Habitats Directive (92/43/EEC)	Objectives to seek to prevent and eliminate the causes of habitat loss and maintain and enhance current levels of biodiversity.
	EU Birds Directive (as modified) (79/409/EEC)	Objectives seek to prevent and eliminate the causes of bird species loss and maintain and enhance current levels of biodiversity.
	EU Freshwater Fish Directive (78/659/EEC)	Objectives seek to protect those fresh water bodies identified by Member States as waters suitable for sustaining fish populations. For those waters it sets physical and chemical water quality objectives for salmonid waters and cyprinid waters.
Human Health	EU Shellfish Waters Directive (2006/113/EC)	Objectives seek to protect or improve shellfish waters in order to support shellfish life and growth, therefore contributing to the high quality of shellfish products directly edible by man.
	EU Environment and Health Strategy 2004-2010	Objectives seek to prevent and reduce the impacts of pollution on human health.
	Major Accidents (Seveso) Directive (96/82/EC as amended)	Objectives seek to prevent major accidents involving dangerous substances and limit their consequences for man and the environment, with a view to ensuring high levels of protection throughout the Community.
Air	Air Quality Directive 2008/50/EC	Sets standards and target dates for reducing concentrations of fine particles, which together with coarser particles known as PM ₁₀ already subject to legislation, are among the most dangerous pollutants for human health.
	IPPC Directive (96/61/EC) as amended by Directive 2008/1/EC	Objective is to achieve a high level of protection of the environment through measures to prevent or, where that is not practicable, to reduce emissions to air, water and land. The Directive provides an integrated approach to establish pollution prevention from stationary "installations".

Cultural Heritage	European Landscape Convention 2000	Provides for the protection, management and planning of landscapes.
	Granada Convention for protection of the Architectural Heritage of Europe 1985	Sets out general objectives of all signatory states including Ireland to meet international standards in the identification and protection of architectural heritage including groups of buildings and monuments and their settings.
	European Convention on protection of Architectural Heritage 1992	Provides the basic framework for policy on the protection of the archaeological heritage.
Water	The Water Framework Directive (2000/60/EC)	Objectives seek to maintain and enhance the quality of all surface waters in the EU.
	Urban Wastewater Treatment Directive (91/271/EEC) as amended by Directive 98/15/EEC	The primary objective is to protect the environment from the adverse effects of discharges of urban wastewater, by the provision of urban wastewater collecting systems (sewerage) and treatment plants for urban centres. The Directive also provides general rules for the sustainable disposal of sludge arising from wastewater treatment.
	The Drinking Water Directive 98/83/EC	The objective of the Drinking Water Directive is to protect the health of the consumers in the European Union and to make sure the water is wholesome and clean.
	Floods Directive 2007/60/EC	Its aim is to reduce and manage the risks that floods pose to human health, the environment, cultural heritage and economic activity.
	EU Dangerous Substances Directive (76/464/EEC)	The objective is to regulate potential aquatic pollution by thousands of chemicals produced in Europe. The Directive covers discharges to inland surface waters, territorial waters, inland coastal waters and groundwater.
Waste	Waste Framework Directive 2006/12/EC (revised by 2008/98/EC)	The revised sets the basic concepts and definitions related to waste management and lays down waste management principles such as the "polluter pays principle" or the "waste hierarchy".

Source: Adapted from SEA of PRPs for Designated Shellfish Waters –Waterford & Wexford and additional information from http://ec.europa.eu/environment/policies_en.htm

