

# APPENDIX II: NON-TECHNICAL SUMMARY

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## ENVIRONMENTAL REPORT OF THE WESTPORT TOWN AND ENVIRONS DEVELOPMENT PLAN 2010-2016

### STRATEGIC ENVIRONMENTAL ASSESSMENT



**For: Westport Town Council**

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Westport  
County Mayo



**& Mayo County Council**

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**FEBRUARY 2010**

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## **Section 1 Introduction and Terms of Reference**

This is the Non-Technical Summary of the Environmental Report of the Westport Town and Environs Development Plan Strategic Environmental Assessment (SEA). The purpose of the report is to provide a clear understanding of the likely environmental consequences of decisions regarding the future accommodation of growth in certain areas of Westport and its Environs.

### **What is an SEA?**

SEA is a systematic process of predicting and evaluating the likely environmental effects of implementing a proposed plan, or other strategic action, in order to ensure that these effects are appropriately addressed at the earliest appropriate stage of decision-making on a par with economic and social considerations.

### **Why is it needed?**

The SEA was carried out in order to comply with the provisions of the SEA Regulations and in order to improve planning and environmental management within Westport Town and its Environs. This report should be read in conjunction with the Environmental Report and the Development Plan.

### **How does it work?**

All of the main environmental issues in Westport Town and Environs were assembled and presented to the team who were preparing the new Plan. This helped them to devise a plan that protects whatever is sensitive in the environment. It also helped the identification of environmental problems/issues in the Plan area - so that these won't get any worse - and ideally the plan tries to improve these.

To decide how best to make a plan that protects the environment as much as possible the Planners examined alternative versions of the Plan. This helped to highlight the type of plans that are least likely to harm the environment.

## Section 2 The Westport Town and Environs Development Plan

### 2.1 Structure and Content

The Westport Town and Environs Development Plan consists of a Written Statement, an Environmental Report and Development Plan maps, which give a graphic representation of the proposals of the Plan, indicating land use and other development standards together with various local objectives.

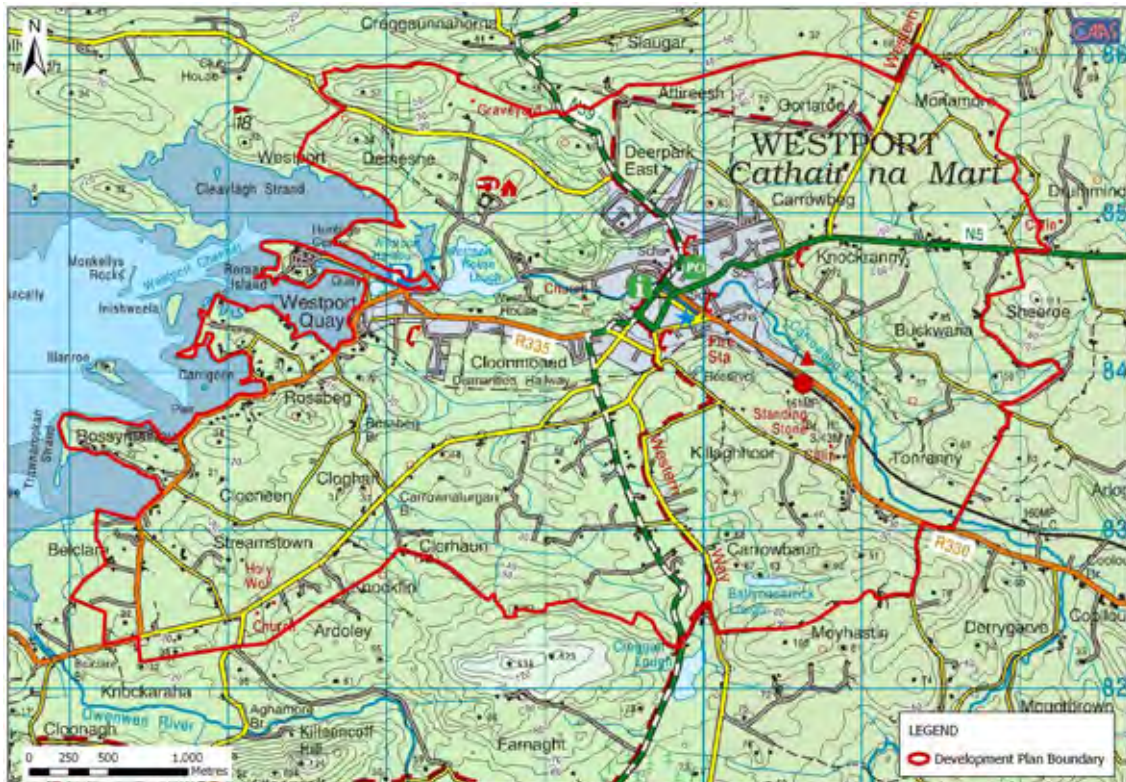


Figure 2.1 The Development Plan Boundary

Policies and objectives included in the Plan include those which relate to: Regional Role of the Town, Town Function, Population, Employment and Industry, Infrastructural Services, Water & Sewerage, Water, Flooding, Waste Management, Housing, Retail, Education, Community Facilities, Open Space and Recreational Facilities, Townscape And Conservation of the Built Environment, Obsolescence/Derelict Sites, Environment, Landscapes & Natural Environment, Water Quality, Land Use, Major Accidents Directive and Development Contributions.

### 2.2 What the Development Plan will seek to do

The Development Plan will seek to:

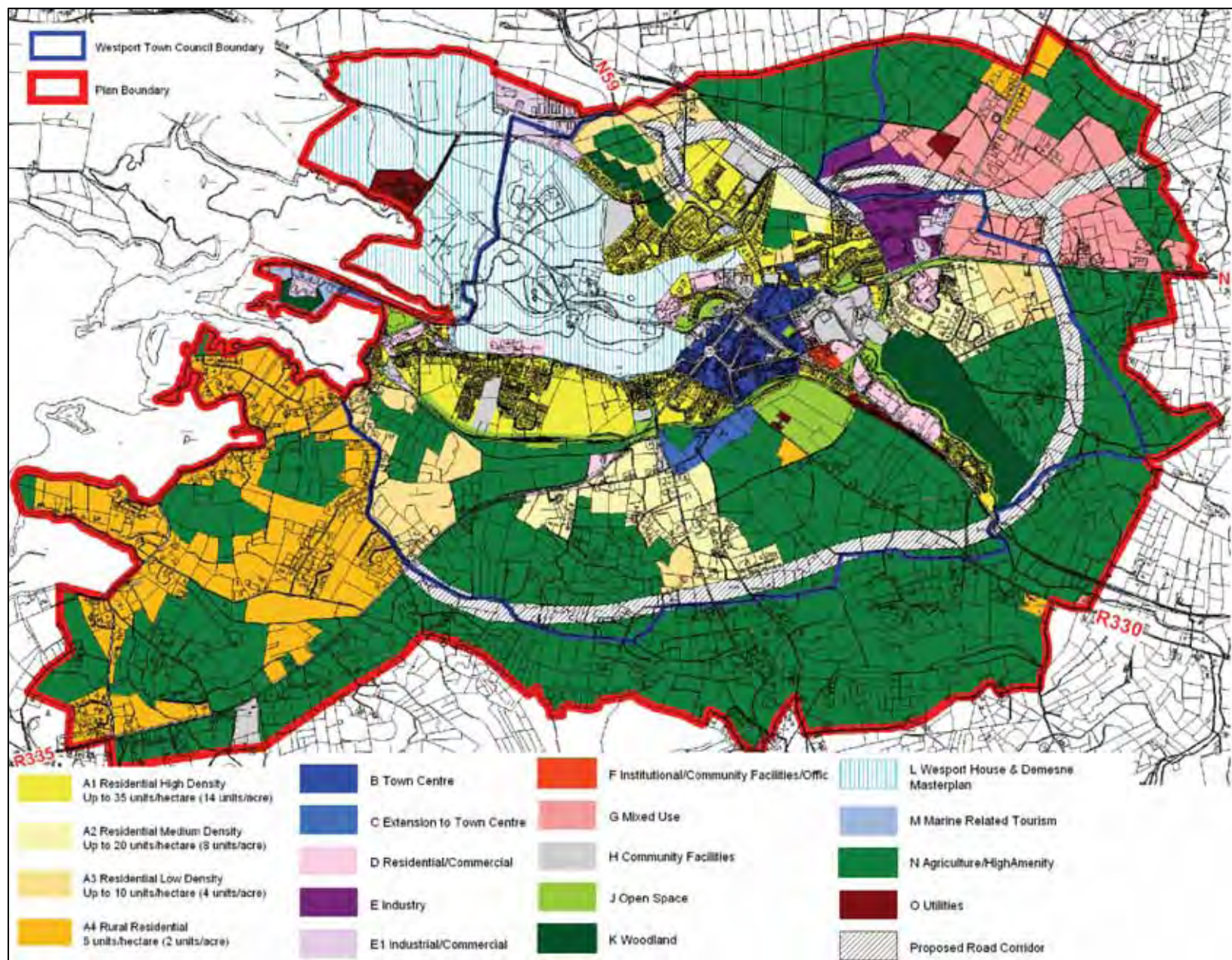
- To provide a framework which will allow for a balanced and coordinated development of the Plan area in the interests of the common good and the proper planning and sustainable development of the area;
- To reinforce the existing strong urban structure and to consolidate and extend the urban core whilst protecting the unique drumlin topography of the Town;

- To clearly indicate the overall development strategy for the Plan area including areas capable of accommodating built development, the conservation of certain areas and the provision of passive and active amenity spaces;
- To provide for a mix of uses within the Plan area which will increase the viability and the sustainability of residential areas and which will allow for the efficient provision of social and community infrastructure as well as the efficient use of existing services and utilities infrastructure;
- To provide design guidelines for new development in the Plan area and in particular to provide guidance on appropriate site planning, overall building form, building typologies and scale of proposed development;
- To identify the requirement for new roads and other infrastructure and to indicate the routing and/or land requirements for such proposals;
- To identify suitable development which utilises Roman Island as a tourism/recreational area for Westport;
- To identify lands for employment and enterprise uses;
- To provide for the protection of areas of high amenity; and,
- To control the spread of uncoordinated ribbon development in the Environs of Westport in the interests of the common good and the proper planning and sustainable development of the area.

## **2.3 Land Use Zoning**

Overleaf is the Land Use Zoning map included in the Development Plan.





**Figure 2.2 Westport Town and Environs Land Use Zoning Map from the Draft Development Plan**

## Section 3 Existing Environment

### 3.1 Introduction

The environmental baseline of Westport Town and Environs is described in this section. This baseline together with the Strategic Environmental Objectives, which are outlined in Section 4 of the Environmental Report, was used in order to identify, describe and evaluate the likely significant environmental effects of implementing the Development Plan and in order to determine appropriate monitoring measures.

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. A description is also included 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 the Development Plan.

The Westport Town and Environs Plan area is located in County Mayo on the West Coast of Ireland. The town of Westport stands on the Carrowbeg River, in the west of County Mayo on the easterly shore of Westport Bay, to the east of Clew Bay. The town was designed in 1780 by James Wyatt and grew as a prosperous centre for linen and cotton trade until the 1800s. Westport, as one of the few planned towns in the Country, has a distinct and valuable urban design and visual quality and is generally regarded as one of the most important heritage towns in Ireland.

Westport is the third largest town in Mayo with an urban population of 5,163 and a population of 312 in its Environs<sup>1</sup>. The town is set within a landscape characterised by a series of steep, flat-topped drumlins between which the town core is located. The core characterised by a series of planned linear streets and urban set-pieces such as the Mall, Bridge Street, Shop Street, the Octagon and the town clock.

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<sup>1</sup> Central Statistics Office (2006) *Census 2006 Volume 1 - Population Classified by Area* Cork: CSO.  
CAAS for Mayo County Council and Westport Town Council



## 3.2 Biodiversity and Flora and Fauna

### 3.2.1 Overview

Westport Town and Environs support a wide diversity of natural and semi-natural habitats. These habitats host a wide range of wild plant and animal species, which are coming under threat due to development pressures and the increasing demand for new development land. These lands include significant expanses of fresh and salt water and associated habitats, along the Carrowbeg River, Westport Bay and Clew Bay.

The Carrowbeg River runs east to west through the heart of Westport Town interacting with both the natural and built heritage to give a unique and distinct character. The Carrowbeg River flows into Westport Bay and subsequently, Clew Bay, which is protected by way of ecological designation.

