

SEA (Environmental Report)

of the

Draft Blessington Local Area Plan

2013 - 2019



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Section 1

Introduction and Background

1.1 Introduction and Terms of Reference

This is the Environmental Report of the Blessington Local Area Plan (LAP) 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 Blessington.

The SEA is being carried out in order to comply with the provisions of the SEA Regulations and in order to improve planning and environmental management in Blessington. This report should be read in conjunction with the Blessington LAP.

1.2 SEA Definition

Environmental assessment is a procedure that ensures that the environmental implications of decisions are taken into account before the decisions are made. Environmental Impact Assessment, or EIA, is generally used for describing the process of environmental assessment which is limited to individual projects such as waste incinerators, housing developments or roads while Strategic Environmental Assessment, or SEA, is the term which has been given to the environmental assessment of plans, and other strategic actions, which help determine what kind of individual projects take place.

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.

The kind of development that occurs within Blessington and where it occurs will be significantly determined by the implementation of the Local Area Plan. By anticipating the effects and avoiding areas in which growth cannot be sustainably accommodated and by directing development towards more compatible and robust receiving environments real improvements in environmental management and planning can occur within the plan area – the scope of any EIAs which may be required as part of planning applications are likely to be reduced; and, planning applications are more likely to be granted permission.

1.3 Legislative Context

Directive 2001/42/EC of the European Parliament and of the Council of Ministers, of 27 June 2001, on the assessment of the effects of certain plans and programmes on the environment, referred to hereafter as the SEA Directive, introduced the requirement that SEA be carried out on plans and programmes which are prepared for a number of sectors, including land use planning. The SEA Directive was transposed into Irish Law through the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (Statutory Instrument Number (SI No.) 435 of 2004) and the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004) as amended. Both sets of Regulations became operational on 21 July 2004.

The following sources of guidance have been used during the preparation of this environmental report and during the overall SEA process for the Blessington Local Area Plan:

- The Department of the Environment, Heritage and Local Government, Implementation of SEA Directive (2001/42/EEC) Assessment of the Effects of Certain Plans and Programmes on the Environment, Guidelines to Regional Authorities and Planning Authorities on the implementation of the Directive (2004).

- Development of Strategic Environmental Assessment (SEA) Methodologies for Plans and Programmes in Ireland, Synthesis Report, Environmental Protection Agency (2003).
- Environmental Protection Agency, SEA process checklist (Draft) (2008).
- Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011, (S.I. No. 201 of 2011), amending the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. No. 436 of 2004).
- DoECLG Circular (PSSP 6/2011) 'Further Transposition of the EU Directive 2001/42/EC on Strategic Environmental Assessment (SEA)

1.4 Implications for Wicklow County Council and the Elected Members

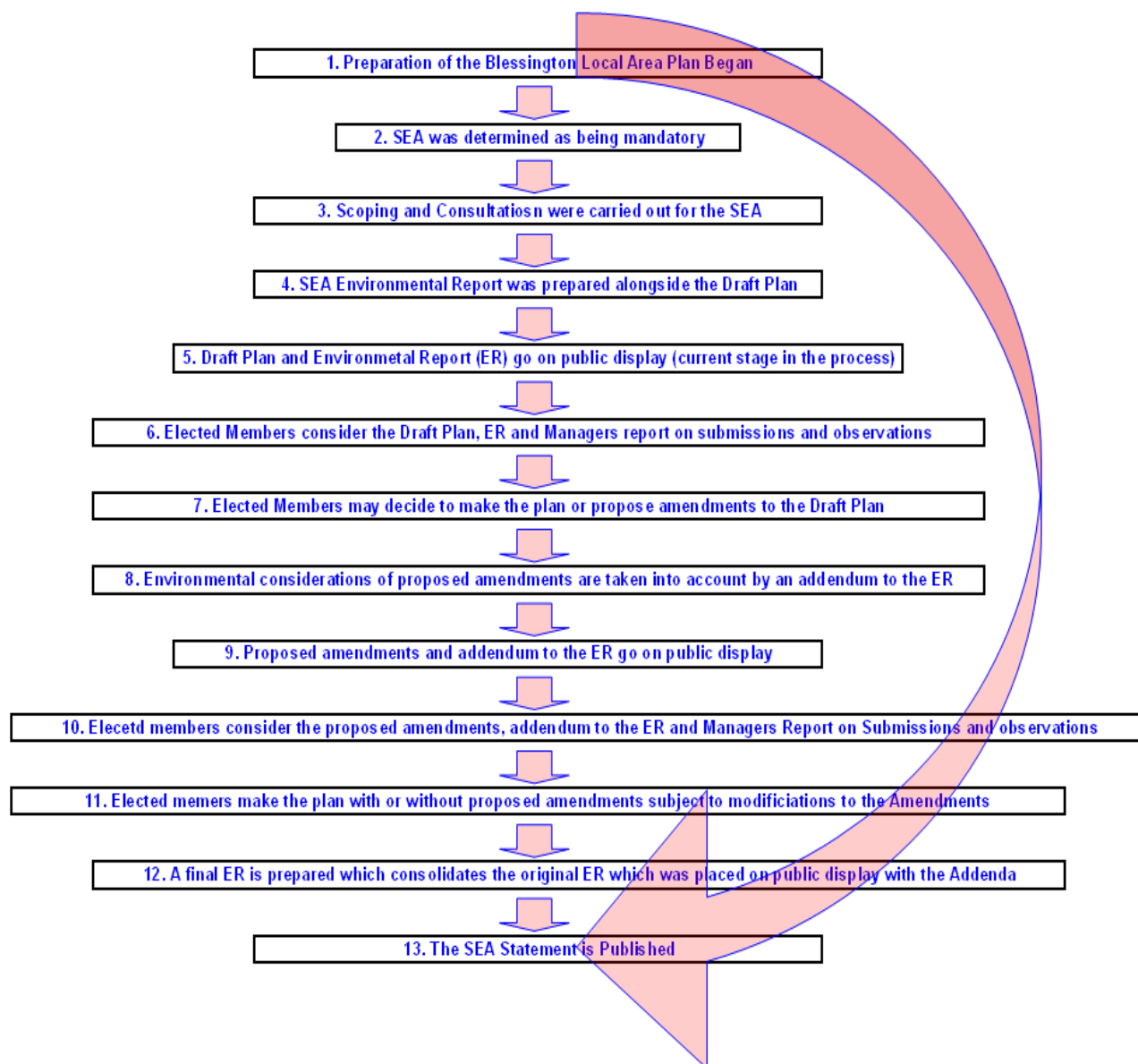
As a result of the above legislation, certain plans and programmes which are prepared by Wicklow County Council are required to undergo SEA. The findings of SEA are expressed in an Environmental Report which is submitted to the Elected Members alongside the relevant plan or programme. The Elected Members must take account of the Environmental Report before the adoption of the plan or programme.

When the plan or programme is adopted a statement must be made public, summarising, inter alia: how environmental considerations have been integrated into the plan or programme, and; the reasons for choosing the plan or programme as adopted over other alternatives detailed in the Environmental Report.

Section 2 Methodology

2.1 Introduction

This section details how the SEA for the Local Area Plan has been undertaken alongside the preparation of the Plan. The SEA process started in March 2012 and this report has been produced in July 2012. Figure 2.1 lays out the main stages in the Development Plan SEA process. The process is currently at the fifth stage in the process as indicated in Figure 2.1 below.



2.2 Scoping Introduction:

In consultation with the relevant authorities, the scope of environmental issues to be dealt with by the SEA together with the level of detail to which they are to be addressed was broadly decided on after preliminary data collection. Scoping of the SEA was continuous with certain issues being selected for further examination after certain data was obtained. Scoping helped the SEA to become focused upon the important issues, such as those relating to existing and potential environmental issues and environmental problems¹, thereby avoiding resources being wasted on unnecessary data collection.

Scoping facilitated the selection of issues relevant to the environmental components which are specified under the SEA Directive - biodiversity, fauna, flora, population, human health, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, and landscape.

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). Impacts upon human beings arising as a result of social and economic conditions are not considered by SEA.

The Environmental Protection Agency (EPA), the Department of the Environment, Community and Local Government (DECLG), The Department for Agriculture, Marine and Food, The Department Communications Energy and Natural Resources, the Department of Arts, Heritage and Gaeltacht Affairs and Kildare County Council were all sent a preliminary SEA scoping report and notice indicating that submissions or observations in relation to the scope and level of detail of information to be included in the environmental report could be made in regard to the Local Area Plan. Written submissions were received from the EPA, Dept of Heritage and Gaeltacht Affairs and Kildare County Council which were taken into consideration in the preparation of the SEA. A short Summary of the contents of these submissions is contained in Appendix 1 of this report.

In addition, the Council's intention to carry out SEA as part of the Local Area Plan process was identified during the consultation process on the preparation of the new Plan.

The findings of the SEA were communicated to the plan making team on an ongoing basis from the outset in order to allow for their integration into the Local Area Plan thus minimising the potential for significant negative environmental effects arising from implementation of the Plan.

2.3 Most Important Strategic Environmental Issues

The principal environmental issues centre on water and water-related issues. This is because of the emergence of specific requirements from the Eastern River Basin Management Plans (ERBMP's) and the challenges of meeting those requirements on account of the existing condition and trends in both the surface and ground waters within and surrounding the proposed plan area for the town of Blessington. The following issues were among those identified during the SEA scoping process.

⇒ The timely availability of waste water treatment capacity;

¹ Annex I of the SEA Directive requires that information is provided on 'any existing environmental problems which are relevant to the plan or programme', thus, helping to ensure that the proposed strategic action does not make existing environmental problems worse. Environmental problems arise where there is a conflict between current environmental conditions and ideal targets. If environmental problems are identified at the offset they can help focus attention on important issues and geographical areas where environmental effects of the plan or programme may be likely.

- ⇒ The protection of designated ecological sites and corridors,
- ⇒ The protection and improvement of water bodies.
- ⇒ Flooding – within the plan area

2.4 Environmental Baseline Data and other Strategic Actions

The SEA process is led by the environmental baseline (i.e. the current state of the environment - flora and fauna, soil, water, cultural heritage etc.) to facilitate the identification, evaluation and subsequent monitoring of the effects of the Local Area Plan. Data was collected to describe the environmental baseline and its likely evolution without implementation of the Development.

The SEA Directive requires that information on the baseline environment be focused upon the relevant aspects of the environmental characteristics of areas likely to be significantly affected and the likely evolution of the current environment in the absence of the strategic action i.e. the Local Area Plan. Any information that does not focus upon this is surplus to requirements; therefore, the SEA of the Development Plan focuses on the significant issues, disregarding the less significant ones. In addition, the SEA Directive aims to avoid duplication of the assessment whereby a strategic action forms part of a hierarchy. Furthermore, if certain matters are more appropriately assessed at different levels of the hierarchy in which the Development Plan is positioned, or, if certain matters have already been assessed by a different level of the hierarchy then additional assessment is not needed.

In order to describe the baseline - the current state of the environment - data was collated from currently available, relevant environmental sources.

2.5 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. Taking into account the objectives and the geographical scope of the Plan, alternatives were formulated alongside the plan-making team.

2.6 The Environmental Report

In this Environmental Report, which has been prepared alongside the Local Area Plan, the likely environmental effects of the Local Area Plan and the alternatives are predicted and their significance evaluated while having regard to the environmental baseline. The Environmental Report provides the decision-makers, who decide to adopt the Local Area Plan, with a clear understanding of the likely environmental consequences of decisions regarding the future accommodation of development in the Blessington Local Area Plan. Mitigation measures to prevent or reduce significant adverse effects posed by the Local Area Plan, or to maximise any benefits arising, as well as measures concerning monitoring were proposed.

The Environmental Report will be required to be altered should amendments be proposed to the Plan or should a Plan, which includes elements which have not been evaluated by the SEA and which may be likely to have significant environmental effects be adopted.

2.7 The SEA Statement

When the Plan is adopted a document referred to as the SEA Statement must be made public. This is required to include information on: how environmental considerations have been integrated into the Plan - highlighting the main changes to the Plan which resulted from the SEA process; how the Environmental Report and consultations have been taken into account - summarising the key issues raised in consultations and in the Environmental Report

indicating what action, if any, was taken in response; and the reasons for choosing the Plan in the light of the other alternatives, identifying the other alternatives considered, commenting on their potential effects and explaining why the Plan was selected.

2.8 Legislative Conformance

This report complies with the provisions of the SEA Regulations and is written in accordance with Schedule 2B of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004) as amended.

Table 2.1² (below) is a reproduction of the checklist of information to be contained in the Environmental Report (DEHLG, 2004) and includes the relevant sections of this report, which deal with these requirements.

2.9 Difficulties Encountered

The lack of a centralised data source that could make all environmental baseline data for the County both readily available and in a consistent format posed a challenge to the SEA process.

This difficulty is one, which is encountered at local authorities across the Country and was overcome by investing time in the collection of data from various sources and through the use of Geographical Information Systems.

Information Required to be included in the Environmental Report	Corresponding Section of this Report
(A) Outline of the contents and main objectives of the plan, and of its relationship with other relevant plans and programmes	Sections 4 and 5
(B) Description of relevant aspects of the current state of the environment and the evolution of that environment without implementation of the plan	Section 3 and Appendix II (Synopsis of Designated Sites)
(C) Description of the environmental characteristics of areas likely to be significantly affected	Sections 3, 7 and 8
(D) Identification of any existing environmental problems which are relevant to the plan, particularly those relating to European protected sites	Section 3
(E) List environmental protection objectives, established at international, EU or national level, which are relevant to the plan and describe how those objectives and any environmental considerations have been taken into account when preparing the plan	Sections 4, 7 and 8
(F) Describe the likely significant effects on the environment	Section 7 and 8
(G) Describe any measures envisaged to prevent, reduce and as fully as possible offset any significant adverse environmental effects of implementing the plan	Section 9
(H) Give an outline of the reasons for selecting the alternatives considered, and a description of how the assessment was undertaken (including any difficulties)	Sections 2 and 6
(I) A description of proposed monitoring measures	Section 10
(J) A non-technical summary of the above information	Appendix III
(K) Interrelationships between each environmental topic	Addressed as it arises within each Section

Table 2.1 checklist of information included in this environmental report.

² DEHLG (2004) Implementation of SEA Directive (2001/42/EC): Guidelines for Regional Authorities and Planning Authorities Dublin: Government of Ireland

Section 3

Baseline Environment for the Plan Area:

3.1 Introduction

The environmental baseline of Blessington is described in this section. This baseline together with the Strategic Environmental Objectives, which are outlined in Section 4, is used in order to identify, describe and evaluate the likely significant environmental effects of implementing the Local Area 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.

The proposed Blessington Local Area Plan will be the first Local Area Plan for the town and will cover the area of land located within the red boundary as outlined in Figure 3.1 below.

3.2 Description of the town of Blessington

Blessington is located on the Kildare / Wicklow border approximately 27km southwest of Dublin and 11km from Naas, the county town of Kildare.

The national secondary road the N81 links Blessington to Dublin to the north and to Baltinglass to the south. To the north-west, the regional road the R410 links the town to Naas in Kildare. Transport links to the east are more restricted by the Poulaphouca Reservoir and the Dublin and Wicklow Mountains, with the regional routes the R759, R758 and R756 linking Blessington to the east via the Sally Gap and Wicklow Gap.

To the east and south Blessington is bounded by the Poulaphouca Reservoir, a man-made lake created in the 1940's by the damming of the River Liffey at Poulaphouca waterfall, to the south of the town. Hydroelectricity is generated at the dam, and the reservoir also supplies water to the Dublin region following treatment at the nearby Ballymore Eustace waste treatment plant in Co. Kildare. Limited recreational use is also made of the reservoir and it is an important asset to the town and its surrounds.

The south-west boundary of the settlement is formed by the county boundary with Co. Kildare, and to the west of the town are the East Kildare Uplands and the locally elevated Glen Ding / Deerpark woodlands. These forested areas are bounded to the west and south by Regional Road R410 (Blessington-Naas). For most of its northern and eastern flank this woodland area bounds an existing quarry. Much of the site is commercial coniferous forest, mainly of spruce, fir and larch. There is a mix of deciduous species in pockets throughout, notably stands of beech to the northwest and southeast. There are a number of national monuments located in this woodland area, most notably Rath Turtle Moat located near the top of Glen Ding hill.

Lands immediately adjoining the settlement to the north have been extensively quarried for sand and gravel. While 'Doran's Pit' on the east side of the N81 has been inactive for some time, the Roadstone quarry to the west of the N81 has been intensively quarried up until recently.

The town is designated as a Moderate Growth Town in the Wicklow County Development Plan which provides for an indicative population for Blessington in 2016 is 6,000 and 7,500 in 2022.

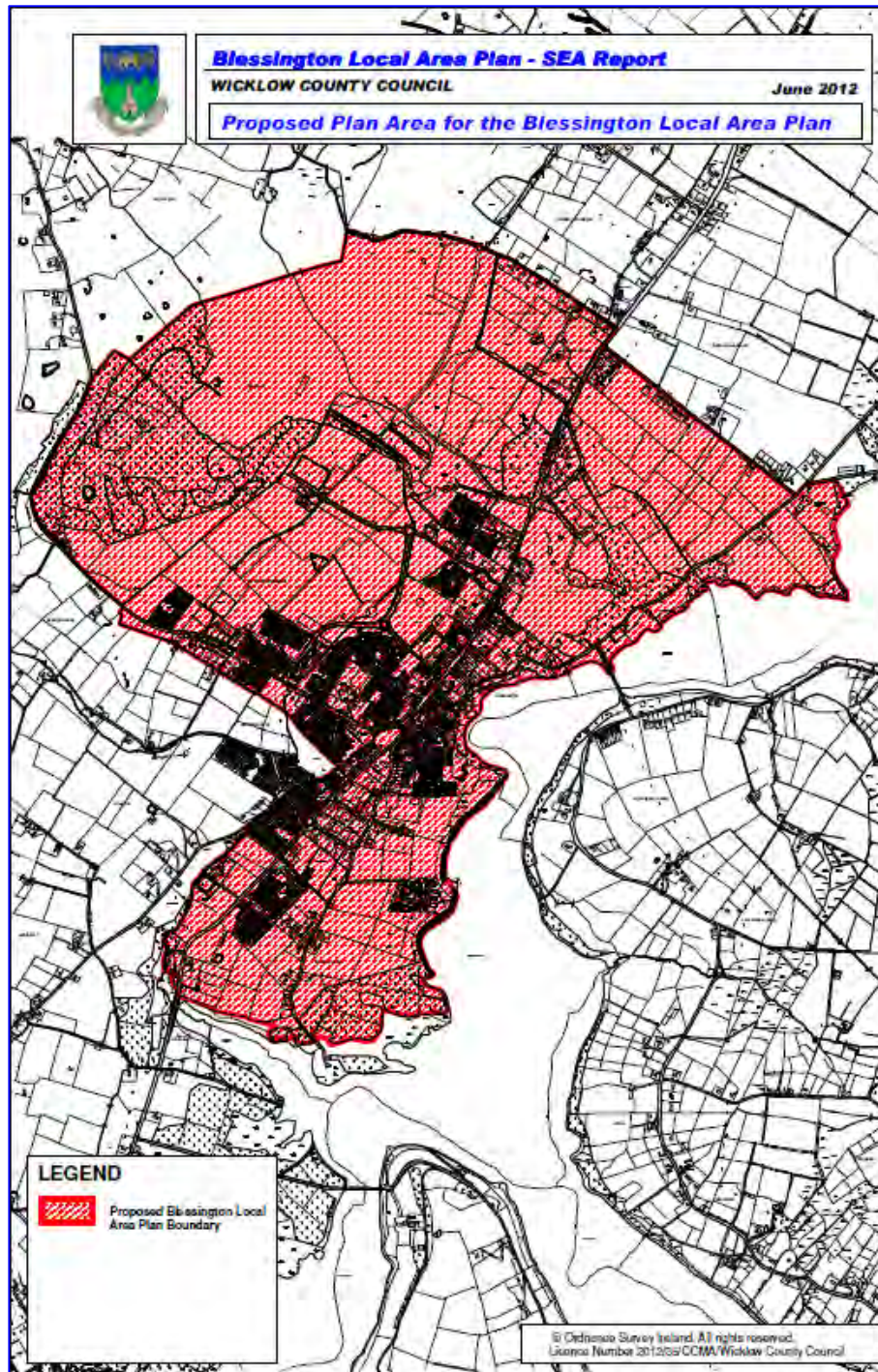


Figure 3.1

3.3 Biodiversity Flora and Fauna

Introduction

Most habitats in the Blessington area have been impacted upon to varying degrees by human beings over time. The clearing of vegetation centuries ago resulted in the replacement of an amount of the natural habitats with semi-natural, low biodiversity habitats. However, a number of important natural and semi-natural habitats remain within and adjacent to the study area.

General Description

CORINE Land Cover mapping classifies land cover under various headings. CORINE land cover mapping for the study area is shown on Figure 3.3 CORINE Land Classification 2006. The Corine land cover mapping 'changes' from 2000 to 2006 identify pockets of land within the town centre area and towards the south of the town area, which have been developed during this time and are classified as Discontinuous Urban Fabric.

The most common land cover headings which are identified across the area the Discontinuous Urban Fabric and Pastures located towards the northwest and south east of the town centre. The existing quarrying sites at Dorans pit and Newpaddocks are recognised as mineral extraction sites while Glen Ding is recognized as a coniferous plantation with a section of the lands adjoining the lakeshore being described as a traditional woodland scrub.

Chapter 17 of the Wicklow County Development Plan sets out landscape categories for the entire County. The town of Blessington itself falls within the Urban Area which is given to have a low vulnerability however the lands adjoining the plan area classified as the lakeshore area to the east is classified as being part of the Mountain and Lakeshore Area of Outstanding Natural Beauty (ML-AONB) with a high vulnerability. This landscape category includes areas deemed to be most sensitive and which are considered to be of greatest scenic value and which are considered to be under severe development pressure.

This area known as the Poulaphuca Reservoir area generally relates to the area around Poulaphuca Reservoir and extends into Sorrell Hill. The lake dominates the reservoir zone, the area being characterised by views onto and from the lake and by lake vegetation.

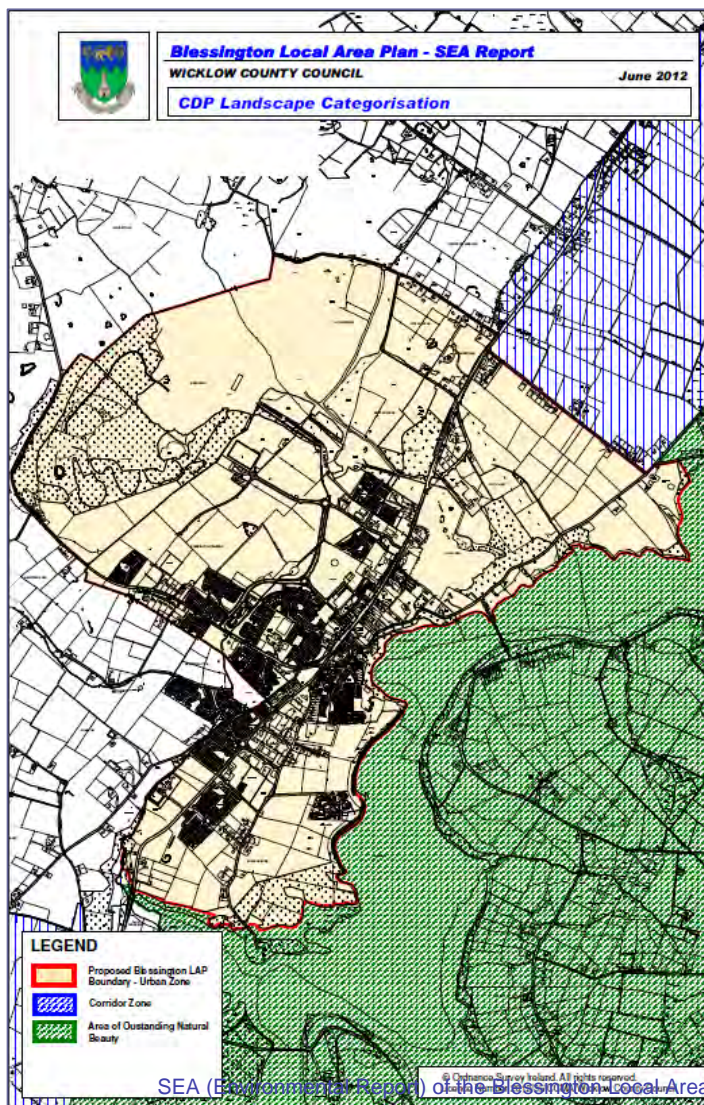


Figure 3.2
Wicklow CDP Landscape
Categorisation

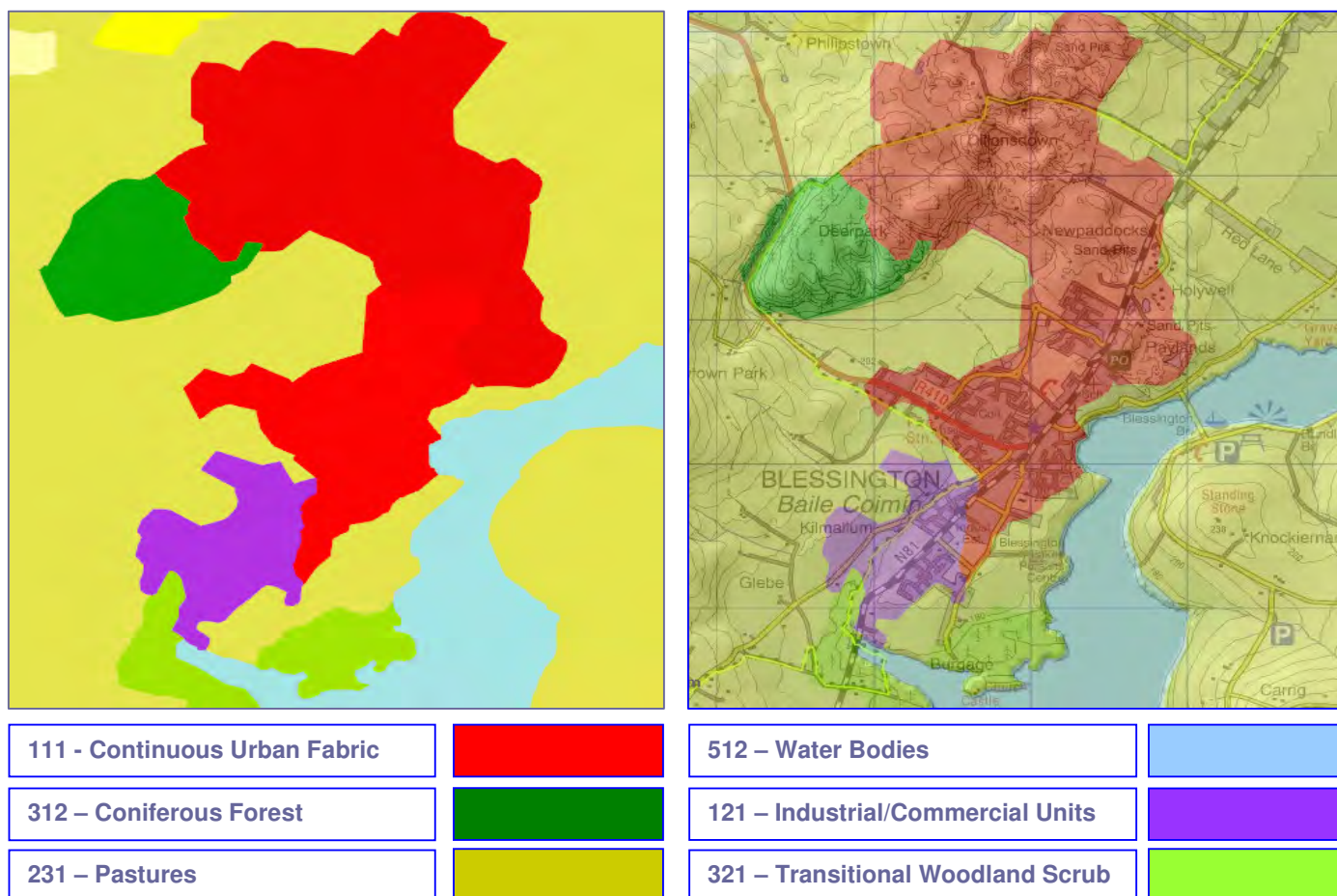


Figure 3.3 Corine Land Cover Mapping 2006

Article 10 of the Habitats Directive recognizes the importance of ecological networks as corridors and stepping-stones for wildlife, including for migration, dispersal and genetic exchange of species of flora and fauna. The Directive requires that ecological connectivity and areas of ecological value outside the Natura 2000 network of designated ecological sites are maintained and it recognises the need for the management of these areas through land use planning and development policies. Ecological networks are important in connecting areas of local biodiversity with each other and with nearby designated sites so as to prevent islands of habitat from being isolated entities. Ecological networks are composed of linear features, such as treelines, hedgerows, rivers and canals, which provide corridors or stepping stones for wildlife species moving within their normal range. They are particularly important for mammals, especially for bats and small birds.

Habitat Mapping:

Wicklow County Council in partnership with The Heritage Council commissioned *NATURA* Environmental Consultants Ltd in October 2006 to undertake a study of Local Biodiversity Areas in Blessington town and environs. Local Biodiversity Areas (LBAs) are sites of local biodiversity value that are not within designated areas, such as SACs or SPAs. Thus, they form a lower tier of ecologically important sites than those nationally and internationally recognised. The aims of the study were:

- To identify sites within the study area which are of local value for their natural heritage (termed Local Biodiversity Areas); to assess their ecological values and threats to their conservation.
- To map this information in a format compatible with the Local Authority Geographic Information System (GIS).
- To identify where potential exists for habitat networks which link these LBA's with nearby designated sites, in this way enhancing their overall biodiversity value.

This study involved both a desk top study and field surveys with the evaluation of each site being based on a field assessment of the diversity and rarity of the habitats and species which it contains. The study used a five-point scale of evaluation for Local Biodiversity Areas based on the site evaluation table prepared by NATURA for other studies. The ratings used ranged as follows:

- A: International value.
- B: National value.
- C: High local value.
- D: Moderate local value.
- E: Low local value.

All the designated areas fall into the categories A and B (international and national importance) while remaining sites are generally rated C, D, or E (local value from high to low).

The main habitat types of biodiversity value which occur within the town boundary of Blessington are listed below. The classification (and codes in parenthesis) follows that of Fossitt (2000).

Reservoirs (FL7), Reed and large sedge swamps (FS1), Eroding upland rivers (FW1), Dry to humid acid grassland (GS3), Wet grassland (GS4), Mixed broadleaved woodland (WD1), Mixed broadleaved/conifer woodland (WD2), Conifer plantation (WD4), Wet willow-alder-ash woodland (WN6), Hedgerows (WL1), Treelines (WL2), Scrub (WS1), Immature woodland (WS2), Recently-felled woodland (WS5)

Local Biodiversity Sites Identified: Table 3.1

Site Number	Name	Habitats Present	Evaluation	Vulnerability/Threats
LBA 1	Haylands	Mosaic of Grassland, Scrub and Woodland	High Local Value	Infrastructure and Quarrying
LBA 2	Santryhill	Mosaic of Grassland, Scrub, Woodland and Reeds Swamp	High Local Value	Vehicular Traffic and Noise from the Quarry, Drainage of lands
LBA 4	Blessington Demesne	Wood Grove	Moderate Local Value	Small Isolate pocket of Woodland
LBA 5	Blessington Demesne - Pond	Used by Gulls, Mallard and Heron	Moderate Local Importance	Agricultural Runoff
LBA 3	Deerpark	Mosaic of Woodland	Regional Importance and High Local Value	Harvesting of Forest Plantation
LBA 7	Deerpark -	Immature Woodland	Remediated from Quarrying activities -	Moderate
LBA 6	Blessington Demesne - Stream	Eroding upland River	High Local Value	Pollution due to Run-off from Agri Land, Culverts without Mammal Legdes from Roads
LBA 8	Burgage - Shoreline	Wet Grassland and Willow Woodland	Moderate Local Value	Conifer Dominance and Leaching from Plantation
LBA 9	Glebe East	Wetland	Moderate Local Value	Run-off from Road and Agricultural Dominance
LBA 10	Blessington Town South	Mature Trees and Greenspace	Moderate Local Value	Felling due to Safety, Over-Management.