National Legislation, Plans, Policies and Programmes

Topic	Title	Summary of Objectives
Biodiversity	The Wildlife Act 1976 and The Wildlife (Amendment) Act 2000	Provide for the protection of Wildlife (both Flora and Fauna) and the control of activities, which may impact adversely on the conservation of Wildlife.
	European Communities (Natural Habitats) Regulations (SI 94/1997 as amended by SI 233/1998 and SI 378/2005)	These Regulations give effect to Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (Habitats Directive) and the Minister to designate special areas of conservation (endangered species and habitats of endangered species) as a contribution to an EU Community network to be known as NATURA 2000.
	Quality of Salmonid Waters Regulations 1988 (SI 293 of 1998)	Prescribe quality standards for salmonid waters and designate the waters to which they apply, together with the sampling programmes and the methods of analysis and inspection to be used by local authorities to determine compliance with the standards. Also, give effect to Council Directive No. 78/659/EEC on the quality of fresh waters needing protection or improvement in order to support fish life.
	National Biodiversity Plan 2002	Secure the conservation, including where possible the enhancement, and sustainable use of biological diversity in Ireland.
Human Health	European Communities (Quality of Shellfish Waters) Regulations 2006 (SI 268 of 2006), as amended by SI 55 of 2009 and SI 464 of 2009	Give effect to Council Directive 79/923/EEC of 30 October 1979 on the quality required of shellfish waters and prescribe quality standards for shellfish waters and designate the waters to which they apply, together with sampling and analysis procedures to be used to determine compliance with the standards.
Air	Air Quality Standards Regulations 2002 (SI 271 of 2002)	Transposed the EU Air Quality Framework Directive 96/62/EC (superseded by Air Quality Directive 2008/50/EC) on ambient air quality assessment and management.
	The Heritage Act, 1995	Promote public interest in and knowledge, appreciation and protection of the Natural Heritage
	National Heritage Plan 2002	Sets out a clear and coherent strategy and framework for the protection and enhancement of or heritage

Cultural Heritage	Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999	Makes provision for the carrying out of a National Inventory of Architectural Heritage (NIAH). The purpose of the NIAH is to identify, record, and evaluate the post-1700 architectural heritage of Ireland, uniformly and consistently as an aid in the protection and conservation of the built heritage. NIAH surveys provide the basis for the recommendations of the Minister for the Environment, Heritage and Local Government to the planning authorities for the inclusion of particular structures in their Record of Protected Structures (RPS).
	Planning and Development Acts 2000-2010	Part IV applies to the protection of architectural heritage.
Water	Water Services Act 2007	Provides the legislative context, governing functions, standards, obligations and practice in relation to the planning, management and delivery of water supply and wastewater collection and treatment services.
	Urban Waste Water Treatment Regulations, 2001 (SI 254 of 2001), as amended by SI 48 of 2010	Prescribe requirements in relation to the provision of collection systems and treatment standards and other requirements for urban waste water treatment plants, generally and in sensitive areas.
	European Communities (Drinking Water) Regulations 2000 (SI 439 of 2000), as amended by SI 278 of 2007 and SI 106 of 2007	Prescribe quality standards to be applied in relation to certain supplies of drinking water, including requirements as to sampling frequency, methods of analysis, the provision of information to consumers and related matters. Give effect to provisions of EU Council Directive 98/83/EC on the quality of water intended for human consumption.
	European Communities (Water Policy) Regulations (SI 722 of 2003), as amended by SI 413 of 2005 & SI No 219 of 2008	Provide for the transposition into Irish national law of the provisions of the EU Water Framework Directive.
	Water Conservation Regulations 2008 (SI No. 527 of 2008)	Specifies that corrective action be taken to prevent wastage or excessive consumption of water.

Source: Adapted from SEA of PRPs for Designated Shellfish Waters –Waterford & Wexford and additional information from www.environ.ie and www.epa.ie

Regional Plans, Policies and Programmes

Topic	Title	Summary of Objectives
Human Health	Regional Planning Guidelines	Provide for the implementation of the National Spatial Strategy at regional level and set out strategic planning guidance to Local Authorities and other bodies across the South-East region.
Water	River Basin Management Plan for the South Eastern River Basin District	Achieve at least good water quality status by 2015 to meet the requirements of the Water Framework Directive.
	Waterford Harbour Pollution Reduction Programme	Compliance with the standards and objectives established by the Quality of Shellfish Waters Regulations 2006 for the designated shellfish growing waters at Waterford Harbour.
Waste	Joint Waste Management Plan for the South East Region 2006	To promote waste prevention and minimisation through source reduction, producer responsibility and public awareness and to manage the recovery/recycling/disposal of waste arising on a regional basis.