Clew Bay comprises a complex series of interlocking bays and islands creating a variety of marine and terrestrial habitats. A wide range of bird species, marine invertebrates, marine bivalves, seals and other marine mammals use the bays and their adjoining habitats.

Man-made habitats within the Town are important biodiversity areas. Large areas of mixed and natural woodland are situated within the Plan area, particularly at Westport Demesne and Knockranny. Peatland is the main habitat type in the western part of County Mayo. Peat bogs lie along the southern Plan boundary.

The CORINE land cover mapping for the Westport and Environs area for the year 2000<sup>2</sup> (see Figure 3.1) which classifies land cover indicates that *agricultural lands with natural vegetation* and *transitional woodland scrub* are the main types of semi-natural land cover, particularly in the hinterland of the Town. *Continuous urban fabric* indicates the Town Centre and is surrounded by *discontinuous urban fabric*.

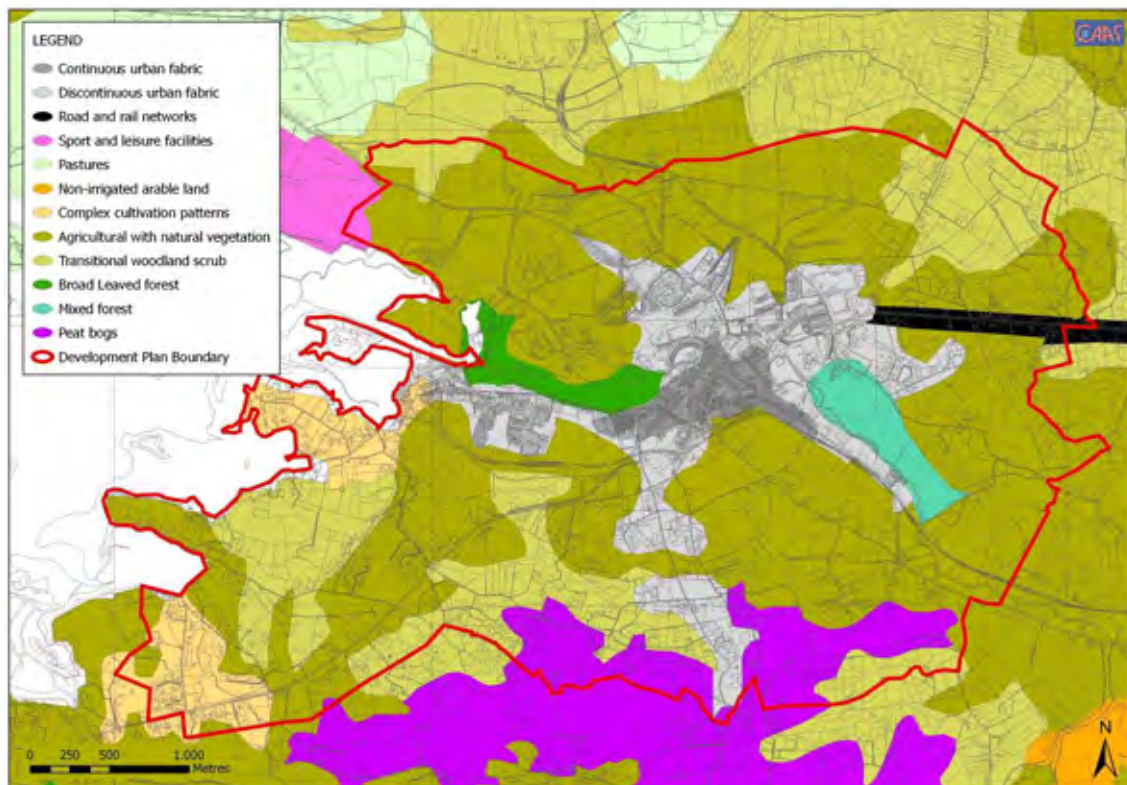


Figure 3.1 CORINE Land Cover Map (2000)

<sup>2</sup> European Environment Agency Coordination of Information on the Environment (2004) *Ireland's Corine Land Cover 2000 (CLC2000)* Copenhagen: EEA

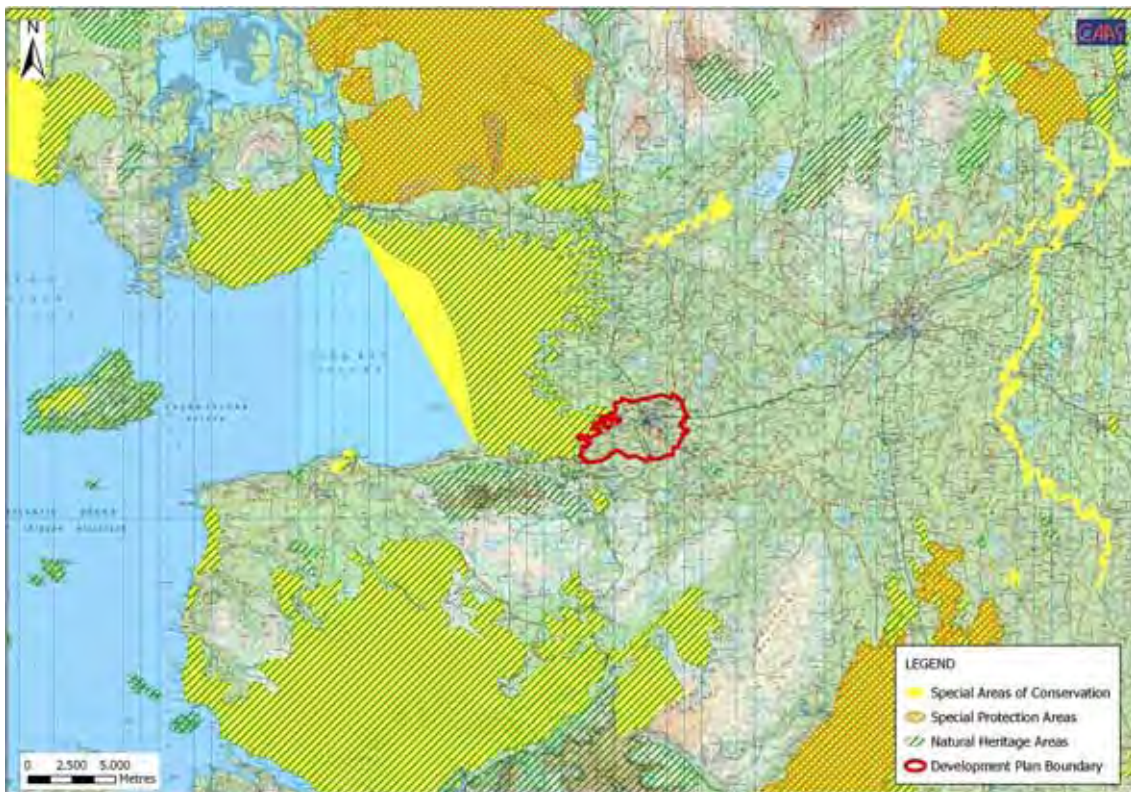


### 3.2.2 Designations

Westport is located on the easterly shore of Westport Bay which is designated for protection as part of the wider Clew Bay Complex Special Area of Conservation<sup>3</sup> (SAC) and proposed Natural Heritage Area<sup>4</sup> (pNHA).

The context of the Plan area in relation to the entire Clew Bay Complex sites and other designated sites within the region is shown on Figure 3.2. The interaction between the eastern part of the Plan boundary, the Clew Bay Complex site and Ardgommon Wood proposed NHA which is located about one kilometre to the east of the Plan area are also shown on this map.

The European Communities (Quality of Shellfish Waters) Regulations 2006 (SI No. 268 of 2006) designate and protect 14 Shellfish Waters in Ireland, giving effect to the Shellfish Waters Directive 1979<sup>5</sup> and revoking previous regulations (SI No. 200 of 1994 and SI No. 459 of 2001). The waters of Clew Bay<sup>6</sup> are one of the Shellfish Waters designated and protected by these Regulations.



**Figure 3.2 Designations within and surrounding the Plan area**

<sup>3</sup> Special Areas of Conservation (SACs) have been selected for protection under the European Council Directive on the conservation of natural habitats and of wild fauna and flora (92/43/EEC) by the DEHLG due to their conservation value for habitats and species of importance in the European Union.

<sup>4</sup> Natural Heritage Areas (NHAs) are designated due to their national conservation value for ecological and/or geological/geomorphological heritage. They cover nationally important semi-natural and natural habitats, landforms or geomorphological features, wildlife plant and animal species or a diversity of these natural attributes. NHAs are designated under the Wildlife (Amendment) Act 2000. Proposed NHAs were published on a non-statutory basis in 1995, but have not since been statutorily proposed or designated.

<sup>5</sup> Council Directive 79/923/EEC of 30 October 1979 on the quality required of shellfish waters.

<sup>6</sup> The designated area covers all that area up to the high water mark and east of a line drawn from the most northerly point at Old Head to the most easterly point at Gubbaun Point as shown on a map of public record certified by the Minister for the purposes of these Regulations and kept at the head office of the Department of Communications, Marine and Natural Resources or at such other place as the Minister has publicly notified. The designated area covers approximately 16,000 ha, up to the high water mark.

### **3.2.3 Important Issues to Consider**

Fragmentation of ecological corridors has occurred as a result the development of Westport Town and Environs. It is likely that further development will continue to cause fragmentation of ecological corridors within the Plan area.

Land cover differences between the CORINE 1990 data and the data for the year 2000 indicate a cumulative loss of agricultural areas which have natural vegetation and their associated habitats - including their flora and fauna. Differences in lands at Carrowbaun indicate what could be the beginning of a cumulative encroachment on areas of peatlands to the south of the Town.

## **3.3 Population and Human Health**

### **3.3.1 Human Health**

With regard to human health, impacts relevant to the SEA are those which arise as a result of interactions with environmental vectors (i.e. environmental components such as air, water or soil through which contaminants or pollutants, which have the potential to cause harm, can be transported so that they come into contact with human beings).

Human health has the potential to be impacted upon by environmental vectors including water, soil and air. Hazards or nuisances to human health can arise as a result of exposure to these vectors arising from incompatible adjacent land uses for example. These factors have been considered with regard to the description of: the baseline of each environmental component; and the identification and evaluation of the likely significant environmental effects of implementing the plan and the alternatives.

### **3.3.2 Population**

Westport Town together with its Environs is the third largest settlement in County Mayo with an estimated population of 6,432 persons living within the Plan area. This is calculated by adding the estimated populations of Westport Town (5,163), Environs of Westport (312) and the remainder of LAP area (957).

Population is measured in Ireland by the Central Statistics Office (CSO). The boundaries used by the CSO to measure the population of three areas in or around Westport - *Westport Town*, *Westport Environs* and *Westport Rural* - do not correspond, in the case of the CSO's *Westport Town*, to the boundaries used for the administrative boundaries of Westport Town Council, or, in the case of the CSO's *Westport Environs*, to the environs area which together with the administrative area of Westport Town Council makes up the Development Plan area.

The planning authorities have estimated that the population of the Plan area will increase to approximately 8,770 persons by 2016, the end of the Development Plan period.

### **3.3.3 Important Issues to Consider**

Certain environmental vectors within the Plan area - such as air, water or soil - have the potential to transport and deposit contaminants or pollutants, which have the potential to cause harm and adversely impact upon the health of the Plan areas population.

## **3.4 Soil**

Soil is the top layer of the earth's crust. It is formed by mineral particles, organic matter, water, air and living organisms. Soil can be considered as a non-renewable natural resource because it develops over very long timescales. It performs many vital functions including: food and other biomass production, storage, filtration and transformation of many substances including water, carbon, and nitrogen. 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. Such functions of soil are worthy of protection because of their socio-economic as well as environmental importance.<sup>7</sup>

Westport Harbour is located at the south east corner of Clew Bay. Proposals to develop the Harbour exist. The channel into the Harbour from the Bay is navigable at high tide. Environmental issues relating to the development of the proposed facility at Westport Harbour include the requirement for dredging, the amount of material to be removed, the type of material to be dredged and the methods of disposal of dredged material.

### **3.4.1 Important Issues to Consider**

Greenfield development involves the building upon and thereby sealing off of soil thus representing an environmental problem.

There is potential that soil may be polluted and contaminated as a result of pollution from agricultural sources and from development which is not serviced by appropriate waste water infrastructure.