Of the above 10 undesignated sites identified within the study area, 4 sites were identified as being of high local value. Details of these sites are listed as follows:

LBA 1. Haylands – Mosaic of Grassland, Scrub and Woodland

This site lies to the west of the reservoir shore and to the east of an active sand quarry. The site is flanked by a quarry to the west, mature wooded gardens to the south, pasture to the north and the NHA boundary and lake to the east. The site is split by a minor road leading to Crosscoolharbour and Kilbride. West of the road the site is a mosaic of dry grassland (GS3), scrub (WS1), mixed conifer/broadleaved woodland (WD2) and wet woodland (WN6). The habitats run approximately in this order from south west to north east (Plate 1). A grassland verge borders the quarry site at the top of a mound dominated by red fescue (*Festuca rubra*). Further east the grassland blends into willow (*Salix* spp.) scrub with alder (*Alnus glutinosa*) and occasional gorse (*Ulex europeaus*). The woodland is bounded by walls, suggesting previous management and contains a mix of native and non-native species, including conifers and broadleaves. The dominant conifer is fir (*Abies* sp.) and the dominant broadleaf is alder, with some very mature specimens of alder. Other broadleaved species included beech (*Fagus sylvatica*), poplar (*Populus* sp.) and pendunculate oak (*Quercus robur*). This wooded area also supports a diverse fungal biota. Further to the north of the site there is a wet area with a small stand of wet willow (*Salix* sp.) and alder woodland with an undergrowth of common reed (*Phragmites australis*) and sedges (*Carex* sp.) and occasional ash (*Fraxinus excelsior*). At the north west end of the site plantation forestry (WD4) is dominant. Rabbit and deer were evident, as were fox and badger. Sand martin burrows were seen on the quarry cliff faces.

East of the road the site borders the NHA which is a wet woodland habitat along the shoreline of the lake. The habitat on site is mixed broadleaf and conifer woodland (WD2) and was recently felled of many of the conifers (WS5). Remaining trees on site include mature alder and ash and shrubs such as hawthorn and elder. The entire site has a variety of habitats of different ages and also a variety of species and is thus of high local value for biodiversity.

LBA 2. Santryhill – Mosaic of Grassland, Scrub, Woodland and Reedswamp

The site at Santryhill has a varied topography and a broad number of habitats (Plate 2). The area is apparently remediated from previous quarrying operations. The grassland is dry (GS3) to wet (GS4) grassland, similar to that in LBA 1 with the addition of hard rush (*Juncus inflexus*) and more damp in places. Scrub (WS1) blends into mixed broadleaved and conifer woodland (WD2). The species diversity in young trees is more diverse and these are obviously planted judging from the mix of species and the exotic species present, such as black poplar and red alder. Species included ash, willow (*Salix cinerea*), sycamore (*Acer pseudoplatanus*), alder, birch (*Betula pendula*) and poplar (*Populus nigra*). Towards the east near the road the topography of the landscape is varied and there is a mix of sandy cliff faces, grassland, scrub and reedswamp. The reedswamp (FS1) is a small area and is dominated by bulrush (*Typha latifolia*). The cliff faces had holes that were suitable for sand martin. Rabbit and deer were evident on the site. This area is of high local value for biodiversity.

LBA 3. Deerpark – Mosaic of Woodland

This is a large site on the border with county Kildare. It contains a mosaic of mature beech woodland with fir intermixed (WD2) and conifer plantations (WD4) dominated by fir and spruce. There is a small area of amenity grassland (GA2) around the monument on the top of the hill in the west of the site. On the western boundary of the site there is a treeline of mature oaks (*Quercus robur*). The woodland has paths throughout and is used by local walkers. Beech is non-native (Webb, 1996), but the size of this site and the maturity of the trees are of note (Plate 3). The beech woods in particular support a diverse fungal biota. Further north east in this complex, north of Blessington Demesne there are some very mature oak and some younger stands of oak. There are also some mature oaks on the boundaries of this site, in particular on the south eastern and northern boundaries. Due to the size of the area this

site is of regional importance and is of high local value for biodiversity. The woodland is of high value for birds and mammals and the dead wood in particular is of high value for fungi and invertebrates.

LBA 6. Blessington Demesne - Stream

The stream (FW1) is small, approx. 0.5 m wide and approx. 0.2 m deep. The water is slow moving and there is a gravel bed with silt deposits. The channel of the stream acts as a corridor between sites and forms part of a habitat network, however the sites demarcated on Figure 1 also compose of mature treelines and so are considered as a LBA in there own right. The river feeds the pond and there is an area of reedswamp downstream of the pond. The dominant plant downstream of the pond is brooklime (*Veronica beccabunga*), however, upstream of the pond along the stream is a line of mature oak and beech (WL2) over grassland pasture. This stream is likely to contain crayfish as the water in most of the streams surrounding Blessington is relatively hard and alkaline and thus suitable for crayfish. Further upstream of the mature trees this site is impacted by recent and future planned developments (as per plans from Wicklow County Council).

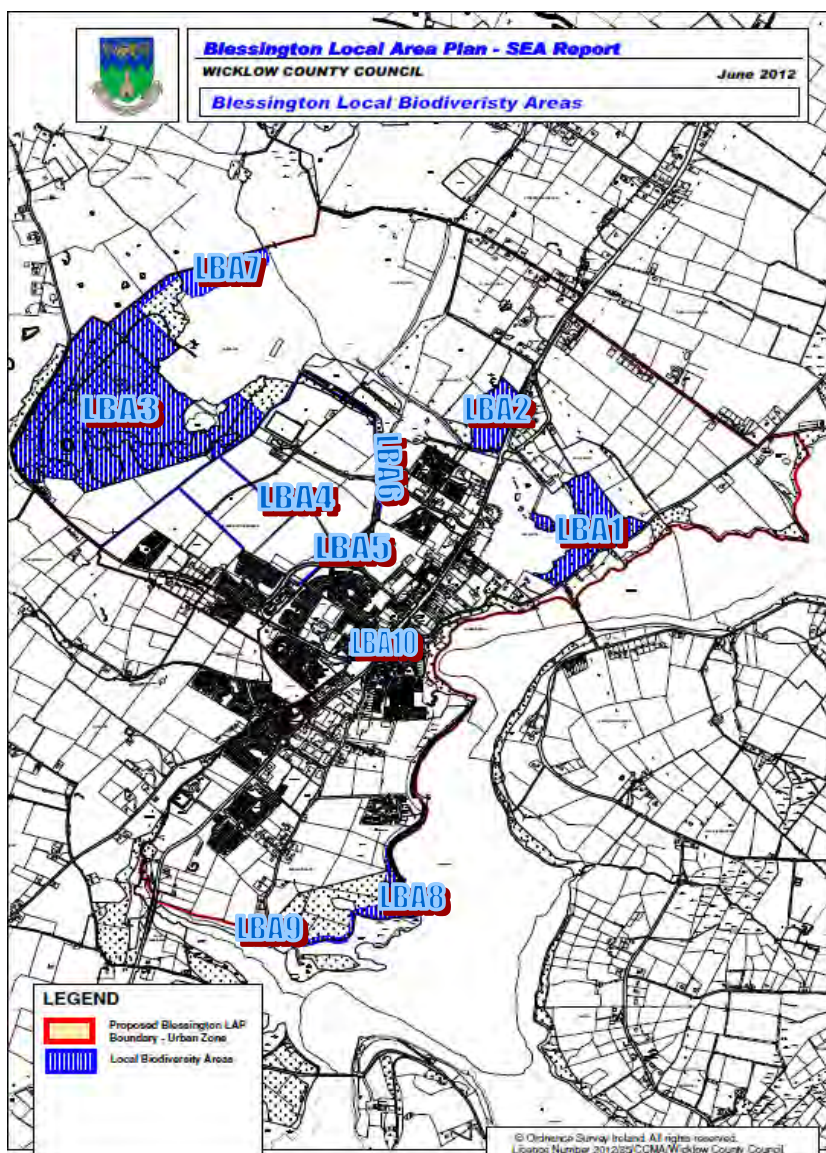


Figure 3.4
Blessington
Local Biodiversity
Areas

As can be seen from figure 3.4 above there are strong water based ecological networks located to the west of the town centre centred around Glen Ding Wood linking LBA's 3, 4, 5 and 6.

Designations

There are no Natura 2000¹ sites located within the plan area however the Poulaphuca Reservoir SPA borders the plan area to the east comprising of the Blessington Lakeshore. This area is also designated as a pNHA.

Other designated sites which occur in the area include Red Bog cSAC (000397), which is located approximately 3km to the north of the town centre, and Wicklow Mountains SPA (004040) and SAC (002122), which is located approximately 3km to the east of the town.

The Site synopsis for each for the Poulaphuca reservoir SPA and pNHA are located within Appendix II of this document alongside the specific conservation objectives. Given the proximity of the plan area to Red Bog and the significant buffer formed by the Blessington lakes to the Wicklow Mountains its is considered more prudent to concentrate on the designation of the Poulaphuca reservoir as an c.SPA and pNHA.

Existing Environmental Problems

Infrastructure and water quality – The existing Blessington Waste Water Treatment Plant has a P.E capacity of 6,000 with an outfall approximately 5.5km to the south of the plan area in County Kildare. The capacity and potential for increasing the capacity of this existing treatment system is restricted by limitations imposed on the discharge licence and by the ESB permit which limits the maximum allowable biological and chemical discharge. This further limits the capacity of the plant and the level of treatment achievable to a population equivalent of 6,810. Given the projected population within Blessington and the potential development of lands zoned within the Kildare County Development Plan which adjoin the plan area, capacity is inadequate to meet demand which will need to be addressed. An increase in the capacity of the existing plant without any further treatment or alternative treatment method is likely to impact upon the aquatic biodiversity, flora and fauna.

Designated Sites and connectivity – As set out above there are a number of ecological networks throughout the plan area with the Poulaphuca reservoir adjoining the eastern boundary of the plan area being a designated SPA. Increased development pressures as a result of the growth of the town on current green field lands may also impact on these networks and the integrity of the SPA.

Ecological networks have been adversely impacted upon by the development of infrastructure such as roads which result in the habitat fragmentation as well as by the development of housing which results in the removal of hedgerows or housing which occurs along the edges of inland surface waters.

Terrestrial Biodiversity, Flora and Fauna - Over time, ongoing road and building developments within the study area have impacted upon biodiversity, flora and fauna with semi-natural habitats replaced by artificial surfaces as indicated by the discontinuous urban fabric shown on Figure 3.2.

¹ The 1992 Habitats Directive seeks to establish Natura 2000, a network of protected areas including Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) - throughout the European Union. SACs are designated and protected under the under the Habitats Directive due to their conservation value for habitats and species of importance in the European Union while SPAs are designated and protected under the 1979 Birds Directive (European Council Directive on the Conservation of Wild Birds 79/409/EEC). Both Directives are transposed into Irish law through various Habitats Regulations.

With regard to terrestrial flora and fauna, all greenfield development in the area causes an impact - the replacement of natural and semi natural habitats with artificial surfaces results in loss of flora and fauna and therefore adversely impacts upon this environmental component.

The significance of the impact of Greenfield development depends on whether individual greenfield developments result in the loss of habitats or species of importance together with the cumulative amount of habitats and species lost and fragmented as a result of all Greenfield developments. It is noted that development of brownfield sites and re-development can also have impacts on terrestrial flora and fauna.

Evolution of Biodiversity, Flora & Fauna in the absence of a Local Area Plan:

In the absence of a Local Area Plan for Blessington development would have no guidance as to where to be directed and planning applications would be assessed on an individual basis with flora and fauna, habitats and ecological connectivity protected under a number of strategic actions relating to biodiversity and flora and fauna protection. The evolution of biodiversity and flora and fauna would be dependent on the rate and extent of any such developments which would take place and these developments would be considered with regard to the County Development Plan 2004-2010.

3.4 Population and Human Health

Population

Blessington is designated as a Moderate Growth Town in the Wicklow County Development Plan. In 1996, the population of Blessington was 1,860. This grew to 4,018 in 2006, an increase of 116% over 10 years. The most rapid increase occurred between 2002 and 2006 when the population increased at an average rate of 12% per annum on the previous year. It is considered however that this rate of growth will not be sustained and was symptomatic of the economic and property boom during that period. It is estimated now that growth will now moderate and will not exceed c. 7% per annum up to 2022.

Year	Population	Annual % change on previous population	Source
1996	1,860	-	1996 Census
2002	2,509	+4% pa	2002 Census
2006	4,018	+12% pa	2006 Census
2011	4,784 ²	+c. 3%	2011 Census
2016	6,000	+c. 4.5. pa	CDP Indicative Population
2022	7,500	+c. 4% pa	CDP Indicative Population

Table 3.2 Population

Based on the information provided by Geodirectory postal system and using Airo Data It is estimated that there are 1,634 households located within the plan area equating to an average household size of 2.9.

It is estimated that by 2016 average household size in Wicklow will have declined to 2.56. Assuming this same household size for Blessington, there would be a need for 2,344 dwelling units in the settlement by 2016. Further declines to 2019 will necessitate a total housing stock in the region of 2,777 units to meet the 2022 population target. Although the proposed new plan will have a lifespan up to 2019, it will make provision for the future growth of Blessington up to 2022. Therefore this Local Area Plan will be required to make provision for c. 1,839 new housing units.

² Source 2011 Small Area Population Statistics

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 and incompatible land uses. In particular the development of the plan area in the absence of a wastewater treatment works has the potential to adversely impact on human health through water (including bathing waters) and air pollution. This potentially poses serious implications for drinking water quality with the current supply being identified by the HSE as an area where further investigation or improvement maybe required.

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.

Existing Environmental Problems

There is a lack of waste water treatment capacity to serve the projected population target for the proposed Blessington plan area. This lack of capacity will constrain the accommodation of population growth; - a significant number of residential developments have already been granted planning permission adjoining the town centre in Blessington which will if developed exceed the current capacity of the existing treatment plan. Restrictions on future permissions will be required until such time as the existing treatment plan has been upgraded.

Septic tanks form the majority of waste water treatment systems within the existing agricultural areas bordering the plan area. Such systems require continual maintenance in order to avoid pollution of groundwaters. Untreated waste from inefficient septic tanks may have significant negative effects on human health. Areas which have high numbers of septic tanks, such as along the lake shore on the Kilbride Road and the Red Lane alongside existing outfalls from public network may cumulatively have potential to pollute groundwater, with consequent effects on human health.

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

Due to the constraints regarding land availability within the town itself given the proximity of the County Boundary, Glen Ding wood and the existing quarrying activities to the west and the designated Natura 2000 site to the south and east, the remaining lands within the proposed plan area must be used to accommodate the anticipated population increases over the coming years.

The occurrence of growth in areas not identified as having environments which are compatible to such land uses can result in significant adverse impacts on the environment. As there is likely to be further increases in the population of Blessington over the coming years, there is a need to direct growth towards the most robust and away from the most sensitive environments.

This can be done by policies and objectives, which are included in a Local Area Plan and by zoning sufficient amounts of land in order to ensure that growth is directed towards the most compatible environments. In the absence of a Local Area Plan such direction of growth would be unlikely to occur and would be likely to result in significant adverse impacts upon a range of environmental components including the landscape, biodiversity, flora and fauna, cultural heritage and water resources.

In the absence of a Local Area Plan for the area there would be no framework for the provision of infrastructure to serve existing and future development and this would be likely to

delay or hinder the provision of infrastructure which would have the potential to result in impacts on environmental vectors to which humans are exposed e.g. a lack of appropriate waste water treatment infrastructure could adversely impact upon drinking water quality and subsequently upon human health.

3.5 Soil

Bedrock Geology

The bedrock geology in and around Blessington consists largely of Pollaphuca Formation. Pollaphuca Formation is made up of coarse, graded greywacke sandstones, medium grey in colour, and grits, and dark grey shales (GSI, 1994)³.

Quaternary Geology

Quaternary geology comprises the study of soils which have been deposited or formed during the last 2 million years. The majority of subsoils, or quaternary geology, underlying Blessington and its surrounds consist of sand and gravel deposits. The close proximity of these deposits around Blessington has meant that the area has historically supported a number of quarries which have extracted and processed the sand and gravel, supplying it to the construction industry.

Figure 3.5 shows the quaternary geology at Blessington. Most of the town and its immediate surrounds are underlain by limestone sand and gravel deposits. A band of sandstone till is found between two areas of limestone and gravel deposits, one which underlies the town and areas north of the town and one which underlies an area to the west of the town. This band of sandstone till underlies much of the R410 Regional Road, from Deerpark to an area to the north of Burgage. Cherty, a sandy till, is found to the northeast of the town. Lacustrine sediments are to be found at Burgage and at the northern banks of the reservoir at Blessington Bridge (GSI, 2006)⁴.

Existing quarry lands around Blessington are shown on Figure 3.6. It is noted that quarrying areas to the north of the town were previously used for illegal landfilling of wastes. Landfilling in these areas failed to integrate appropriate environmental control technologies such as lining systems which would prevent pollution and contamination. Roadstone Dublin Ltd. were required by the courts to get a waste license and on 9 February 2006 they were granted such a licence for activities associated with the cleanup of unauthorised landfill of approximately 300,000 tonnes of mixed waste within their landholding. This mixed waste was deemed likely to contain waste which would form toxic leachate overtime and which could infiltrate into surrounding soils, groundwater and surface water thereby potentially impacting upon soil quality and other environmental components (see Section 3.3, Section 3.5 and Section 3.7).

The licence that was granted to Roadstone required the removal off-site of all wastes to an approved disposal/recovery facility and the landscaping and reclamation of the excavated areas in order to remediate the site. This process has now been completed with the EPA surrendering the licence for the licensable activities in February 2012. In its decision the EPA stated that the agency is satisfied that the licensable activities have ceased at the facility and the condition of the facility is not causing or likely to cause and environmental pollution.

³ Geological Survey of Ireland (1994) *Geology of Kildare-Wicklow Sheet 16 100K Series* Dublin: Geological Survey of Ireland.

⁴ Geological Survey of Ireland (2006) *Quaternary Geology Kildare, North Wicklow* Dublin: Geological Survey of Ireland.

Blessington Delta

The Blessington Delta, the gently sloping ground beyond the south-east flank of Glen Ding ridge, is identified in table 17.7 of the Wicklow County Development Plan 2010-2016 as an Area of Geological and Geomorphological interest.

Soils

Soil 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.

Figure 3.5 Soils⁵ shows the spatial distribution of soils in the study area. These soils overlying the gravel and sand subsoils in and around Blessington are composed largely of grey brown podzolic and brown earths which are generally well to moderately drained and contain a medium to high organic content. The biodiversity, flora and fauna detailed under Section 3.2 are facilitated by these soils, as is an extent of agricultural land use.

Existing Environmental Problems

The development of quarries in Blessington has led to the depletion of both subsoils, the material which has been quarried, and topsoil, which has been removed in order to obtain the subsoil.

Building upon and thereby sealing off of soil represents another environmental problem. There is potential for the Blessington Stream to be polluted by silt run off quarry. The soils beneath Blessington function as aquifers, containing groundwater. Pollution or contamination of these soils would be likely to impact upon groundwater which is connected through aquifers to the Pollaphuca Reservoir, the main water supply for the Greater Dublin Region (see Section 3.5). Problems relating to dust from the quarry are described under Section 3.6.

Evolution of Soil in the Absence of a Local Area Plan

In the absence of a Local Area Plan it is likely that there would be applications to expand quarrying activities in certain areas which are underlain by limestone sand and gravel deposits. Such development would result in the reduction of the non-renewable subsoil and soil resources in and around the town.

Greenfield development in the town would result in the building upon and thereby sealing off of the non-renewable subsoil and soil resources.

Soil may be potentially polluted and contaminated as a result of the infiltration of leachate from the previous illegal landfill area in Blessington as well as from quarries. The extent to which soil has been or will be adversely impacted upon as a result of this leachate is unknown. While the waste licence granted to Roadstone has been deemed to be complied with and the illegally dumped wastes have been removed from the site concerned, the extent to which leachate will have already entered the hydrological system underlying Blessington is unknown. Such effects caused as a result of this leachate infiltration would not be affected by the presence or absence of a Local Area Plan for Blessington.

⁵ Teagasc, Geological Survey of Ireland, Forest Service & EPA (2006) Soils and Subsoils Class Dublin: DEHLG

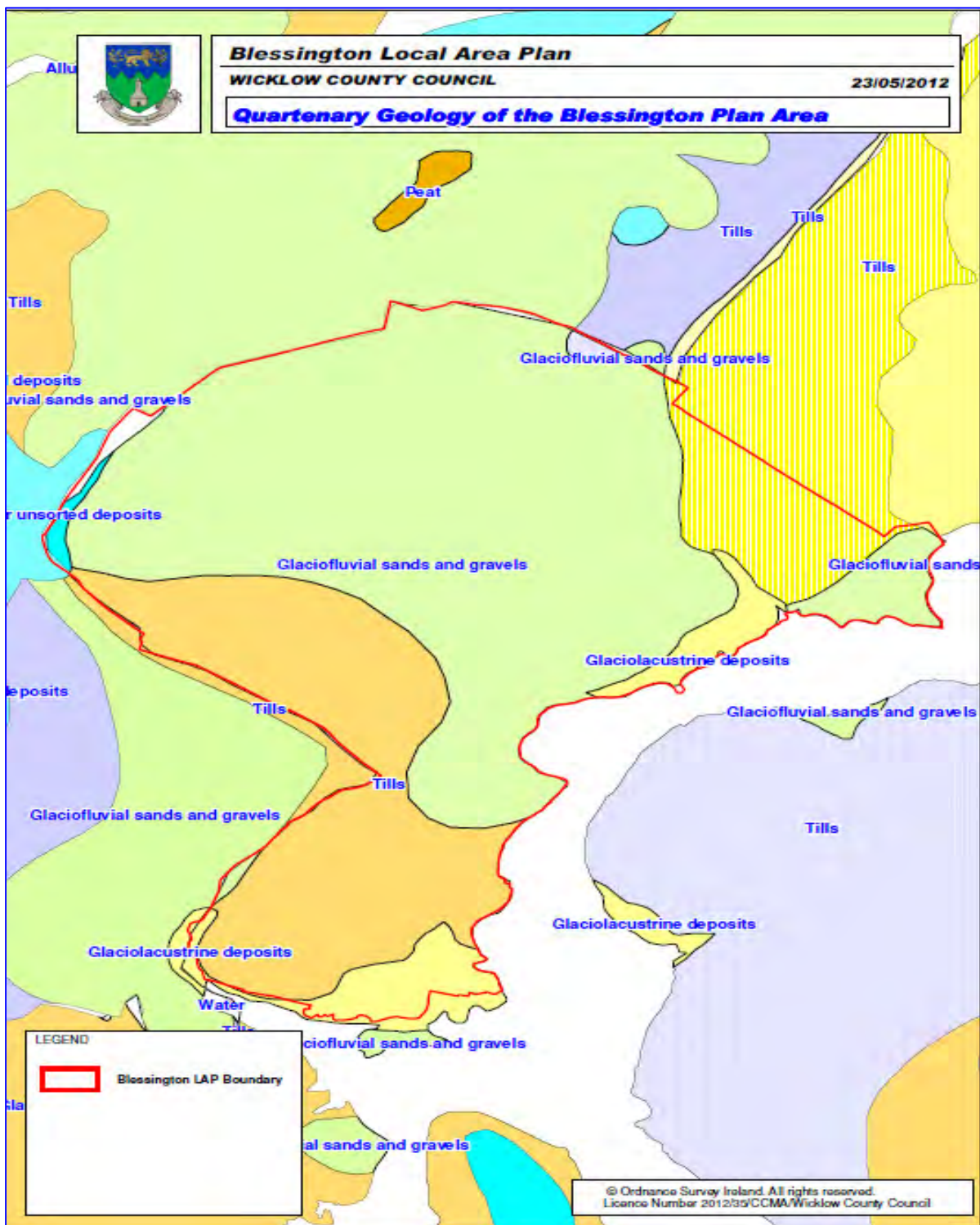


Figure 3.5 Blessington – Quaternary Geology

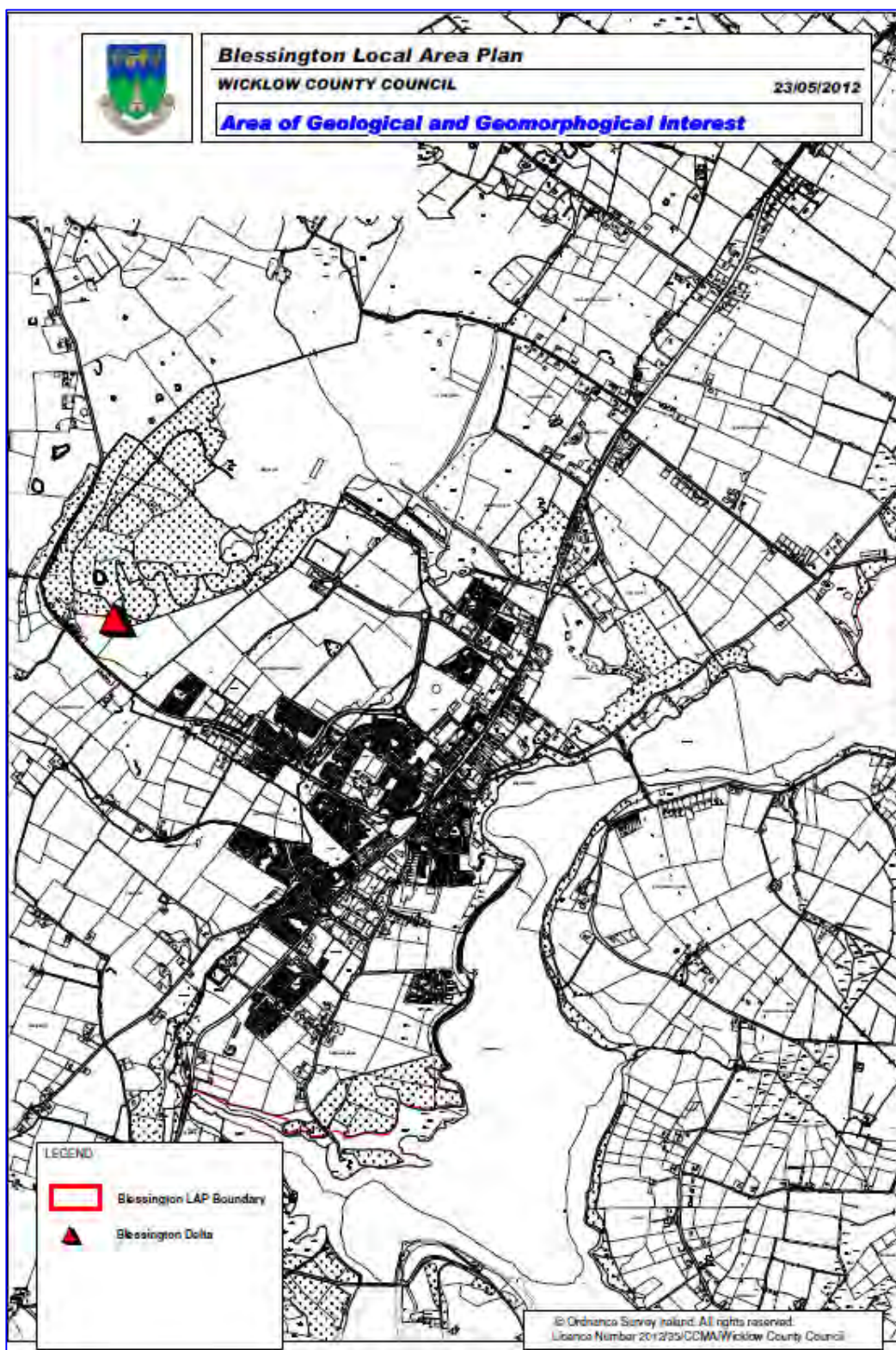


Figure 3.6 Areas of Geological and Geomorphological interest.

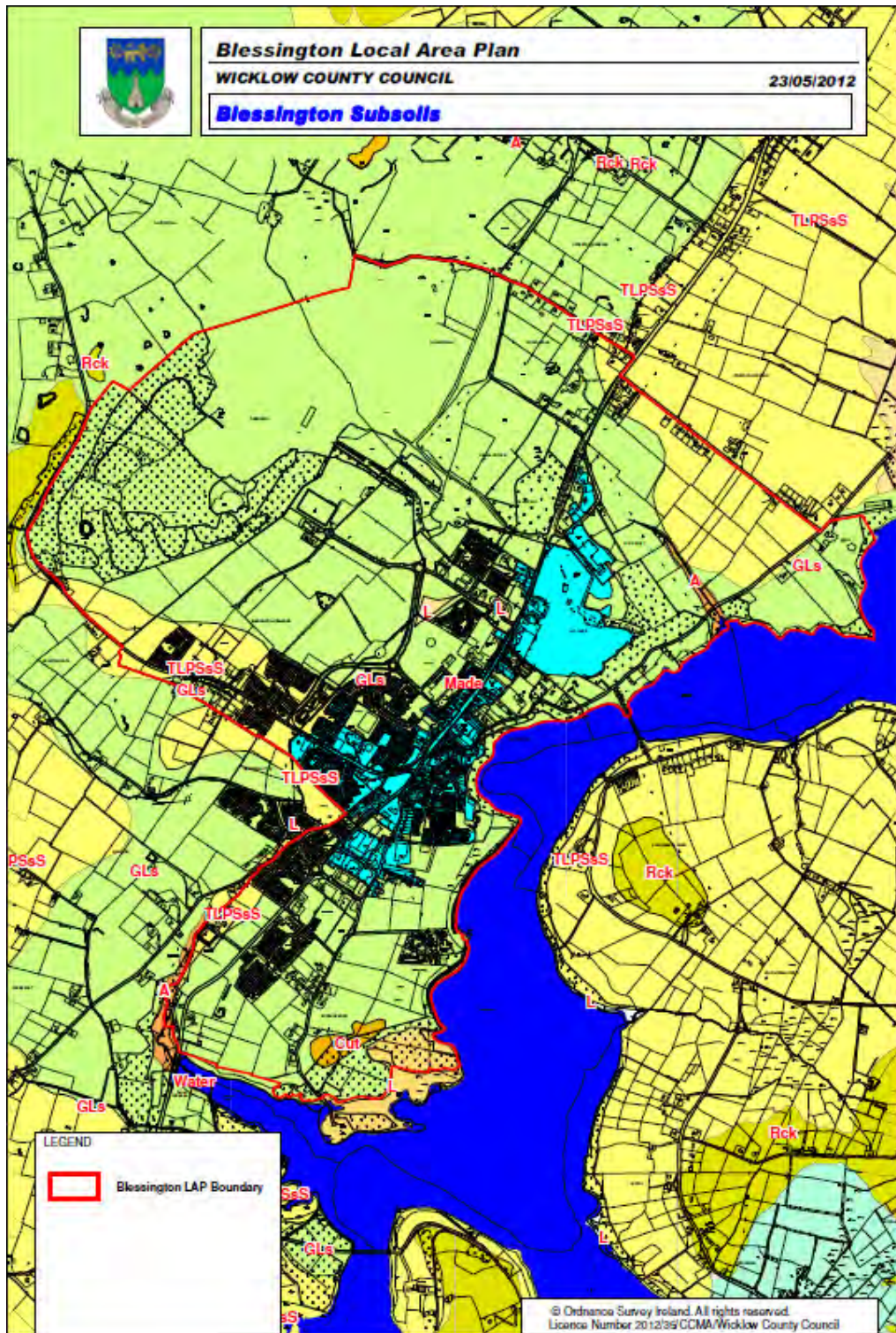


Figure 3.7 Blessington Subsoils

3.6 The Water Framework Directive

Introduction:

Since 2000, Water Management in the EU has been directed by the Water Framework Directive 2000/60/EC (WFD). The WFD has been transposed into Irish legislation by the European Communities (Water Policy) Regulations 2003 (SI No. 722 of 2003) and 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.

River Basin Districts and Water Bodies

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. Blessington falls within the Eastern River Basin District (ERBD).

Within each River Basin District - for the purpose of assessment, reporting and management - water has been divided into groundwater, rivers, lakes, estuarine waters and coastal waters which are in turn divided into specific, clearly defined water bodies.

WFD Risk Assessment

In order to achieve the objectives of the WFD it is necessary:

- ⇒ To assess the risk that water bodies may not achieve good quality status;
- ⇒ To identify the pressures from human activities causing this risk; and,
- ⇒ To develop strategies and management plans to minimise the risk.

Risk assessment procedures were developed at national level and applied across all River Basin Districts in order to analyse the impact of the pressures. The risk assessments were predictive, i.e. they examined each pressure and predicted the magnitude, which would be likely to have a negative impact.

Each water body has been assessed and classified, 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. The classifications used for reporting this assessment are:

- ⇒ **(1a)** At Significant Risk - water body is at risk of failing to meet good status in 2015
- ⇒ **(1b)** Probably at Significant Risk – water body is thought to be at risk of failing to meet good status in 2015 pending further investigation
- ⇒ **(2a)** Not at Significant Risk - the water body is expected to meet good status in 2015.
- ⇒ **(2b)** Probably Not at Significant Risk - water body is expected to meet good status in 2015, pending further investigation

Water bodies placed in the (1a) At Significant Risk category will need improvement to achieve the required status while water bodies in the (1b) probably at Significant Risk category are likely to need improvement in order to achieve the required status.