Appendix 3: Site Synopsis

SITE NAME: RIVER BARROW AND RIVER NORE

SITE CODE: 002162

This site consists of the freshwater stretches of the Barrow/Nore River catchments as far upstream as the Slieve Bloom Mountains and it also includes the tidal elements and estuary as far downstream as Creadun Head in Waterford. The site passes through eight counties – Offaly, Kildare, Laois, Carlow, Kilkenny, Tipperary, Wexford and Waterford. Major towns along the edge of the site include Mountmellick, Portarlinton, Monasterevin, Stradbally, Athy, Carlow, Leighlinbridge, Graiguenamanagh, New Ross, Inistioge, Thomastown, Callan, Bennettsbridge, Kilkenny and Durrow. The larger of the many tributaries include the Lerr, Fushoge, Mountain, Aughavaud, Owenass, Boherbaun and Stradbally Rivers of the Barrow and the Delour, Dinin, Erkina, Owveg, Munster, Arrigle and King's Rivers on the Nore. Both rivers rise in the Old Red Sandstone of the Slieve Bloom Mountains before passing through a band of Carboniferous shales and sandstones. The Nore, for a large part of its course, traverses limestone plains and then Old Red Sandstone for a short stretch below Thomastown. Before joining the Barrow it runs over intrusive rocks poor in silica. The upper reaches of the Barrow also runs through limestone. The middle reaches and many of the eastern tributaries, sourced in the Blackstairs Mountains, run through Leinster Granite. The southern end, like the Nore runs over intrusive rocks poor in silica. Waterford Harbour is a deep valley excavated by glacial floodwaters when the sea level was lower than today. The coast shelves quite rapidly along much of the shore.

The site is a candidate SAC selected for alluvial wet woodlands and petrifying springs, priority habitats on Annex I of the E.U. Habitats Directive. The site is also selected as a candidate SAC for old oak woodlands, floating river vegetation, estuary, tidal mudflats, *Salicornia* mudflats, Atlantic salt meadows, Mediterranean salt meadows, dry heath and eutrophic tall herbs, all habitats listed on Annex I of the E.U. Habitats Directive. The site is also selected for the following species listed on Annex II of the same directive - Sea Lamprey, River Lamprey, Brook Lamprey, Freshwater Pearl Mussel, Nore Freshwater Pearl Mussel, Crayfish, Twaite Shad, Atlantic Salmon, Otter, Desmoulin's Whorl Snail *Vertigo moulinsiana* and the Killarney Fern.

Good examples of Alluvial Forest are seen at Rathsnagadan, Murphy's of the River, in Abbeylax estate and along other shorter stretches of both the tidal and freshwater elements of the site. Typical species seen include Almond Willow (*Salix triandra*), White Willow (*S. alba*), Grey Willow (*S. cinerea*), Crack Willow (*S. fragilis*), Osier (*S. viminalis*), with Iris (*Iris pseudacorus*), Hemlock Water-dropwort (*Oenanthe crocata*), Angelica (*Angelica*

sylvestris), Thin-spiked Wood-sedge (*Carex strigosa*), Pendulous Sedge (*C. pendula*), Meadowsweet (*Filipendula ulmaria*), Valerian (*Valeriana officinalis*) and the Red Data Book species Nettle-leaved Bellflower (*Campanula trachelium*). Three rare invertebrates have been recorded in this habitat at Murphy's of the River. These are: *Neoascia obliqua* (Diptera: Syrphidae), *Tetanocera freyi* (Diptera: Sciomyzidae) and *Dictya umbrarum* (Diptera: Sciomyzidae).