Soil erosion due mainly to surface erosion resulting from construction works and agricultural / forestry operations has major potential to impact on water quality and fishery resources.

In addition to water quality and fishery impacts, these can impact on infrastructure and can have health and safety implication.

The removal and disposal of material dredged from Westport Harbour could, if unmitigated, cause problems for water quality and ecology.

## **3.5 Water and Waste Water**

### **3.5.1 Introduction**

Human activities, if not properly managed, can cause deterioration in water quality. Pressures exerted by human activities include the following:

- sewage and other effluents discharged to waters from point sources, e.g. pipes from treatment plants;
- discharges arising from diffuse or dispersed activities on land;
- abstractions from waters; and,
- structural alterations to water bodies.

### **3.5.2 The Water Framework Directive**

The Water Framework Directive (WFD) requires that all member states implement the necessary measures to prevent deterioration of the status of all waters - surface, ground, estuarine and coastal - and protect, enhance and restore all waters with the aim of achieving good status by 2015. All public bodies, including Mayo County Council and Westport Town Council, are required to: coordinate their policies and operations so as to maintain the good status of water bodies which are currently unpolluted; and improve polluted water bodies to good status by 2015.

For the purpose of implementing the WFD, Ireland has been divided into eight river basin districts or areas of land that are drained by a large river or number of rivers and the adjacent estuarine/coastal areas. Westport Town and Environs is located within the Western River Basin District (WRBD).

For the purposes of assessment, reporting and management, water in the RBDs has been divided into groundwater, rivers, lakes, estuarine waters and coastal waters which are in turn divided into specific,

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<sup>7</sup> Teagasc, GSI, Forest Service & EPA (2006) *Soils and Subsoils Class* Dublin: DEHLG  
CAAS for Mayo County Council and Westport Town Council

clearly defined water bodies. Each water body has been assessed, on the basis of human activity, whether it is *at risk* or *not at risk* of failing to achieve the WFD's objectives by 2015.

In order to facilitate this assessment, a four-class risk classification scheme was applied using the following terminology:

- Not at Significant Risk
- Probably Not at Significant Risk
- Probably at Significant Risk (these are likely to need improvement in order to achieve the required status)
- At Significant Risk (these will need improvement to achieve the required status)

In addition to these assessments, the WFD requires that Registers of Protected Areas (RPAs) are compiled for a number of water bodies or part of water bodies which must have extra controls on their quality by virtue of how their waters are used by people and by wildlife.

Local Authorities located in the WRBD, including Westport Town Council and Mayo County Council, are preparing a management plan which will be implemented in order to help protect and improve all waters in the WRBD. This Management Plan will provide specific policies for individual river basins in order to implement the requirements of the WFD. The first River Basin Management Plan for the Western RBD was published at the end of 2008 for public consultation.



### 3.5.3 Risk Assessments

#### 3.5.3.1 River Catchments

The two largest surface water bodies which flow through the Plan area are the Carrowbeg River - which flows through the centre of Westport Town - and the Carrownalurgan River - which flows through the south of the Town.

Figure 3.3 shows the current risk assessment for the Carrowbeg River and Carrownalurgan River. In terms of achieving the WFD's objectives by 2015 both rivers are currently rated as being *(1a) at significant risk* of failing to achieve the WFD's objectives by 2015. This rating is allocated to these rivers and their catchments as a result of the EPA's modelling of diffuse sources of pollution within the catchments.

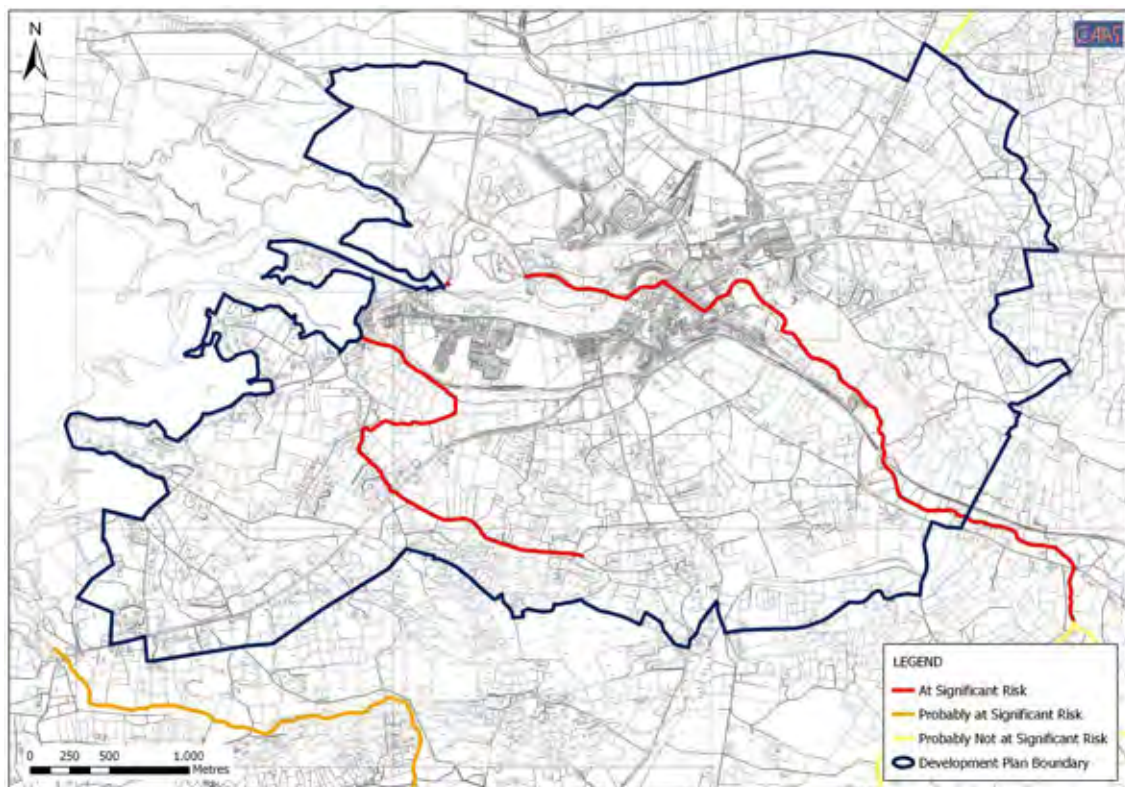


Figure 3.3 River Catchments Risk Assessment

### 3.5.3.2 Transitional Waters

Transitional waters are bodies of surface water in the vicinity of river mouths which are partly saline in character as a result of their proximity to coastal waters but which are substantially influenced by freshwater flows. These areas are important for the shell fish industry for which unpolluted water is essential.

Figure 3.4 shows the current risk assessment for the transitional waters of the Westport and Environs area. In terms of achieving the WFD's objectives by 2015 the transitional waters in Westport Bay are currently rated as being *(1b) probably at significant risk* of failing to achieve the WFD's objectives by 2015.

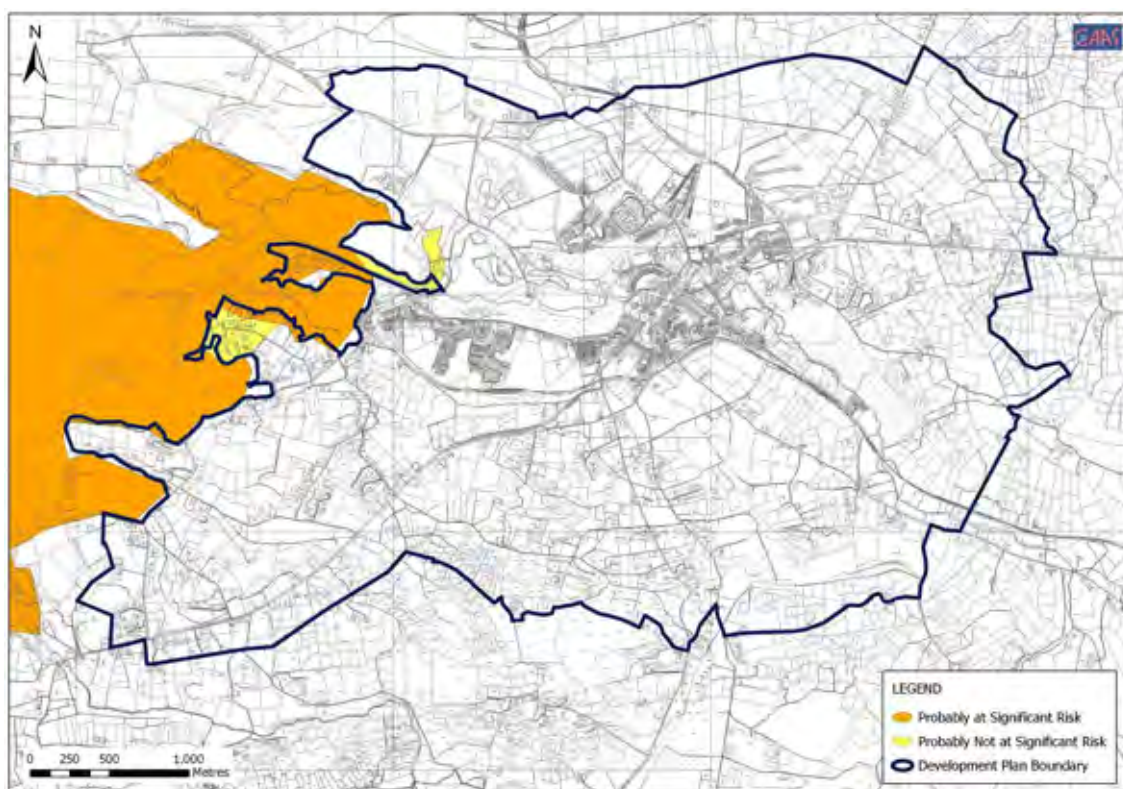


Figure 3.4 Transitional Waters Risk Assessment



### 3.5.3.3 Coastal Waters

Coastal water is surface water on the landward side of a line, every point of which is at a distance of one nautical mile on the seaward side from the nearest point of the baseline from which the breadth of territorial waters is measured, extending where appropriate up to the outer limit of transitional waters.

Figure 3.5 shows the WFD risk assessment for the coastal waters located off Westport. The coastal waters of Inner Clew Bay are rated as being *(2a) probably not at significant risk*.

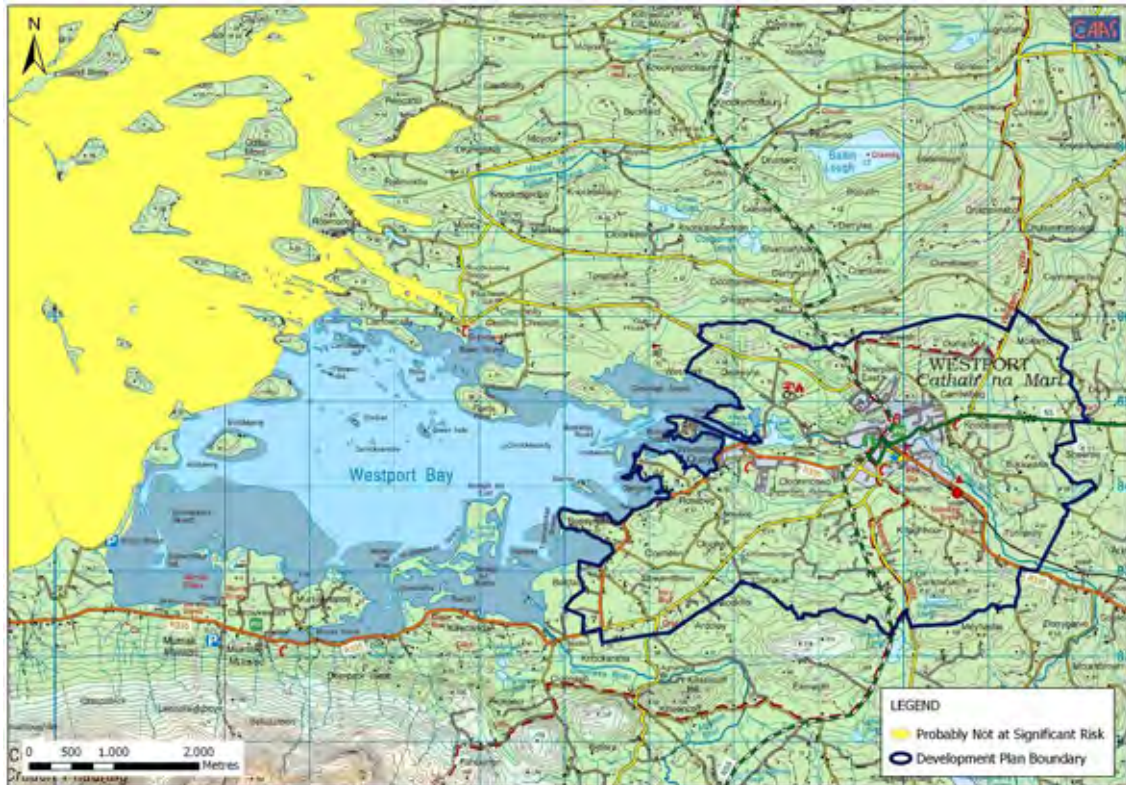


Figure 3.5 Coastal Waters Risk Assessment

### 3.5.3.4 Ground Waters

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.