Risk Assessment:

In terms of achieving the objectives of the Water Framework Directive the following is of note in relation the Blessington Plan Area:

The plan area falls within the Water Management Unit of the Liffey Lower which includes the Blessington waterbody the Liffey Lower and Pollaphuca Reservoir, with a section of the plan area falling within the Morell waterbody. The following table provides a breakdown of the Overall Status, Risk and Objectives for these surface water bodies:

Water Body	Status	Risk ⁶ Status	Reasons for Risk level	Overall Objective
Blessington	Good	1a	At Risk - Diffuse Pollution	Protect
Liffey Lower	Moderate	1a	At Risk - Diffuse and Morphological Sources	Restore 2021
Pollaphuca Reservoir	Moderate	2a	Probably Not at Risk	Restore 2021
Morell	Moderate	1a	Diffuse Pollution	Restore 2021

Table 3.3 (Refer to Figure 3.8 Below)

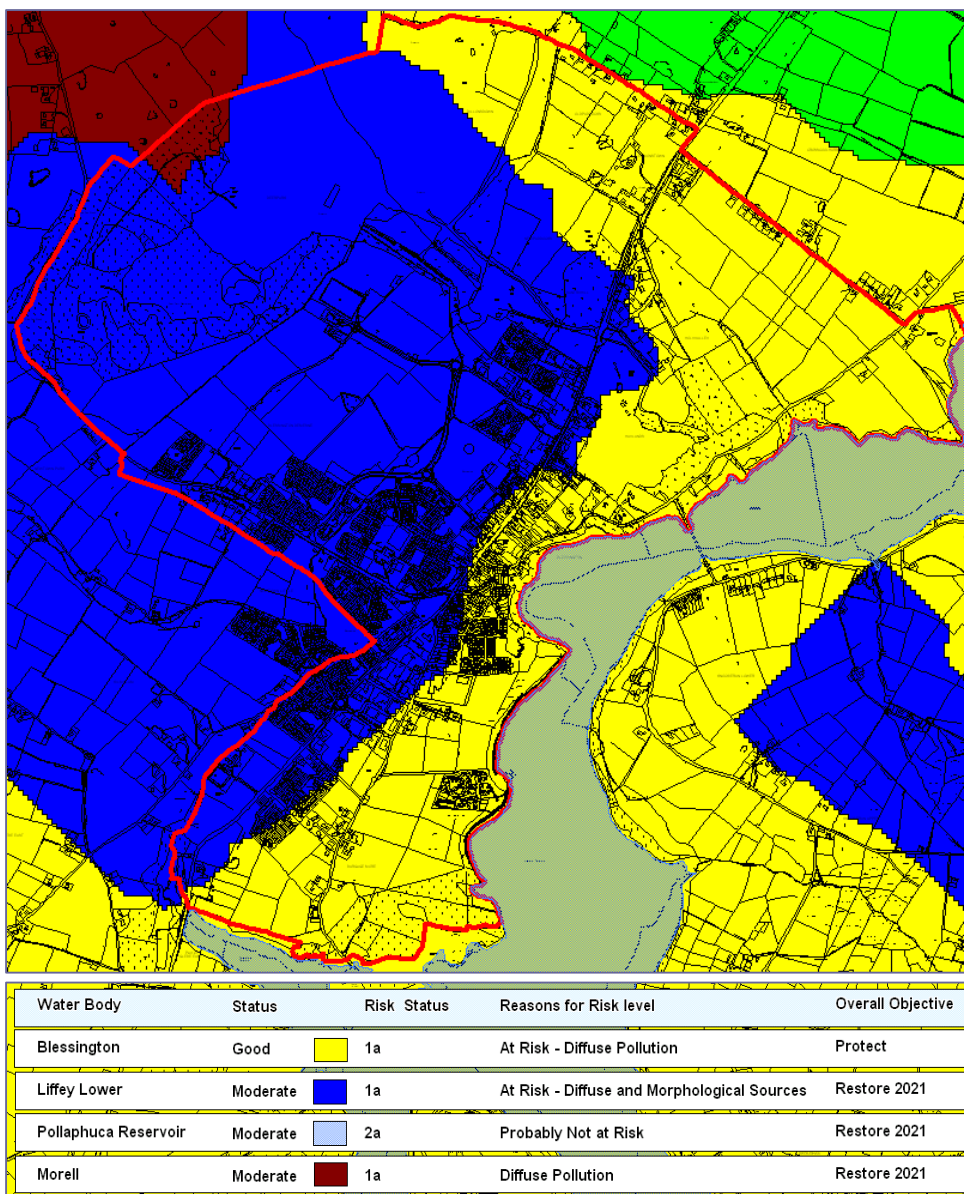


Figure 3.8 Blessington Water Bodies

⁶ By 'risk' we mean the risk that a water body will not achieve good ecological or good chemical status/potential at least by 2015.

Eastern River Basin Management Plan

Local Authorities located in the ERBD have prepared a River Basin Management Plan with a life span of 6 years from 2009-2015. The ERBD Management Plan describes the actions that are proposed to ensure the necessary protection of the districts water including Blessington's waters over the coming years. It sets out how the aims and objectives of improving and protecting water quality and ecology in the waters of each river basin district could be achieved, by means of a Programme of Measures.

Pollaphuca Reservoir and Associated Rivers

Pollaphuca Reservoir to the south and east of Blessington was created in 1944 by damming the River Liffey for the purpose of generating electricity from hydropower. The Reservoir covers an area of approximately 20 square kilometres and is the largest inland water body in the mid-east and south-east regions.

Pollaphuca Reservoir is hydraulically connected to the aquifers which underlie Blessington and its surrounds. The Reservoir receives water from two surface waters, the River Liffey at the northern end, and the Kings River at the southern end. The exit is into the River Liffey gorge at the western end. The EPA (2005)⁷ identifies Pollaphuca Reservoir as being mesotrophic⁸ – mesotrophic lakes have low levels of pollution as well as very little impairments with regard to the use of the lake.

The EPA sampling point upstream of the Reservoir on the River Liffey is recorded as being unpolluted (Q4)⁹, while the sampling point on the Brittas River which is a tributary of this part of the Liffey is recorded as being unpolluted (Q4-Q5). The two sampling points upstream of the Reservoir on the Kings River are unpolluted (Q4). The sampling point on the section of the River Liffey which flows out of the Reservoir at Ballymore Eustace is recorded as being slightly polluted (Q3-Q4) (EPA, 2005)¹⁰.

Blessington Stream and Blessington Demesne Pond

Blessington Stream has its source in Deerpark and feeds into the pond in Blessington demesne before it flows through the west of the Town and into Pollaphuca Reservoir at the Burgage Mór to the immediate south of the Town. Blessington Stream is not presently monitored although the presence of algal bloom in Blessington Pond suggests that the stream may be polluted to an extent.

Natura (2006)¹¹ identify algal deposits in the pond in Blessington Demesne, indicating a eutrophic status - possibly from nearby agricultural runoff. Figure 3.9 maps surface waters in and around Blessington.

⁷ Environmental Protection Agency (2005) *Water Quality in Ireland 2001 – 2003* Wexford: Environmental Protection Agency

⁸ Nutrient enrichment, resulting in eutrophication, is the principal pressure on lake quality in Ireland. These nutrient inputs result in plant growth in lakes whose presence is quantified by a measure of the algal pigment chlorophyll. Lake trophic status, or the extent to which a lake is nutrient enriched, is determined by a consideration of the annual maximum chlorophyll values. Oligotrophic or mesotrophic status is considered to be satisfactory water quality while hypertrophic is the most enriched status with eutrophic status in between hypertrophic and mesotrophic.

⁹ The Biotic Index Values, or Q values, are assigned to rivers in accordance with biological monitoring of surface waters - low Q ratings, as low as Q1, are indicative of low biodiversity and polluted waters, and high Q ratings, as high as Q5, are indicative of high biodiversity and unpolluted waters.

¹⁰ Environmental Protection Agency (2005) *Water Quality in Ireland 2001 – 2003* Wexford: Environmental Protection Agency

¹¹ Natura Environmental Consultants (2006) *Blessington Local Biodiversity Areas* Wicklow: Wicklow County Council

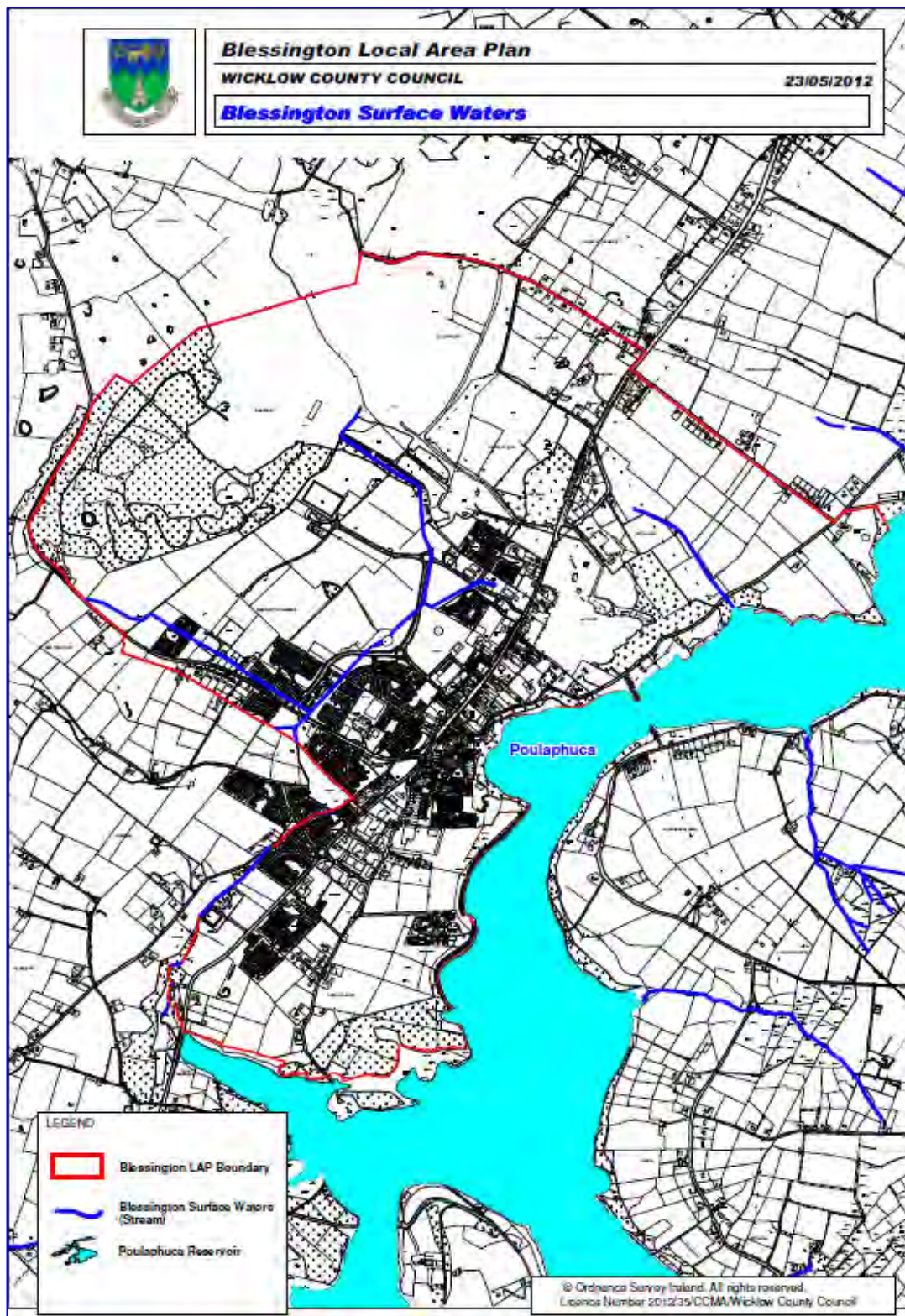


Figure 3.9 Surface Water Status

Groundwater:

Within the plan area two groundwater bodies are identified 1) Blessington S & G¹² and 2) The Kilcullen Groundwater Body.

The Blessington S & G groundwater body achieved a good status with an overall risk rating of 1b ('probably at risk of not achieving good status by 2015') due to the presence of diffuse and general groundwater pollution, quarrying and landfill activities.

The Kilcullen groundwater body achieved a good status with an overall risk rating of 1a ('at risk of not achieving good status by 2015') due to diffuse pollution, contaminated land risk, general groundwater pollution and exceedances of water quality above specific standards.

Productivity and Vulnerability

The Geological Survey of Ireland rates the aquifers of Ireland according to their productivity and their vulnerability to pollution. Figure 3.10 below shows the Groundwater Protection Zone (GPZ) (GSI, 2006)¹³ ratings for the area in and around Blessington. GPZ ratings integrate aquifer categories, which categorise aquifers with regard to their productivity, and aquifer vulnerability ratings, which rate aquifers on the ease with which groundwater may be contaminated by human activities.

Much of Blessington and its immediate surrounds are located over an extensive sand/gravel aquifer which is locally important for the supply of drinking water. Locally important aquifers are aquifers which are moderately productive, capable of yielding enough water to boreholes or springs to supply villages, small towns or factories. This aquifer is of a high vulnerability which is the second most vulnerable rating, behind extreme and ahead of moderate and low. The aquifer is also hydraulically connected to Pollaphuca Reservoir, the water supply for the Greater Dublin Region.

All other aquifers surrounding Blessington are poor aquifers which are normally capable of yielding only sufficient water from wells or springs to supply single houses, small farms or small group water schemes. A number of vulnerability ratings have been attached to these poor aquifers; an extreme vulnerability rating generally covers the area to the east of the reservoir and an aquifer band which stretches from north to south, approximately 2km south east of the Town; a high vulnerability rating covers areas to the west of the Town and to the east of the Town, including areas around much of the edge of the Reservoir, and; a moderate vulnerability rating covers an area to the east of the Town as well as areas to the south of the Town.

Register of Protected Areas

In accordance with the requirements of the Water Framework Directive and the associated national regulations, the Environmental Protection Agency have compiled Registers of Protected Areas.

The protected areas are identified as those requiring special protection under existing national or European legislation, either to protect their surface water or groundwater, or to conserve habitats or species that directly depend on those waters. The areas protected and listed on the register are as follows:

¹² S & G – Sand and Gravel

¹³ Geological Survey of Ireland (2006) *Groundwater Protection Zone Ratings for County Wicklow* Dublin: Geological Survey of Ireland

Protected Drinking Waters			
Name	Water Body Type	Management Unit	Overall Status
Blessington S & G	Groundwater	N/A	Good
Special Protection Areas (SPAs); Water Dependent Habitats and Species			
Name	Conservation Status	Overall Protected Area Status	
Poulaphuca Reservoir	Unassigned	Unassigned	
Wicklow Mountains	Unassigned	Unassigned	
Special Areas of Conservation; Water Dependent Habitats			
Name	Conservation Status	Overall Protected Area Status	
Red Bog	Unassigned	Unassigned	
Wicklow Mountains	Unassigned	Unassigned	
Natural Heritage Areas (NHAs)			
Name	Type	Conservation Status	
Poulaphuca Reservoir	pNHA	Proposed	
Red Bog	pNHA	Proposed	

Table 3.4 Register of Protected Areas

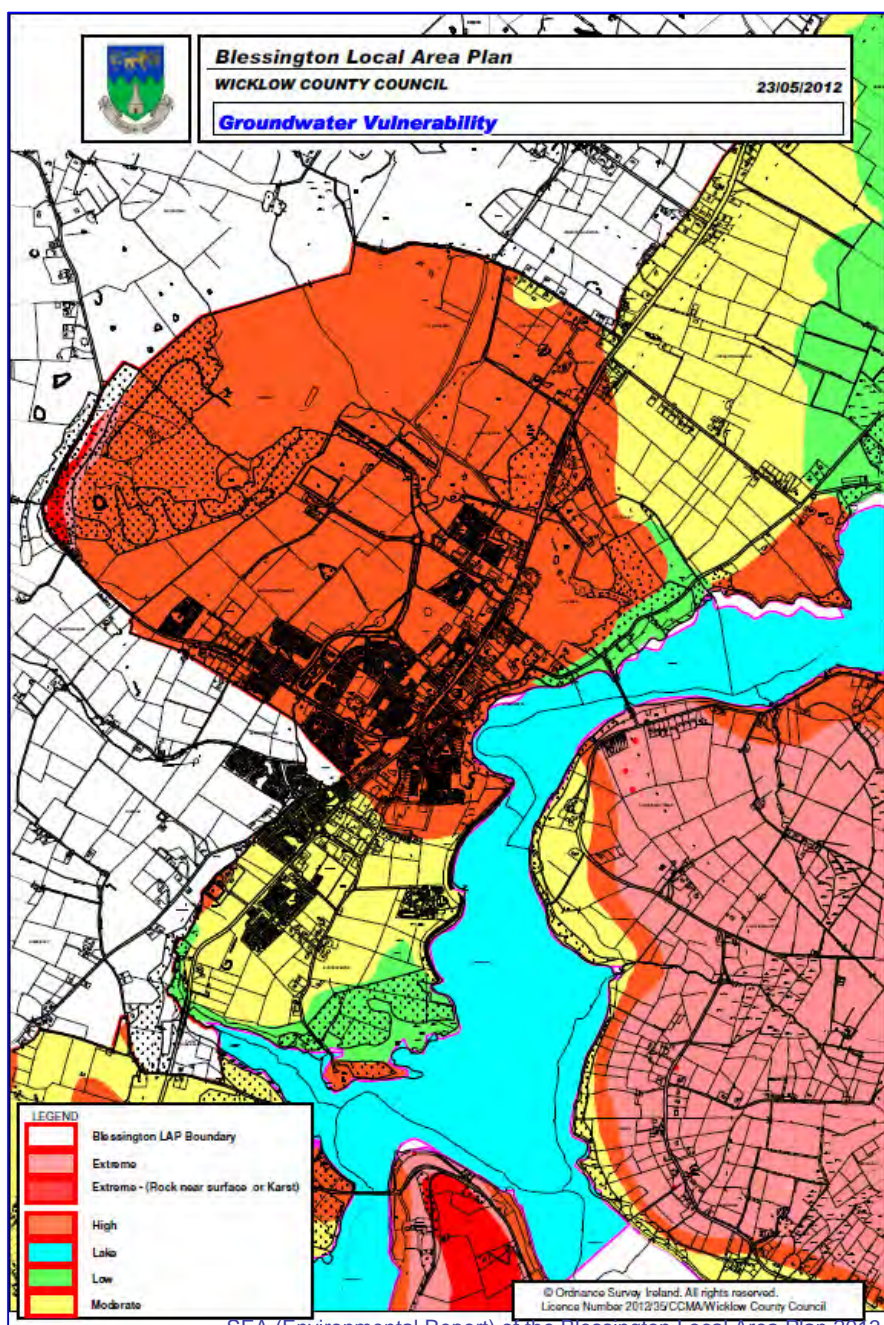


Figure 3.10
Groundwater
Vulnerability

Existing Problems

Problems with regard to water quality have the potential for significant adverse impacts upon biodiversity, flora and fauna, drinking water supplies and human health.

As set out above the plan area falls within the Water Management Unit of the Liffey Lower which includes the Blessington water body, the Liffey Lower and Pollaphuca Reservoir, with a section of the plan area falling within the Morell waterbody. All of these waterbodies with the exception of the Pollaphuca Reservoir have been classified as being 1A at risk of failing to achieve the WFD's objectives by 2015.

With regard to the area's groundwater, a significant amount of the waters are classified as being either of high or extreme vulnerability.

The failure to provide appropriate wastewater treatment infrastructure and capacity alongside development presents a significant potential problem, which could affect the Council's ability to meet its commitments under the WFD.

To comply with the EU Floods Directive introduced in November 2007, and in line with the Guidelines for Planning Authorities 'The Planning System and Flood Risk Management', an assessment of flood risk is to be undertaken as part of the preparation of the new Local Area Plan. In accordance with the guidelines, the preparation the plan is to incorporate an approach that aims to avoid development in areas at risk of flooding, and where development on floodplains cannot be avoided, to take a sequential approach to flood risk management based on reduction and mitigation of risk.

The Office of Public Works (OPW) National Flood Hazard mapping project provides information on records of flooding the area. The maps do not indicate any areas of flooding within the proposed plan area. The closest occurrence of flooding is situated c. 3km to the north west of the town centre at Eadestown cemetery and c. 4km to the north east of the town centre where the River Liffey flows into the reservoir.

In addition, the plan preparation process will have regard to the Glen Ding Flood Study prepared in April 2012 by Barry and Partners consulting engineers. The study involved calculating the capacity of the four existing streams within and adjoining the proposed plan boundary at Glen Ding, within the former O'Leary lands, Newtown Park and Kilmalum. Mathematical modelling was used to determine what works are required to provide adequate capacity in the streams to cater for the 100-year design flow for the scheme.

Existing Environmental Problems

Natura (2006)¹⁴ identified algal deposits in the pond in Blessington Demesne, indicating a eutrophic status - possibly from nearby agricultural runoff.

Blessington Stream is not presently monitored although the presence of algal bloom in Blessington Pond suggests that the stream may be polluted to an extent.

The EPA sampling point upstream of the Reservoir on the River Liffey is recorded as being unpolluted, while the sampling point on the Brittas River which is a tributary of this part of the Liffey is recorded as being slightly polluted. The sampling point on the section of the River Liffey which flows out of the Reservoir is recorded as being slightly polluted (EPA, 2005)¹⁵.

Evolution of Water in the Absence of a Local Area Plan

The quality of the River Liffey, the Brittas River and the Kings River upstream of the Reservoir would not be affected by the presence or absence of a Local Area Plan for Blessington.

¹⁴ Natura Environmental Consultants (2006) *Blessington Local Biodiversity Areas* Wicklow: Wicklow County Council

¹⁵ Environmental Protection Agency (2005) *Water Quality in Ireland 2001 – 2003* Wexford: Environmental Protection Agency

In the absence of a framework for development such as a Local Area Plan planning applications for Blessington would be assessed on an individual basis. If existing permissions were added to by granting additional applications the capacity of the waste water treatment plant in Blessington would be further exceeded (see Section 3.7). Development under such circumstances would be likely to adversely impact upon the quality of Blessington's aquifers, the Pollaphuca Reservoir and the section of the River Liffey which flows out of the Reservoir.

Neither Blessington Stream nor Blessington Pond are presently monitored however the presence of algal bloom in Blessington Pond suggests that both are likely to be polluted to an extent. If this potential pollution was not investigated and mitigated against if necessary the quality of these water bodies would be unlikely to change. Development along either the Blessington Stream or the Blessington Demesne Pond could result in water pollution which would reduce the quality of these water bodies and potentially impact upon the quality of the Pollaphuca Reservoir into which the stream flows.

Increasing demand for water supply from the Pollaphuca Reservoir is likely to lead to a decrease in the quantity of water in the Reservoir and a lowering of the water level fluctuation range. Such effects of an increase in water supply demand would not be affected by the presence or absence of a Local Area Plan for Blessington.

3.7 Air and Climatic Factors

Introduction and Legislation

In order to protect human health, vegetation and ecosystems, EU Directives set down air quality standards in Ireland and the other Member States for a wide variety of pollutants. These pollutants are generated through fuel combustion, in space heating, traffic, electricity generation and industry and, in sufficient amounts, could affect the well being of the areas inhabitants. The EU Directives include details regarding how ambient air quality should be monitored, assessed and managed.

The principles to this European approach are set out under the Air Quality Framework Directive 1996 as transposed into Irish law under the Environmental Protection Agency Act 1992 (Ambient Air Quality Assessment and Management) Regulations 1999 (SI No. 33 of 1999).

Four daughter Directives lay down limits or thresholds for specific pollutants. The first two of these directives cover: sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter and lead; and, carbon monoxide and benzene. Two more daughter directives deal with: ozone; and polycyclic aromatic hydrocarbons, arsenic, nickel, cadmium and mercury in ambient air.

In order to comply with these directives, the EPA measures the levels of a number of atmospheric pollutants. For the purposes of monitoring in Ireland, 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, Wicklow, 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.

The Blessington area is located in Zone D.

There is currently no ambient air quality monitoring in the Blessington Area with past monitoring stations being situated in Avondale and Bray.

While Air Quality within the general study area is not considered to be a significant issue it is noted that the occurrence of dust from previous and existing quarrying activities in the area create a harsh sensory environment, however this issue is most appropriately dealt with by the relevant authorities.

Potential sources of point source emissions to Air:

IPPC Licensed Facilities:

There is only one IPPC Licensed Facility (Licence Number) P0197 – 02 A.B. Converters located to the south of the town. The IPPC Licence requires that all operations on-site be carried out in a manner such that air emissions and/or odours do not result in significant impairment of, or significant interference with amenities or the environment beyond the site boundary.

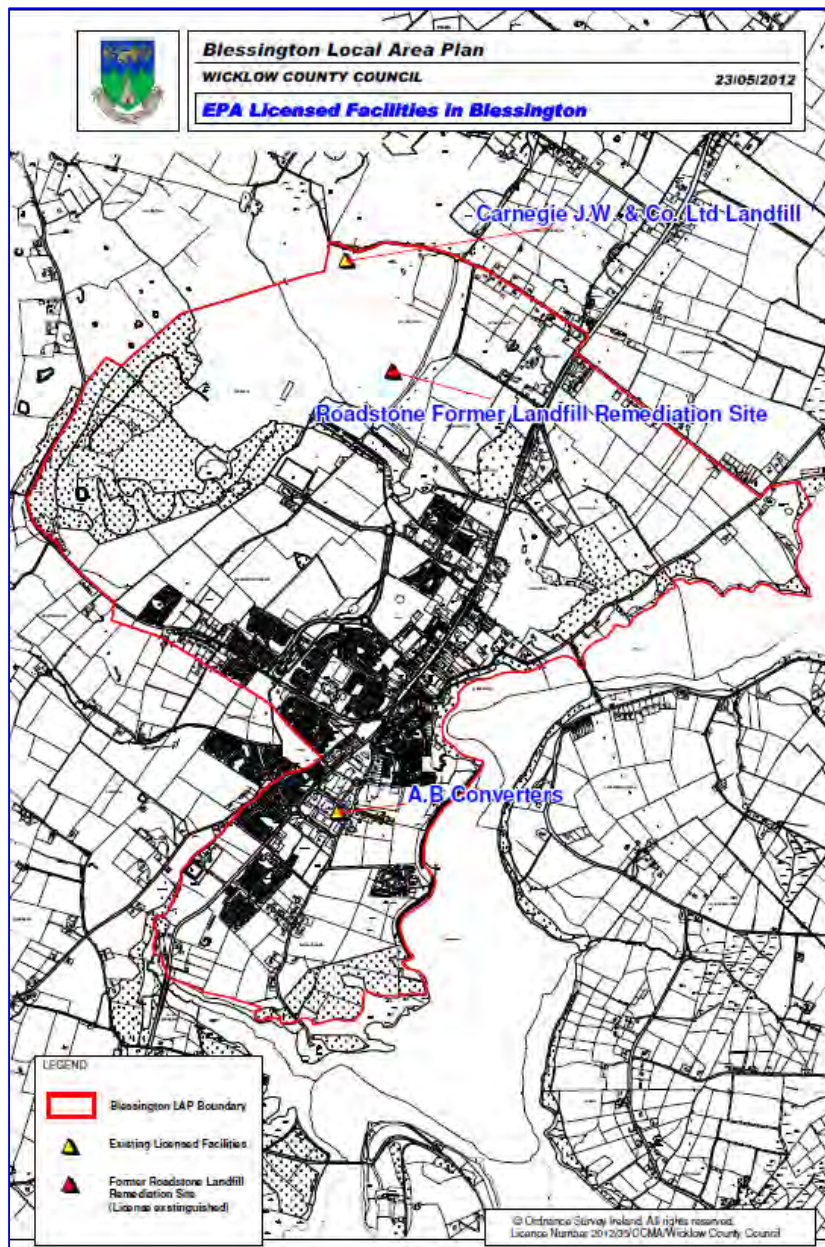


Figure 3.11
EPA Licensed Facilities

3.8 Noise

Within the proposed Blessington plan area the places most commonly affected by noise are urban areas and areas along roadsides. Noise is unwanted sound. It can seriously harm human health and interfere with daily activities at school, at work, at home and during leisure time. Traffic noise alone is harming the health of almost every third European today. The main health risks of noise identified by the WHO include: pain and hearing fatigue; hearing impairment; annoyance; interferences with social behaviour; interference with speech communication; sleep disturbance and all its consequences; and performance at work and school.

The over-riding noise source within the plan area is from traffic. The existing main street acting as the main thoroughfare through the town has high traffic counts as well as enclosing main street buildings which are likely to have harsh sensory environments in regard to noise levels.

In addition, there are localised noise sources, which include air conditioning equipment, quarry activities and night clubs. The Main Street and existing link to the new town centre shopping facilities form the main traffic hotspots within the town and are likely to have elevated levels of air pollution and noise due to traffic congestion. These areas provide for a harsh sensory environment, which may impact upon human health.

3.9 Climatic Factors

Introduction

Climate change refers to any change in climate over time and represents one of the greatest environmental, social and economic threats facing the planet. It causes a significant change in the average weather or climate that a region experiences and can be caused by natural factors such as variations in sunlight intensity.

The Intergovernmental Panel on Climate Change (IPCC) concluded in its 4th assessment report (2007) that warming of the climate system is unequivocal. This report was preceded by Sir Nicholas Stern's 2006 economic review estimating the cost of inaction regarding combating climate change.

For this reason it is important that Wicklow County Council and its residents, act responsibly at a local level in order to assist in the reduction of greenhouse gas emissions - which are created primarily by the use of non-renewable fossil fuels. Holistically reducing these emissions will require implementing an overarching strategy affecting many aspects of the development of the County.

Greenhouse Gas Emissions

The term climate change is more generally used to refer to changes in our climate due to the build up of greenhouse gases (GHG's) in the atmosphere. In order to reduce greenhouse gas emissions the internationally agreed Kyoto Protocol established emissions reduction targets for developing countries. Ireland's emission target for greenhouse gases is to limit the increase in their combined emissions during the five-year period 2008-2012 to 13 per cent above 1990 levels.

Based on the inventory figures for 2006, the EPA estimates that Ireland's emissions in 2006 were 25.5 per cent higher than the baseline estimate that underlies Ireland's allowable emissions for the period 2008-2012, as agreed in the peer review of Ireland's 2006 submission to the United Nations Framework Convention on Climate Change.

Transport continues to be the dominant growth sector with emissions at 682,000 tonnes higher in 2006 than in 2005. This represents a 5.2% increase on 2005 levels and 165% increase on the 1990 transport emissions. Road transport accounts for 97% of the transport sector emissions. The increase in the GHG emissions from the transport sector reflects

sustained increases in fuel consumption with petrol usage up 3.4% and diesel consumption up 7.9% from the previous year.

Potential Effects of Climate Change

The EPA's 'Climate Change: Regional Climate Model Predictions for Ireland' (2005)¹⁶ report provides an analysis of future Irish climate conditions for the period 2021–2060 based on the outputs from a new regional climate modelling facility located in Met Éireann.

As increased temperatures will lead to greater amounts of water vapour in the atmosphere and an accelerated global water cycle, it is reasonable to expect that river catchment areas will be exposed to a greater risk of flooding. The increase in winter precipitation will be likely to produce a significant increase in the more intense discharge episodes, raising the risk of future flooding.

The report identifies that although it is not possible to comment on changes in flood magnitude and frequency, the increase in winter runoff indicated for many parts of the west of the country, especially under the scenario for the period 2061–2090, is likely to have significant implications. River flooding tends to be more common during the wetter winter months when soils are near saturation and can be exacerbated in coastal areas when interactions occur between high tides and high flows. Many of the rivers draining upland areas have a rapid or “flashy” response to rainfall enhanced by rising topography. Steep slopes and thin soils favour rapid flow pathways and water is rapidly transmitted to the channel network especially in urbanised catchments with extensive areas of impermeable surfaces.

Existing Air and Climatic Problems

Traffic hotspots along the main street and new town centre are likely to have elevated levels of air pollution and noise due to traffic congestion.

Blessington's location within the commuter belt for Dublin and West Wicklow amount to a large quantity of traffic movements along the N81 that is a significant concern within the plan area. A lack of sustainable public transport linking Blessington to these areas and other settlements within the County has resulted in increased private car trips. Such linkages must be provided before public transport becomes a viable alternative to car trips. Reductions in private car movements will result in a reduction in emissions such as PM10 and NOx.

Localised air pollution incidences with regard to PM10 and PM2.5 and noise pollution are both likely to occur when demolition/construction takes place - especially in relation to PM10 if suppression techniques are not introduced

In terms of the impact of various licensed industrial facilities on future development, the development of brownfield sites for mixed use development will need to have regard to any health and safety constraints imposed by existing industrial uses.

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 area's human beings, its biodiversity and its economy

¹⁶ Community Climate Change Consortium for Ireland (2005) Environmental RTDI Programme 2000–2006 Climate Change: Regional Climate Model Predictions for Ireland (2001-CD-C4-M2) Final Report Wexford: Environmental Protection Agency

Evolution of Air and Climatic Factors in the absence of a Local Area Plan

In the absence of a Local Area Plan there would be no framework for the location of new development and as a consequence development would be likely to occur in a piecemeal fashion, spread out across wider areas than otherwise may be the case. This would result in significant increases in travel related emissions to air.