A good example of petrifying springs with tufa formations occurs at Dysart Wood along the Nore. This is a rare habitat in Ireland and one listed with priority status on Annex I of the EU Habitats Directive. These hard water springs are characterised by lime encrustations, often associated with small waterfalls. A rich bryophyte flora is typical of the habitat and two diagnostic species, *Cratoneuron commutatum* var. *commutatum* and *Eucladium verticillatum*, have been recorded.

The best examples of old Oak woodlands are seen in the ancient Park Hill woodland in the estate at Abbeyleix; at Kyleadohir, on the Delour, Forest Wood House, Kylecorragh and Brownstown Woods on the Nore; and at Cloghristic Wood, Drummond Wood and Borris Demesne on the Barrow, though other patches occur throughout the site. Abbeyleix Woods is a large tract of mixed deciduous woodland which is one of the only remaining true ancient woodlands in Ireland. Historical records show that Park Hill has been continuously wooded since the sixteenth century and has the most complete written record of any woodland in the country. It supports a variety of woodland habitats and an exceptional diversity of species including 22 native trees, 44 bryophytes and 92 lichens. It also contains eight indicator species of ancient woodlands. Park Hill is also the site of two rare plants, Nettle-leaved Bellflower and the moss *Leucodon sciuroides*. It has a typical bird fauna including Jay, Long-eared Owl and Raven. A rare invertebrate, *Mitostoma chrysomelas*, occurs in Abbeyleix and only two other sites in the country. Two flies *Chrysogaster virescens* and *Hybomitra muhlfeldi* also occur. The rare Myxomycete fungus, *Licea minima* has been recorded from woodland at Abbeyleix.

Oak woodland covers parts of the valley side south of Woodstock and is well developed at Brownsford where the Nore takes several sharp bends. The steep valley side is covered by Oak (*Quercus* spp.), Holly (*Ilex aquifolium*), Hazel (*Corylus avellana*) and Birch (*Betula pubescens*) with some Beech (*Fagus sylvatica*) and Ash (*Fraxinus excelsior*). All the trees are regenerating through a cover of Bramble (*Rubus fruticosus* agg.), Foxglove (*Digitalis purpurea*) Wood Rush (*Luzula sylvatica*) and Broad Buckler-fern (*Dryopteris dilatata*).

On the steeply sloping banks of the River Nore about 5 km west of New Ross, in County Kilkenny, Kylecorragh Woods form a prominent feature in the landscape. This is an excellent example of a relatively undisturbed, relict Oak woodland with a very good tree canopy. The wood is quite damp and there is a rich and varied ground flora. At Brownstown a small, mature Oak-dominant woodland occurs on a steep slope. There is younger woodland to the north and east of it. Regeneration throughout is evident. The

understorey is similar to the woods at Brownsford. The ground flora of this woodland is developed on acidic, brown earth type soil and comprises a thick carpet of Bilberry (*Vaccinium myrtillus*), Heather (*Calluna vulgaris*), Hard Fern (*Blechnum spicant*), Cow-wheat (*Melampyrum* spp.) and Bracken (*Pteridium aquilinum*).

Borris Demesne contains a very good example of a semi-natural broad-leaved woodland in very good condition. There is quite a high degree of natural re-generation of Oak and Ash through the woodland. At the northern end of the estate Oak species predominate. Drummond Wood, also on the Barrow, consists of three blocks of deciduous woods situated on steep slopes above the river. The deciduous trees are mostly Oak species. The woods have a well established understorey of Holly (*Ilex aquifolium*), and the herb layer is varied, with Brambles abundant. Whitebeam (*Sorbus devoniensis*) has also been recorded.

Eutrophic tall herb vegetation occurs in association with the various areas of alluvial forest and elsewhere where the flood-plain of the river is intact. Characteristic species of the habitat include Meadowsweet (*Filipendula ulmaria*), Purple Loosestrife (*Lythrum salicaria*), Marsh Ragwort (*Senecio aquaticus*), Ground Ivy (*Glechoma hederacea*) and Hedge Bindweed (*Calystegia sepium*). Indian Balsam (*Impatiens glandulifera*), an introduced and invasive species, is abundant in places.