Figure 3.6 maps the current risk assessment for groundwater in the Westport Town and Environs area. The groundwater bodies underlying the south, south west and east of Westport and its Environs are currently rated as being *(2a) probably not at significant risk* of failing to achieve the WFD's objectives by 2015 while groundwater bodies underlying the north and west of the Plan Area are rated as *(2b) not at significant risk*.

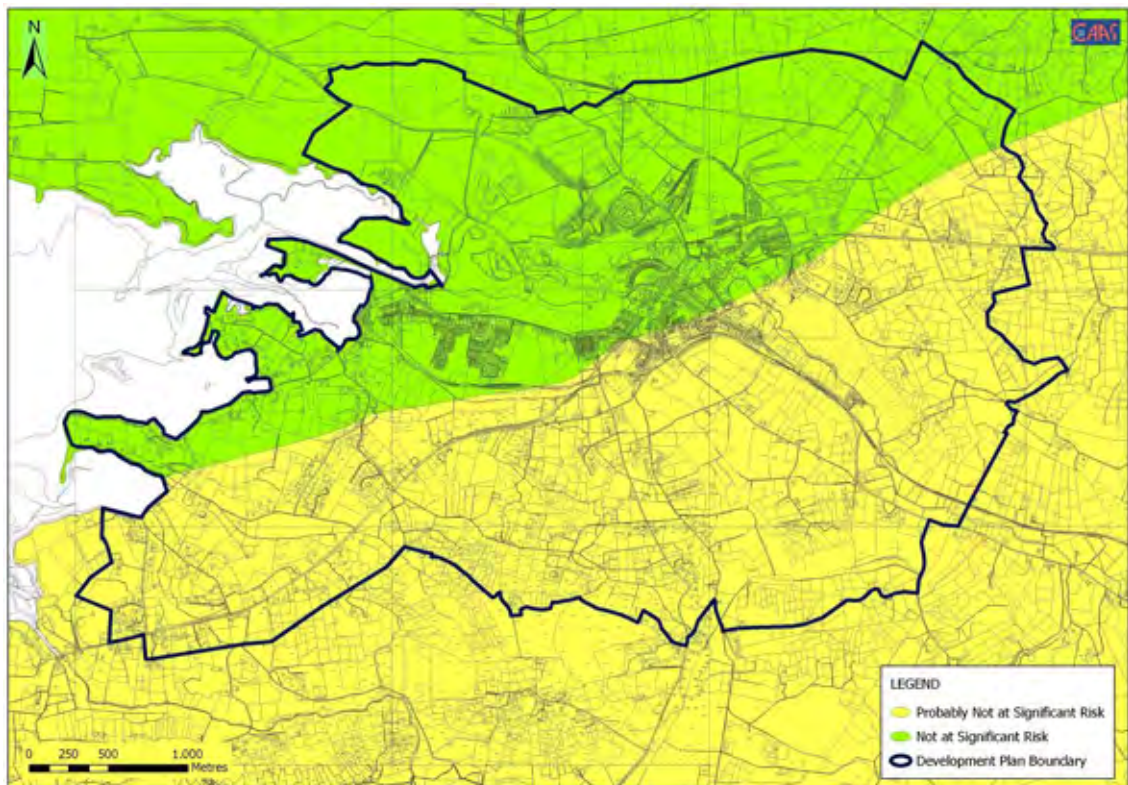


Figure 3.6 Ground Water Risk Assessment



### 3.5.4 WFD Register of Protected Areas

In addition to the assessments mentioned above, the WFD requires that Registers of Protected Areas (RPAs) are compiled for a number of water bodies or part of water bodies which must have extra controls on their quality by virtue of how their waters are used by people and by wildlife.

The WFD requires that these RPAs contain: areas from which waters are taken for public or private water supply schemes; designated shellfish production areas; bathing waters; areas which are affected by high levels of substances most commonly found in fertilizers, animal and human wastes - these areas are considered nutrient sensitive; areas designated for the protection of habitats or species e.g. salmonid areas; Special Areas of Conservation (SACs); and, Special Protection Areas (SPAs).

In Ireland, waters intended for human consumption are protected under the Drinking Water Regulations (S.I. 439/2000). Westport Bay and parts of Clew Bay have been listed on the RPA for *Shellfish Areas*. Groundwater underlying and surrounding the Plan Area is listed on the RPA for *Drinking Water GW*. Waters in the Plan area which are listed on the RPA are mapped on Figure 3.7.

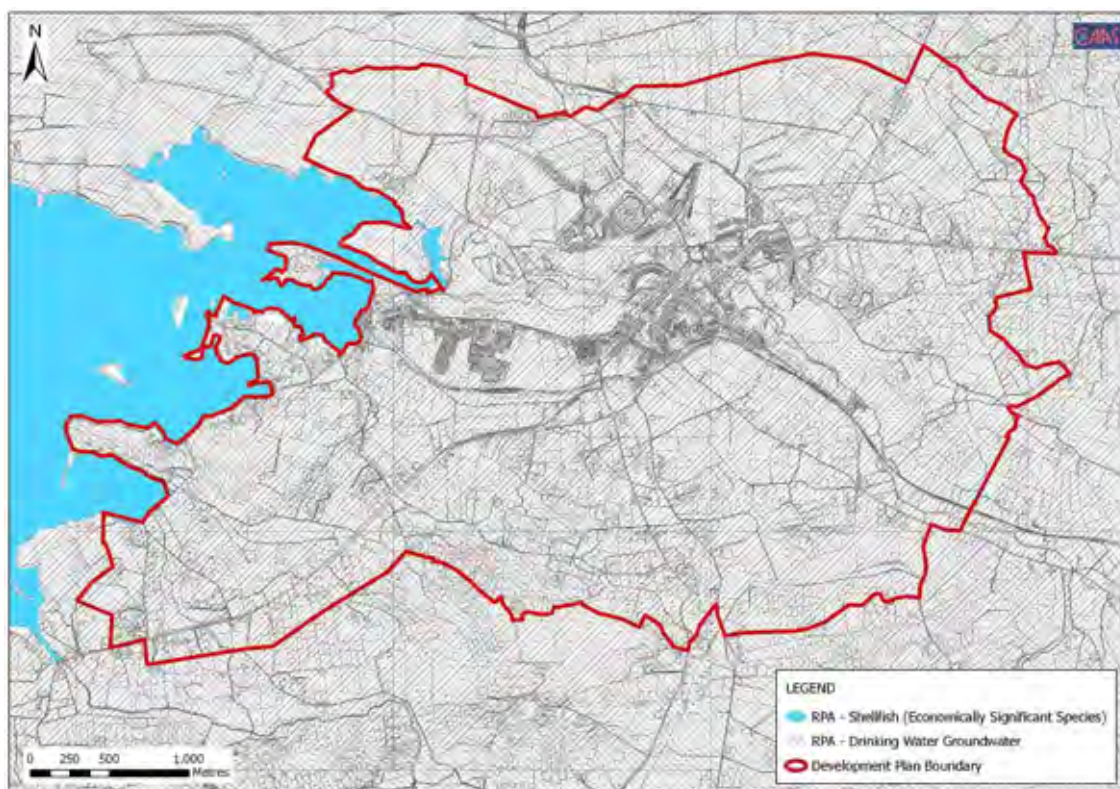


Figure 3.7 WFD Register of Protected Areas

### 3.5.5 Ground Water Vulnerability

Aquifer vulnerability refers to the ease with which pollutants of various kinds can enter underground water. The Geological Survey of Ireland (GSI) rates aquifers according to their vulnerability to pollution. Figure 3.8 maps this rating for the Plan area.

The majority of the ground water beneath the Plan area is rated as being unclassified (an interim study took place which gives underlying aquifers a general high to low vulnerability rating). Extreme aquifer vulnerability and high aquifer vulnerability can be found in areas to the south of the Plan area. These are the two ratings of aquifers which are most sensitive to an imposed contaminant load.

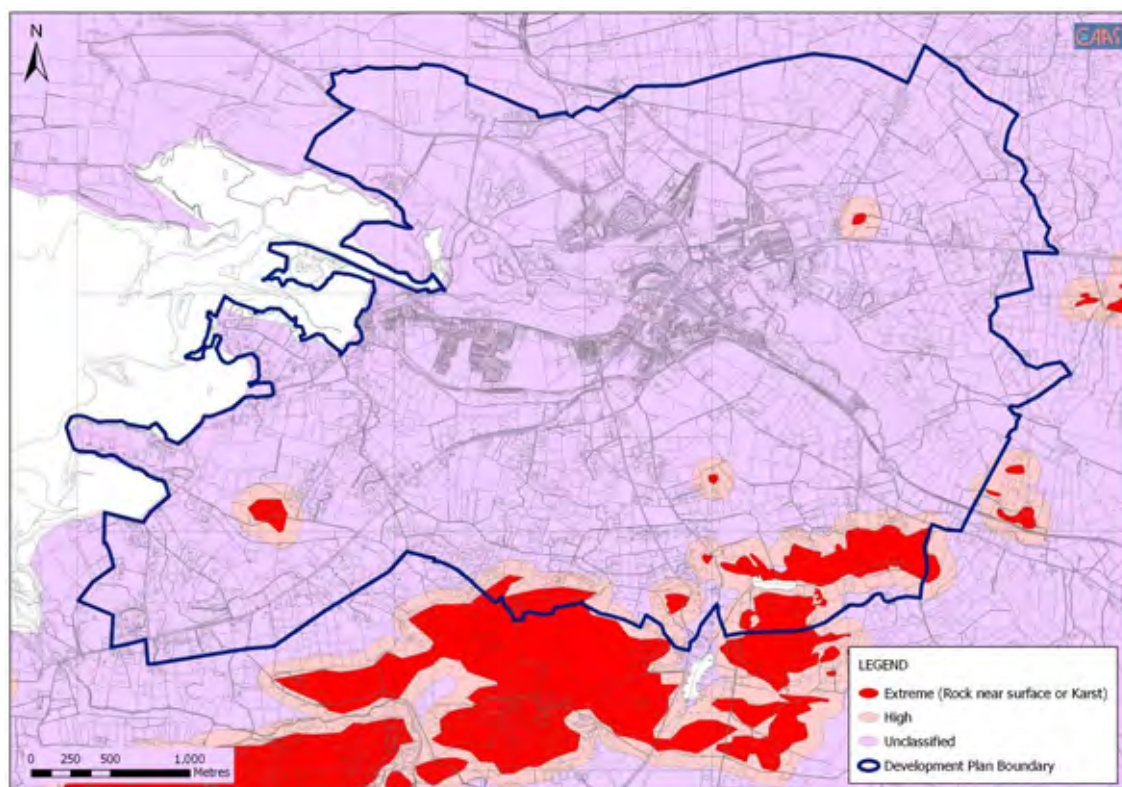


Figure 3.8 Ground Water Vulnerability

### 3.5.6 Ground Water Productivity

Geological Survey of Ireland (GSI) rates aquifers based on the hydrogeological characteristics and on the value of the groundwater resource. Ireland's entire land surface is divided into nine aquifer ratings. The Plan area is divided into three different ratings. The northern half of the Plan area is underlain by a regionally important karst aquifer while the southern half of the Plan area is underlain by a poor aquifer which is generally unproductive except for in local zones.

### 3.5.7 Waste Water

A new Waste Water Treatment Plant was opened at the Golf Course Road in Westport in May 2004. Waste water from the Plan area is treated at this facility. Waste water undergoes secondary treatment at the plant. Current demand at the plant is 15,000 Population Equivalent (P.E.)<sup>8</sup>. There is scope to extend the capacity to 24,000P.E. which is thought to be adequate capacity well into the future. The outfall point for the Plant is at Cleverleagh Strand.