While increases in the use of catalytic converters, cleaner fuels, better engine technology and maintenance is generally reducing the pollution omitted per motor vehicle, this reduction is probably being offset by the increase in the number of cars as well as the increase in the volume and incidences of traffic congestion. Increases in the number of cars as well as the increase in the volume and incidences of traffic congestion may lead to increases in air and noise pollution in the future.

In the absence of a Local Area Plan, the realisation of objectives relating to energy efficiency, renewable energy and a reduction in transport related emissions contained within the Local Area Plan would be made more difficult.

If new development or an intensification of existing land uses were to occur in the Plan area adverse impacts upon air quality and noise levels, and resultant impacts upon human health, would be likely to arise if unmitigated.

3.10 Material Assets

Waste Water

Waste water in Blessington is treated by the town's waste water treatment plant which is located to the southwest of the town, on the Wicklow side of the Wicklow-Kildare County boundary, north of the N81 and west of the industrial estate. A network of foul sewers collects sewage from developments and transports it to the plant for treatment. An effluent pressure main takes treated waste water from the plant to Golden Falls where it is discharged under a Discharge License agreement with the EPA and Electricity Supply Board.

The existing plant has a p.e of c. 6,000 with the limiting factor in the size of the plant being the restrictions imposed on its discharges which are subject to an EPA discharge licence. The final outfall is discharged to Golden Fall Lake via a 225mm diameter pressure pipe which is regulated by the ESB and subject to a permit which places a maximum hydraulic daily discharge and biological discharge. This further limits the capacity of the plant and the maximum level of treatment achievable to a population equivalent of 6,810. Given the projected population within Blessington (*Wicklow CDP Population Projection of 7,500*) and the potential development of lands zoned within the Kildare County Development Plan which adjoin the plan area, capacity is inadequate to meet demand, which will need to be addressed.

Drinking Water

As part of the West Wicklow Water Supply Scheme (phase 1a) Blessington is now served (as of April/May 2010) from the Dublin Regional Water Supply, in this case from the Ballymore Eustace Treatment Plant. This relatively new system comprises of an 8km water main, a new pumping station in Eadestown Co. Kildare and a storage reservoir at Glen Ding with a capacity of 4,300m³. The scheme has adequate capacity for existing needs and also for future growth of Plan area, and to allow the connection of surrounding areas which are currently served by problematic group water schemes.

Transport

Blessington is linked to Dublin, to the north east and south west, via the N81 National Secondary Road which passes through the Main Street, the centre of the town. The location of Blessington on this national distributor road and local service road has led to intense

development pressures as well as high traffic levels and a resultant harsh sensory environment for pedestrians. In the town centre the R410 Regional Road from Naas to the northwest intersects with the N81.

While a large section of the proposed new inner relief road has been constructed the northern section has yet to be completed which would provide a complete by-pass of the town from Roadstone to the north to the existing roundabout close to the Texaco garage to the south of the town. Once completed, the inner relief road has the potential to remove significant quantities of through - and Naas bound - traffic from the town centre of Blessington.

Blessington is served by a network of local roads which link the town centre to the reservoir, Blessington Bridge and Kilbride to the north east of the town centre and to Burgage and Ballymore Eustace in the southwest and to all existing residential development in the town.

In addition to the above road networks the proposed N81 Hollywood Cross to Tallaght Road Improvement Scheme Preferred Route Corridor process has reached a preferred route stage.

Existing Environmental Problems

Given the existing restrictions in the design and level of discharge allowable from the Blessington Waste Water Treatment Plant and the extent of existing planning permissions there is inadequate capacity for existing and permitted development and no capacity for further development.

Evolution of Material Assets in the Absence of a Local Area Plan

Given waste water treatment needs of existing and permitted development in Blessington, the capacity of the existing Waste Water Treatment will be exceeded therefore there is inadequate capacity for existing and permitted development and no capacity for further sustainable development in the town. In order for further growth to be accommodated in Blessington the capacity of the Waste Water Treatment Plant would need to be increased or capacity would need to be sourced elsewhere.

There are presently no issues with drinking water supply following the construction of the public water network system coming from Ballymore Eustace and therefore Drinking Water Supply would not be an issue in the absence of the a Local Area plan.

Relatively high levels of traffic in Blessington's town have the potential to be removed when construction of the new inner relief road is completed. This will be further ensured through the construction of the N81 new route corridor with the preferred route being proposed to be located to the west of the town centre in close proximity to the County Boundary.

3.11 Cultural Assets

Introduction:

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.

The Wicklow County Development Plan 2010-2016, in line with the Planning and Development Act 2000 and Government Policy seeks to protect and conserve buildings, areas, structures and features of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest.

The most important items of archaeological and architectural heritage in the Blessington Plan Area are set out in chapter 16 of the Wicklow County Development Plan 2010 – 2016 chapters

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. Archaeological sites may have no visible surface features; the surface features of an archaeological site may have decayed completely or been deliberately removed but archaeological deposits and features may survive beneath the surface. Such sites may sometimes be detected as crop-marks visible from the air or have their presence indicated by the occurrence of artefact scatters in ploughed land, but in other cases may remain invisible unless uncovered through ground disturbance.

Archaeology in Ireland is protected under the National Monuments Acts 1930 to 2004.

The Record of Monuments and Places- Terrestrial Entries

The Record of Monuments and Places for Blessington lists and protects monuments and places under Section 12 of the National Monuments (Amending National Monument Acts from 1930 to 1994) Act, 1994. Monuments are any artificial or partly artificial building, structure, or erection. Monuments protected under the Act include prehistoric monuments and any monuments and places associated with commercial, cultural, economic, industrial, military, religious or social history. The Act includes all monuments in existence before 1700 A.D. (Government of Ireland, 1994)

A number of entries in the Record of Monuments and Places in and around Blessington provide evidence of early settlement (Figure 3.13). The Wicklow County Development Plan 2010 - 2016 identifies the deserted medieval borough at Burgage as an area of archaeological potential and significance. The borough includes the ruins of the 15th Century Burgage Castle and a medieval Church. The County Development Plan also identifies St. Mark's Cross at Burgage Mór in Burgage Cemetery as a major site of archaeological importance in Wicklow which is in state ownership. This is a High Cross dating from the 12th Century and was originally located at an ancient church which is now submerged in the lake.

Buffer zones have been defined around certain Recorded Monuments and Places entries in the Glen Ding woodland, including the Rath Turtle Moat, in order to prevent encroachment of quarrying and the associated adverse impacts upon archaeology.

The Record of Monuments and Places- Submerged Entries

Further historical context is given to Blessington through a number of entries in the Record of Monuments and Places which have been submerged under the Pollaphuca Reservoir since 1944 when the River Liffey was dammed in order to create hydropower for the generation of electricity.

When the water levels in the lake are low the old walls and ruins of the Blessington Townlands can be partially observed from the shore.

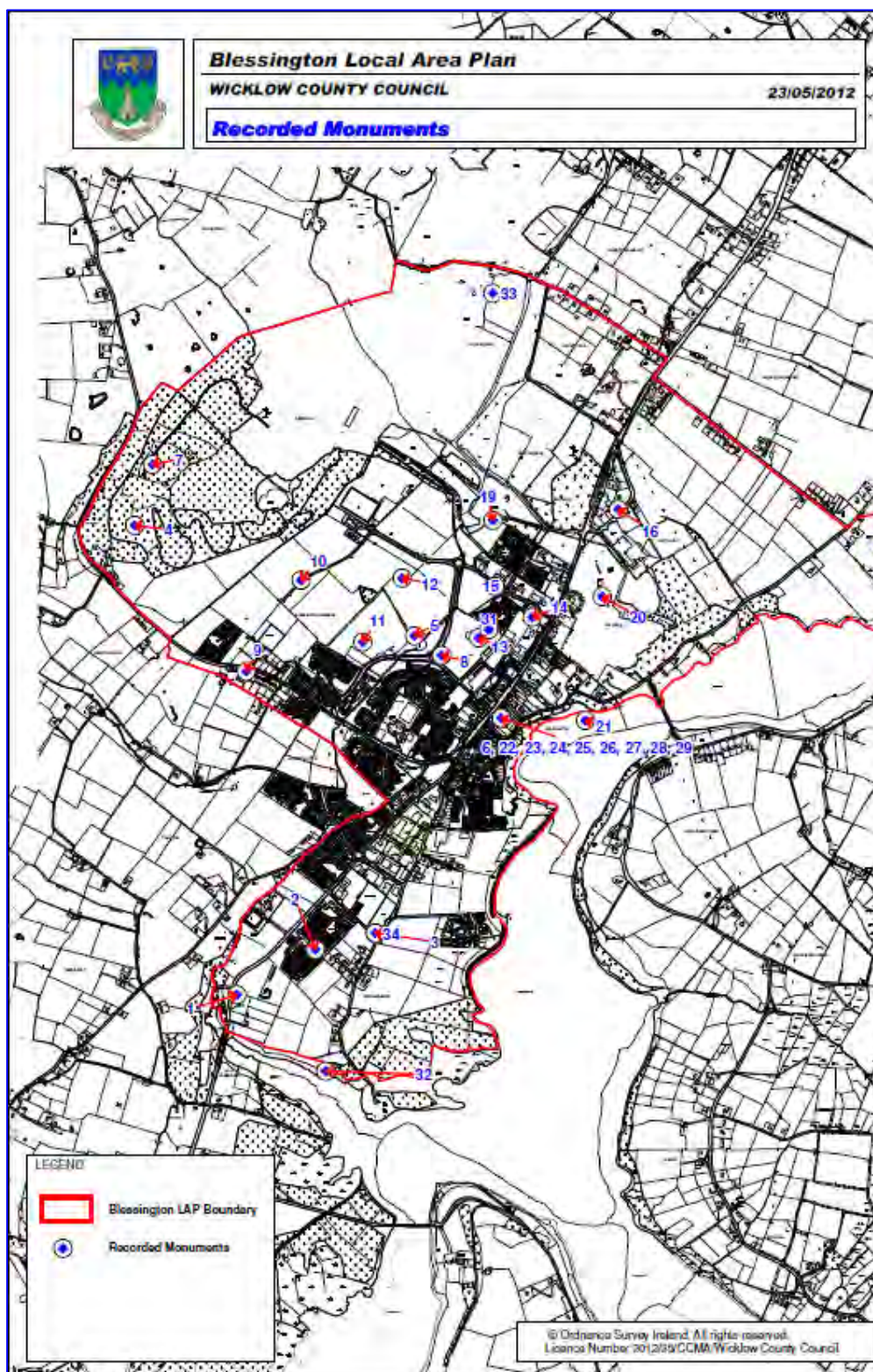


Figure 3.12 Recorded Monuments

Architectural Heritage

Blessington is an estate village that has developed into a linear town, centred on the Main Street that runs in a broadly north-south direction.

Blessington Town centre was adopted as an Architectural Conservation Area (ACA) under the County Development Plan 2010-2016. An ACA is a place, area, group of structures or townscape which is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or value, or contributes to the appreciation of protected structures, whose character it is an objective to preserve in a development plan. Such a designation that would require that planning permission must be obtained before significant works can be carried out to the exterior of a structure in the ACA which might alter the character of the ACA.

The ACA was adopted in order to protect the most significant part of the historic and architecturally important core of the town through the protection of: groups of structures of distinctiveness or visual richness or historical importance, and; the setting of the protected structures in the town, extending beyond their curtilage. This ACA extends to include most of Main Street and the original Town Square. Although more modern development is not included within this ACA, it is recognised that it is vital to integrate such development and to provide a positive interface between old and new.

The Records of Protected Structures included in the Wicklow County Development Plan are legislated for under Section 51 of the Planning and Development Act 2000 and include structures which form part of the architectural heritage and which are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest. All structures, buildings, or erections, which came into existence after 1700 A.D., can be protected through enlistment in the Record of Protected Structures. Protection can apply to all parts of the structure, surrounding lands and any other structure on surrounding lands. Most of the entries in the Record of Protected Structures in Blessington are to be found in the proposed ACA.

Entries in the Record of Protected Structures (RPS) in and around Blessington, include:

Ref No.	No.	Building Address	Structure	Description
05-02	96	Blessington The Rectory	House	A circa 1870, L-plan house of three bays and two storeys. Facing the garden is a gabled breakfront. The house has cement-rendered walls, string-course and moulded architrave to windows, timber porch and round-headed doorcase.
05-03	97	Blessington Main Street	Bank, formerly a house.	Large, early-19th century, five-bay, two-storey house over a basement with a round-headed doorcase and radial fanlight, ground-floor windows in blank arches linked by a granite string-course and with a hipped roof.
05-04	98	Blessington Main Street Downshire Hotel	Hotel	Early-19th century, seven-bay, two-storey building over a basement, with granite porch, painted, rough-cast walls, Georgian panes in sash windows and a low-pitched roof.
05-05	99	Blessington Main Street Credit Union House	Former Market House	A handsome market house, dating from circa 1830, of granite ashlar with a three-bay, two-storey facade with a pedimented breakfront, arched ground floor (two arches open on the ground floor) heavy cornice, coat of arms and hipped roof.
05-06	100	Blessington Main Street Church of Ireland	Church	Mid-19th century, gothic-revival church of opus incertum with pointed windows and a steep-pitched roof. The tall, three-stage tower, probably late 17th century, has a distinct batter, rendered walls and simple

				pinnacles.
05-07	101	Blessington Main Street Former Catholic church	Hall	An early-19th century, five-bay, single-cell of coursed-rubble stone with a gabled porch and a bellcote. The windows are square-headed and the roof slated.
05-08	102	Blessington Main Street 'Dempsey'	House and shop	A tall, three-bay, three-storey, gable-ended house with a distinct batter to the rendered walls, natural slates and end stacks. The windows have Georgian glazing bars and the round-headed door case is architraved. (The ground-floor fenestration ahs been a

Table 3.5 Blessington Record of Protected Structures

As well as there being a number of buildings in Blessington included on the record of protected structures, there a number of other buildings that have no special protection but are of significance to the character of the village, some of which are listed in the National Inventory of Architectural Heritage (NIAH). Figure 3.14 shows the location of entries to the Record of Protected Structures, the boundary of the proposed Architectural Conservation Area in the town.

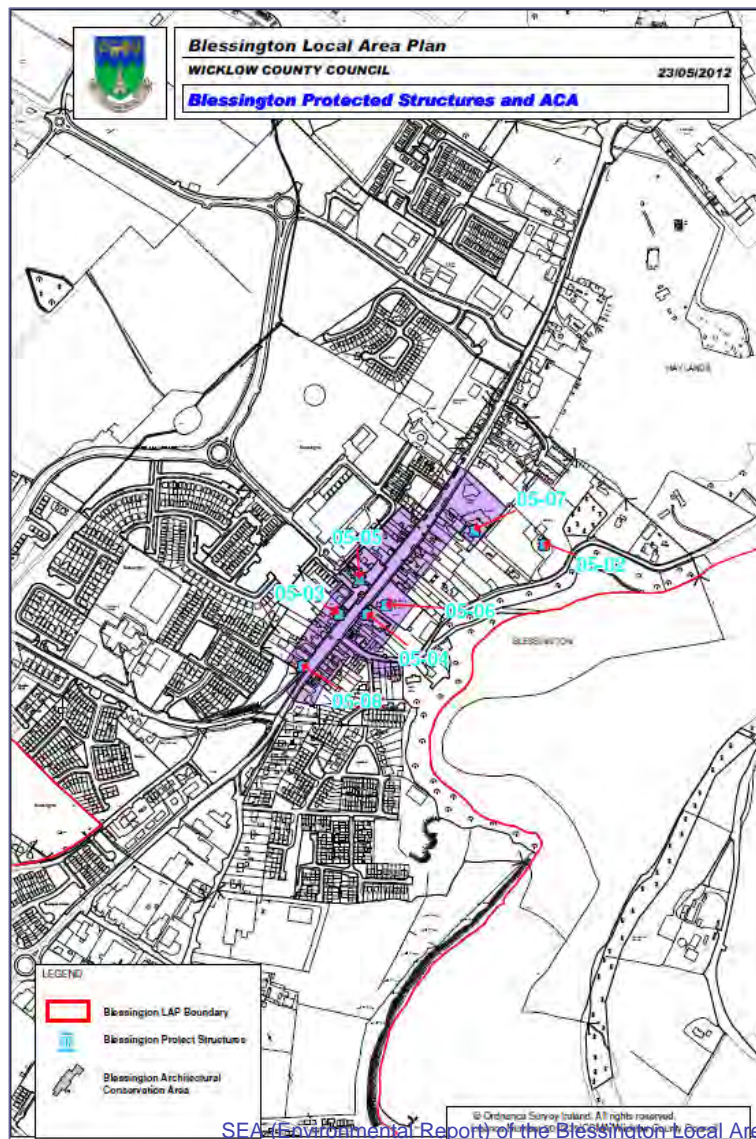


Figure 3.13

Blessington Protected Structures and ACA

Existing Environmental Problems

Existing problems relating to archaeology have been identified with regard to the delisting of certain entries from the Record of Monuments and Places. Many of these entries have since disappeared as a result of the encroachment of quarrying in the Glen Ding area.

Evolution of Cultural Heritage in the Absence of a Local Area Plan

Introduction

In the absence of a Local Area Plan for Blessington, development would continue to have no guidance as to where to be directed and planning applications would continue to be assessed on an individual basis with cultural heritage protected under the policies of the County Development Plan as well as under a number of other strategic actions relating to archaeological and architectural protection. Cultural heritage would be impacted upon by the nature of permitted applications.

Archaeological Heritage

Development within and adjacent to Burgage has the potential of impacting upon an area of archaeological potential and significance.

Further encroachment of quarrying activities on the Glen Ding Woodland and its associated Record of Monuments and Places entries and could adversely impact upon archaeology and context. Any applications for the expansion of quarrying activities into the Glen Ding Woodland or indeed any other areas may be accompanied by requests to de-list entries in the Record of Monuments and Places. Such delisting would be likely to have significant adverse impacts upon archaeological heritage and the context of this heritage within the landscape in line with instances which have occurred as a result of expansion of quarrying activities in the Glen Ding area.

Entries in the Record of Monuments and Places which have been submerged under the Pollaphuca Reservoir are unlikely to be affected by the presence or absence of a Local Area Plan for Blessington.

Architectural Heritage

With Blessington Town centre being designated as an ACA existing legislative protection of the most significant part of the historic and architecturally important core of the town has been increased.

3.12 Landscape:

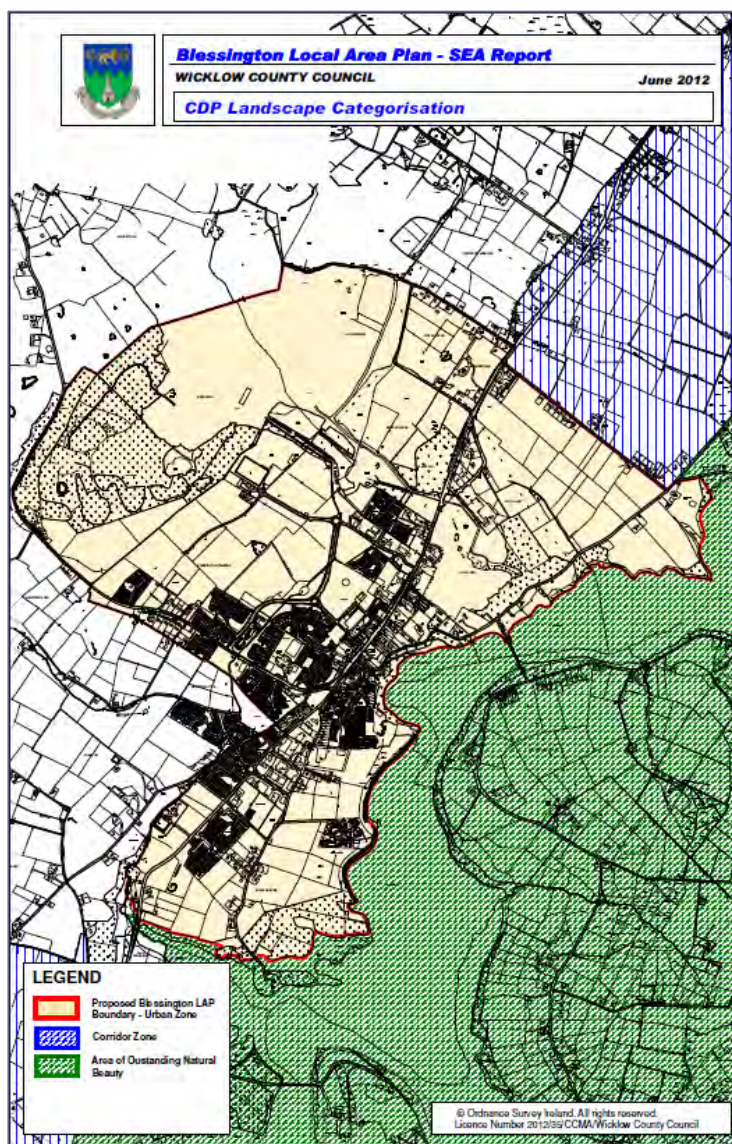
Landscapes are areas which are perceived by people and are made up of a number of layers: landform, which results from geological and geomorphological history; landcover, which includes vegetation, water, human settlements, and; human values which are a result of historical, cultural, religious and other understandings and interactions with landform and landcover.

Blessington Town is located in northwest of County Wicklow, on the border with County Kildare. The Town is bordered by the various hills and quarrying sites in the north of the town, by the water body of the Pollaphuca Reservoir, which lies on the River Liffey, to both the south and east and by hills, and county boundary between County Kildare and County Wicklow, to the west.

The land in Blessington and its surrounds are generally gently sloping from east to west with a topography which is approximately between 180m and 270m above sea level.

The majority of the plan area is located within the 'Corridor zone' with a small section of the plan to the south east adjoining the lakeshore falling within the 'Area of Outstanding Natural Beauty' as per the Wicklow County Development Plan. All lands to the immediate east of the plan boundary including the Blessington lakes are situated within the Area of Outstanding Natural Beauty.

There are no protected views within the preliminary plan boundary however as set out in the Wicklow County Development Plan, there is a protected view to the immediate south of the plan boundary listed as 'Poulaphuca Reservoir and inlet from the N81 roadway'. There are no prospects within the plan boundary.



**Figure 3.14 -
Wicklow CDP
Landscape
Categorisation**

The area of Blessington's surrounding landscape which lies in County Kildare is classified under the County Kildare Landscape Character Assessment (CAAS, 2005)¹⁷. This assessment uses a different classification system than that used in the Wicklow Landscape Characterisation identifying specific landscape features as sensitivities as well as identifying certain landscape areas which are sensitive.

¹⁷ CAAS (Environmental Services) Ltd. (2003) Landscape Character Assessment of County Kildare Kildare County Council

The lands adjoining the Wicklow County Boundary are classified as the Eastern Uplands within the Kildare County Development Plan 2011-2017 with these lands being given a classification of high sensitivity. Landscape sensitivity is a measure of the ability of the landscape to accommodate change or intervention without suffering unacceptable effects to its character and values. It is determined using the following factors: slope, ridgeline, water bodies, land use and prior development.

The landscape of Blessington and its surrounds have experienced new development in recent years, partly as a result of the attractiveness of the mountainous landscape surrounding Blessington which contains the Pollaphuca Reservoir.

Existing Environmental Problems

An emerging environmental problem with regard to the environmental component of landscape is the visual impact which one off housing unit developments are beginning to have on the landscape of very high sensitivity of the Pollaphuca Reservoir.

Although this locally valued and uncommon landscape is largely unspoilt, a small number of houses together with the lakeshore holiday village are visible from the low-lying reservoir banks. Such one off housing unit developments, which individually would not have significant adverse impacts, would have the potential to cumulatively and adversely significantly impact upon this landscape of very high sensitivity.

A number of quarry developments are visible within the northern half of the plan area. Exposed areas of these quarries are inconsistent with the natural landscape and are conspicuous to the eye, adversely impacting upon the visual integrity of the parts of the landscape within the town.

Evolution of Landscape in the Absence of a Local Area Plan

Although the Pollaphuca Reservoir Area of Outstanding Natural Beauty is not protected by the County's Landscape Characterisation, the Landscape Characterisation together with a number of policies in the County Development Plan could be used in order to protect this sensitive and valuable landscape by directing development in and around Blessington towards the less sensitive Western Corridor Area.

Current trends show that the majority of development in and around Blessington has occurred in this Western Corridor Area however it is likely that the Pollaphuca Reservoir Area of Outstanding Natural Beauty would come under increasing pressure for development in the future. Such development if it occurred would significantly adversely impact upon this sensitive landscape. In the absence of a Local Area Plan for Blessington, such impacts in the Area of Outstanding Natural Beauty would continue to be assessed on an individual basis with no longer guidance capable of protecting this area.

3.13 Overlay Mapping of Environmental Sensitivities

Introduction:

In order to identify where most sensitivities in the study area occur, a number of the environmental sensitivities described above were weighted and mapped overlapping each other.

Environmental sensitivities on the figures, which follow, are indicated by colours and arranged by the level of environmental mitigation required with lands falling within the range (0 -15) being low, within (15+ - 30) being medium and within the range (30+ - 50) being high. Where the mapping shows a concentration of environmental sensitivities there is an increased likelihood that development will conflict with these sensitivities and cause environmental deterioration. This is particularly the case where the cumulative development of small-scale

projects, such as small housing developments, gradually causes a slow deterioration of a resource, such as water quality.

Methodology

A Risk weighting system applied through Geographical Information System (GIS) software was used in order to calculate the sensitivity of all parts of the study area. The following table sets out the values placed on the landscape categories within and surrounding the plan area.

Landscape Category	Sensitivity/vulnerability	Risk Weighting
Urban Area	Low	5
AONB	High	9
Corridor Area	Medium	5

Table 3.6: Landscape Categorisation Weightings:

Table 3.7 below provides details of further risk weightings applied to relevant environmental components located within the plan area such as ecological designations, surface waters at significant risk, Groundwater, entries to the Record of Protected Structures, Architectural Conservations Areas and the findings of the Local Biodiversity Study. While there are elements of unavoidable subjectivity inherent to the selection and weighting of environmental sensitivities the SEA and plan making team worked closely in order to minimise such subjectivity. The more sensitive the environmental component was deemed to be the higher the risk weighting that was applied e.g. SPA's are given a risk weighting of 10 as these habitats would be highly sensitive to development and therefore at a higher risk.

Weightings Range (1 being low, 10 being high)	
Environmental Baseline Blessington	Weighting
Designated Sites SAC's, SPA's	10
pNHA's	8
Local Biodiversity Areas	6
Monuments and Places	6
Protected Structures	6
Flood Risk Area's from OPW	5
TPO's	4
Architectural Conservation Area	4
National Inventory of Architectural Heritage	3
Eastern River Basin Management Plan	
Surface Water Status	Good – 5 Moderate 5 -
Groundwater status	Good – 5
Register of Protected Areas	
SPA - Wicklow Mountains	5
SAC - Red Bog	5
SAC - Wicklow Mountains	5
Nutrient Sensitive Waters - Liffey	5
Protected Drinking Waters –	5
Liffey Lower	5
Old Kilcullen S and G	5
Blessington S & G	5

Table 3.7 Environmental Baseline Weightings

Each environmental component was then overlaid on top of the plan boundary map with scores for each area being added to each other in order to determine overall sensitivity. A working example of how this was carried is provided below in figure 3.15. This example demonstrates how differing environmental components that fell within the Poulaphuca Reservoir were overlaid in order to derive a figure for this areas overall sensitivity.

As can be seen in the figure 3.15 below the highlighted areas along the lakeshore and including the reservoir itself where highly sensitive in recognition of the Landscape Categorisation, SPA, pNHA and water related environmental components relevant to this area.

Limitations:

It is noted that there are elements of unavoidable subjectivity inherent to the weighting systems applied to environmental sensitivities it is considered that the Baseline Map produced as set out in Figure 3.16 sufficiently represents the importance of the environmental components discussed in sections 3.1 – 3.10 above and provides a very practical and balanced baseline from which to assess potential alternative plan scenarios.

Figure 3.16 indicates that the following areas have environmental characteristics that are particularly vulnerable:

- Lands adjoining the Poulaphuca Reservoir are highly sensitive in recognition of a number of environmental sensitivities in this area.
- The surface water network running along the western section of the town ranges from medium to highly sensitive in recognition of its importance as a water body, risks posed by flooding, a life support for habitats flora fauna and ecological connectivity, within the plan area.
- Lands to the north east of the plan area, adjoining the lakeshore and forming part of Doran's pit are recognised as being a moderately sensitive environment which must be recognised in the formulation of the plan.
- Blessington town centre's vulnerability is attributed to the designations including the Architectural Conservation Area and protected structures in the area.
- Lands at Dorans Pit, Roadstone adjoining the N81 and Glen Ding Wood are recognised as being vulnerable reflecting there status as Local Biodiversity Areas.



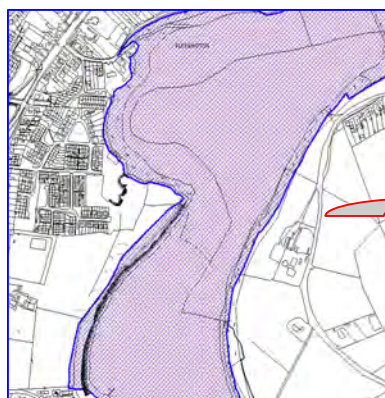
Land with no environmental weighting



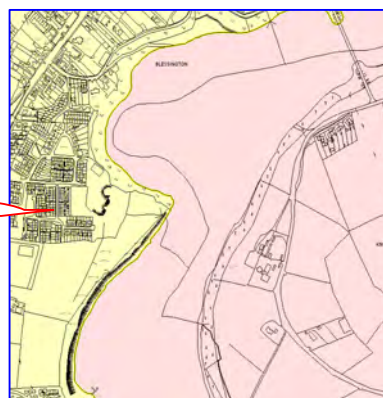
Land with Surface Water Status Weighting (5)



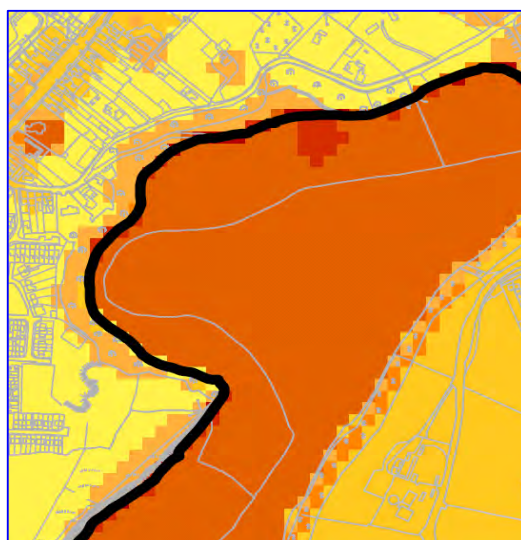
Land with SPA weighting (10)



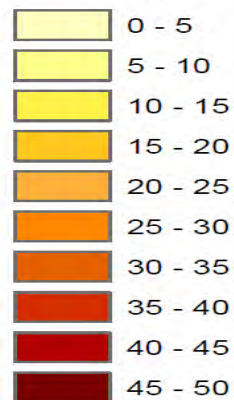
Land with pNHA weighting (8)



Land with Landscape category weighting Area of Outstanding Natural Beauty (9)



Lower Environmental Sensitivity



Higher Environmental Sensitivity

Once weightings have been added for these lands a total sensitivity score of 32 is reached = Highly Sensitive

Figure 3.15

Note: While lands within County Kildare have been blanked out in this map consideration of the impacts of the plan on this receiving environment have been taken into consideration during the SEA of the plan.

KILDARE COUNTY COUNCIL

Figure 3.16

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WICKLOW COUNTY COUNCIL

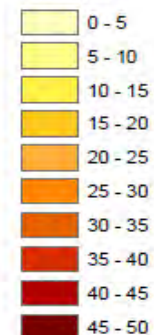
Draft Blessington
Local Area Plan

Strategic Environmental
Assessment (SEA)

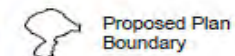
**BASELINE MAP OF
ENVIRONMENTAL
SENSITIVITIES**

LEGEND

Lower Environmental
Sensitivity



Higher Environmental
Sensitivity



Section 4

Strategic Environmental Objectives

4.1 Introduction

SEA uses a combination of objectives, targets and indicators to predict impacts, and describe and monitor change of proposed plans and programmes on the environment (Thérivel, 2004). Strategic Environmental Objectives (SEOs) and targets set aims and thresholds that should be taken into account when assessing the impact of proposed Plans and Programmes on the environment. Allied to the development of the SEOs are environmental indicators and targets. Indicators facilitate the monitoring aspect of the SEA, while Targets provide a realistic and achievable target to which the local authority can work towards. Indicators are used to illustrate and communicate impacts in a simple and effective manner. Indicators can also be used to form the basis of a monitoring programme for the Plan, the results of which will inform the next Plan Review and other studies.

4.2 Objective of the Environmental Report

The primary objective of this Report is to provide for a high level of environmental protection and to contribute to the integration of environmental considerations into the preparation and adoption of the Blessington Local Area Plan. It will do this by assessing the Plan in terms of its overall environmental impact and following this indicating where necessary how improvements can be incorporated into the Plan to improve its environmental performance and/or mitigation and monitoring.