Floating River Vegetation is well represented in the Barrow and in the many tributaries of the site. In the Barrow the species found include Water Starworts (*Callitriche* spp.), Canadian Pondweed (*Elodea canadensis*), Bulbous Rush (*Juncus bulbosus*), Milfoil (*Myriophyllum* spp.), *Potamogeton x nitens*, Broad-leaved Pondweed (*P. natans*), Fennel Pondweed (*P. pectinatus*), Perfoliated Pondweed (*P. perfoliatus*) and Crowfoots (*Ranunculus* spp.). The water quality of the Barrow has improved since the vegetation survey was carried out (EPA, 1996).

Dry Heath at the site occurs in pockets along the steep valley sides of the rivers especially in the Barrow Valley and along the Barrow tributaries where they occur in the foothills of the Blackstairs Mountains. The dry heath vegetation along the slopes of the river bank consists of Bracken (*Pteridium aquilinum*) and Gorse (*Ulex europaeus*) species with patches of acidic grassland vegetation. Additional typical species include Heath Bedstraw (*Galium saxatile*), Foxglove (*Digitalis purpurea*), Common Sorrel (*Rumex acetosa*) and Bent Grass (*Agrostis stolonifera*). On the steep slopes above New Ross the Red Data Book species Greater Broomrape (*Orobanche rapum-genistae*) has been recorded. Where rocky outcrops are shown on the maps Bilberry (*Vaccinium myrtillus*) and Wood Rush (*Luzula sylvatica*) are present. At Ballyhack a small area of dry heath is interspersed with patches of lowland dry grassland. These support a number of Clover species including the legally protected Clustered Clover (*Trifolium glomeratum*) - a species known from only one other site in Ireland. This grassland community is especially well developed on the west side of the mud-capped walls by the road. On the east of the cliffs a group of rock-dwelling species occur, i.e. English Stonecrop (*Sedum anglicum*), Sheep's-bit (*Jasione montana*) and

Wild Madder (*Rubia peregrina*). These rocks also support good lichen and moss assemblages with *Ramalina subfarinacea* and *Hedwigia ciliata*.

Dry Heath at the site generally grades into wet woodland or wet swamp vegetation lower down the slopes on the river bank. Close to the Blackstairs Mountains, in the foothills associated with the Aughnabrisk, Aughavaud and Mountain Rivers there are small patches of wet heath dominated by Purple Moor-grass (*Molinia caerulea*) with Heather (*Calluna vulgaris*), Tormentil (*Potentilla erecta*), Carnation Sedge (*Carex panicea*) and Bell Heather (*Erica cinerea*).

Saltmeadows occur at the southern section of the site in old meadows where the embankment has been breached, along the tidal stretches of in-flowing rivers below Stokestown House, in a narrow band on the channel side of Common Reed (*Phragmites*) beds and in narrow fragmented strips along the open shoreline. In the larger areas of salt meadow, notably at Carrickcloney, Ballinlaw Ferry and Rochestown on the west bank; Fisherstown, Alderton and Great Island to Dunbrody on the east bank, the Atlantic and Mediterranean sub types are generally intermixed. At the upper edge of the salt meadow in the narrow ecotonal areas bordering the grasslands where there is significant percolation of salt water, the legally protected species Borrer's Saltmarsh-grass (*Puccinellia fasciculata*) and Meadow Barley (*Hordeum secalinum*) (Flora Protection Order, 1987) are found. The very rare Divided Sedge (*Carex divisa*) is also found. Sea Rush (*Juncus maritimus*) is also present. Other plants recorded and associated with salt meadows include Sea Aster (*Aster tripolium*), Sea Thrift (*Armeria maritima*), Sea Couch (*Elymus pycnanthus*), Spear-leaved Orache (*Atriplex prostrata*), Lesser Sea-spurrey (*Spergularia marina*), Sea Arrowgrass (*Triglochin maritima*) and Sea Plantain (*Plantago maritima*).