<sup>8</sup> Population equivalent (in waste-water monitoring and treatment) refers to the amount of oxygen-demanding substances whose oxygen consumption during biodegradation equals the average oxygen demand of the waste water produced by one person.

### 3.5.8 Important Issues to Consider

The above descriptions identify a number of sensitivities with regard to the status of water bodies within the Westport Town and Environs Plan area. By virtue of how they are used by people, Westport Bay, parts of Clew Bay and the groundwater underlying the Plan area are all listed on the Registers of Protected Areas under the Water Framework Directive.

The Carrowbeg River and the Carrownalurgan River are both at significant risk of failing to achieve the WFD's objectives of good status by 2015. Transitional waters are *probably at significant risk* of failing to meet the objective pending further investigation.

## 3.6 Air and Climatic Factors

### 3.6.1 Air Quality

For the purposes of air quality monitoring in Ireland by the EPA, four zones are defined in the Air Quality Standards Regulations 2002 (SI No. 271 of 2002). The main areas defined in each zone are:

- 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, Westport, Naas, Carlow, Tralee and Dundalk.
- Zone D: Rural Ireland, i.e. the remainder of the State - small towns and rural areas of the country - excluding Zones A, B and C.

Westport falls into Zone D. Current air quality in Zone D is "good". The index is calculated based on the latest available measurements of PM10, sulphur dioxide, nitrogen dioxide and ozone in Zone D.

### 3.6.2 Greenhouse Gases

Ireland's current emissions are exceeding targets agreed in the peer review of Ireland's 2006 submission to the United Nations Framework Convention on Climate Change. It is unlikely that Ireland will meet these targets and it is likely therefore that financial penalties will be incurred. Transport related emissions continue to be the dominant growth sector.

Changes in sea level and/or changes in the occurrence of severe rainfall events as a result of climate change could adversely impact upon the Plan area's human beings, its biodiversity and its economy.

### 3.6.3 Flooding

The Carrowbeg River has burst its banks over the years along the North Mall in the centre of Westport Town though flooding has not occurred in the Mall area of Westport since the 1980's. Remedial work was carried out during the 1980's to alleviate the problem. This work included the fitting of non return valves on the stormwater system to stop the river backing up the pipes in the area. When the main drainage works were being carried out in Westport in 2001, a new surface water pipe was laid on the Mall to reduce the risk of flooding. This pipe starts at the Fairgreen and enters the river below St. Mary's Crescent with the Castlebar Street area storm system also entering this pipe.

In addition, local knowledge indicates that an area along the Ballinrobe Road, north east and east of the junction of Sandyhill, is subject to flooding. The Council have refused permissions based on this knowledge in the past and have zoned the area as Agriculture /High Amenity as a result. No information in relation to flooding was available for the Plan area other than what is detailed above and that from floodmap.ie, (the Office of Public Works National Flood Hazard Mapping website) which indicates that no flood events occur in the area.



## 3.7 Cultural Heritage

Heritage, by definition, means inherited properties, inherited characteristics and anything transmitted by past ages and ancestors. It covers everything, from objects and buildings to the environment. Cultural heritage includes physical buildings, structures and objects complete or in part, which have been left on the landscape by previous and indeed current generations.

Westport, as one of the few planned towns in the Country, has a distinct and valuable urban design and visual quality and is generally regarded as one of the most important heritage towns in Ireland.

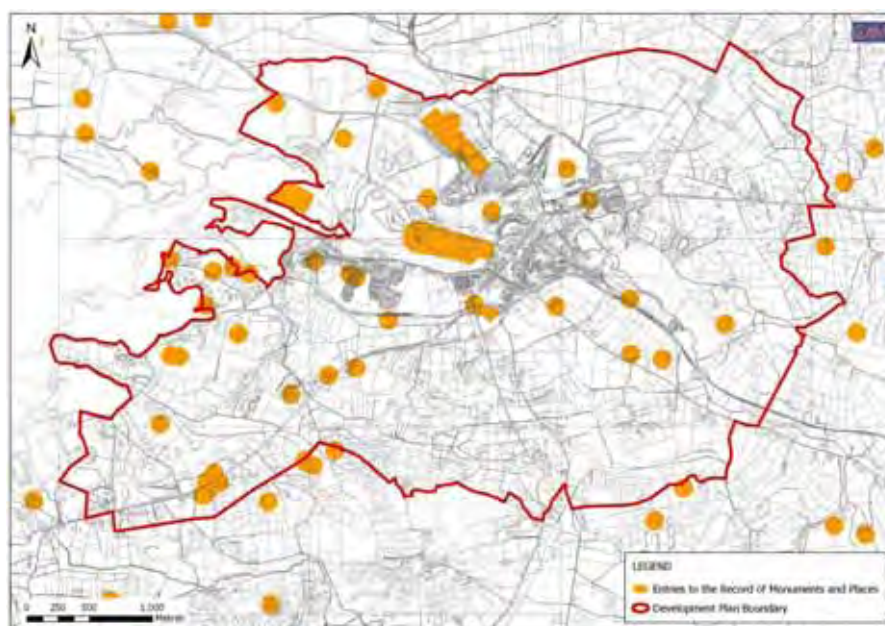
The heritage of Westport Town and Environs is a unique resource which is fundamental to the cultural identity of the area and the quality of life of its citizens - it is central to how we see ourselves and to our identity as individuals and communities. Historic buildings can define localities and communities within the area and can become a focus of community identity and pride. An historic church or park, for example, can help define a neighbourhood and create a sense of local cohesion.

### 3.7.1 Archaeological Heritage

Archaeology is the study of past societies through the material remains left by those societies and the evidence of their environment. Archaeological heritage consists of such material remains (whether in the form of sites and monuments or artefacts in the sense of moveable objects) and environmental evidence. As archaeological heritage can be used to gain knowledge and understanding of the past it is of great cultural and scientific importance. Archaeological sites and monuments vary greatly in form and date; examples include earthworks of different types and periods, (e.g. early historic ringforts and prehistoric burial mounds), megalithic tombs from the Prehistoric period, medieval buildings, urban archaeological deposits and underwater features such as wrecks.

The term 'monument' includes all man-made structures of whatever form or date except buildings habitually used for ecclesiastical purposes. A recorded monument is a monument included in the list and marked on the map which comprises the Record of Monuments and Places (RMP) set out county by county under Section 12 of the National Monuments (Amendment) Act, 1994 by the Archaeological Survey of Ireland.

Figure 3.9 maps the location of entries to the Record of Monuments and Places within and surrounding the Plan area. These include clusters of monuments at Rossbeg, Cloonmonad and Streamstown and Zones of Archaeological Potential near Westport House in Westport Demesne, at Garvillau in Westport Demesne and to the north of Kings Hill at Deerpark.



**Figure 3.9 Archaeological Heritage: Sites and Monuments Records**



### 3.7.2 Architectural Heritage

The term architectural heritage is defined in the Architectural Heritage (National Inventory) and Historic Monuments Act 1999 as meaning all structures and buildings together with their settings and attendant grounds, fixtures and fittings; groups of structures and buildings; and, sites which are of technical, historical, archaeological, artistic, cultural, scientific, social, or technical interest.

The physical form of the individual structures in Westport Town and Environs has evolved through many periods. The built heritage which has developed has attained a character that contributes to the distinctive area that is Westport Town. Figure 3.10 maps Records of Protected Structures for the Westport area. They are concentrated mainly in the Town Centre and along the coast.

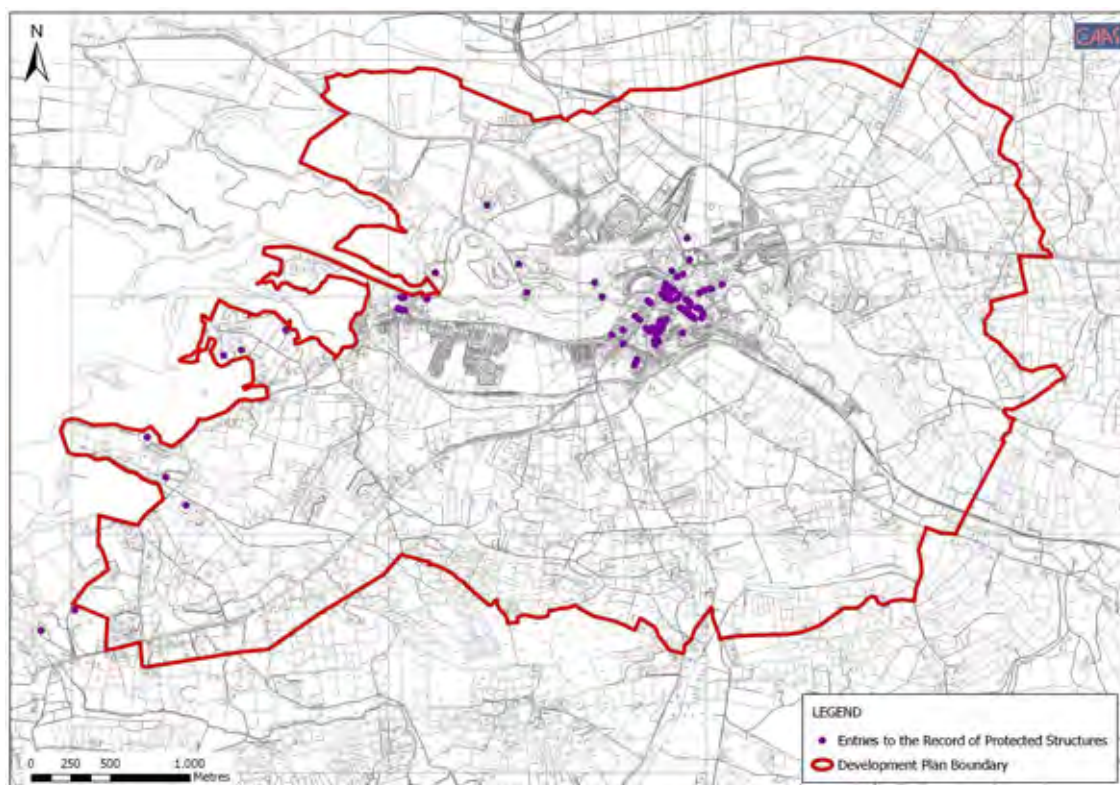


Figure 3.10 Entries to the Record of Protected Structures

### 3.7.3 Important Issues to Consider

No existing problems have been identified with regard to cultural heritage within the Plan area; however, although many aspects of the heritage are protected under legislation, impacts can still occur as a result of development. Archaeology can be previously unknown but can be damaged through development causing ground disturbance.

Development which involves material alteration or additions to protected structures can detract from the special character of the structure and its setting, and have the potential to result in the loss of features of architectural or historic interest and the historic form and structural integrity of the structure are retained. Development on sites adjoining protected monuments, places or structures can also impact upon the setting of these cultural heritage items. The integrity setting of Westport House and Demesne may be compromised by encroaching development.

The cumulative accommodation of large scale development in Westport Town and Environs has the potential to cumulatively impact upon the cultural and architectural heritage of the Plan area. Encouraging and facilitating the accommodation of growth on brownfield sites will contribute to mitigating a number of the adverse impacts associated with greenfield development, however, brownfield development has the potential to significantly adversely impact upon cultural heritage - both archaeological and architectural - if unmitigated against.

### 3.8 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 a result of historical, cultural, religious and other understandings and interactions with landform and landcover.