The SEA Directive and Regulations require that evaluation be focused upon relevant aspects of environmental parameters likely to be significantly affected. In compliance with this requirement, SEOs have been developed for the environmental parameters which are likely to be impacted as a result of the implementation of the Blessington LAP.

Furthermore, monitoring is based upon the indicators which allow for a quantitative measure of progress over time relating to the SEOs used in the evaluation. Focus is given to indicators which are relevant to the likely significant environmental effects of implementing the Plan and existing monitoring arrangements will be used to monitor the selected indicators. Each indicator to be monitored will be accompanied by the relevant target(s). The indicators and targets are discussed in more detail in Chapter 9 on Monitoring.

4.3 Development of Strategic Environmental Objectives for Blessington

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

SEOs are distinct from the objectives of the Plan - although they will often overlap - and are developed from international, national and regional policies, which generally govern environmental protection objectives. Such policies include those of various European Directives, which have been transposed into Irish law, all of which are intended to be implemented at a local level within the Blessington Local Area Plan.

The SEA Directive requires that the evaluation of plans be focused upon the relevant aspects of the environmental characteristics of areas likely to be significantly affected. In compliance with this requirement, the SEA has focused upon the most relevant aspects of the environmental characteristics within and surrounding the Blessington Area. SEOs relating to these environmental characteristics have been identified and developed for the SEA. Most attention has been given to environmental components, which are likely to be impacted as a result of implementation of the Blessington Local Area Plan.

A number of SEOs are linked to indicators which can facilitate monitoring the environmental effects of implementing the Plan when adopted, as well as to targets which the Plan can help work towards.

The primary source used in formulating the SEO's was Table 4B of the SEA Guidelines (DEHLG, 2004). This list has been amended to give effect to objectives that are considered relevant to receiving environment of Blessington. The use of SEOs, although not a statutory requirement, does fulfill obligations set out in Schedule 2B of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004).

4.4 SEOs, Indicators and Targets

Biodiversity Flora and Fauna:

SEO B1	<i>To ensure compliance with the Habitats Directive and National Biodiversity Plan with regard to protected species and habitats both within and outside of designated sites in accordance with the provisions of Articles 6 and 10 of the Habitats Directive.</i>
Indicator B1:	<i>Conservation status of habitats and species as assessed under Article 17 of the Habitats Directive</i>
Target B1:	<i>Maintenance of favourable conservation status for all habitats and species protected under national and international legislation</i>

SEO B2	<i>To avoid significant adverse impacts, including direct, cumulative and indirect impacts, to relevant habitats, geological features, species or their sustaining resources in designated ecological sites such as Poulaphouca Reservoir pNHA and SPA by development adjacent to this site.</i>
Indicator B2:	<i>Number of significant adverse impacts, including direct, cumulative and indirect impacts, to relevant habitats, geological features, species or their sustaining resources in designated ecological sites by development within or adjacent to these sites as a result of implementation of the LAP</i>
Target B2:	<i>No significant adverse impacts, including direct, cumulative and indirect impacts, to relevant habitats, geological features, species or their sustaining resources in designated ecological sites by development within or adjacent to these sites as a result of implementation of the CDP</i>

SEO B3	<i>To ensure compliance with Article 10 of the Habitats Directive with regard to the management of features of the landscape – by sustaining, enhancing or - where relevant - preventing the loss of ecological networks or parts thereof which provide significant connectivity between areas of local biodiversity</i>
Indicator B3:	<i>Percentage of relevant habitats and designated ecological sites lost as a result of implementation of the DP.</i>
Target B3:	<i>No losses of relevant habitats, species or their sustaining resources in designated ecological sites as a result of implementation of the DP.</i>

Note: The impact of implementing the Plan on aquatic biodiversity and flora and fauna is also influenced by both impacts upon the quality of surface water bodies - which relates to SEO W-S - and the provision of appropriate levels of waste water treatment infrastructure - this relates to SEO WW.

Population and Human Health

SEO HH1	<i>To protect human health from hazards or nuisances arising from exposure to incompatible land uses in particular from the re-use of brown field lands in areas where previous uses may have contaminated lands such as existing quarry lands.</i>
Indicator HH1	<i>Occurrence (any) of a spatially concentrated deterioration in human health arising from environmental factors as identified by the Health Service Executive (HSE) and Environmental Protection Agency (EPA)</i>
Target HH1	<i>No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan</i>

SEO R1	<i>Maximise the sustainable re-use of brownfield lands, and maximise the use of the existing built environment rather than developing greenfield lands</i>
IndicatorR 1:	<i>Area of brownfield lands developed over the Local Area Plan's lifespan</i>
Target R1:	<i>Reduced availability of brownfield land (subject to availability on the open market, the demand for such land and the ability for such lands to be sustainably re-used) at the end of the Local Area Plan lifespan</i>

Soils

SEO S1	<i>To prevent pollution and/or contamination of soil within the plan area of Blessington.</i>
IndicatorsS1:	<i>Number of instances of pollution and/or contamination of soil</i>
Target S1:	<i>No significant instances pollution and/or contamination of soil</i>

Water

SEO Code W-S	<i>To maintain and improve, where possible, the quality of Streams, Rivers, Lakes and other surface waters within and adjoining the plan area of Blessington.</i>
Indicators W-S:	<i>Classification of Overall Status (comprised of ecological and chemical status) under the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (SI No. 272 of 2009)</i>
Target W-S:	<i>To achieve 'good status'¹ in all bodies of surface waters by 2015 and to not knowingly allow deterioration in the status of any surface water</i>

SEO Code W-G	<i>To prevent pollution and contamination of ground waters</i>
Indicators W-G:	<i>Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC</i>
Target W-G:	<i>Compliance with Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC</i>

SEO Code W-F	<i>To prevent development on lands which pose - or are likely to pose in the future - a significant flood risk</i>
Indicators W-F:	<i>Number of developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk</i>
Target W-F:	<i>Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk in compliance with The Planning System and Flood Risk Management Guidelines for Planning Authorities</i>

¹ Good status as defined by the WFD equates to approximately the following in the current national schemes of classification as set out by the EPA:

- Q4 in the biological classification of rivers;
- Mesotrophic in the classification of lakes; and,
- Unpolluted status in the Assessment of Trophic Status of Estuaries and Bays in Ireland (ATSEBI).

Material Assets

Wastewater Infrastructure

SEO WW	Code	To serve new development with appropriate waste water treatment
Indicators WW:		Number of new developments granted permission which can be adequately served with waste water treatment over the lifetime of the Plan
Target WW:		All new developments granted permission to be connected to and adequately served by waste water treatment over the lifetime of the Plan
Indicators WW(2)		Preparation of a Water Services Strategic Plan - in compliance with the Water Services Act - for the functional area of the Council
Target W(2)	W-	For the Council to prepare a Water Services Strategic Plan in compliance with the Water Services Act

Drinking Water

SEO DW	Code	To serve development within the Plan area with drinking water that is both wholesome and clean
Indicators DW:		Number of non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health
Target DW:		No non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health as a result of implementing the Plan
Indicators DW(2)		Preparation of a Water Services Strategic Plan - in compliance with the Water Services Act - for the functional area of the Council
Target DW(2)		For the Council to prepare a Water Services Strategic Plan in compliance with the Water Services Act

Air and Climatic Factors:

SEO AQ1	Code	To reduce travel related greenhouse emissions to air
Indicators AQ1:		Percentage of population within the Town travelling to work or school by public transport or non-mechanical means
Target AQ1:		An increase in the percentage of the population travelling to work or school by public transport or non-mechanical means
Indicators AQ12²		Average distance travelled to work or school by the population of the Town
Target AQ1(2)		A decrease in the average distance travelled to work or school by the population of the Town

SEO AQ2:	Code	To reduce car dependency within the plan area by way of, inter alia, encouraging modal change from car to more sustainable forms of public transport and encouraging development which will not be dependent on private transport
The use of the SEO AQ2 provides a qualitative directional measure, which is used to evaluate the effects of implementing the Plan.		

² As measured by the Central Statistics Office

Cultural Heritage

Archaeological Heritage:

SEO Code AH1	<i>To protect the archaeological heritage of Blessington including entries to the Record of Monuments and Places — and the context of the above within the surrounding landscape where relevant</i>
Indicators AH1:	<i>Percentage of entries to the Record of Monuments and Places - - (and their context of the above within the surrounding landscape where relevant) protected</i>
Target AH1:	<i>Protect entries to the Record of Monuments and Places (and their context of the above within the surrounding landscape where relevant)</i>

Architectural Heritage:

SEO Code AH2	<i>To preserve and protect the special interest and character of Blessingtons architectural heritage including entries to the Record of Protected Structures, and their context within the surrounding landscape where relevant</i>
Indicators AH2:	<i>Percentage of entries to the Record of Protected Structures (and/or their context within the surrounding landscape where relevant) protected</i>
Target AH2	<i>Protect entries to the Record of Protected Structures (and/or their context within the surrounding landscape where relevant)</i>

Landscape

SEO Code L1	<i>To protect and avoid significant adverse impacts on the landscape of Blessington including landscape features such as the Lake Shore and Glen Ding Wood.</i>
Indicators L1:	<i>Number of complaints received from statutory consultees regarding avoidable impacts on the landscape resulting from development which is granted permission under the Plan</i>
Target L1:	<i>No developments permitted which result in avoidable impacts on the landscape resulting from development which is granted permission under the Plan</i>

Section 5

Context for the Local Area Plan

5.1 Legislative Context

The Blessington Local Area Plan 2013-2019 is made in accordance with the requirements for Local Area Plans as set out within the Planning and Development Act, 2000 (as amended). The Act introduced a tiered and plan led system, setting out the framework for the provision of Local Area Plans to give more detailed and localised effect to the policies and objectives of the County Development Plan.

Section 19 (2) of the Planning and Development Act 2000 (as amended) sets out that:

“a local area plan shall be consistent with the objectives of the development plan, its core strategy and any regional planning guidelines that apply to the area of the Plan and shall consist of a written statement and a plan or plans which may include –

a) Objectives for the zoning of land for the use solely or primarily of particular areas for particular purpose,

Or

b) Such other objectives in such detail as may be determined by the planning authority for the proper planning and sustainable development of the area to which it applies, including the objective of development of land on a phased basis and detail on community facilities and amenities and on standards for the design of developments and structures”.

In addition to compliance with the Planning and Development Acts 2000-2010 and the Wicklow County Development Plan 2010-2016; the Blessington Local Area Plan 2013-2019 is also prepared in compliance with the objectives of the Regional Planning Guidelines for the Greater Dublin Area 2010-2022 in particular relating to its assigned population targets as well as with relevant national environmental legislation and planning guidelines with regard to the proper planning and sustainable development of the plan area.

This Blessington Local Area Plan complies with the requirements of the Strategic Environmental Assessment, Habitats, Water Framework and Floods Directives as appropriate. All development proposals must be consistent with the objectives of these higher level plans, programmes, strategic plans and guidelines.

5.2 Structure of the Plan

The Local Area Plan consists of a written statement, Appendix as detailed below, with accompanying maps. The maps give a graphic representation of the proposals of the Plan, indicating land use and other control standards together with various objectives of the Council.

The written statement comprises 11 chapters and an appendix providing details of the calculations for the plan, the content of which are briefly outlined below.

1. Purpose and Status of the Plan

This section sets out the legislative background to the plan, the overall context of the plan area and the vision for the plan.

2. Population & Housing

This chapter sets out the settlement the population, housing and objectives for the Blessington plan area.

3. Town Centre & Retail

This section sets out the strategy for the town centre and retailing within the plan area and also identifies key opportunity sites within the plan area.

4. Economic Development

This sets out the economic strategy for the plan area relating to the location of employment and types of employment to be permitted etc.

5. Tourism

This chapter sets out the strategy for tourism within the plan area.

6. Social Infrastructure

This chapter sets out the educational, open space and recreational needs of the projected population is set out in this chapter.

7. Service Infrastructure

This section relates to Water and Sewage, telecommunications, energy infrastructure within the plan area.

8. Built and Natural Heritage

This section relates to all aspects of the Natural environment all living and non-living things occurring naturally and are not primarily or solely of human creation, in contrast to the 'built environment' individual or group of buildings, structures, monuments, or installations, or remains, which are associated with architectural, cultural, social, political, economic, or military history

9. Action Areas and Specific Local Objectives

Details relating to the 4 Action Area Plans at Burgage Mor (2), Dorans pit and along the Naas Road and the 3 specific Local Objectives at Burgage Mor, Carrig Glen, and Roadstone lands to the west of the N81.

10. Zoning

This chapter sets out the zoning objectives for the plan outlining the council's intentions for all land within the plan area.

5.3 Vision Statement:

Following a public consultation process a number of key themes emerged regarding the future development of Blessington. These themes have been amalgamated and expressed in the vision below.

The vision of the plan aims to address the key issues identified within the plan area while also meeting the projected population target of 7,500 as set out in the Wicklow County Development Plan 2010 – 2016 by 2022.

The key elements of the vision for Blessington are to:

- Improve the quality of life of the resident population of Blessington by planning for and encouraging the provision of high quality housing and employment, social and community facilities, and a range of recreational options, in a quality environment;
- Regulate pressures from both urban and rural development, in particular sporadic development in rural areas and development pressures emanating from south-west Dublin by providing a sustainable settlement and growth strategy to create a compact urban form and to enhance the physical, economic and social profile of Blessington;
- Develop the tourism potential of Blessington as a visitor / tourist destination in itself and in its role as a 'gateway' to the west of the County and Wicklow Mountains.
- Protect the heritage of the existing town of Blessington and its environs along with its identity, in terms of its built and natural heritage and landscape conservation in the area.

This will be achieved by:

- Reinforcing and improving the visual appearance of the central area of the town with particular attention on the town centre area which is a designated architectural conservation area, and encouraging development that will enhance the town's vitality and vibrancy;
- Addressing the problems that arise for the town resulting from a national route passing through the centre of the town and the implications of the re-routing of the N81;
- Improving linkages between the existing main street and the new town centre development and providing further linkages between these areas and the remainder of the plan area;

- Facilitating the provision of infrastructure to meet the demand for development and future population needs in a sustainable manner;
- Promoting and ensuring the protection and suitable recreational and tourism use of natural habitats (in particular the protected habitats of the Poulaphuca Reservoir), cultural heritage, ecological resources, networks, quality landscapes and the protection and enhancement of biodiversity.

5.4 Alternatives:

Section 6 & 7 of this report identify, describe and evaluate 3 alternative development scenarios for the Plan, taking into account the relevant land use strategic actions, the SEOs identified in section 4 as well as the geographical scope of the functional area of Blessington. The evaluation of the alternatives results in the identification of potential environmental effects. These environmental effects are considered alongside planning - social and economic - effects leading to the emergence of a preferred alternative.

5.5 Interactions of the Plan with Other relevant Planning Policy

The Blessington Local Area Plan 2013-2019 sits within a hierarchy of international, European, national and local planning policies and statutory instruments. These policies and instruments are required to be taken into account in the development of objectives for the Plan and Environmental Protection Objectives for the Environmental Report.

It is not intended to provide an exhaustive list of these policies and instruments given the local planning level of this plan which is required to be consistent with the objectives of the County Development Plan, its core strategy and any regional planning guidelines. In this regard the following sets out the relationship of the plan at a Regional and County level.

Regional Planning Guidelines for the Greater Dublin Area 2010-2022

The Greater Dublin Area incorporates the Dublin Regional Authority and the Mid East Regional Authority being the geographical and administrative areas of Dublin City, Dun Laoghaire-Rathdown, Fingal, South Dublin, Wicklow, Meath and Kildare. The Regional Planning Guidelines (RPG) is a policy document, which aims to direct the future growth of the Greater Dublin Area over the medium to long term and works to implement the strategic planning framework as set out in the National Spatial Strategy (NSS) published in 2002. The RPG's inform and direct the City and County Development Plans for each of the Councils in the Greater Dublin Area. They provide the clear policy link between national policies-the National Development Plan and the National Spatial Strategy and other national policy documents and guidance; and local Authority planning policies and decisions.

Local Framework

The Wicklow County Development Plan 2010 - 2016

The Wicklow County Development Plan addresses the issues set out in Section 10 of the Planning and Development Act 2000. In the settlement hierarchy of County Wicklow, Blessington is designated as a Moderate Growth Town/Level 4 settlement.

Moderate Growth Towns are described as towns with with lesser levels of economic activity beyond that required to service the local population. Commuting from here to Large Growth Towns is currently a significant element for both hinterland and metropolitan towns in this category, with connections by bus to a number of destinations and the City (where available by rail) meeting such needs. Most of these towns are envisaged as having an interacting and supporting role to their adjacent higher order town in hinterland areas or as part of the City within the metropolitan area. A minority of these towns are smaller in size, but have a higher level servicing function to smaller towns, villages and undeveloped rural/amenity lands in their catchments, due to their remoteness from larger towns.

5.6 Environmental Protection Objectives

The Local Area Plan is subject to a number of high level national, international and regional environmental protection policies and objectives, including those, which have been, identified as Strategic Environmental Objectives in section 4.

Examples of Environmental Protection Objectives include the aim of the EU Habitats Directive - which is to contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora in the European territory of Member States - and the purpose of the Water Framework Directive - which is to establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater which, among other things, prevents deterioration in the status of all water bodies and protects, enhances and restores all waters with the aim of achieving good status by 2015.

The plan must be consistent with these objectives and implement them in the Blessington area.

Section 6

Description of Alternative Plan Scenarios

6.1 Introduction

One of the critical roles of a SEA is to facilitate an evaluation of the likely environmental consequences of a range of alternative strategies for accommodating the future development of Blessington within the constraints imposed by intrinsic environmental conditions. In this instance the consideration of conceptual alternatives arose during the early stages of plan inception. The principal findings are presented in this section.

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. Alternatives were formulated through consultation with the Plan making team of Wicklow County Council.

Later sections of this report identify, describe and evaluate different alternatives of how to achieve the overall strategy - taking into account the relevant land use strategic actions and the SEOs identified previously, as well as the geographical scope of the Local Area Plan. The evaluation of alternatives results in the identification of a preferred alternative, which will be submitted to the Elected Members of Wicklow County Council along with this report for consideration.

6.2 Identification and Description of Alternative Plan Scenarios

Introduction

A range of three potential scenarios for the types of planning strategies that could be adopted are described in this section. They represent increasingly intensive and extensive development. A number of features are core to all scenarios, namely the location, extent and use of lands adjoining the Poulaphuca Reservoir (SPA and pNHA) and the identification of suitable lands for Employment and Open Space.

Scenario 1 Minimal Development Envelope

Characteristics of this scenario as set out in figure 6.1 provide for an extensive 200m buffer zone inland from the shoreline of the Poulaphuca Reservoir and designation of lands within this zone for agricultural purposes only, the expansion of Glen Ding Wood and designation as a conservation zone onto lands currently in use as forestry/remediated from quarrying activities within this area. This scenario places a strong emphasis on the protection of locally important Biodiversity sites and ecological networks.

This plan also places a strong emphasis on the protection of the Architectural Conservation Area within the town centre and the provision of increased pedestrian movements by providing linkages between lands with a specific emphasis on linking Glen Ding woods directly to the town via a new amenity park.

In addition to the above measures, this plan places a strict emphasis on the development of lands only where existing infrastructure is adequate to cater for such development.

This plan scenario contains the following specific local objectives:

Local Objective 1 – To provide for a 200m buffer along the lakeshore of the Poulaphuca Reservoir and restrict lands within this zone to agricultural or conservation and amenity uses only.

Local Objective 2 – To protect existing ecological linkages and Local Bio-diversity areas within the plan area.

Local Objective 3 - Provision of a conservation and amenity zoning at Glen Ding Wood, to the east of the plan area adjacent to and forming part of Doran's Pit.

Local Objective 4 – Provision of a new amenity park and employment zone at Roadstone to the north of the town, promoting the conservation and enhancement of existing lands.

Local Objective 5 – Strict monitoring of existing and future quarry activities

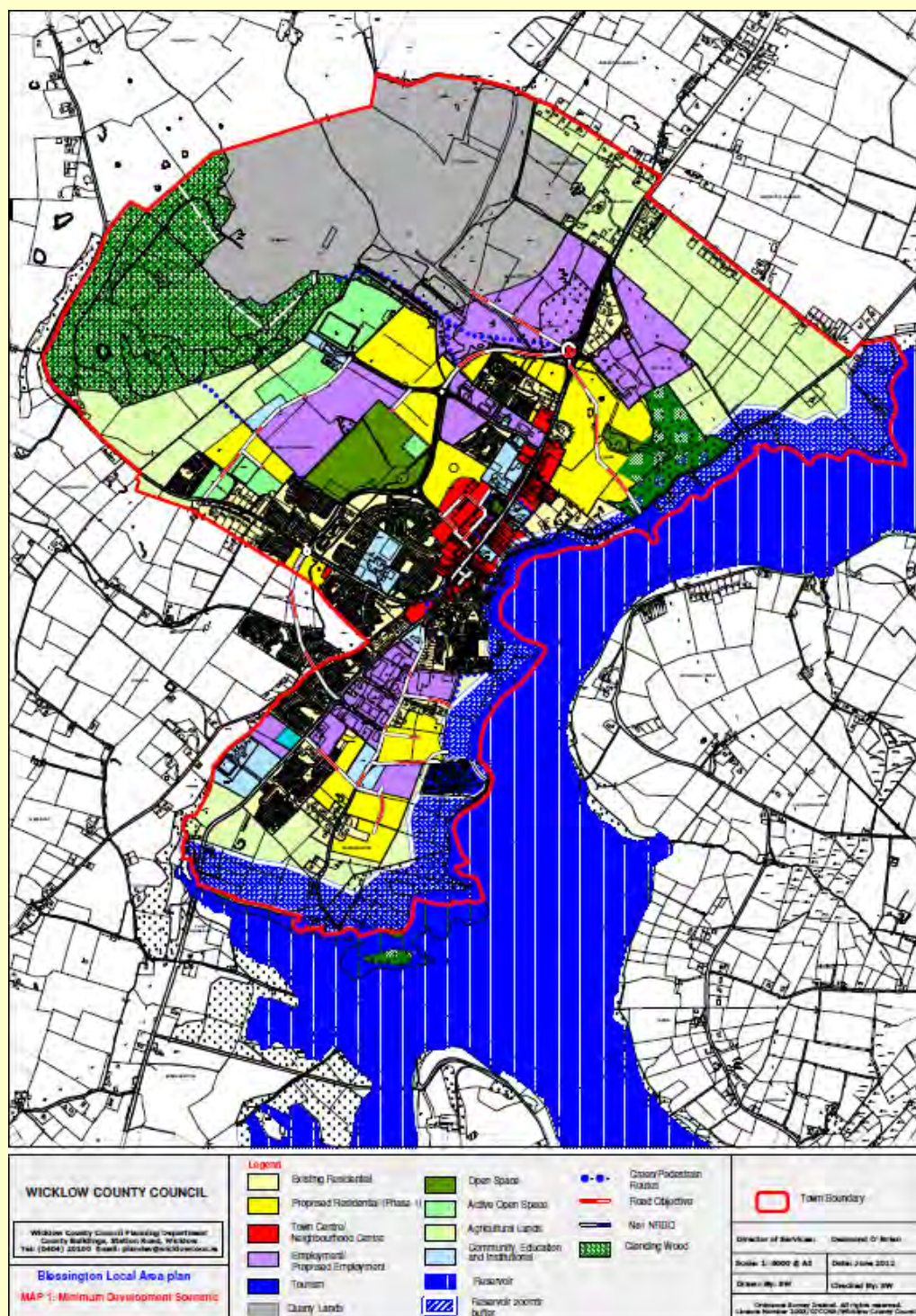


Figure 6.1 Minimal Development Scenario

Scenario 2 Moderate Development Envelope

Characteristics of this scenario are similar to scenario 1 with the following exceptions;

1. The 200m buffer along the Poulaphuca Reservoir has been reduced to 100m Buffer zone with agricultural zonings within this area.
2. This plan scenario provides a further c. 60 - 100m of lower order uses adjacent to the buffer zone detailed in scenario 1 above in the form of extensive Active Open Space lands as a further measure aimed at preventing any impacts on the pNHA and designated SPA.
3. A slightly reduced open space and amenity park zone has been provided to the north east of the plan area in recognition of the findings of the local biodiversity study carried out and from on the ground site inspections. The emphasis of this reduced zoning being the protection of the more extensive and fully established areas of woodland in this area with the more unestablished portion being rezoned as an expanded employment zoning.
4. The provision of a larger employment zoning area at Roadstone to the northwest of the town centre providing for a lower density employment development and with the increased lands forming a new amenity park area linked to Glending Woods by pedestrian walks.
5. A recognition of the existing permissions for quarrying activities at Glen Ding with all remaining lands forming part of the Woodland Conservation Zone.
6. The provision of residentially zoned lands adjacent to the Blessington Stream, provided for through the justification test.

The scenario includes the following local objectives:

Local Objective 1 – To provide for a 100m buffer along the lakeshore of the Poulaphuca Reservoir and restrict lands within this zone to agricultural or conservation and amenity uses only.

Local Objective 2 - Provision of conservation zones at Glen Ding, Burgage Mor and adjacent to Doran Pit.

Local Objective 3 - To protect existing ecological linkages and Local Bio-diversity areas within the plan area.

Local Objective 4 - Provision of a new large amenity park and employment zone at Roadstone to the north of the town, promoting the conservation and enhancement of existing lands and linkages to Glen Ding Wood.

Local Objective 5 – Strict monitoring of existing and future quarry activities.

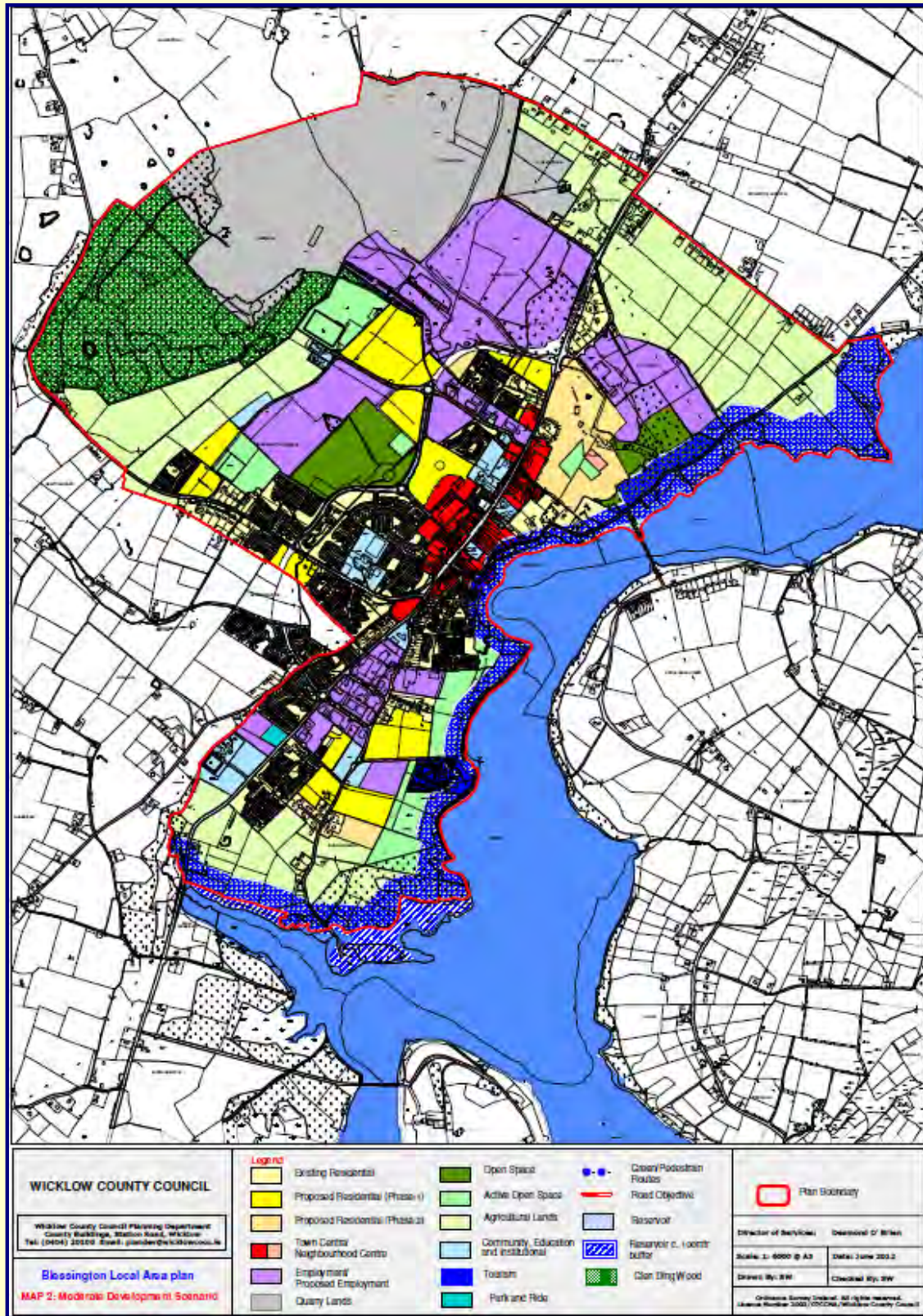


Figure 6.2 Moderate Development Scenario

Scenario 3 Maximum Development Envelope

This scenario (see figure 6.3) represents a further intensification development and associated impacts set out in scenario 2 with the further encroachment of development into virgin/rural lands to the north and south and east of the plan area. This scenario provides for extensive zonings maximising the development potential and views along the lakeshore with a limited distance between these zonings and the pNHA and SPA.

This scenario aims to maximise the development potential along the lakeshore with the provision of a large area being zoned to provide for a new integrated tourism and leisure facility at Burgage Mor further maximising the tourism potential of the lake.

This scenario also provides for an expansion of existing quarrying activities into Glen Ding Woods providing for a minimal buffer between this area and the listed recorded monuments within this zoning.

A low density residential zoning is provided along the lakeshore to the north east allowing for the provision of single housing overlooking the reservoir. A more dense employment zone is also provided for along the N81 to the north west of the town on lands owned by Roadstone with this plan having little or no regard to the findings of the Local Biodiversity study.

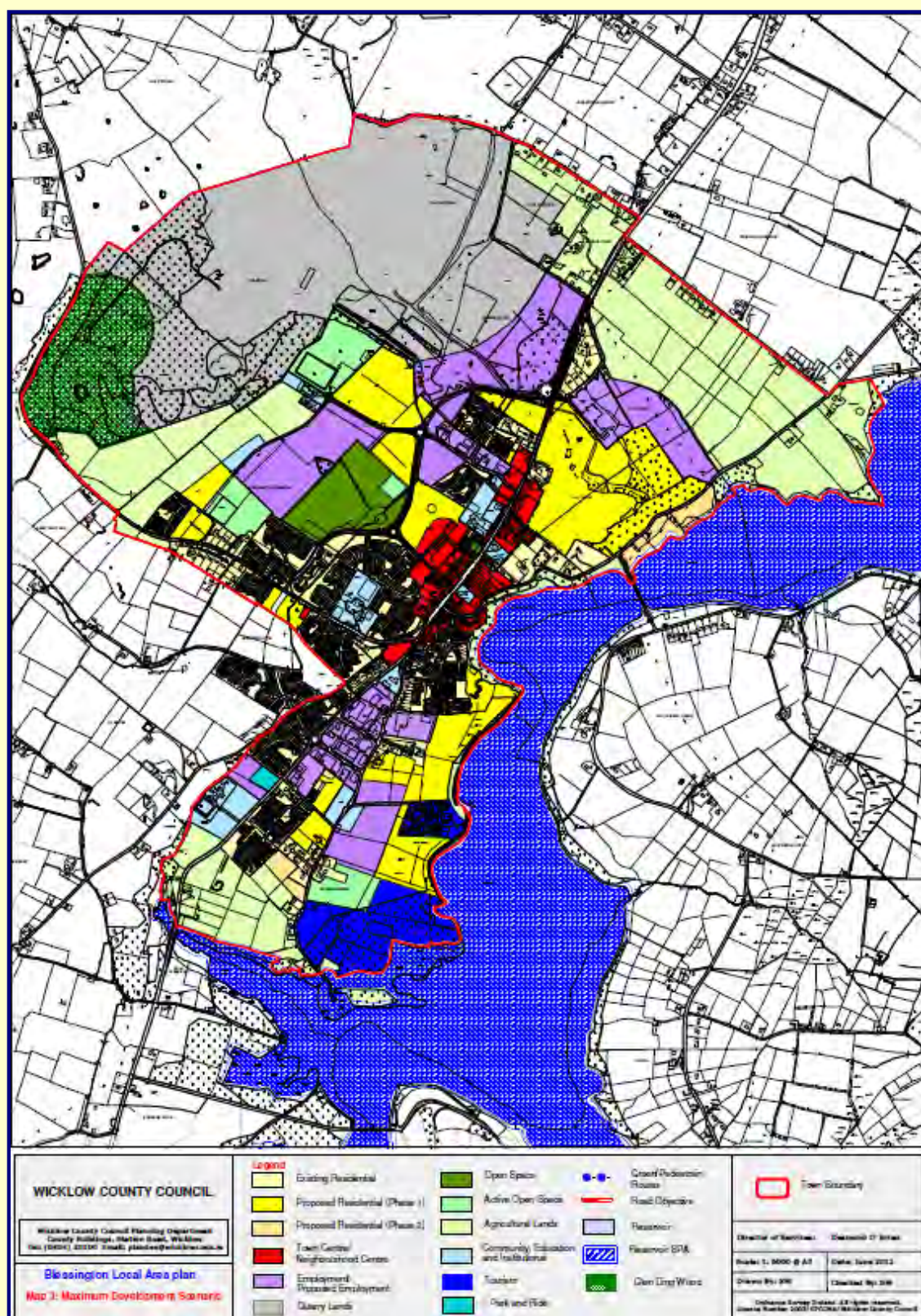
The scenario includes the following local objectives:

Local Objectives 1 – Provision of extensive residential development along the Lakeshore with little or no provision for a buffer zone to the Poulaphuca Reservoir.