Salicornia and other annuals colonising mud and sand are found in the creeks of the saltmarshes and at the seaward edges of them. The habitat also occurs in small amounts on some stretches of the shore free of stones.

The estuary and the other Habitats Directive Annex I habitats within it form a large component of the site. Extensive areas of intertidal flats, comprised of substrates ranging from fine, silty mud to coarse sand with pebbles/stones are present. Good quality intertidal sand and mudflats have developed on a linear shelf on the western side of Waterford Harbour, extending for over 6 km from north to south between Passage East and Creadaun Head, and in places are over 1 km wide. The sediments are mostly firm sands, though grade into muddy sands towards the upper shore. They have a typical macro-invertebrate fauna, characterised by polychaetes and bivalves. Common species include *Arenicola marina*, *Nephtys hombergii*, *Scoloplos armiger*, *Lanice conchilega* and *Cerastoderma edule*.

The western shore of the harbour is generally stony and backed by low cliffs of glacial drift. At Woodstown there is a sandy beach, now much influenced by recreation pressure and erosion. Behind it a lagoonal marsh has been impounded which runs westwards from Gaultiere Lodge along the course of a slow stream. An extensive reedbed occurs here. At the edges is a tall fen dominated by sedges (*Carex* spp.), Meadowsweet, Willowherb (*Epilobium* spp.) and rushes (*Juncus* spp.). Wet woodland also occurs. This area supports populations of typical waterbirds including Mallard, Snipe, Sedge Warbler and Water Rail.

The dunes which fringe the strand at Duncannon are dominated by Marram grass (*Ammophila arenaria*) towards the sea. Other species present include Wild Sage (*Salvia verbenaca*), a rare Red Data Book species. The rocks around Duncannon ford have a rich flora of seaweeds typical of a moderately exposed shore and the cliffs themselves support a number of coastal species on ledges, including Thrift (*Armeria maritima*), Rock Samphire (*Crithmum maritimum*) and Buck's-horn Plantain (*Plantago coronopus*).

Other habitats which occur throughout the site include wet grassland, marsh, reed swamp, improved grassland, arable land, quarries, coniferous plantations, deciduous woodland, scrub and ponds.

Seventeen Red Data Book plant species have been recorded within the site, most in the recent past. These are Killarney Fern (*Trichomanes speciosum*), Divided Sedge (*Carex divisa*), Clustered Clover (*Trifolium glomeratum*), Basil Thyme (*Acinos arvensis*), Hemp nettle (*Galeopsis angustifolia*), Borrer's Saltmarsh Grass (*Puccinellia fasciculata*), Meadow Barley (*Hordeum secalinum*), Opposite-leaved Pondweed (*Groenlandia densa*), Autumn Crocus (*Colchicum autumnale*), Wild Sage (*Salvia verbenaca*), Nettle-leaved Bellflower (*Campanula trachelium*), Saw-wort (*Serratula tinctoria*), Bird Cherry (*Prunus padus*), Blue Fleabane (*Erigeron acer*), Fly Orchid (*Ophrys insectifera*), Broomrape (*Orobanche hederæ*) and Greater Broomrape (*Orobanche rapum-genistæ*). Of these the first nine are protected under the Flora Protection Order 1999. Divided Sedge (*Carex divisa*) was thought to be extinct but has been found in a few locations in the site since 1990. In addition plants which do not have a very wide distribution in the country are found in the site including Thin-spiked Wood-sedge (*Carex strigosa*), Field Garlic (*Allium oleraceum*) and Summer Snowflake (*Leucojum aestivum*). Six rare lichens, indicators of ancient woodland, are found including *Lobaria laetevirens* and *L. pulmonaria*. The rare moss *Leucodon sciurioides* also occurs.