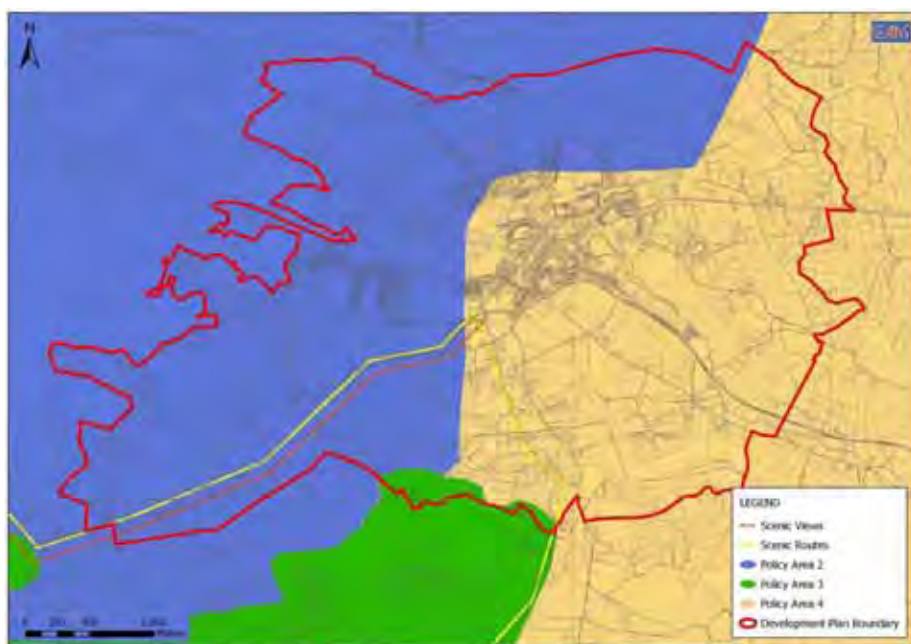
Westport Town and Environs is set within a landscape characterised by a series of steep, flat-topped drumlins running east to west. The town core is located between a series of drumlins and characterised by a series of planned linear streets and urban set-pieces including the Mall, Bridge Street, Shop Street, The Octagon, Peter Street, John Street and the clock tower.

County Mayo's Landscape Appraisal (CAAS, 2002)<sup>9</sup> subdivides the County into sixteen distinct landscape *character units* each containing an area of land with similar character-giving elements such as slope, vegetation and landuse. The appearance of the landscape is relatively uniform within each Character Unit. The Landscape Appraisal identifies vulnerable features across the County including river banks, lake shorelines, the coastline and the skylines of the County's uplands.

With regard to both the character units and the vulnerable features, the Appraisal groups together character units into Policy Areas which provide for the guidance of development across the County. The Plan area falls into Area J: Clew Bay Glacial Drumlins. There are four Landscape Policy Areas and two Sub-Policy Areas in County Mayo, three of which occur in the Westport Town and Environs area. These Landscape Policy Areas include Policy Area 2: Lowland Coastal Zone, Policy Area 3: Uplands, moors, heath or bogs and Policy Area 4: Drumlins and Lowlands and they are shown on Figure 3.11. Scenic routes and views are also shown on this map.

#### 3.8.1 Important Issues to Consider

A problem with regard to the environmental component of landscape is the cumulative visual impact which occurs as a result of developments such as one off houses. Such developments, which individually often do not have significant adverse impacts, have the potential to cumulatively and adversely significantly impact upon sensitive landscapes. This is especially problematic in the sensitive parts of the landscape including the visually prominent, elevated parts of the Westport hinterland and areas along the coastline.



**Figure 3.11 Views and Prospects of Special Amenity Value or Interest**

<sup>9</sup> CAAS (2002) *Mayo Landscape Appraisal* Mayo: Mayo County Council  
CAAS for Mayo County Council and Westport Town Council

## Section 4 Description of Alternative Plan Scenarios

### 4.1 Introduction

One of the critical roles of the SEA is to facilitate an evaluation of the likely environmental consequences of a range of alternative strategies for accommodating future development in Westport and its Environs. The environmental consequences of 4 scenarios for the Plan were examined.

### 4.2 Description of Alternative Scenarios

#### 4.2.1 Alternative Scenario 1

Alternative Scenario 1 takes place against a background of significant slowing of economic activity as well as a steady or falling population coupled with increasingly restrictive interpretations of environmental designations and a very local assertive planning regime. Significant growth and investment is concentrated within the serviced lands of the contiguous urban areas of Westport. There is a particular emphasis on the encouragement of infill and “brownfield” development as well as continued strong emphasis on conservation and re-use of older building stock. New building is regarded as a last resort in core conservation areas. Elsewhere new developments are expected to achieve high levels of density, high urban design standards and low dependency on car use. Development in the environs is tightly confined to established nodes of development and their immediate environs. In these areas there is a policy to encourage consolidation and intensification – to form small serviced “nodes”. This Scenario has elevated levels of non-vehicular mobility - including walking and cycling. It foresees a high and effective level of utilisation of existing services and infrastructure - with little need for additional capital investment.

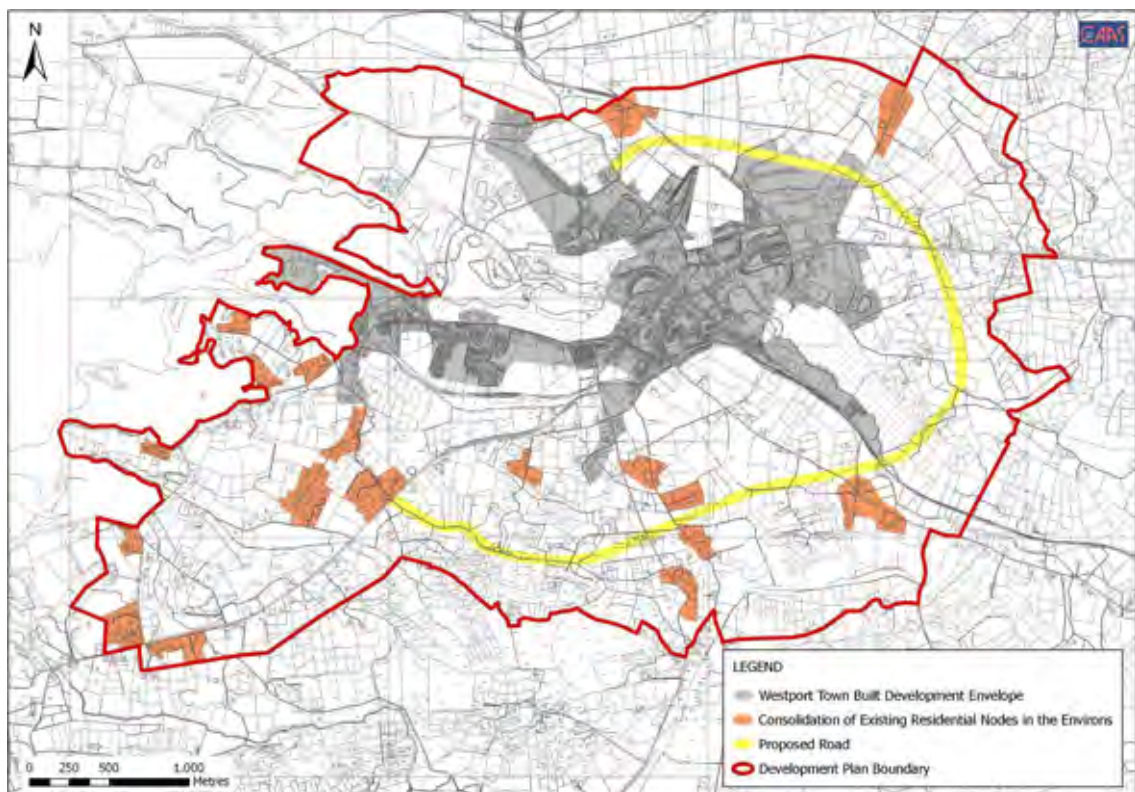


Figure 4.1 Alternative Scenario 1



## 4.2.2 Alternative Scenario 2

Alternative Scenario 2 takes place against a background of slowing of economic activity coupled with increased awareness of the need to comply with new environmental designations - for habitats and water quality in particular - all co-ordinated by a pragmatic yet careful planning approach. Most growth and investment is concentrated within the serviced lands of the contiguous urban areas of Westport. There is an aspiration to encourage infill and 'brownfield' development and to continue the conservation and re-use of older building stock where feasible. Transportation planning places an equal emphasis on car and pedestrian journeys - except in central areas where pedestrians have priority. Development in the Environs is directed towards established nodes of development. Consolidation and intensification along selected serviced roads aims to balance the demand for suburban and semi-rural housing with the need for orderly and clear transitions between rural and built-up areas. There are sufficient existing and planned services and infrastructure to accommodate the existing and near future needs of this scenario.