Local Objective 2 – Provision of an Integrated Tourism and Leisure development at Burgage Mor to the south of the town maximizing the tourism potential of the lake.

Local Objective 3 – Provision of low-density residential development with individual wastewater treatment facilities along the lakeshore and within lands zoned for agricultural lands.

Local Objective 4 – Expansion of existing quarry lands at Roadstone to the north of the town.



Section 7

Evaluation of Alternative Plan Scenarios:

7.1 Introduction

The objective of this section is to determine the relative merits of a range of alternative scenarios under a range of types of plan regimes. This determination seeks to understand whether each alternative is likely to improve, conflict or have a neutral interaction with the provisions of the Plan as well as the certainty of that interaction. A series of Strategic Environmental Objectives were developed based on an understanding of the existing and emerging environmental conditions facing Blessington. These were then used to assess the likely effect of these different strategic alternatives for the Plan. The SEOs and the Scenarios are then arrayed against each other to identify which interactions – if any – caused impacts on specific components of the environment.

7.2 Methodology

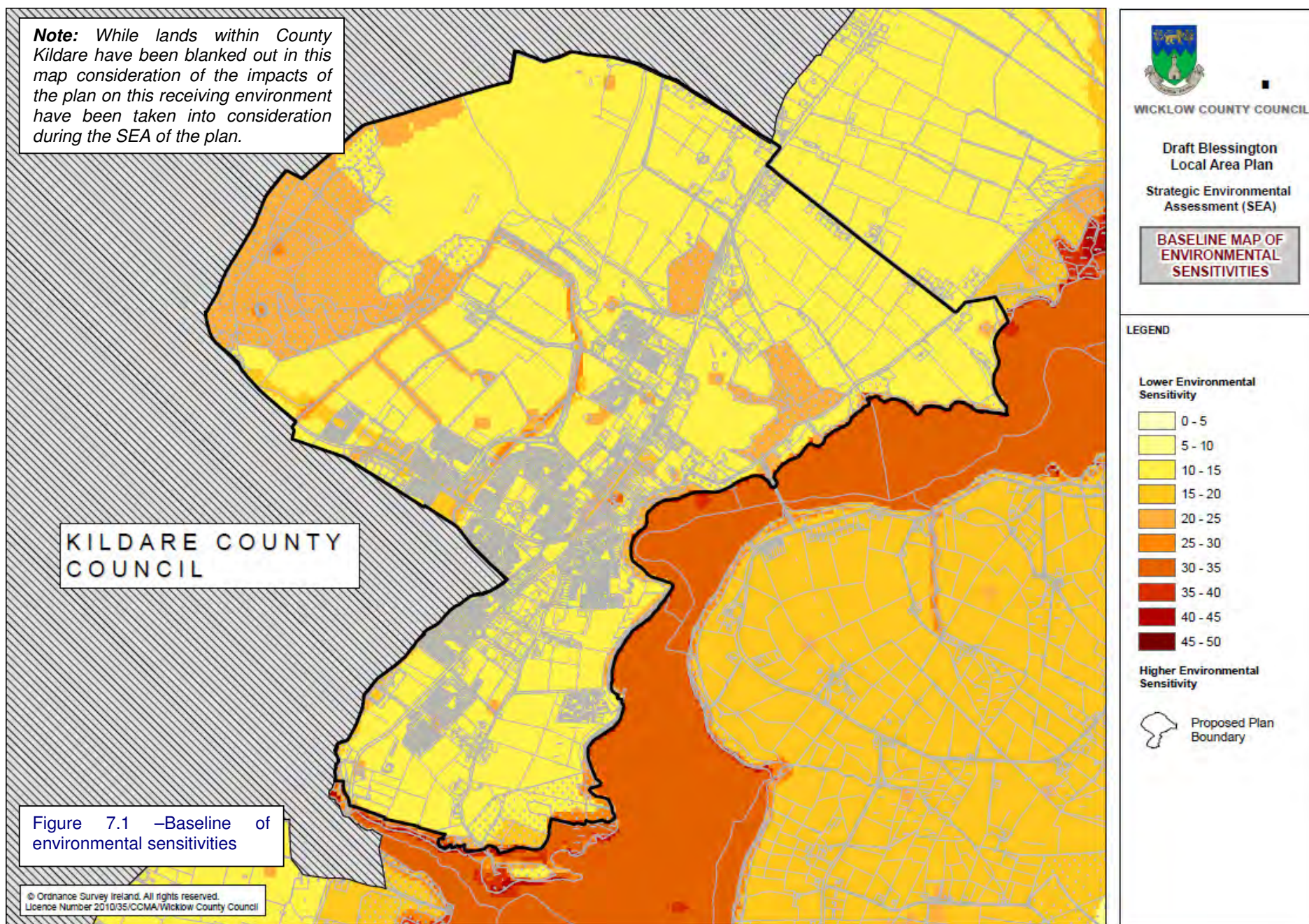
Existing Environment

Use has been made of the description of the environmental baseline, including the maps, which spatially represent components of the environmental baseline (Section 3) in order to identify how each alternative scenario would impact upon the environment.

The interactions between the SEOs and the alternatives determine the likely significant effects of implementing the Plan. These effects include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

Overlay Mapping

In order to identify the extent to which environmental sensitivities are likely to be impacted upon by implementation of the Plan alternatives, overlay mapping (which weighs environmental sensitivities and maps them overlapping each other as shown under Section 3) is also used.



Strategic Environmental Objectives

Based on an understanding of the existing and emerging environmental conditions in the Blessington local area, a series of SEOs were developed in order to assess the likely environmental effects, which would be caused by the implementation of each of the three alternative scenarios described and mapped in Section 6. The alternatives are evaluated using compatibility criteria (see Table 7.2) to determine how they are likely to affect the status of these SEOs.

Table 7.1 brings together all the SEOs, which have been developed from international, national and county policies, which generally govern environmental protection objectives. The SEOs and the alternative scenarios are assessed against each other in order to identify which interactions - if any - would cause impacts on specific components of the environment.

Where the appraisal identifies a likely conflict with the status of an SEO the relevant SEO code is entered into the conflict column - **e.g. B1 which stands for SEO likely to be affected – in this instance ‘to avoid loss of relevant habitats, species or their sustaining resources in designated ecological sites’.**

Likely to Improve status of SEOs	Probable Conflict with status of SEOs unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	No Likely interaction with status of SEOs
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Criteria for appraising the effect of Plan provisions on Strategic Environmental Objectives

Table 7.1 - Strategic Environmental Codes and Objectives – for the Blessington Local Area Plan

SEO B1	<i>To ensure compliance with the Habitats Directive and National Biodiversity Plan with regard to protected species and habitats both within and outside of designated sites in accordance with the provisions of Articles 6 and 10 of the Habitats Directive.</i>
SEO B2	<i>To avoid significant adverse impacts, including direct, cumulative and indirect impacts, to relevant habitats, geological features, species or their sustaining resources in designated ecological sites such as Poulaphouca Reservoir pNHA and SPA by development adjacent to this site.</i>
SEO B3	<i>To ensure compliance with Article 10 of the Habitats Directive with regard to the management of features of the landscape – by sustaining, enhancing or - where relevant - preventing the loss of ecological networks or parts thereof which provide significant connectivity between areas of local biodiversity</i>
SEO HH1	<i>To protect human health from hazards or nuisances arising from exposure to incompatible land uses in particular from the re-use of brown field lands in areas where previous uses may have contaminated lands such as existing quarry lands.</i>
SEO R1	<i>Maximise the sustainable re-use of brownfield lands, and maximise the use of the existing built environment rather than developing greenfield lands</i>
SEO S1	<i>To prevent pollution and/or contamination of soil within the plan area of Blessington.</i>

SEO Code W-S	<i>To maintain and improve, where possible, the quality of Streams, Rivers, Lakes and other surface waters within and adjoining the plan area of Blessington.</i>
Indicators W-S(2)	<i>Poor, Sufficient, Good and Excellent classifications of bathing water as set by Directive 2006/7/EC</i>
SEO Code W-G	<i>To prevent pollution and contamination of ground waters</i>
SEO Code W-F	<i>To prevent development on lands which pose - or are likely to pose in the future - a significant flood risk</i>
SEO Code WW	<i>To serve new development with appropriate waste water treatment</i>
SEO Code DW	<i>To serve development within the Plan area with drinking water that is both wholesome and clean</i>
SEO Code AQ1	<i>To reduce travel related greenhouse emissions to air</i>
SEO Code AQ2:	<i>To reduce car dependency within the plan area by way of, inter alia, encouraging modal change from car to more sustainable forms of public transport and encouraging development which will not be dependent on private transport</i>
SEO Code AH1	<i>To protect the archaeological heritage of Blessington including entries to the Record of Monuments and Places — and the context of the above within the surrounding landscape where relevant</i>
SEO Code AH2	<i>To preserve and protect the special interest and character of Blessingtons architectural heritage including entries to the Record of Protected Structures, and their context within the surrounding landscape where relevant</i>
SEO Code L1	<i>To protect and avoid significant adverse impacts on the landscape of Blessington including landscape features such as the Lake Shore and Glen Ding Wood.</i>

7.3 Evaluation against Scenarios

Table 7.2 evaluates each alternative against the Strategic Environmental Objectives.

Scenario 1 Minimal Development Envelope

This plan scenario has the least environmental impact – with no new large-scale development being permitted until such time as adequate wastewater treatment infrastructure is in place. The scenario provides for extensive buffers along the lakeshore c. 200m, Poulaphuca SPA and pNHA, a strong recognition of the findings of the Local Biodiversity Study carried out, a strong protection and expansion of Glen Ding Wood. Strict adherence to the provisions of the Flood Management Guidelines is also provided for.

The resultant settlement pattern is tightly concentrated around the existing town centre promoting sustainable patterns of mobility with new zonings also being accompanied by strong environmental objectives.

Scenario 2 Moderate Development Envelope

This plan scenario bears similarities to Scenario 1 however provides for a more expansive plan area recognising the extent of existing quarrying permissions obtained by Roadstone, by reducing the protection buffer along the lakeshore from 200m to 100m and providing for lower order uses within the 100-200 zone from the lakeshore in the form of Active Open Space lands. The provision of such spaces while making use of existing agricultural lands facilitates the expansion of the sporting and open space needs of the town while also protecting the natural environment of these areas and providing a further buffer from further residential and employment development.

This scenario provides for a relatively compact layout with the exception of the appearance of the extensive employment zoning to the north west of the plan area. While the appearance of this zone may seem excessive the provisions of this employment zoning only allow for development at a plot ratio of 0.1 with the remaining lands being development as open space and amenity parkland capable of providing connectivity to Glen Ding Wood and maintaining the existing Local Biodiversity areas and linkages in this area.

Failure to provide waste water treatment infrastructure and capacity in line with population growth would be likely to result in significant adverse impacts upon surface waters at risk of not meeting objectives under the Water Framework directive, thereby impacting upon biodiversity and flora, fauna and upon human health. This plan scenario also has a strict policy of no new large-scale development being permitted until such time as adequate wastewater treatment infrastructure is in place.

Scenario 3 Maximum Development Envelope

This scenario provides for a significant development for residential and tourism purposes along the lakeshore in close proximity to the designated SPA and pNHA. This scenario has little recognition of the Local Biodiversity areas identified in the Biodiversity study carried out and also facilitates an expansion of quarrying activities into Glen Ding Wood with a minimalist approach towards protecting the listed national monuments located in this area.

The provision of single one off housing along the lakeshore is also a feature of this scenario maximising the scenic value of the lakeshore and views of the Wicklow Mountains. Little or no protection is provided for the identified water and wildlife corridors as set out in the Local Biodiversity mapping and the provision of significant residential, employment development is prioritised over the locating of community and open space needs of the plan area.

As is the case with Scenario 1 and Scenario 2, failure to provide waste water treatment infrastructure and capacity in line with population growth would be likely to result in significant adverse impacts upon surface, estuarine and coastal waters already at significant risk of not meeting objectives under the Water Framework development, upon biodiversity and flora and fauna and upon human health.

Evaluation against SEO's:

Table 7.2 Evaluation against SEO's

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	No Likely interaction with status of SEOs
Scenario 1	B1, B2, B3, HH1, R1, W-S, W-G, W-F, WW, DW, AH1, AH2, L1 (Protection of various environmental components resulting from minimising greenfield development). AQ1, AQ2 , (reducing travel emissions, energy usage and encouraging sustainable mobility) WW , (strictly no development unless adequate WWT in place)		AH1, AH2 (Consolidation of existing town centre may conflict with Archaeological and Architectural Heritage), HH1 , (Regeneration of potentially contaminated lands within the Employment/former quarry zone) B1, B2, B3, R1, W-S, W-G, W-F, WW, DW, L1 (Conflicts with various environmental components and projects will have to be mitigated)	
Scenario 2	B1, B2, B3 (strict protection of cSPA & pNHA and ecological corridors) WW , (strictly no development unless adequate WWT in place) HH1, R1, W-S, W-G, W-F, DW, AH1, AH2, L1 (Protection of various environmental components resulting from minimising greenfield development).	AQ1, AQ2 , (Expansion of development boundary will lead to increases in travel related emissions, energy usage) B3 (due to direct impacts as a result of greenfield development)	B1, R1, W-S, W-G, W-F, WW, DW, L1, AH1, AH2 (Reduced protection of various environmental components resulting from increasing impingement onto greenfield lands). HH1 , (Regeneration of potentially contaminated lands within employment/former quarry lands)	
Scenario 3		AQ1, AQ2 , (Expansion of development boundary will lead to increases in travel related emissions, energy usage) B2, B3, L1 (reduced protection of cSPA and pNHA and due to direct impacts as a result of greenfield development) WW , (allowance for individual WWTP to serve new developments)	B1, R2, W-S, W-G, W-F, DW, AH1, AH2 , (Reduced protection of various environmental components resulting from increasing impingement onto greenfield lands). HH1 , (Regeneration of potentially contaminated lands within employment/former quarry lands)	

7.4 Overlay Mapping

In order to identify the extent to which environmental sensitivities are likely to be impacted upon by the implementation of the Plan alternatives, overlay mapping (which weighs environmental sensitivities and maps them overlapping proposed zonings as shown under Section 3 and 6) was once again used. As mentioned above Figure 7.1 Overlay of Weighted Environmental Sensitivities was used for this purpose.

7.5 Methodology

To carry this out effectively, each land use type was provided with a weighting, which was carried forward through each of the alternative plan scenarios. The weighting system applied to each type of land use was decided upon in consultation with the plan making team. The weighting system was based on the level of potential impact (on a scale of 1-10) each type of land use was perceived to generally have on the receiving environment. Table 7.3 below sets out the weighting system applied to each zoning type.

As can be seen from this table, quarry activities were given a weighing of 10, maximum impact as the processes involved in quarrying were deemed to have the most significant impact on the receiving environment. The Conservation zoning applied at Glen Ding in Scenarios 1 and 2 was given the lowest impact rating of 0 to 1 as the this type of zoning was deemed to have a negligible impact if any on the receiving environment given its protective purposes.

Zonings	Value
<i>Glen Ding - Conservation Zone</i>	1
<i>Agricultural Zone Reservoir Buffer</i>	1
<i>Open Space</i>	2
<i>Active Open Space</i>	3
<i>Existing Residential</i>	4
<i>Town Centre</i>	5
<i>Park and Ride</i>	5
<i>New Residential</i>	8
<i>Neighbourhood Centre</i>	6
<i>New Residential Medium along lakeshore or close to streams</i>	9
<i>New Tourism and leisure Resort along lakeshore</i>	9
<i>Employment</i>	7
<i>Community Zonings (all)</i>	4
<i>Hotel and Leisure</i>	6
<i>Quarry Activity</i>	10
<i>Action Area Plans</i>	8

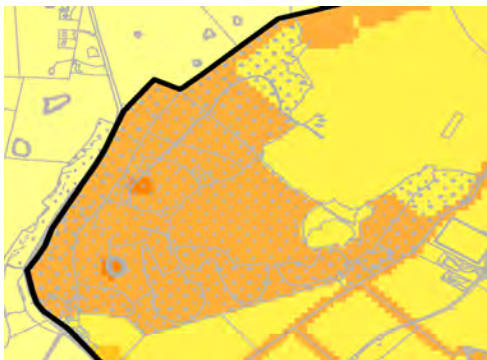
Table 7.3 – Weighting system applied to zonings

Once the weightings had been applied to each zoning in the alternative plan scenarios Geographical Information Systems (GIS's) was used to overlay the land use scenario map on top of the overall sensitivity mapping. The mapping system was then used to calculate the potential vulnerability of all land within each of the alternative plan scenarios.

For each plan scenario a vulnerability range of 5 representing (low mitigation required) to 90+ (a high level of mitigation required) was used.

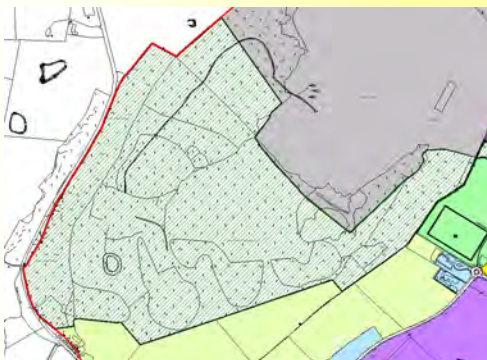
The following provides a visual example of how GIS's was used to calculate and produce the vulnerability maps for each scenario based on the lands highlighted within the Glen Ding area.

Figure 7.2 Example of Overlay Mapping Methodology



Overall Sensitivity Map:

Here Glen Ding Forest is shown where an overall sensitivity falls within the range c. 15-20. This indicates that this area falls within the mid range of environmental sensitivity.



Scenario 2: Moderate Development Scenario

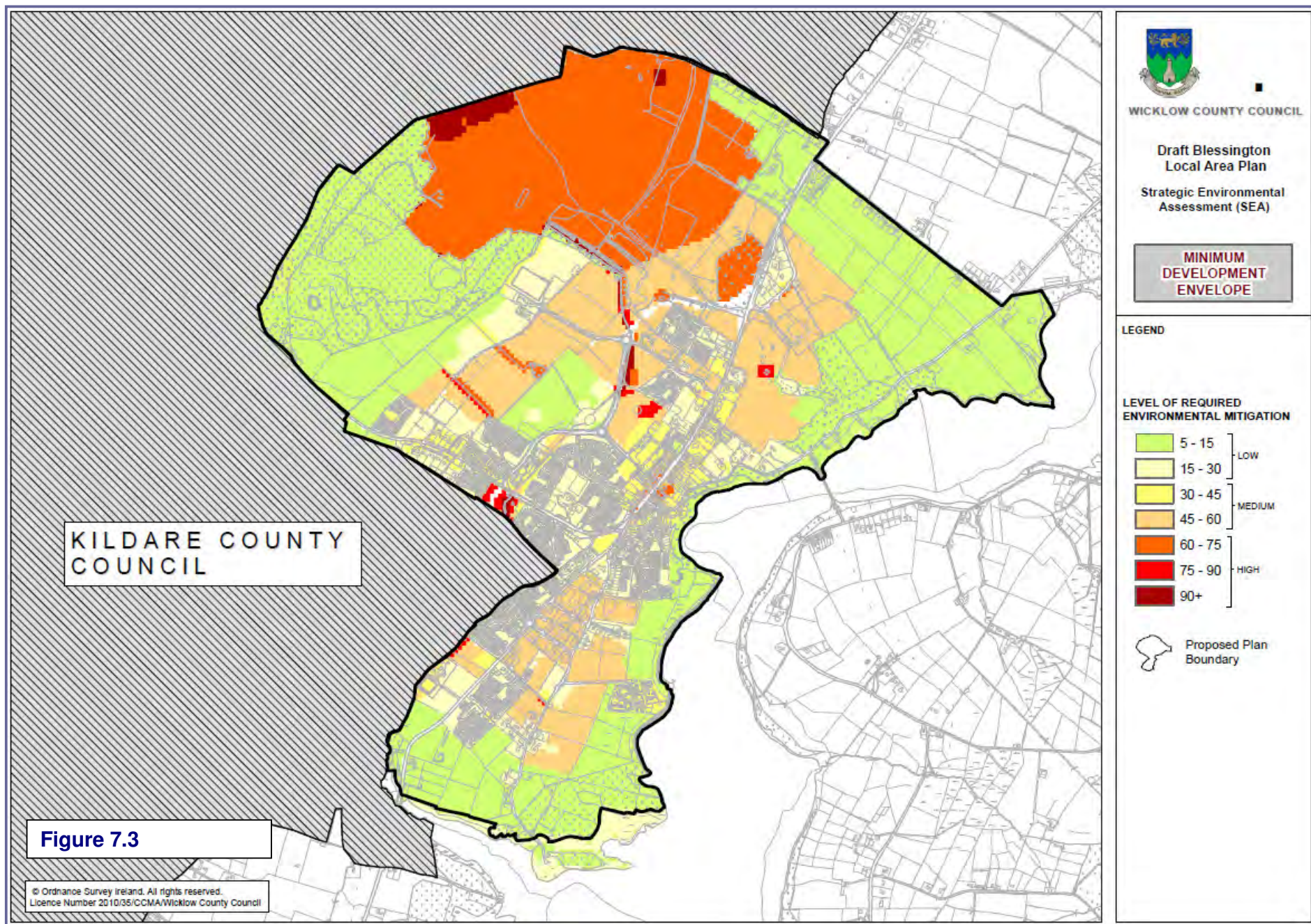
The Moderate Development scenario provides for a zoning objective of "Conservation Zone" which has been given a weighting of 1. As set out above in table 7.3 this zoning is deemed to have the least impact on the landscape alongside the *Agricultural Zone Reservoir Buffer*

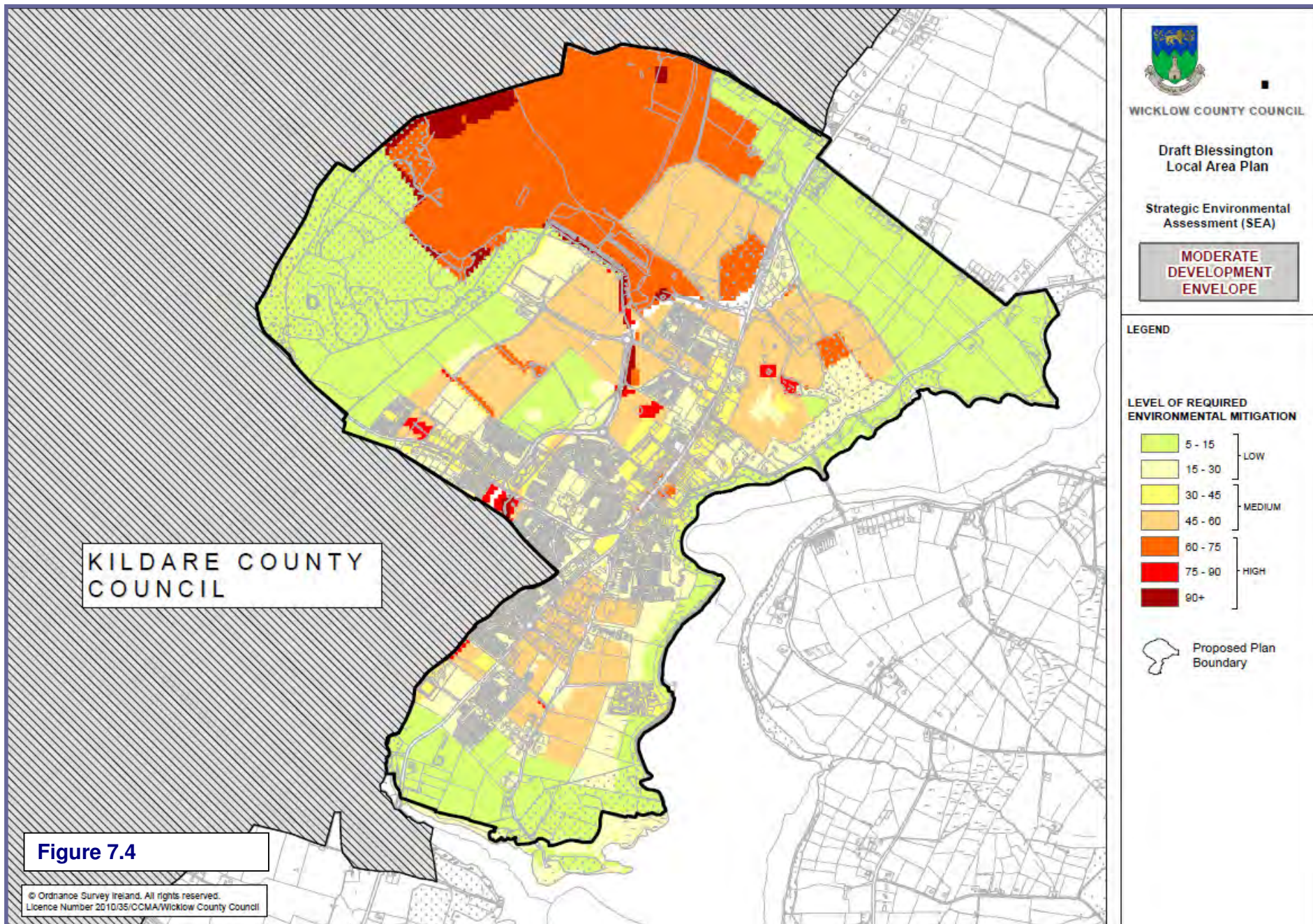


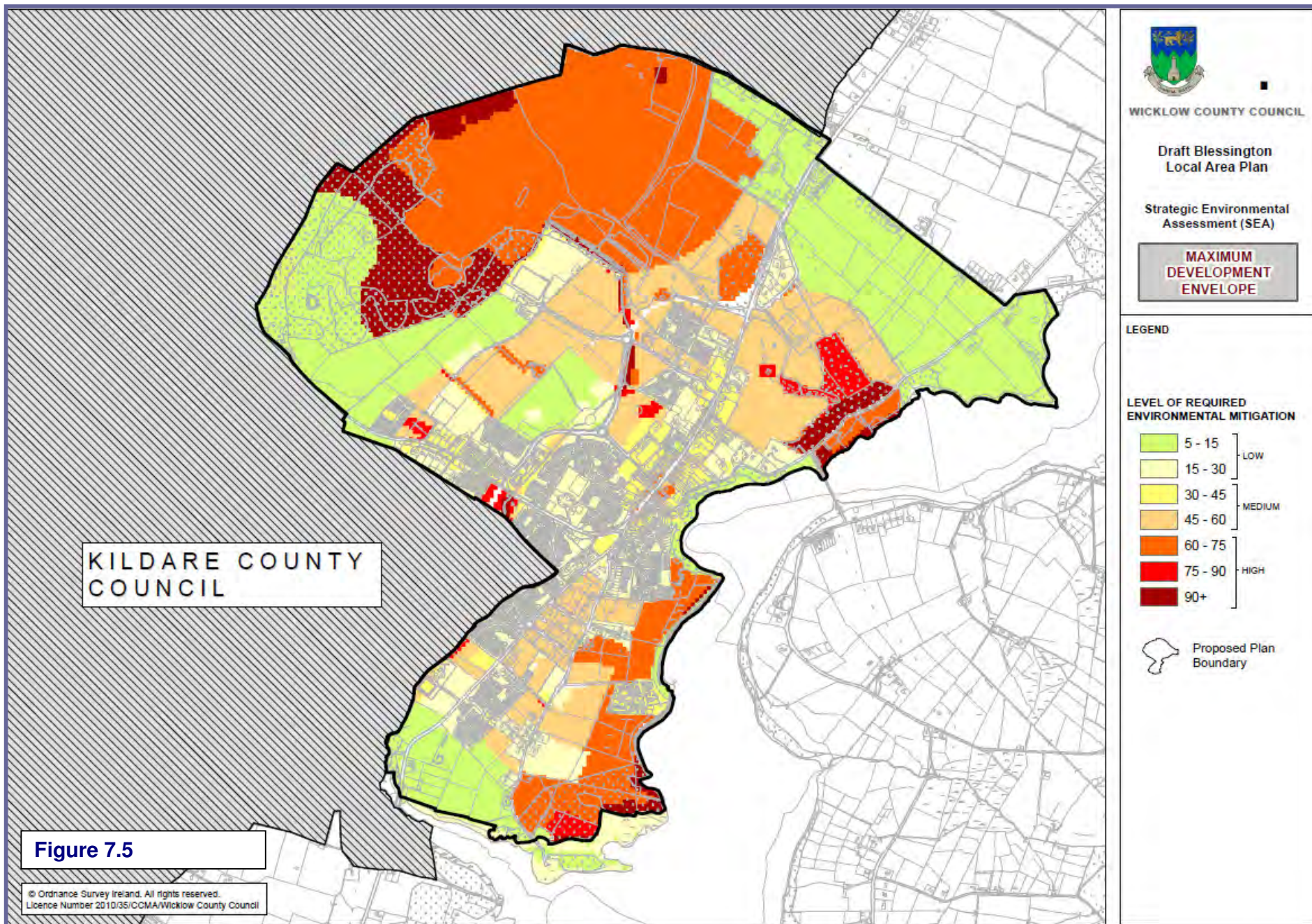
Level of required Mitigation map:

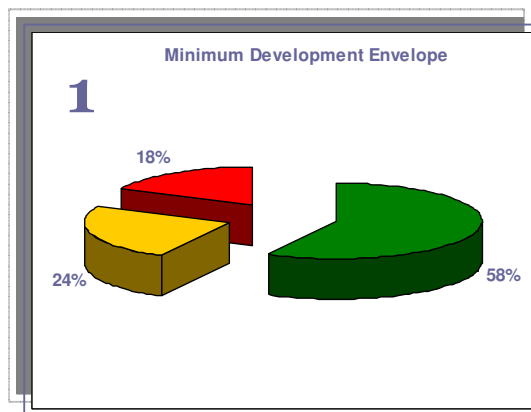
When the weighting from the overall sensitivity Map is multiplied by the weighting applied from the zoning objective (conservation zone – least impact) a low impact rating is provided indicating a low level of environmental mitigation is required in this area.

The following figure 7.3 – 7.5 illustrate and quantify the areas which are likely to be impacted upon through the implementation of each plan scenario. As set out above each plan scenario was over-layed on top of the overall sensitivity map in order to decipher what impacts each zoning scenario was likely to have on the receiving environment and determine the level of mitigation required in zoning certain lands for development.

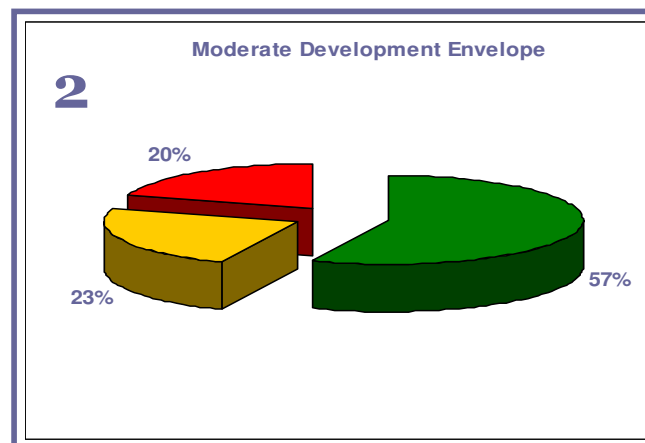




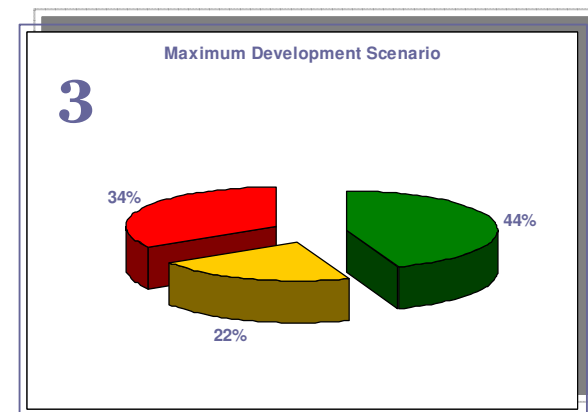




1. The breakdown of the Minimum Development Scenario provides a large percentage of low impact zonings (58%) with moderate impacts equating to 24% while the high impact ratings equate to 18% of the overall zoned plan area



2. The Moderate Development Scenario aims to provide for a more balanced development of the plan area placing equal emphasis on the social, economic and environmental issues within the plan area. This scenario provides for a slight decrease in both the low and moderate impacts while this difference provides for a slight increase in the higher level impact range requiring greater mitigation.