The site is very important for the presence of a number of EU Habitats Directive Annex II animal species including Freshwater Pearl Mussel (*Margaritifera margaritifera* and *M. m. durrovensis*), Freshwater Crayfish (*Austropotamobius pallipes*), Salmon (*Salmo salar*), Twaite Shad (*Alosa fallax fallax*), three Lamprey species - Sea (*Petromyzon marinus*), Brook (*Lampetra planeri*) and River (*Lampetra fluviatilis*), the marsh snail *Vertigo moulinsiana* and Otter (*Lutra lutra*). This is the only site in the world for the hard water form of the Pearl Mussel *M. m. durrovensis* and one of only a handful of spawning grounds

in the country for Twaite Shad. The freshwater stretches of the River Nore main channel is a designated salmonid river. The Barrow/Nore is mainly a grilse fishery though spring salmon fishing is good in the vicinity of Thomastown and Inistioge on the Nore. The upper stretches of the Barrow and Nore, particularly the Owenass River, are very important for spawning.

The site supports many other important animal species. Those which are listed in the Irish Red Data Book include Daubenton's Bat (*Myotis daubentoni*), Badger (*Meles meles*), Irish Hare (*Lepus timidus hibernicus*) and Frog (*Rana temporaria*). The rare Red Data Book fish species Smelt (*Osmerus eperlanus*) occurs in estuarine stretches of the site. In addition to the Freshwater Pearl Mussel, the site also supports two other freshwater Mussel species, *Anodonta anatina* and *A. cygnea*.

The site is of ornithological importance for a number of E.U. Birds Directive Annex I species including Greenland White-fronted Goose, Whooper Swan, Bewick's Swan, Bar-tailed Godwit, Peregrine and Kingfisher. Nationally important numbers of Golden Plover and Bar-tailed Godwit are found during the winter. Wintering flocks of migratory birds are seen in Shanahoe Marsh and the Curragh and Goul Marsh, both in Co. Laois and also along the Barrow Estuary in Waterford Harbour. There is also an extensive autumnal roosting site in the reedbeds of the Barrow Estuary used by Swallows before they leave the country.

Landuse at the site consists mainly of agricultural activities – many intensive, principally grazing and silage production. Slurry is spread over much of this area. Arable crops are also grown. The spreading of slurry and fertiliser poses a threat to the water quality of the salmonid river and to the populations of Habitats Directive Annex II animal species within the site. Many of the woodlands along the rivers belong to old estates and support many non-native species. Little active woodland management occurs. Fishing is a main tourist attraction along stretches of the main rivers and their 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 on the rivers. There is net fishing in the estuary and a mussel bed also. Other recreational activities such as boating, golfing and walking, particularly along the Barrow towpath are also popular. There is a golf course on the banks of the Nore at Mount Juliet and GAA pitches on the banks at Inistioge and Thomastown. There are active and disused sand and gravel pits throughout the site. Several industrial developments, which discharge into the river, border the site. New Ross is an important shipping port. Shipping to and from Waterford and Belview ports also passes through the estuary.

The main threats to the site and current damaging activities include high inputs of nutrients into the river system from agricultural run-off and several sewage plants, overgrazing within the woodland areas, and invasion by non-native species, for example Cherry Laurel and Rhododendron (*Rhododendron ponticum*). The water quality of the site remains vulnerable. Good quality water is necessary to maintain the populations of the Annex II

animal species listed above. Good quality is dependent on controlling fertilisation of the grasslands, particularly along the Nore. It also requires that sewage be properly treated before discharge. Drainage activities in the catchment can lead to flash floods which can damage the many Annex II species present. Capital and maintenance dredging within the lower reaches of the system pose a threat to migrating fish species such as lamprey and shad. Land reclamation also poses a threat to the salt meadows and the populations of legally protected species therein.

Overall, the site is of considerable conservation significance for the occurrence of good examples of habitats and of populations of plant and animal species that are listed on Annexes I and II of the E.U. Habitats Directive respectively. Furthermore it is of high conservation value for the populations of bird species that use it. The occurrence of several Red Data Book plant species including three rare plants in the salt meadows and the population of the hard water form of the Pearl Mussel which is limited to a 10 km stretch of the Nore, add further interest to this site.

6.10.2006