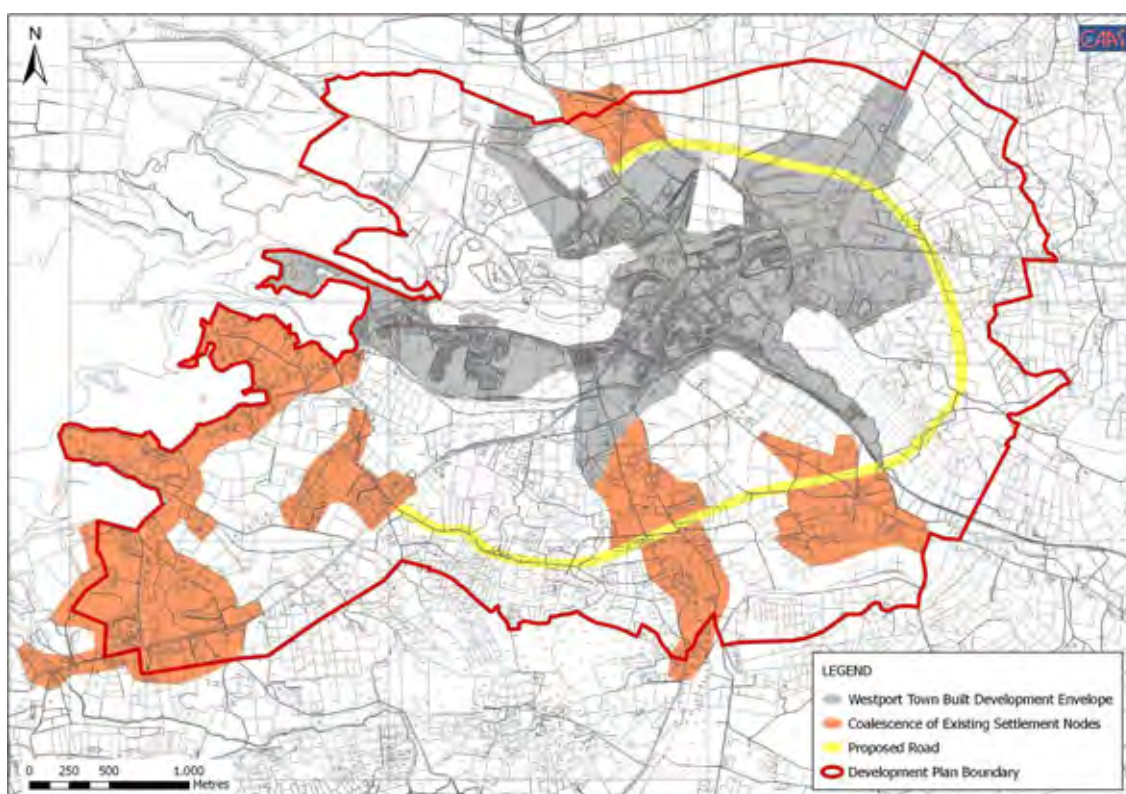


Figure 4.2 Alternative Scenario B

## 4.2.3 Alternative Scenario 3

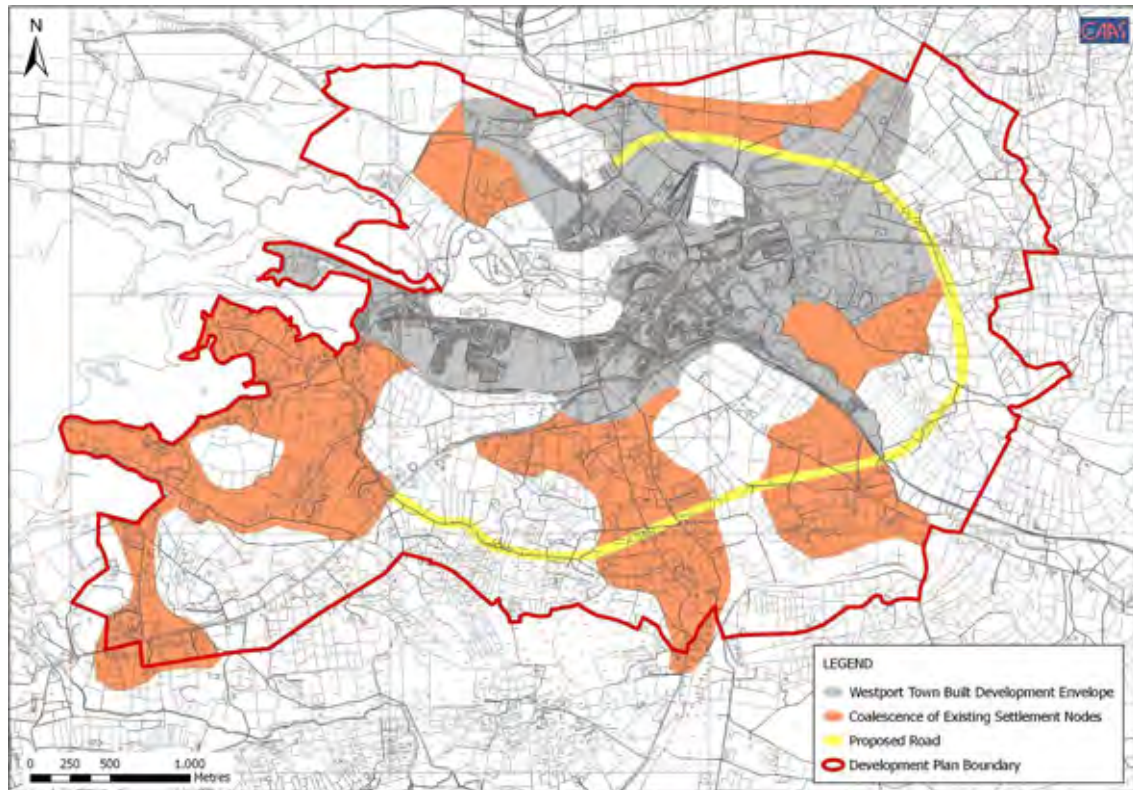
Alternative Scenario 3 takes place in a period of economic and population growth and limited environmental or planning restrictions. Core urbanised areas expand and intensify especially around a number of planned 'nodes'. Large areas of poorly co-ordinated, low density development occur in parts of the environs – especially along the coast and along some major roads. There is overloading of some services and infrastructure. Traffic congestion is an increasing issue, especially in the centre. In summer, long delays are common in the centre and at junctions along the relief road. Water supply experiences occasional shortages and there is some overloading of the waste water treatment facility.

## 4.2.4 Alternative Scenario 4

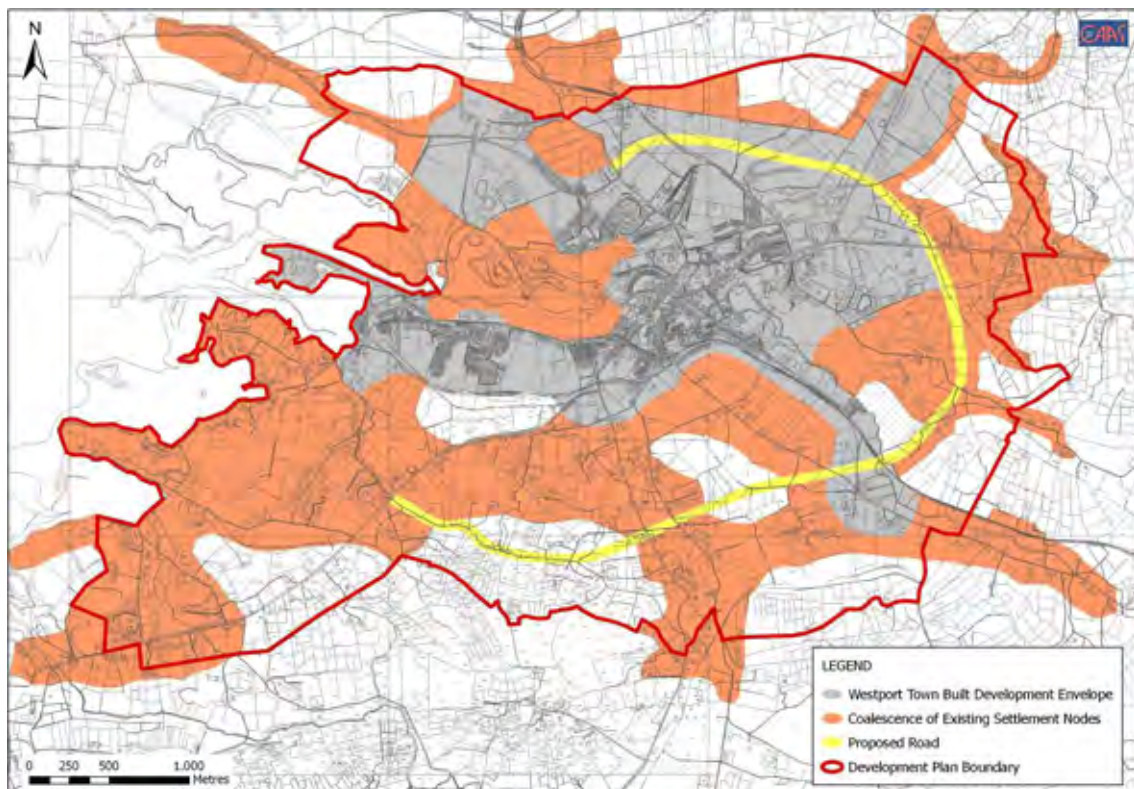
Alternative Scenario 4 takes place rapidly in a period of strong economic growth, high population growth and few environmental or planning restrictions. Core Urbanised areas expand and intensify with larger-scale development occurring further from the centre. There is very extensive, though poorly co-ordinated low density development throughout the Environs – especially along the coast and along all existing major and minor roads. There is significant overloading of all services and infrastructure. Traffic



congestion is a serious issue in the Centre. Everywhere else long delays are common throughout the year at junctions along the relief road during peak hours. Water supply experiences seasonal shortages and there is significant overloading of the waste water treatment facility - though efforts to increase its size and capacity are resisted by new residential developments in the vicinity.



**Figure 4.3 Alternative Scenario 3**



**Figure 4.4 Alternative Scenario 4**

## Section 5 Evaluation of Alternative Plan Scenarios

### 5.1 Introduction

This section summarises the evaluation of the Alternative Scenarios which is detailed in the Environmental Report.

### 5.2 Evaluation of Alternative Scenario 1

- **Tourism - Socio-Economic Effects**

This scenario would stabilise or reduce existing effects on the environment - resulting in a significant strategic capacity to attract and sustain both a growing tourism sector as well as other new economic activities.

- **Water and Waste Water**

This scenario would provide the best opportunity for the river, estuarine, coastal and ground water bodies within and surrounding the Plan area to achieve the Water Framework Directive objective of good status by 2015. This scenario would help achieve compliance with the objectives of the Urban Waste Water Treatment Directive (91/271/EEC) (amended by Directive 98/15/EEC). This, in turn, will have direct, indirect and cumulative positive effects on human health, economic development and on the resources necessary to sustain designated sites and species. Provided planned expansions to the water supply network are made operational before developments are occupied, there would be sufficient treated drinking water available to meet demand.

- **Traffic**

By placing emphasis on the encouragement of infill and 'brownfield' development within existing built up areas and by requiring new developments elsewhere to achieve high levels of density and low dependency on car use this scenario would contribute to elevated levels of non-vehicular mobility - including walking and cycling - and help to reduce car dependency and its associated greenhouse gas emissions.

- **Cultural Heritage and Landscape**

This scenario would be likely to significantly beneficially impact upon the protection of core architectural heritage areas by regarding new buildings as a last resort in these areas. In these and other areas, brownfield and infill development would be required to achieve high urban design standards. Mitigation measures and measures for the construction of projects arising out of development management and EIA processes would be required to be adhered to in order to mitigate adverse effects on RMP entries, unknown archaeology and Protected Structures. This scenario would not safeguard and beneficially impact upon the protection of the landscape of the Town and Environs; new development upon ridges would be avoided and greenfield development would be minimised.

- **Biodiversity, Flora & Fauna and Soil**

It is likely that this scenario would help to avoid increased direct, indirect and cumulative effects on designated sites, protected species and the resources necessary to sustain them. By minimising new greenfield development this scenario would help to avoid increases in the encroachment of greenfield development into habitats at the fringes of the Town and along the coast.

- **Sustainable Land Use**

By placing emphasis on the encouragement of infill and 'brownfield' development within existing built up areas and by requiring new developments elsewhere to achieve high levels of density this scenario would be sure to minimise greenfield development and its associated effects.

## 5.3 Evaluation of Alternative Scenario 2

- **Tourism - Socio-Economic Effects**

Subject to compliance with normal planning and environmental standards - and higher standards of compliance in coastal, elevated and historic sites - this Scenario is within the carrying capacity of the receiving environment; implementation of this scenario would be unlikely to significantly affect the Town's tourism industry.

- **Water and Waste Water**

As most growth is concentrated within the serviced lands of the contiguous urban areas of Westport, it is likely that - provided the provisions of the Urban Waste Water Treatment Directive (91/271/EEC) (amended by Directive 98/15/EEC) are complied with - this scenario would help to reduce significant further declines in the status of surface and groundwaters. It is noted however that if development was to occur without appropriate waste water infrastructure then it is likely that the quality of water bodies both within and outside of the Town area to meet WFD commitments would be reduced and adverse effects with regard to biodiversity and flora and fauna and human health as a result of poor water quality could arise. Provided planned expansions to the water supply network are made operational before developments are occupied, there would be sufficient treated drinking water available to meet demand.

- **Traffic**

Although traffic management measures would remain a necessity, the direction of growth towards already serviced lands together with the medium long term development of relief roads would contribute towards a reduction in increases in traffic levels. Transportation planning would place an equal emphasis on car and pedestrian journeys helping to reduce increases in car dependency and greenhouse gas emissions.

- **Cultural Heritage and Landscape**

The brownfield development aspired to under this scenario would have the potential to impact upon architectural and archaeological heritage. Mitigation measures and measures for the construction of projects arising out of development management and EIA processes would be required to be adhered to in order to mitigate adverse effects on RMP entries, unknown archaeology and Protected Structures. New development would have to avoid the ridges of the Town's drumlins in order to prevent individual instances of impacts upon the Town's landscape.

- **Biodiversity, Flora & Fauna and Soil**

Developments under this scenario would need to be planned carefully in order to ensure that areas of national importance designated for protection along the coast, aquatic habitats and the ecological connectivity that remains within the Plan area and along the coast are all maintained and enhanced.

- **Sustainable Land Use**

Under this scenario, there would be an aspiration to encourage infill and 'brownfield' development and to continue the conservation and re-use of older building stock where feasible.

This aspiration would be likely to reduce the extent of greenfield development which would arise as well as its associated effects. Consolidation and intensification along selected serviced roads would help to balance the demand for suburban and semi-rural housing with the need for orderly and clear transitions between rural and built-up areas.

## 5.4 Evaluation of Alternative Scenario 3

- **Tourism - Socio-Economic Effects**

The implementation of this Scenario 3 would be likely to arouse a number of concerns from Westport's tourism sector especially with regard to the potential the scenario has to significantly detract from the Town's distinctiveness and scenery and the potential it has to cause traffic congestion in the summer months.

- **Water and Waste Water**

The extent of development under this scenario would be likely to result in some overloading of the Town's waste water treatment facility while large areas of poorly co-ordinated, low density development would make serving developments with waste water collection infrastructure more costly. Deterioration of water quality would occur, reducing the ability of Westport's water bodies to meet WFD commitments. Water supply would experience occasional shortages.

- **Traffic**

Traffic congestion would become an increasingly large concern of the tourism sector under this Scenario - in summer, long delays would be common in the centre of the Town and at junctions along the relief road. In the Environs, large areas of poorly co-ordinated, low density development would be likely to undermine the economic viability of the provision of public transport services. Dependency upon private transport would be likely to increase resulting in adverse impacts upon traffic levels and increased greenhouse gas emissions.

- **Cultural Heritage and Landscape**

A loss of distinctiveness in the Town and impacts upon scenery would become an increasingly large concern of the tourism sector under this scenario. Development under this scenario would be more likely than that under scenarios 1 or 2 to encroach upon areas which are sensitive from both a cultural and landscape perspective - most notably on the ridges surrounding the Town and along the coast. Low density development to the north of the Westport House and its Demesne would need to be carefully planned in order to avoid impacting upon the context of the Estate.

- **Biodiversity, Flora & Fauna and Soil**

Poor water quality- in the rivers, on the estuary and in the groundwater - coupled with disturbance arising from development along the coast would threaten to affect the integrity and diversity of the designated ecological sites in the estuary. Uncoordinated low density greenfield development across the Environs would be likely to significantly fragment ecological connectivity and would impact upon non-designated biodiversity and flora and fauna.