3. The breakdown of the Maximum Development Envelope provides for significant increase in the higher impact range requiring this plan to provide greater mitigation. While the moderate impact range remains close to the minimum and moderate scenarios the lower impact range drops

The Measurements indicate the following:

- ⇒ Scenario three would be likely to result in more adverse environmental impacts than each of the other two Scenarios.
- ⇒ If mitigated, Scenarios 1 and 2 would be likely to result in a lesser frequency and magnitude of impacts than Scenario 3.
- ⇒ Scenario 3 is the scenario with the greatest amount of high and acute vulnerability areas covered by development pressure areas and the only scenario for which extremely vulnerable areas are covered by development pressure areas.

The preferred Alternative:

On the basis of the above analysis Scenario 1 would be likely to improve the status of a number of the SEOs and emerges as the most environmentally sustainable option. If unmitigated, Scenarios 2 and 3 would be likely to result in a number of adverse environmental impacts. Having regard to Planning considerations, Scenario 2 provides a better balance between environmental protection and economic and social development and therefore provides for the most overall sustainable option. Under Scenario 2, potential conflicts with environmental objectives can largely be offset by appropriate mitigation measures as indicated in section 9 to follow.

The key areas identified as requiring mitigation relate to lands adjoining the lakeshore, Lands zoned for Quarrying and Employment to the north of west of the plan, the existing ecological corridors formed by the Blessington Stream, Local Biodiversity Areas within the plan area, the town centre area which includes the Architectural Conservation Area and the existing protected buildings structures and monuments within this area.

The Local Area Plan for Blessington: The Local Area Plan that has emerged from the Plan preparation corresponds most closely to Scenario 2.

Section 8

Summary of Evaluation of Development Plan Objectives

8.1 Introduction

The Environmental Report is required to include information on the likely significant effects on the environment of the Blessington Local Area Plan 2013 - 2019. Matrices were used to evaluate each of the proposed Plan aims and objectives once the preferred plan alternative had been identified.

This section evaluates the Plan provisions. Strategic Environmental Objectives (SEOs) are used for this purpose as outlined under Section 7.2 Use has also been made of the environmental baseline descriptions and the maps of the individual environmental components and the overlay of environmental sensitivities provided in Section 3.

The interactions between the SEOs and the provisions of the Plan determine the likely significant effects of implementing the Plan. These effects include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

8.2 Assessment of Plan Objectives against SEO's

The following sets out the full assessment and brief commentary on each of the proposed policies.

Section 1: Overall vision and development strategy	Likely to <u>Improve</u> status of SEOs	Probable <u>Conflict</u> with status of SEOs- unlikely to be mitigated	Potential <u>Conflict</u> with status of SEOs- likely to be mitigated	<u>No Likely</u> interaction with status of SEOs
<p>A key aim of a Local Area Plan is to set out the vision and overall strategy for the future development of a settlement and from this vision, all policies and objectives can be developed and implemented with the overall aim of achieving this vision.</p> <p>The key elements of the vision for Blessington are to:</p> <ul style="list-style-type: none"> Improve the quality of life of the resident population of Blessington by planning for and encouraging the provision of high quality housing and employment, social and community facilities, and a range of recreational options, in a quality environment; 	<p>B1 B2 B3 HH1 R1 S1 WS WG WF AQ1 AQ2 WW DW AH1 AH2 L1</p>			

<ul style="list-style-type: none"> Regulate pressures from both urban and rural development, in particular sporadic development in rural areas and development pressures emanating from south-west Dublin by providing a sustainable settlement and growth strategy to create a compact urban form and to enhance the physical, economic and social profile of Blessington; Develop the tourism potential of Blessington as a visitor / tourist destination in itself and in its role as a 'gateway' to the west of the County and Wicklow Mountains. Protect the heritage of the existing town of Blessington and its environs along with its identity, in terms of its built and natural heritage and landscape conservation in the area. 				
<p><i>Vision - The overall vision for the plan is likely to improve the status of all the SEO's particularly those relating to the direction of development in close proximity to public transport nodes within walking distance of community facilities all of which will act to reduce emissions, car based movements, reduce noise and improve human health. The vision promotes the enhancement of Blessington Town centre as a core facilitating redevelopment where appropriate. Protection and reuse of protected structures/recognition of the ACA and Natural heritage sites, would be part of the overall requirements of proposed residential environments, as required by heritage policies of the Proposed Local Area Plan. Important features, which form part of significant habitat networks, are to be retained, or replaced as required under the Habitats Directive. Recognition of the impact, and need for mitigation of larger scale new development on the landscape is important. New residential environments would be required to comply with the requirements of the Habitats Directive and the Water Framework Directive (WFD). Design and layout of new developments will be required to ensure that water quality is maintained and improved, through retaining water bodies along with associated buffer zones, providing for SUDS, and restricting development on lands susceptible to flooding.</i></p>				
<p>Section 2: Population and Settlement</p>	<p>Likely to Improve status of SEOs</p>	<p>Probable Conflict with status of SEOs- unlikely to be mitigated</p>	<p>Potential Conflict with status of SEOs- likely to be mitigated</p>	<p>No Likely interaction with status of SEOs</p>
<p>P1 To adhere to the objectives of the Wicklow County Development Plan in regard to population and housing as are applicable to the plan area.</p>	<p>HH1 R1 AQ1 AQ2 L1</p>		<p>B1 B2 B3 R1 S1 WS WG WF AQ1 AQ2 WW DW AH1 AH2 L1</p>	
<p><i>P1 - The overarching theme arising from the Population and Settlement chapter of the County Development Plan is to provide for population in appropriate locations of an appropriate design/layout on lands closest to town centres in a sustainable manner. As applicable to Blessington these objectives are likely to inform the location of residential</i></p>				

development in appropriate locations reducing the need for car based trips, reducing emissions, improving air quality and thus human health. The provisions of the County plan also promote the development of lands in a incremental manner working from the town centre outwards reducing the impact on the surrounding landscape.

The development of this area does however conflict with a number of SEOs with impacts such as noise from construction impacting on human health, the increased loading such development would place on water services potentially impacting on surface, ground and drinking water quality. Potential increases in traffic movements from large-scale development may impact on air quality through increased emissions. The potential for impacts on Archaeological Heritage from excavation during construction may impact on the site and general landscape

P2	Notwithstanding the zoning of land for residential purposes, the Development Management process shall monitor and implement the population targets for Blessington as set out in the County Development Plan and shall phase and restrict, where necessary, the granting of residential planning permissions to ensure these targets are not exceeded.			B1 B2 B3 HH1 R1 S1 WS WG WF AQ1 AQ2 WW DW AH1 AH2 L1	
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P2 - Objective P2 requires the development management process to monitor and implement the population targets of the County Development Plan 2010 – 2016 as applicable to Blessington plan area. This objective has the potential to conflict with the status of all SEO's as it involves a granting of permissions with arising impacts such as noise from construction impacting on human health, the increased loading such development would place on water services potentially impacting on surface, ground and drinking water quality. Potential increases in traffic movements from large-scale development may impact on air quality through increased emissions. The potential for impacts on Archaeological Heritage from excavation during construction may impact on the site and general landscape.

Section 3: Town Centre		Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	No Likely interaction with status of SEOs
TC1	To support and facilitate activities and developments that will improve the vitality, connectivity and vibrancy of the town centre areas.	HH1 R1 AQ1 AQ2		AH1 AH2	S1 WS WG WF WW DW L1
TC1 - Likely to improve human health, air quality and regeneration of the town centre by promoting a more compact settlement form within and around the existing town centre areas. Promoting redevelopment within the town centre however may potentially conflict with the zone of archaeological potential and existing protected structures unless they are developed in a sensitive manner.					
TC2	To promote the development of opportunity sites within the town centre in accordance with the specific criteria set out for each identified area as set out in subsection 3.3.3. below.	HH1 R1 AQ1 AQ2		AH1 AH2	S1 WS WG WF WW DW L1

<i>TC2 - As per TC1 above</i>				
TC3	To ensure that all new applications for retail development accord with the provisions of the “Retail Planning Guidelines for Planning Authorities” (DOEHLG 2012), and any subsequent Ministerial Guidelines or directives and the Wicklow County Retail Strategy.			B1 B2 B3 WS WG WF WW DW AH1 AH2 L1
<i>TC3 - The provisions of the retail planning guidelines generally aim to ensure that core retailing areas are located primarily within the town centre in so far as possible benefiting the regeneration of the town centre area and reducing the need for car based trips, reducing emissions, improving air quality and thus human health. The development of such enterprise on brownfield lands has the potential to impact on areas prone to flooding and may impact on existing archaeology and architectural heritage. The potential development of edge of centre retail activities where no viable site can be found within the plan area has the potential to impact on biodiversity, surface and ground waters and increase loading on existing infrastructure. The physical development of such outlets also has the potential to impact on the landscape of the plan area.</i>				
Opportunity Site 1: Town Centre Link Site This site measures 0.114ha and provides an opportunity to link the northern section of the Main Street to the new town centre and St. Mary’s School and crèche facility. Objectives: <ul style="list-style-type: none"> ○ To facilitate the redevelopment of the site for a mix of uses and providing for a new street dedicated to pedestrians, passively supervised by ground floor retail/office/town house style development. ○ The proposed pedestrian street should be a minimum 3m wide and of a design/finish capable of attracting pedestrians through this area. ○ The design should provide for a dual aspect building(s) addressing both the Main Street and the new town centre development while the height, massing and proposed finishes of any proposed development must take cognisance of the Architectural Conservation Area designation of the site and the surrounding developments. 	R1 HH1 AQ1 AQ2 AH2 L1		AH1	B1 B2 B3 S1 W-S W-G W-F WW DW
<i>OP1 - The development of this opportunity site maximises the re-use of an existing town centre site, the development of which will reduce the need for car based trips, reducing emissions, improving air quality and thus human health. The redevelopment of this site is also likely to improve the visual appearance of this section of the main street with the objectives ensuring the design of any new development must respect the existing architecture in the area.</i>				
<i>The development of such lands has the potential to impact on existing archaeology within this area.</i>				

<p>OP2: Market Square/Old Forge Site: This site measures 0.1366ha and is situated in a very prominent location within the Market Square and backing onto the new town centre site.</p> <p>Objectives:</p> <ul style="list-style-type: none"> ○ To provide for the redevelopment of the site for a mix of uses and providing for a new street dedicated to pedestrians, passively supervised by ground floor retail/office/town house style development. ○ The proposed pedestrian street should be a minimum of 4m wide and of a design/finish capable of attracting pedestrians through this area while also acting as an extension to the traditional Market Square. ○ The design should provide for a dual aspect building(s) addressing both the Market Square and the new town centre development while the height, massing and proposed finishes of any proposed development must take cognisance of the Architectural Conservation Area designation of the site and the surrounding developments in particular the existing credit union building. 	<p>R1 HH1 AQ1 AQ2 AH2 L1</p>		<p>AH1</p>	<p>B1 B2 B3 S1 W-S W-G W-F WW DW</p>
<p><i>OP2 - The development of this opportunity site maximises the re-use of an existing town centre site, the development of which will reduce the need for car based trips, reducing emissions, improving air quality and thus human health. The redevelopment of this site is also likely to improve the visual appearance of the main square linking the main street to the new town centre with the objectives ensuring the design of any new development must respect the existing architecture in the area.</i></p> <p><i>The development of such lands has the potential to impact on existing archaeology within this area.</i></p>				
<p>OP3: Lands adjoining the Naas Road opposite Rockypool Villas The subject lands are situated in a very prominent location, fronting onto two major routes the N81 and the Naas Road. The site measures c. 1ha.</p> <p>Objectives</p> <ul style="list-style-type: none"> ○ To provide for a Mixed Use development of a strong architectural design capable of addressing all frontages. ○ The height and scale of any proposed development should reflect that of the existing surrounding developments while also maximising the potential of the site through use of the sloping topography of the lands. . ○ A public park/civic space measuring c. 0.3 ha should be integrated in to the design of the site along the northern and eastern boundary of the site in a manner capable of providing linkages to the green space opposite Rocky Pool Villas and the green walkway at 	<p>HH1 AQ1 AQ2</p>		<p>B3 HH1 R1 S1 W-S W-G W-F WW DW AH1 AH2 L1</p>	<p>B1 B2</p>

<i>Dempsey's Lane.</i>				
<p><i>OP3 - The development of this greenfield infill site in close proximity to the town centre is likely to reduce the need for car based trips, reducing emissions, improving air quality and thus human health. Increased pedestrian and cycle linkages between these lands and the adjoining uses will further reduce the need for car based trips.</i></p> <p><i>The development of these greenfield lands has the potential to impact on ecological networks, conflicts with the redevelopment of existing brownfield sites, has the potential to impact on biodiversity and Human Health arising from increased demands on water infrastructure causing deterioration in Water Quality while also impacting on the landscape of this area.</i></p>				
<p>OP4: Open space at St. Josephs Road</p> <p>The subject lands are located adjacent to St. Josephs Road housing development and form part of the old public park area which is currently underutilised. The opportunity site measures 0.241ha.</p> <p>Objective:</p> <ul style="list-style-type: none"> To facilitate and promote in consultation with the Community and Enterprise Section of Wicklow County Council the re-development of the public park area providing for both passive and active recreational green and hard landscaped areas. The redevelopment of the existing open space should be easily accessible and highly visible from the Main Street in order to create a more inviting park area for the public. The public park area should provide for soft landscaping in the form of small green spaces with more formal hard landscaping such as park benches/tables in sections. A section of the open space should be dedicated to an informal play area for children. 	HH1 AQ1 AQ2			B1 B2 B3 R1 S1 WS WG WF WW DW AH1 AH2 L1
<i>OP4 - The redevelopment of this area is likely to reduce the need for car based trips to other such areas, reducing travel related emissions benefiting human health.</i>				
Section 4: Employment	Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	No Likely interaction with status of SEOs
E1 To facilitate the development of employment generating activities on suitably zoned lands within Blessington in accordance with the objectives and development standards set out in the County Development Plan	HH1 AQ1 AQ2 B3 L1		B1 B2 B3 R1 S1 W-S W-G W-F WW DW AQ1	

			AQ2 AH1 AH2 L1	
<p><i>E1 - The overall theme of the economic development chapter of the CDP 2010-2016 as applicable to Blessington is to provide for employment of a suitable design and scale in appropriate locations close to existing services positively impacting on Human health, air quality through reduced emissions in a manner which protects local biodiversity and the surrounding landscape.</i></p> <p><i>The provisions of such objectives have the potential to increase car-based journeys impacting on air quality and human health. The development on greenfield lands also has the potential to impact on the general landscape of the area. The redevelopment of existing town centre and existing employment sites also has the potential to impact on existing archaeology and architecture arising from excavation and construction. Increased loading on services is also likely from the development of employment lands.</i></p>				
E2	To protect employment zoned land from inappropriate development that would undermine future economic activity or the sustainable development of such areas.	HH1 S1 WS WG WF WW DW AQ1 AQ2 B3 L1 AH1 AH2		B1 B2 R1
<p><i>E2 – The provisions of this objective aim to ensure only suitable employment types of development are located on the lands zoned for employment within the plan area in the interests of protecting human health, air quality, local biodiversity and the landscape of the plan area.</i></p>				
E3	To encourage the redevelopment of already developed or brownfield employment / mixed use lands for enterprise and employment creation throughout the settlement, subject to the proper planning and sustainable development of the area and compliance with all other objectives of this plan.	HH1 R1 AQ1 AQ2	WS WG WF WW DW AH1 AH2	B1 B2 B3 S1 L1
<p><i>E3 - The development of employment units within the town centre/on brown field sites may result in a reduction in travel related emission within the plan area improving air quality and benefiting human health. The development of such enterprise on brownfield lands has the potential to impact on existing archaeology and architectural heritage. The physical development and operation of such facilities may also impact on surface and ground waters and increase loading on existing infrastructure.</i></p>				
E4	To encourage the development of significant new employment zones at <ul style="list-style-type: none"> - Downshire demesne lands (part of permitted 'Cookehill' development) - Roadstone - Haylands / Mart site in accordance with the detailed requirements set out in Section 10 of this plan.		B1 B2 B3 HH1 R1 S1 WS WG WF AQ1 AQ2 WW DW AH1 AH2 L1	
<p><i>E4 - The provision of new developments has the potential to impact on biodiversity and Human Health arising from increased demands on water infrastructure causing a deterioration in Water Quality while lands zoned for employment uses on the outskirts of the plan area have the potential to increase car-based journeys impacting on air quality. This development on greenfield lands also has the potential to impact on the general landscape of the area. Within the town centre areas conflicts arise where such</i></p>				

<i>development would be permissible while excavations and construction may impact on existing archaeology and architecture.</i>				
E5	To require the design and layout of employment lands located at Blessington Demesne to provide for a pedestrian walkway (linked to the proposed public park) along the southern boundary, adjoining Action Area 1.	HH1 AQ1 AQ2		B2 B3 B1 R1 S1 WS WG WF WW DW AH1 AH2 L1
<i>E5 - Promotes walking and cycling through increased linkages reducing the need for car-based trips, reducing emission to air. The provision of linkages has the potential through construction and land take to cause habitat disturbance and impact on ecological connectivity.</i>				
E6	To facilitate and encourage the exploration and exploitation of minerals in the plan area in a manner, which is consistent with the principle of sustainability, the protection of residential, environmental and tourism amenities within the plan area and the objectives of the Wicklow County Development Plan 2010 – 2016 in particular section 8.3.			B1 B2 B3 HH1 R1 S1 WS WG WF WW DW AQ1 AQ2 AH1 AH2 L1
<i>The development of Quarry activities within the plan area is likely to impact on biodiversity arising from the excavation of minerals within the plan area with implications for surface waters and ground water quality. The operation and processing of materials has the potential to impact on air quality from dust emissions and increased traffic movements. Increased loading on existing water and wastewater infrastructure arising from surface water run-off may also be an issue. The physical excavation of lands is likely to adversely impact on the landscape of the plan area unless landscape restoration measures are carried out.</i>				
Section 5: Tourism		Likely to improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated
TP1	To promote and facilitate improvements to tourism and recreation infrastructure in the Blessington area.			B1 B2 B3 HH1 R1 S1 WS WG WF AQ1 AQ2 WW DW AH1 AH2 L1
<i>TP 1 - No likely interaction with the status of SEO's</i>				
TP2	To improve, as funding allows, the principle access routes and junctions linking Blessington town centre to surrounding tourist attractions such as the lakeshore and its associated villages, the Wicklow Mountains, Russborough House and Glen Ding	AQ1 AQ2 HH1		B3 S1 HH1 AQ1 AQ2 B1 B2 R1 WS WG WF WW DW AH1 AH2 L1
<i>TP - 2 Improved accessibility to the town centre from existing tourist locations aims to reduce the impacts of traffic congestion reducing emission and improving human health. The development of such routes however is likely to conflict with ecological connectivity arising from construction while also potentially encouraging greater car usage in these areas.</i>				
TP3	To support and facilitate in co-operation with relevant bodies, the provision of amenity routes around the Poulaphuca reservoir in an environmentally sustainable manner			B2 B3 S1 WS DW L1 B1 HH1 R1 WG WF AQ1

				AQ2 WW AH1 AH2
<i>TP3 - Potential impacts arise relating to existing habitats along the lakeshore from increased usage impacting on biodiversity through habitat fragmentation, surface water and the general landscape of the area.</i>				
TP4	To require new developments in proximity to the reservoir / Glen Ding (or between the town centre and these areas) to provide / fund the development of new roads, and pedestrian / cycle linkages between the development and the existing town centre (generally as shown on Figure 5.1 of the Written Statement/Plan).	R1 HH1 AQ1 AQ2 L1		B3 S1 L1
<i>TP4 - The provisions of this objective require new development on the outskirts of the town in poorly/un-serviced areas to provide for increased car, pedestrian and cycle accessibility reducing the need for long distance car-based travel, promoting walking and cycling and thus reducing emissions positively impacting on human health. While this may be the case increased accessibility to the Reservoir/Glen Ding Wood may impact on existing habitats and networks and the overall landscape of the area.</i>				
Section 6: Community and Education		Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated
CD1	To ensure sufficient lands are zoned for community needs within the plan area and to implement the objectives of the Chapter 15 'Social and Community Infrastructure' of the Wicklow County Development 2010 - 2016 as applicable to the plan area.	HH1 AQ1 AQ2 B3		B1 B2 B3 HH1 R1 S1 WS WG WF WW DW AH1 AH2 L1
<i>CD1 - In accordance with the provision of the County Development Plan 2010 – 2016 aims to ensure the provision of adequate open space lands capable of serving the resident population of the plan area. The provision of such lands in close proximity to existing residential populations is likely to reduce the need for travel, reducing travel related emissions, improving air quality and thus human health. The provision of open space lands throughout the plan area will facilitate the expansion of ecological networks.</i>				
<i>While this may be the case the objective to provide for extensive open spaces has the potential to impact on biodiversity through the use of lands for amenity and recreational purposes. Such lands can also be located within areas prone to flooding where certain types of development/facilities may impact on surface/ground waters and potentially on drinking water quality arising from increased pressures on infrastructure. Impacts on Archaeological heritage may arise during the development of active open spaces requiring extensive drainage networks in order to ensure the ability to cater for such uses. The visual impact of such development also has the potential to impact on architecture and the landscape of the area.</i>				
CD2	To co-operate with the Department of Education & Skills, the Vocational Education Committee for Co.Wicklow and school management boards in the provision of school			B1 B2 B3 HH1 R1 S1 WS WG

places where a need is identified.					WF AQ1 AQ2 WW DW AH1 AH2 L1
<i>CD2 - No likely interaction of with status of SEO's</i>					
CD3	To facilitate opportunities for play and sport and support the implementation of the County Council 'Play' and 'Sports & Recreation' Policies and their objectives, including the collection of development levies.	HH1 AQ1 AQ2			B1 B2 B3 R1 S1 WS WG WF WW DW AH1 AH2 L1
<i>CD3 - The promotion of such facilities is likely to reduce the need for car based trips to such areas, reducing travel related emissions benefiting human health.</i>					
CD4	The redevelopment for alternative uses of open space and recreational lands whether owned by private recreational clubs or publicly owned, will normally be resisted by the Council unless suitable alternative recreational facilities can be provided in a convenient location.	HH1 AQ1 AQ2			B1 B2 B3 R1 S1 WS WG WF WW DW AH1 AH2 L1
<i>CD4 - Promotes the protection of existing areas of open spaces within the plan areas which are mostly located in close proximity to the existing residential population reducing the need for car based trips, reducing emissions improving air quality and benefiting human health.</i>					
Section 7: Services Infrastructure		Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	No Likely interaction with status of SEOs
S1	To implement the objectives and development standards of Chapters 11, 12, 13 and 14 of the County Development Plan as applicable to Blessington.	HH1 AQ1 AQ2 B1 B2 B3 S1 WG WS WF WW DW		B1 B2 B3 R1 S1 WS WG WW DW AH1 AH2 L1	
<i>S1 - The overarching theme of these chapters relate to the provision of infrastructure i.e. roads, water, waste, environmental emissions, energy and telecommunications infrastructure in a sustainable. Applying the relevant objectives of these chapters to Blessington this objective is likely to ensure the provision of adequate services infrastructure capable of meeting the demands of the projected population in line with new development benefitting human health, air quality, biodiversity, soils and water.</i>					
<i>The provision of such infrastructure is likely to conflict with a number of SEO's during the construction phase. Excavation and installation of new infrastructure has the potential to impact on Biodiversity through habitat disturbance and fragmentation of ecological networks. Excavation may also impact on existing archaeology and the landscape of the plan area.</i>					
S2	To improve and expand wastewater treatment facilities sufficiently to ensure that no barriers exist in Blessington fulfilling its role as a moderate growth town as set out in the	B1 B2 B3 HH1 W-S,		B2 B3 S1 AH1 L1	R1, WF, AQ1, AQ2, , AH2,

Wicklow 'Core Strategy' and Regional Planning Guidelines for the GDA 2010 – 2022.		WG, WW, DW			
<i>S2 - Promotes the sustainable disposal of all waste waters ensuring water quality is maintained facilitating improvement and preventing impacts on human health. The provision of such measures is also likely to improve and enhance existing biodiversity within the plan area in particular water based habitats. The construction phase of development involving excavation and installation of new infrastructure has the potential to impact on Biodiversity through habitat disturbance and fragmentation of ecological networks. Excavation may also impact on existing archaeology and the landscape of the plan area.</i>					
S3	To have regard to the provisions of the 'The Planning System and Flood Risk Management' Guidelines (DoEHLG 2009) and the Flood Risk Assessment carried out as part of this plan	HH1 WF		B2 B3	B1 R1 S1 WS WG AQ1 AQ2 WW DW AH1 AH2 L1
<i>S3 - Requirements likely to reduce human health risks associated with flooding and prevents unsuitable development in flood prone areas while also benefitting river habitats and ecological corridors.</i>					
S4	To facilitate the N81 (Tallaght to Hollywood) re-alignment and to work with the NRA road design office to ensure that amenity routes from the town centre to Glen Ding are facilitated in the final design of the road. Any development within the preferred route corridor will be assessed for acceptability having regard to potential affects on the future viability of the proposed road.	HH1 R1 S1 AQ1 AQ2		B1 B2 B3 HH1 WS WG WF AQ1 AQ2 DW AH1 AH2	WW
<i>S4 - The provision of improved road infrastructure in order to alleviate traffic congestion through the town centre is likely to reduce emissions thus improving human health however the provision of such infrastructure incorporating a new road in close proximity to Glen Ding Wood has the potential to impact on biodiversity during construction through habitat disturbance, water quality, flooding arising from impacts on the existing Blessington Stream,, air quality by encouraging car based movements and archaeological and architectural heritage.</i>					
S5	To facilitate the completion of the Inner Relief Road	HH1 R1 S1 AQ1 AQ2		B1 B2 B3 WG L1	WS WF AH1 AH2 WW DW
<i>S5 - The provision of improved road infrastructure in order to alleviate traffic congestion is likely to reduce emissions thus improving human health however the provision of such infrastructure incorporating a new road has the potential to impact on biodiversity during construction through habitat disturbance, ground water quality. The visual impact of such infrastructure may impact on the landscape of the plan area.</i>					
S6	To reserve lands of c. 0.75ha on the N81 as shown on the plan map for a future bus park-and-ride facility	HH1 S1 AQ1 AQ2		B1 B2 B3 R1 WS WG WF L1	WW DW AH1 AH2
<i>S6 - The provision of a park and ride facility encouraging a modal move away from the car to public transport is likely to reduce emissions thus improving human health, air quality whilst also maximising the sustainable re-use of brownfield lands. While this may be the case the development of lands for such infrastructure has the potential to</i>					

<i>impact on biodiversity during construction through habitat disturbance, ground water quality. The visual impact of such infrastructure may impact on the landscape of the plan area.</i>					
S7	To improve / provide new footpaths and cycleways on existing roads as funding allows and to facilitate the provision of new roads, footpaths and cycleways as detailed in chapters 3, 5 and 10 of this plan.	HH1 AQ1 AQ2		S1	B1 B2 B3 R1 WS WG WF WW DW AH1 AH2 L1
<i>S7 - Promotes walking and cycling through increased linkages reducing the need for car-based trips, reducing emission to air. The provision of linkages has the potential through construction and land take to cause habitat disturbance and impact on connectivity. The provision of such infrastructure has the potential to impact on ecological corridors</i>					
Section 8: Built and Natural Heritage		Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	No Likely interaction with status of SEOs
BD1	To protect the natural, architectural and archaeological heritage of the town, in accordance with the objectives and development standards set out in Chapters 16 and 17 of the County Development Plan as are applicable to Blessington and its environs.	B1 B2 B3 HH1 R1 S1 WS WG WF WW DW AQ1 AQ2 AH1 AH2 L1			
<i>BD1 - The overarching aims of objective BD1 and chapters 16 and 17 of the CDP 2010 – 2016 aim to protect the natural and built heritage as applicable to Blessington. The provisions of such objectives contribute towards the protection of biodiversity, flora and fauna by placing restrictions on development, developments that may have an impact on Natura 2000 sites. The objectives also aim to protect and preserve greenfield lands and ecological corridors, whilst also restricting unsustainable development ensuring development only takes place where no adverse impacts will occur.</i>					
BD2	No projects giving rise to significant adverse direct, indirect or secondary impacts on Natura 2000 sites arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this Plan (either individually or in combination with other plans or projects); any projects with the identified potential to impact on Natura 2000 sites shall include Appropriate Assessment screening or full Appropriate Assessment and / or an EIS	B1 B2 B3 HH1 WS WG WW DW L1			R1 WF AQ1 AQ2 AH1 AH2
<i>BD2 - The provision of BD2 contributes towards the protection of biodiversity, flora and fauna by placing restrictions on development, which may have an impact on a Natura 2000 sites. This objective also aims to ensure that water services infrastructure will be provided without any adverse impact occurring on the receiving environment.</i>					
BD3	In the interests of the protection and enhancement of biodiversity in Blessington, it is an objective of this plan to:	B3 HH1 S1 WS WG L1			B1 B2 R1 WF AQ1 AQ2 WW

<ul style="list-style-type: none"> Protect trees, hedgerows and wooded areas (particularly those containing indigenous species), watercourses and other features of the natural landscape Require the planting of indigenous plant and tree species in new developments and in the restoration of former quarry land 				DW AH1 AH2
<i>BD3 – Aims to ensure the preservation of natural features, ecological corridors and water courses, mitigating against adverse impacts on water bodies and water quality positively impacting on human health and the general landscape of the plan area. This objective also aims to enhance these features there expansion within new developments and in the restoration of former quarry lands.</i>				
BD4 To designate Glen Ding Wood as a conservation, Heritage and amenity zone	B1 B2 B3 S1 AH1 L1			HH1 R1 W-S W-G W-F WW DW AQ1 AQ2 AH2
<i>BD4 – Aims to ensure the preservation of Glen Ding Wood protecting the biodiversity and Archaeology of this area whilst also preventing further impacts on the landscape features of this area.</i>				
BD5 To facilitate the use of natural areas for active outdoor pursuits, subject to the highest standards of habitat protection and management and all other normal planning controls.			B1 B2 B3 HH1 R1 S1 WS WG WF AQ1 AQ2 WW DW AH1 AH2 L1	
<i>BD5 - Facilitating the development of outdoor pursuits has the potential to impact on a number of SEO's arising from increased development pressures, increased accessibility to existing sites of heritage value, increased loading on existing infrastructure. The provision of new outdoor pursuits is also likely to increase tourist numbers, traffic flow and therefore impact on air quality and human health through increased emissions.</i>				
BD6 The Council shall seek to promote access to amenity areas of the plan for the benefit of all, on the basis of co-operation with landowners, recreational users and other relevant stakeholder groups to promote “agreed access” on public and privately owned land in the plan area on the basis of sustainability, consultation and consensus.	B2 B3 HH1 WS L1		B2 B3	B1 R1 S1 WG WF AQ1 AQ2 WW DW AH1 AH2
<i>BD6 - Ensure the protection of the landscape and natural habitats while also facilitating the use natural resources (water) in a sustainable manner protecting human health. Potential impacts on heritage areas and fragmentation of ecological networks arising from increased accessibility and usage.</i>				
BD7 To protect those features that have been identified in the Architectural Conservation Area Appraisal as contributing to the town centre's overall appearance and heritage value and to ensure that new development contributes positively to the designated Architectural Conservation Area.	R1 AH2 L1			B1 B2 B3 S1 HH1 WS WG WF AQ1 AQ2 WW DW AH1
<i>BD7 - Ensures the preservation and sustainable re-use of existing architectural buildings facilitating the regeneration of the town centre area.</i>				

BD8	To facilitate the appropriate refurbishment and renewal of architecturally significant buildings and to accommodate new uses in old buildings to ensure their continued use/preservation;	R1 AH2 L1			B1 B2 B3 HH1 S1 WS WG WF AQ1 AQ2 WW DW AH1
<i>BD8 - Ensures the preservation and sustainable re-use of existing architectural buildings facilitating the regeneration of the town centre area.</i>					
BD9	To encourage the retention of original features, which are important to a building's character such as window type, materials, detailing, chimneys, entrances and boundary walls, both within and outside the architectural conservation area.	AH2 L1		R1	B1 B2 B3 HH1 S1 WS WG WF AQ1 AQ2 WW DW AH1
<i>BD9 - Ensures the preservation of existing architectural landscape of the area which may restrict the achievement of a complete regeneration of the town centre area.</i>					
Section 9: Action Area Plans		Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	No Likely interaction with status of SEOs
AA1	<p>This Action Area adjoins the Naas Road R410 and the Glending housing development. The Action Area measures c. 10ha and shall be developed as a mixed residential, community/educational and active open space development in accordance with the following criteria;</p> <ul style="list-style-type: none"> - 1.32ha for Community and Educational purposes - 4.51ha for Active Open Space - 4.15ha for Residential <p>Any plan prepared or development proposed for these lands, while respecting all relevant development control standards and plan objectives must provide for phased and integrated development. Any plan shall comply with the following objectives:</p> <ul style="list-style-type: none"> o Prior to the commencement of any development a through road shall be provided linking the R420 to the adjoining lands and roadway currently serving the Blessington No. 1 School and KARE Centre of a design to be agreed with Wicklow County Council Planning and Roads sections. o The Action Area shall be developed in 2 phases. 	B3 W-F AQ1 AQ2		B1 B3 HH1 R1 S1 W-S W-G W-F WW DW AQ1 AQ2 AH1 L1	B2 AH2