- **Sustainable Land Use**

As a result of the taking up of large areas of land - especially along the coast and along some major roads - by poorly co-ordinated, low density development land for new economic development would become increasingly expensive and scarce.



## 5.5 Evaluation of Alternative Scenario 4

- **Tourism - Socio-Economic Effects**

The economic and social implications of this scenario would be significantly negative in the medium and long term - especially with regard to Westport's tourism industry. Traffic congestion, poor drinking water quality, loss of distinctiveness and poor scenery would all contribute to a decline in local tourism revenues. Increasing development levies, a shortage of land and unreliable or overloaded services would make it increasingly difficult to attract and sustain new economic activities that might replace tourism.

- **Water and Waste Water**

The extent of development under this scenario would be likely to result in significant overloading of the Town's waste water treatment facility. Efforts to increase the size and capacity of the facility would be resisted by new residential developments in the vicinity. The extensive, uncoordinated nature of development in the Environs would make serving developments with waste water collection infrastructure economically unviable. The overloading of the waste water treatment facility together with discharges of waste water from individual treatment systems would result in a deterioration of water quality and would contribute to poor drinking/bathing water quality. The deterioration in water quality would reduce the ability of Westport's water bodies to meet WFD commitments. Water supply would experience seasonal shortages.

- **Traffic**

Development under this scenario would occur in a piecemeal fashion and would undermine the economic viability of the provision of public transport services, dependency upon private transport would be likely to increase resulting in adverse impacts upon traffic levels and greenhouse gas emissions. Traffic congestion would be a serious issue in the centre of the Town. Everywhere else, long delays would be common throughout the year at junctions along the relief road during peak hours.

- **Cultural Heritage and Landscape**

By adopting limited planning controls, development under this scenario would encroach upon areas which are sensitive from both a cultural and landscape perspective. Developments upon ridgelines around the Town and development along the coast would destroy the distinctiveness of the Town and would result in reductions in tourism revenues. Visual effects due to developments on these high grounds would be experienced across the Town Centre and beyond. Areas of the Town centre would lose coherency of form and character thereby undermining the sense of place and belonging. There would be significant incursions into Westport House and its Demesne with new low density development significantly adversely impacting upon the Estate.

- **Biodiversity, Flora & Fauna and Soil**

As a result of the adoption of limited planning controls along the coast development would be more likely to encroach upon the ecologically designated Clew Bay Complex sites. Significant adverse effects as a result of poor water quality (see below) would occur at these sites. Extensive, uncoordinated low density greenfield development across the Environs would be likely to significantly fragment ecological connectivity and would impact upon non-designated biodiversity and flora and fauna.

- **Sustainable Land Use**

Although Scenario 4 would allow for densities to be maximised and efficient use made of certain land banks in areas away from the centre of the Town, the development capacity of the Environs - at coastal areas and at other areas along existing major and minor roads - would be

significantly reduced as a result of uncoordinated low density residential development. The range of locations available to future locally important projects would be likely to be significantly restricted.

## 5.6 Summary

Implementation of Alternative Scenario 1 would be likely to result in beneficial impacts upon the protection of various environmental components. This scenario would stabilise or reduce existing effects on the environment - resulting in a significant strategic capacity to attract and sustain both a growing tourism sector as well as other new economic activities.

Implementation of Alternative Scenario 2 would be likely to result in beneficial impacts upon the protection of a number of environmental components. Subject to compliance with normal planning and environmental standards - and higher standards of compliance in coastal, elevated and historic sites - implementation of Alternative Scenario 2 would be within the carrying capacity of the receiving environment.

The implementation of Scenario 3 would be likely to conflict with various environmental components with mitigation of the adverse effects arising from these conflicts difficult to achieve. The implementation of Scenario 3 would be likely to arouse a number of concerns from Westport's tourism sector especially with regard to the potential the scenario has to significantly detract from the Town's distinctiveness and scenery and the potential it has to cause traffic congestion in the summer months.

Alternative Scenario 4 would be likely to have the most adverse environmental effects out of all of the scenarios. Traffic congestion, poor drinking water quality, loss of distinctiveness and poor scenery would all contribute to a decline in local tourism revenues under this Scenario. Increasing development levies, a shortage of land and unreliable or overloaded services would make it increasingly difficult to attract and sustain new economic activities that might replace tourism.

## 5.7 The Adopted Development Plan

Alternative Scenario 2 (which "would be within the carrying capacity of the receiving environment") was chosen to be developed for the Draft Development Plan by the plan-making team. The Land Use Zoning Map contained in the Draft Plan which was placed on public display corresponded closely to this Scenario.

A number of Amendments were made by the Elected Members to the Land Use Zoning Map contained in the Draft Plan. Consequently, the Land Use Zoning Map that is contained in the adopted Plan corresponds more closely to Alternative Scenario 3 (which "would be likely to conflict with various environmental components with mitigation of the adverse effects arising from these conflicts difficult to achieve").

As identified in Addendum II to the Environmental Report<sup>10</sup>, certain Proposed Amendments<sup>11</sup> - all of which have been adopted as part of the Plan - would be likely to result in significant cumulative adverse impacts upon:

- the sustainable consolidation of existing development within the Plan area;
- efforts to reduce car dependency and travel related greenhouse gas emissions; and,
- non-designated habitats and ecological connectivity.

If unmitigated, adverse impacts upon the following would be likely to occur:

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<sup>10</sup> Addendum II details the environmental consequences of Proposed Amendments to the Draft Plan. This Addendum was placed on public display with the Proposed Amendments and was considered by the Elected Members during their deliberations on the same. On adoption of the Plan, the findings of Addendum II were used in order to update this Environmental Report.

<sup>11</sup> Zoning Amendments 01, 02, 03, 04, 05, 06, 07, 08, 09, 12, 14, 15, 16, 18, 19, 23, 24, 25 and 29

- the Clew Bay Complex candidate Special Area of Conservation and proposed Natural Heritage Area;
- groundwater quality and the ability of the groundwater beneath the Plan area to achieve the objectives of the Water Framework Directive by 2015; and,
- archaeological heritage.

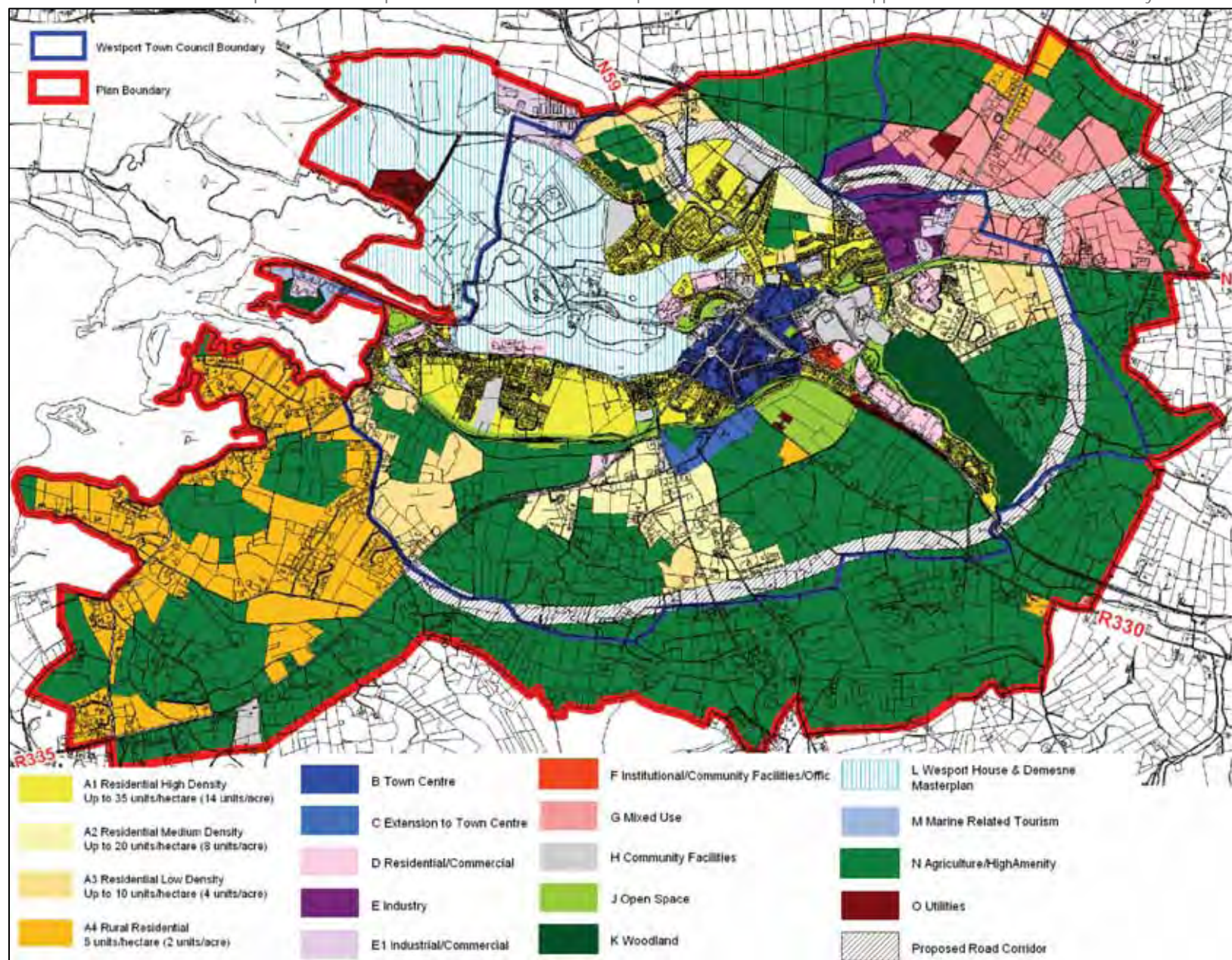
Adverse impacts upon the following would be likely to occur:

- the landscape; and,
- views of the area around the hill in the north of the Plan area to the east of the N59.

The land use zoning map which is included in the adopted Development Plan is shown on Figure 5.1.

## **5.8 Mitigation**

Mitigation measures which have been integrated into the draft Plan are identified in Section 9 of the Environmental Report. Due to the extent of the area which is zoned for development in the Adopted Plan, the achievement of these measures will be made more difficult in comparison to what would have been the case if the Land Use Zoning Map contained in the Draft Plan had of been adopted without the aforementioned amendments.



**Figure 5.1 Land Use Zoning Map from the Adopted Plan**



## Section 6 Mitigation and Monitoring Measures

### 6.1 Mitigation

#### 6.1.1 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. Mitigation involves ameliorating significant negative effects. Where there are significant negative effects, consideration is given in the first instance to preventing such effects or, where this is not possible for stated reasons, to lessening or offsetting those effects. Mitigation measures can be roughly divided into those that: *avoid* effects; *reduce* the magnitude or extent, probability and/or severity of effects; *repair* effects after they have occurred, and; *compensate* for effects, balancing out negative impacts with other positive ones. The mitigation measures may be incorporated into the briefing of design teams as well as the subsequent design, specification and development management of the landuses to be accommodated within the Plan area.

### 6.2 Mitigation Measure Topics

Mitigation measures for the following topics have been integrated into the Plan:

- Biodiversity and Flora and Fauna
- Water Protection
- Waste Water
- Drinking Water
- Flooding
- Cultural Heritage
- Landscape
- Air and Climatic Factors
- Transportation
- Waste Management
- Energy/ Energy Conservation

### 6.3 Monitoring

The SEA Directive requires that the significant environmental effects of the implementation of plans and programmes are monitored. The Environmental Report contains the measures for monitoring the likely significant effects of implementing the Development Plan.

Monitoring enables, at an early stage, the identification of unforeseen adverse effects and the undertaking of appropriate remedial action. In addition to this, monitoring can also play an important role in assessing whether the Development Plan is achieving its environmental objectives and targets - measures which the Development Plan can help work towards - whether these need to be re-examined and whether the proposed mitigation measures are being implemented.

The Environmental Report identifies indicators - which allow quantitative measures of trends and progress in the environment over time. Measurements for indicators generally come from existing monitoring sources. A preliminary monitoring evaluation report on the effects of implementing the Development Plan will be prepared within two years of the making of the plan. The Councils are responsible for collating existing relevant monitored data, the preparation of a monitoring report, the publication of this report and, if necessary, the carrying out of corrective action.