<p>Phase 1 shall comprise of the development of the Active Open Space lands alongside the provision of the residential element of the lands to the east of the proposed new link road only.</p> <p>Phase 2 shall comprise of the development of the remaining residential units within the action area alongside the reservation of lands for the proposed community/educational development. Phase 2 may only be developed once the Active Open Space lands have been provided and laid out in a manner suitable for sporting activities.</p> <ul style="list-style-type: none"> ○ The design and layout of the Action Area in particular the residential element shall address and provide for passive supervision of the proposed through road and Active Open Space areas. At no point should the design or layout allow for housing backing onto this road network. ○ The design and layout of the residential element of the Action Area shall incorporate a passively supervised pedestrian walkway linked to the proposed pedestrian route required by objective E5. ○ Any development proposals shall have regard to the setting and curtilage of structures and sites of heritage value, and habitats of biodiversity value and appropriate buffer zone/mitigating measures shall be provided as required. 				
<p><i>AA1 – Provides for the development of a number of land uses on greenfield lands conflicting with the objectives for the regeneration of the town centre of Blessington however given the necessity to facilitate such development in order to meet the demand of the projected population targets this area is required to be zoned. The provisions of this action area are likely to improve ecological connectivity through strong objectives aimed at preserving and enhancing existing ecological network within this area. A strong emphasis is placed on pedestrian and cycling linkages to the main street through the proposed new public park at Blessington Demesne reducing the need for car movements, reducing emissions improving air quality and thus human health. The objectives also place a strong emphasis on restricting the use of lands within flood Zone A/B to only compatible open space use.</i></p> <p><i>The development of this area does however conflict with a number of SEOs with impacts such as noise from construction impacting on human health, the increased loading such development would place on water services potentially impacting on surface, ground and drinking water quality. Potential increases in traffic movements from large-scale development may impact on air quality through increased emissions. The potential for impacts on Archaeological Heritage from excavation during construction may impact on the site and general landscape.</i></p>				
<p>AA2</p> <p>This Action Area is located at Burgage Mor, is accessed off the L-8858 Local Road and is</p>	<p>B3 AQ1 AQ2</p>		<p>B1 B2 B3 HH1 R1 S1 WS WG WF AQ1 AQ2</p>	

<p>bounded by the Avon Ri access driveway, existing residential development, employment lands and the lake shore. Measuring c. 9.4ha this Action Area shall be developed as a mixed use Residential Development and Active Open Space area in the following manner;</p> <ul style="list-style-type: none"> - 3.96ha for Active Open Space 5.48ha for Mixed Residential Purposes <p>Any plan prepared or development proposed for these lands, while respecting all relevant development control standards and plan objectives, must provide for phased and integrated development. Any plan shall comply with the following objectives:</p> <ul style="list-style-type: none"> ○ This Action Area Plan shall provide for two main vehicular access points off the L-8858. One entrance shall serve the residential element of the Action Area while the second entrance shall provide access to the Active Open Space lands to the rear. ○ The proposed residential element of this Action Area shall provide for a maximum 153 housing units in 3 phases. <ul style="list-style-type: none"> - Phase one shall comprise the provision of a maximum of 50 no. units and the vehicular access road to the Active Open Space lands to the rear of the site. - Phase 2 shall comprise of the provision of a further 50 units alongside the laying out of the Active Open Space element of the Action Area. The uses for the proposed Active Open Space lands shall be decided in consultation with the Community and Enterprise Section of Wicklow County Council and upon decision the subject lands shall be levelled and drained to an appropriate standard capable of accommodating such proposed facilities. - Phase 3 shall comprise of the development of the remaining 53 units alongside the completion of a pedestrian access route along the approximate route shown on the layout below. ○ The design and layout of the proposed development shall be in keeping with the surrounding residential developments in the area with the units to the extreme east of the residential zoning being orientated so as to passively supervise the Active Open Space lands to the rear. ○ Any development proposals shall have regard to the setting and curtilage of structures and 			<p>WW DW AH1 AH2 L1</p>	
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sites of heritage value, and habitats of biodiversity value and appropriate buffer zones/mitigating measures shall be provided as required.				
<p><i>AA2 – Provides for the development of a number of land uses on greenfield lands conflicting with the objectives for the regeneration of the town centre of Blessington however given the necessity to facilitate such development in order to meet the demand of the projected population targets this area is required to be zoned. The provisions of the action area are likely to improve ecological connectivity through strong objectives aimed at preserving and enhancing existing ecological network within this area. A strong emphasis is placed on pedestrian and cycling linkages to the main street through existing developments reducing the need for car movements, reducing emissions improving air quality and thus human health.</i></p> <p><i>The development of this area does however conflict with a number of SEOs with impacts such as noise from construction impacting on human health, the increased loading such development would place on water services potentially impacting on surface, ground and drinking water quality. Potential increases in traffic movements from large-scale development may impact on air quality through increased emissions. The potential for impacts on Archaeological Heritage from excavation during construction may impact on the site and general landscape.</i></p>				
<p>AA3</p> <p>This Action Area is also located at Burgage Mor, is accessed off the L-8858 Local Road and is bounded by the Avon Ri access drive to the north and east, existing agricultural lands to the south and the local road to the west. Measuring c. 10.3ha this Action Area shall be developed as a mixed residential/employment, community and active open space development in the following manner;</p> <ul style="list-style-type: none"> - 2.577ha for employment purposes - 0.8ha for community use (graveyard extension) - 3.558ha for mixed residential purposes - 3.352ha for active open space purposes <p>The following criteria shall apply to these lands:</p> <ul style="list-style-type: none"> ○ To provide for junction improvements at the intersection point between the L8370 and the L8858 and a vehicular entrance sufficiently wide to cater for traffic movements through the proposed residential and employment lands. ○ Access to the Active Open Space lands shall be provided off the L-8858 through the site or alternatively off the existing avenue serving the Avon Ri Resort subject to agreement with relevant owner(s) of this roadway. ○ The design and layout of the proposed residential element of the Action Area shall facilitate a 	AQ1 AQ2		B1 B2 B3 HH1 R1 S1 WS WG WF AQ1 AQ2 WW DW AH1 AH2 L1	

<p>through access into the residential lands to the immediate south, with the housing units to the extreme east of this zoning being orientated in a manner that provides passive surveillance of the adjoining Active Open Space lands.</p> <ul style="list-style-type: none"> ○ The uses for the proposed Active Open Space lands shall be decided in consultation with the Community and Enterprise Section of Wicklow County Council and upon decision the subject lands shall be levelled and drained to an appropriate standard capable of accommodating such proposed facilities. ○ The design and layout of the proposed employment element of the Action Area shall be sympathetic to the adjoining uses and shall provide for extensive landscaping along all boundaries. ○ Any development proposals shall have regard to the setting and curtilage of structures and sites of heritage value, and habitats of biodiversity value and appropriate buffer zones-/mitigating measures shall be provided as required. ○ As an interim measure consideration will be given to the temporary use (maximum 5 years) of all zonings within the Action Area for active open space use while the lands to the east of this Action Area are being developed for permanent playing fields 				
<p><i>AA3 – Provides for the development of a number of land uses on greenfield lands conflicting with the objectives for the regeneration of the town centre of Blessington however given the necessity to facilitate such development in order to meet the demand of the projected population for the area this area is required to be zoned. The provisions of the action area are likely to improve ecological connectivity through strong objectives aimed at preserving and enhancing existing ecological network within this area.</i></p> <p><i>The development of this area does however conflict with a number of SEO's with impacts such as noise from construction impacting on human health, the increased loading such development would place on water services potentially impacting on surface, ground and drinking water quality. Potential increases in traffic movements from large-scale development may impact on air quality through increased emissions and thus human health. Impacts on Archaeology from excavation during construction and architectural Heritage in the design of such new development may adversely impact on the site and surrounding buildings of architectural merit including the general landscape.</i></p>				
<p>Action Area 4</p> <p>This Action Area is located at Holyvalley (Doran's Pit) is accessed directly off the N81 and is bounded by the existing mart site to the north, existing forestry and agricultural lands to the east</p>	<p>B3 HH1 R1 AQ1 AQ2 L1</p>		<p>B1 B2 B3 HH1 R1 S1 WS WG WF AQ1 AQ2</p>	

<p>and south and existing residential development to the south west. The N81 runs along the northern section of the western boundary, with the L-4371 (Kilbride Road) running along the south east of the subject lands. The subject lands measure a total of c 29.81ha and shall provide for mixed residential development, a local neighbourhood centre and active open space areas in the following manner:</p> <ul style="list-style-type: none"> - 17.01ha for mixed residential development - 0.5 ha for community/local neighbourhood centre uses - 1 ha and 0.5ha for equipped play spaces - 10.8ha for open space and amenity use in the form of a woodland Park <p>The development of this Action Area plan offers significant opportunities to link the L-4371 – Kilbride Road and the L-4372 Blessington Bridge to the N81 directly and sit at a prominent location acting as a gateway into the town of Blessington. The proximity to the lakeshore and the potential tourism value of this site is also recognised. Having regard to this the following criteria shall apply to these lands:</p> <ul style="list-style-type: none"> ○ The development of this action area shall be contingent on the provision of a through road linking the N81 directly to the L-4371 (Kilbride Road) and the L-4372 (Blessington Bridge). No residential development shall take place until a programme for the delivery and completion of this road from the N81 to the L-4371 has been agreed with the Planning and Roads Sections of Wicklow County Council. The provision of a continuous footpath along the L-4372 from Blessington Bridge to the subject lands will also be required. ○ The residential element of the Action Area shall be developed in 3 phases which shall be tied in with the provision of the Active Open Space lands and the local neighbourhood centre / community lands as follows: <ul style="list-style-type: none"> - Phase 1 shall provide for a maximum of 250 residential units alongside the delivery of an active open space area measuring a minimum of 1ha. The type, form and layout of this active open space area shall be subject to agreement with the Planning, Community and Enterprise Sections of Wicklow County Council. - The commencement of any further phases shall be contingent on the completion and opening of the N81 to L-4371 link road - Phase 2 shall comprise the provision of a maximum of a further 100 residential units which shall be developed alongside the delivery of a passive open space area / casual play area 			<p>WW DW AH1 AH2 L1</p>	
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<p>and the local community/neighbourhood centre area both measuring a minimum of 0.5ha. The type, form and layout of any such open space shall be subject to agreement with the Planning, Community and Enterprise section of Wicklow County Council.</p> <ul style="list-style-type: none"> - A neighbourhood centre including community facilities, of scale commensurate with the needs of the future population of the Action Area shall be provided on a site of 0.5ha. This local neighbourhood centre shall adjoin the active open space area and provide for a small anchor retail unit alongside smaller local shops and services including non-retail and professional services. The community element of this zoning shall be provided in accordance with the requirements of the Planning, Community and Enterprise section of Wicklow County Council. - Phase 3 shall comprise of the provision of a maximum of 126 units which shall be developed in conjunction with the delivery of a lakeside open park and amenity area measuring 10.8ha. Units within this phase shall be only be occupied upon completion of the parkland area. This parkland shall provide sufficient car parking and open onto the lake to the east. The proposed lakeside park area shall provide for extensive hard and soft landscaping to be agreed with the Planning, Heritage and Community and Enterprise Sections of Wicklow County Council. 				
<p><i>AA4 – Provides for the re-development of the former quarry and processing plant lands at Doran's Pit to provide for a number of land uses in close proximity to the town centre. The provisions of the action area likely to improve ecological connectivity through strong objectives aimed at preserving and enhancing existing ecological networks within this area while also enhancing the landscape of this area in close proximity to the lakeshore. A strong emphasis is placed on pedestrian and cycling linkages to the main street through existing developments reducing the need for car movements, reducing emissions improving air quality and thus human health. The provisions of the action area are also likely to improve ecological connectivity through strong objectives aimed at preserving and enhancing existing ecological network within this area.</i></p> <p><i>The development of this area does however conflict with a number of SEO's with impacts such as noise from construction impacting on human health, the increased loading such development would place on water services potentially impacting on surface, ground and drinking water quality. Potential increases in traffic movements from large-scale development may impact on air quality through increased emissions and thus human health. Impacts on Archaeology from excavation during construction may adversely impact on the site and surrounding buildings of architectural merit including the general landscape.</i></p>				
<p>Specific Local Objective 1: Lands to the south of Action Area 3 shall be developed in a manner which provides for a mix of housing (c. 3.348ha at 28/ha) with the main point of access being provided through Action Area 3. The development of these lands shall be carried out in conjunction with the laying out of lands to</p>	<p>B3 AQ1 AQ2</p>		<p>B1 B2 B3 HH1 R1 S1 WS WG WF AQ1 AQ2 WW DW AH1</p>	

the east for Active Open Space (c. 3.646ha) to an appropriate standard capable of accommodating such activities i.e. levelled and drained. Low density housing at a maximum density of 20/ha shall be provided on c. 1ha of land adjoining the L-8858 in keeping with the existing neighbouring developments and in recognition of the rural nature of this area.			AH2 L1	
<p><i>SLO1 – Provides for the development of a number of land uses on greenfield lands conflicting with the objectives for the regeneration of the town centre of Blessington however given the necessity to facilitate such development in order to meet the demand of the projected population targets this area is required to be zoned. The provisions of the action area are likely to improve ecological connectivity through strong objectives aimed at preserving and enhancing existing ecological network within this area. A strong emphasis is placed on pedestrian and cycling linkages to the main street through existing developments reducing the need for car movements, reducing emissions improving air quality and thus human health.</i></p> <p><i>The development of this area does however conflict with a number of SEOs with impacts such as noise from construction impacting on human health, the increased loading such development would place on water services potentially impacting on surface, ground and drinking water quality. Potential increases in traffic movements from large-scale development may impact on air quality through increased emissions. The potential for impacts on Archaeological Heritage from excavation during construction may impact on the site and general landscape.</i></p>				
<p>Specific Local Objective 2:</p> <p>This objective promotes and aims to facilitate the redevelopment of the open space areas located to the east of the existing Carrig Glen Estate. The redevelopment of this area shall be carried out in consultation with the local community, Community and Enterprise, Housing and Planning sections of Wicklow County Council and comprise of a redeveloped open space area orientated in a manner capable of being passively supervised by adjoining dwellings that shall include a new playing field, a redeveloped hard surfaced play area to the rear of the housing at lakeview, the potential redevelopment of the former scouts building and the continuation of the proposed pedestrian and cycle route from Action Area 2 through to the L-4371 Road.</p>	HH1 R1 S1 AQ1 AQ2 L1		B1 B2 B3 WS HH1 S1 WG WF AQ1 AQ2 WW DW AH2	AH2
<p><i>The redevelopment of these lands maximises the potential of these existing brownfield lands providing for a new public park/play area within an existing residential area reducing the need for car movements, reducing emission, improving air quality and thus human health.</i></p> <p><i>The development of this area does however conflict with a number of SEOs with impacts such as noise from construction impacting on human health, the increased loading such development would place on water services potentially impacting on surface, ground and drinking water quality. Potential increases in traffic movements from new residential development may impact on air quality through increased emissions. The potential for impacts on Archaeological Heritage from excavation during construction may impact on the site and general landscape.</i></p>				

<p>Specific Local Objective 3:</p> <p>These lands located within the Roadstone Quarry to the west of the N81 shall be developed as a comprehensive (not piecemeal) integrated scheme providing for low density employment use, alongside the provision of an open public amenity/nature park, capable of facilitating pedestrian and cycle access to the Glending Woods from the N81 and the Blessington Inner Relief Road. The proposed employment units within this area shall be designed and finished in a manner capable of fully integrating into the surroundings of the amenity lands, whilst also providing passive supervision of surrounding walks and cycle routes.</p> <p>A comprehensive scheme outlining the design and layout of this scheme will be required which shall include a detailed phasing programme.</p>	<p>HH1 R1 S1 B3 AQ1 AQ2 L1</p>		<p>B1 B2 B3 WS HH1 S1 WG WF AQ1 AQ2 WW DW AH1</p>	<p>AH2</p>
<p><i>The re-development of the existing quarry lands for low density employment purposes based within a new public amenity park close to the town centre reduces the need for car movements, reducing emissions, improving air quality and thus human health. The redevelopment of these lands will also positively impact on the landscape of this area and surrounding lands.</i></p> <p><i>The development of this area does however conflict with a number of SEO's such as noise from construction impacting on human health, the increased loading such development would place on water services potentially impacting on surface, ground and drinking water quality. Potential increases in traffic movements from new employment may impact on air quality through increased emissions. The potential for impacts on Archaeological Heritage from excavation during construction may impact on the site and general landscape.</i></p>				

8.3 General Assessment of the Blessington Local Area Plan:

Introduction

The Environmental Report is required to include information on the likely significant effects on the environment of the Blessington Local Area Plan 2013 - 2019. The above Matrices were used to evaluate each of the proposed Plan aims and objectives once the preferred plan alternative had been identified.

The following provides a general summary of the likely significant effects of the Blessington Local Area Plan with particular attention being paid to the identification of the above Plan objectives that are likely to conflict with the SEOs set out in section 4 and includes the measures that have been adopted to mitigate or offset these effects.

Likely significant effects of the Blessington Local Area Plan

Population and Human Health

Overall, the SEA indicates that the Plan has a positive or neutral impact on the SEO's to provide for population growth on appropriate lands within a healthy and high quality environment. Of key importance to the achievement of this objective is the fact that the Plan provides enough zoned land to meet the needs of projected population targets for the lifetime of the current plan.

The proposed zonings are located on lands that can be easily serviced and which are closest to the town centre. This results in the promotion of a compact urban form and sustainable transportation and land use pattern, which reduces the need to travel and which provides access to housing, employment, health, educational and amenity space. This development pattern consequently promotes a healthy and high quality living environment.

Biodiversity Flora and Fauna

One of the most important SEO's is that which relates to the protection of biodiversity. Overall, the evaluation of the Plan objectives is deemed to have a positive or neutral impact on the SEO's to maintain and enhance biodiversity. While the objectives of the Wicklow County Development Plan 2010-2016 are applicable to the Blessington Local Area Plan in this regard additional objectives of the plan namely the objectives set out in section 8 Built and Natural Heritage and objectives S1 to S5 of chapter 7 services infrastructure.

Notwithstanding the above, it should be noted that a significant number of Plan objectives were found to conflict with the SEOs to maintain and enhance biodiversity. These effects are described below:

- The zoning of the Lands for development in particular within the Action Area Plans in close proximity to the lakeshore has the potential to conflict with the SEO to protect ecological networks. The potentially harmful effects on the habitats and connectivity are mitigated through the introduction of objectives within each Action Area and the objectives of section 8 of the plan.
- Chapter 4 sets out objectives for the promotion of enterprise and employment. In general, industrial activities can result in emissions which can have adverse effects on air, water and land, which can in turn have a cumulative impact on biodiversity. However, these effects can be successfully mitigated through the environmental objectives set out in the Plan.
- Objectives for the promotion of tourism and recreation activities can have damaging effects on natural heritage. However, these effects can be successfully mitigated through the environmental objectives set out in the Plan.
- Objectives for the development of new roads can be detrimental to natural heritage, both in a direct and a cumulative manner (whereby increased car usage results in emissions harmful to natural heritage). It is difficult to mitigate the harmful effect of new roads on non-designated sites, however the requirements of the Habitats Directive will safeguard the protection of Natura 2000 sites.

The Plan includes specific environmental protection objectives relevant to Blessington in addition to those set out in the Wicklow County Development that successfully mitigate any potential harmful effects.

Water Resources

Overall, the SEA indicates that the Plan has a positive or neutral impact on the SEOs to achieve a 'good' quality status in all water bodies within the plan area, in line with the target dates set out in the Eastern River Basin Management Plan 2009-2015.

Lands immediately adjoining the existing streams in Blessington have been provided with a minimum buffer of 10m throughout while the lakeshore and Poulaphuca Reservoir have been provided with a minimum 100m buffer with further protection afforded through the designation of lands adjoining this buffer as Active Open Space.

In addition to the above the plan through objectives set out in the Wicklow County Development Plan and objective S2 of section 7 of the plan restrict development on zoned lands unless adequate waste water treatment is available.

The promotion of employment and enterprise and tourism have the potential to conflict with the SEO to achieve 'good' quality status in all water bodies within the plan area, in line with the target dates set out in the Eastern River Basin Management Plan 2009-2015:

All of the above potentially negative effects are mitigated by the objectives of the Wicklow County Development Plan and section 7 of the Blessington LAP.

Material Assets

Overall, the SEA indicates that the Plan has a positive or neutral impact on the SEOs to make the most efficient use of existing water services and transportation infrastructure.

A particularly significant SEO is to make the most efficient use of existing water services infrastructure. In this regard, the Plan is successful in directing development to locations that can in the future be fully served by public infrastructure.

Flooding

Overall, the SEA indicates that the Plan has a positive or neutral impact on the SEO to reduce and mitigate flood risk. In accordance with the 'Flood Risk Management Guidelines for Planning Authorities' (DoEHLG, OPW, 2009), a Flood Risk Assessment (FRA) of the Plan has been prepared. This assessment has ensured that inappropriate development has been avoided in areas that are at risk of flooding. This, in combination with objectives of the County Development Plan and those set out in section 7 of the Plan, ensure that flood risk has been reduced and mitigated throughout the plan area.

Cultural Heritage

Overall, the SEA indicates that the Plan has a positive or neutral impact on the SEOs to protect and conserve architectural and archaeological heritage. Notwithstanding this, the SEA assessment did identify that the following objectives could be detrimental to the achievement of the SEOs:

- Objectives relating to Blessington town centre and the identification of opportunity sites within the plan area could conflict with the character of the ACA.
- Objectives for the promotion of increased tourism and recreation can result in damaging effects on natural and built heritage.

All potentially damaging effects on cultural heritage can be successfully mitigated by the objectives of the Wicklow County Development Plan and those of the Blessington LAP in particular the objectives set out in section 8.

Landscape

Overall, the SEA indicates that the Plan has a positive or neutral impact on the SEO to protect scenic landscapes. The SEA process identified that the following objectives of the Plan required mitigation in order to ensure achievement of the SEO:

- Significant green buffers c. 100m have been provided along the lakeshore with lands within the designated Action Area Plans in close proximity to these areas providing for Active Open Space uses adjoining the buffer zone further protecting the lakeshore.
- The lands within and immediately adjoining Glen Ding Wood have been designated as a conservation and amenity zone.

Climate

Overall, the SEA indicates that the Plan has a positive or neutral impact on the SEOs to minimise greenhouse gas emissions.

In addition, the Plan promotes a compact urban form which facilitates mixed use, 'walkable' neighbourhoods, with increased walking and cycling facilities. This land use pattern reduces dependency on private vehicular use and contributes to the reduction in greenhouse gases.

Notwithstanding this, the SEA assessment did identify that objectives for the development of new roads and transportation infrastructure is likely to have the combined effect of increasing private vehicular use which consequently increases greenhouse gas emissions.

Objectives for the development of employment and enterprise promote industrial activities that could result in noxious emissions. The objectives of the Wicklow County Development Plan alongside the provisions of the Plan aim to mitigate potentially damaging effects on the environment.

Air Quality

The environmental assessment of the Plan for the achievement of good air quality yielded the same results as the test for the environmental objectives to minimise greenhouse gas emissions.

Soils

Overall, the SEA indicates that the Plan has a neutral or beneficial impact on the SEOs to minimise greenhouse gas emissions. Key to the achievement of this objective is the promotion of a compact settlement form maximising the use of the existing built environment. This, in combination with objectives that protect designated and non-designated natural heritage areas, has an overall effect of positively contributing to the quality of soils in the plan area.

Potentially harmful effects are mitigated by the objectives of the Wicklow County Development Plan and the objectives of the Blessington Local Area Plan.

Overall conclusion:

Taking account of the above assessment, it is concluded that the overall effect of the Blessington Local Area Plan 2013 - 2019 on the environment including lands bordering the plan area within County Kildare, is likely to be beneficial or neutral. Any likely significant adverse effects on the environment have been prevented, reduced or offset.

Section 9 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 Blessington Local Area 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 land uses to be accommodated within the Blessington Plan area.

Additional detailed mitigation measures to those listed below and those integrated into the Local Area Plan would be likely to be required by the development management and EIA processes of individual projects.

9.2 SEA Recommendations

The mitigation measures detailed under section 9.3 were recommended by the SEA for inclusion in the Local Area Plan for Blessington. As the Blessington Local Area Plan must conform to the policies and objectives of the Wicklow County Development Plan (CDP) 2016 the plan does not include a repetition of the policies, objectives or strategies as set out in the CDP. Where standards or objectives for a particular development are not included in the Local Area Plan, the provisions of the CDP are to apply.

Taking this into consideration there are a wide range of mitigation measures/objectives within the County Development Plan that are applicable to Blessington and can be found in the relevant chapters of the CDP as applicable to Blessington. A brief summary of objectives of note relevant to the Blessington Local Area Plan is set out in Appendix III.

Accordingly mitigation measures contained hereafter relate specifically to Blessington only and were recommended to be incorporated in their entirety - or omitted. The degree of undertaking should remain as that the measure 'shall' or 'will' be implemented. The substitution of these words with the words 'should', 'ought' or 'may' is not in accordance with best practice and should be avoided.

9.3 Mitigation Measures

- E2** To protect employment zoned land from inappropriate development that would undermine future economic activity or the sustainable development of such areas.
- S2** To improve and expand wastewater treatment facilities sufficiently to ensure that no barriers exist in Blessington fulfilling its role as a moderate growth town as set out in the Wicklow 'Core Strategy' and Regional Planning Guidelines for the GDA 2010 – 2022.
- S3** To have regard to the provisions of the '*The Planning System and Flood Risk Management*' Guidelines (DoEHLG 2009) and the Flood Risk Assessment carried out as part of this plan

- S4** Applications for developments in high or moderate flood risk areas (Flood Zones A and B) shall be assessed in accordance with 'The Planning System and Flood Risk Management Guidelines (Nov 2009 DEHLG & OPW)'. Where the planning authority is considering proposals for new development in areas at high or moderate risk of flooding that include types of development that are vulnerable to flooding and that would generally be inappropriate as set out in Table 3.2 of the Guidelines, the planning authority shall be satisfied that the development satisfies all the criteria of the Justification Test for development management, as set out in Box 5.1 of the Guidelines. Flood Risk Assessments shall be in accordance with the requirements set out in the Guidelines.
- BD1** To protect the natural, architectural and archaeological heritage of the town, in accordance with the objectives and development standards set out in Chapters 16 and 17 of the County Development Plan as are applicable to Blessington and its environs.
- BD2** No projects giving rise to significant adverse direct, indirect or secondary impacts on Natura 2000 sites arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this Plan (either individually or in combination with other plans or projects); any projects with the identified potential to impact on Natura 2000 sites shall include Appropriate Assessment screening or full Appropriate Assessment and / or an EIS
- BD3** To protect trees, hedgerows, wooded areas, watercourses and other features of the natural landscape that contribute to the biodiversity of Blessington
- BD4** To designate Glen Ding Wood as a conservation and amenity zone
- BD5** To facilitate the use of natural areas for active outdoor pursuits, subject to the highest standards of habitat protection and management and all other normal planning controls.
- BD7** To protect those features that have been identified in the Architectural Conservation Area Appraisal as contributing to the town centre's overall appearance and heritage value and to ensure that new development contributes positively to the designated Architectural Conservation Area.
- BD8** To facilitate the appropriate refurbishment and renewal of architecturally significant buildings and to accommodate new uses in old buildings to ensure their continued use/preservation;
- BD9** To encourage the retention of original features, which are important to a building's character such as window type, materials, detailing, chimneys, entrances and boundary walls, both within and outside the architectural conservation area.

AA1, 2, 3 and 4:

Any development proposals shall have regard to the setting and curtilage of structures and sites of heritage value, and habitats of biodiversity value and appropriate buffer zone/mitigating measures shall be provided as required.

Wicklow County Development Plan 2010 – 2016 Objectives

As per Appendix III attached.

Section 10

Monitoring

10.1 Introduction

The SEA Directive requires that the significant environmental effects of the implementation of plans and programmes are monitored. This environmental report puts forward proposals for monitoring the Local Area Plan, which are adopted alongside the Local Area Plan (LAP).

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 LAP is achieving its environmental objectives and targets - measures which the LAP can help work towards - whether these need to be re-examined and whether the proposed mitigation measures are being implemented.

10.2 Indicators and Targets

Monitoring is based around the indicators, which were chosen earlier in the process. These indicators allow quantitative measures of trends and progress over time relating to the Strategic Environmental Objectives used in the evaluation. Focus will be given to indicators, which are relevant to the likely significant environmental effects of implementing the LAP and primarily to existing monitoring arrangements in order to monitor the selected indicators. Each indicator to be monitored will be accompanied by the relevant target(s) - measures which the LAP can help work towards - which were identified with regard to the relevant legislation. The table below shows the indicator and targets, which have been selected with regard to the monitoring of the plan.

10.3 Sources

In compliance with the SEA Directive and the DEHLG Guidelines, measurements for indicators come from existing monitoring sources and no new monitoring should be required to take place. Existing monitoring sources exist for many of the indicators and include those maintained by the Blessington Area Office and Wicklow County Council and the relevant authorities e.g. the Environmental Protection Agency, the National Parks and Wildlife Service and the Central Statistics Office.

The Development Management Process in Wicklow County Council will provide additional monitoring of certain indicators and targets on an application by application basis. Where significant adverse effects - including positive, negative, cumulative and indirect - are likely to occur upon, for example, entries to the RMP, entries to the RPS or ecological networks as a result of the undertaking of individual projects or multiple individual projects such instances will be identified and recorded and will feed into the monitoring evaluation.

10.4 Excluded Indicators and Targets

As noted on Table 10.1 below, future-monitoring data for Indicators AQ1 (Percentage of population within the County travelling to work or school by public transport or non-mechanical means) and AQ2 (Average distance travelled to work or school by the population of the County) will be based around data from the results of the 2011 CSO Census POWCAR data. It is recommended that this data be used as a baseline indicator for the SEA of the next review of the Plan.

10.5 Reporting

The ongoing monitoring of the Blessington Local Area Plan and its implications on the environment is paramount to ensure that the environment of the Plan area and zone of influence is not adversely affected by the implementation of the Plan.

A coordinated approach from all relevant sections within Wicklow County Council will be used to gather data for future plan reviews and the associated SEA process.

10.6 Responsibility

Wicklow County Council 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.

10.7 Thresholds

Thresholds at which corrective action will be considered by the relevant authority are as follows:

- ⇒ Boil notices on drinking water;
- ⇒ Fish kills;
- ⇒ Court cases taken by the DEHLG regarding impacts upon archaeological heritage including entries to the Record of Monuments and Places; and,
- ⇒ Complaints received from statutory consultees regarding avoidable impacts resulting from development, which is granted permission under the CDP.

Table 10.1 Monitoring Measures

Environmental Component	Selected Indicator(s)	Selected Target(s)	Sources
Biodiversity Flora and Fauna	<p>B1: Conservation status of habitats and species as assessed under Article 17 of the Habitats Directive</p> <p>B2: Number of significant adverse impacts, including direct, cumulative and indirect impacts, to relevant habitats, geological features, species or their sustaining resources in designated ecological sites by development within or adjacent to these sites as a result of implementation of the LAP</p> <p>B3: Percentage of relevant habitats and designated ecological sites lost as a result of implementation of the LAP</p>	<p>B1: Maintenance of favourable conservation status for all habitats and species protected under national and international legislation</p> <p>B2: No significant adverse impacts, including direct, cumulative and indirect impacts, to relevant habitats, geological features, species or their sustaining resources in designated ecological sites by development within or adjacent to these sites as a result of implementation of the LAP.</p> <p>B3: No losses of relevant habitats, species or their sustaining resources in designated ecological sites as a result of implementation of the LAP</p>	<p>Designated ecological sites mapping, CORINE Mapping, National Parks and Wildlife Service Records & Development Management Process in Wicklow County Council.</p> <p>Designated ecological sites mapping, Development Management Process Wicklow County Council & Consultation with the National Parks and Wildlife Service.</p> <p>Primary ecological corridors mapping, CORINE mapping and Development Management Process in Wicklow County Council.</p>
Population and Human Health	<p>HH1: Occurrence (any) of a spatially concentrated deterioration in human health arising from environmental factors as identified by the Health Service Executive (HSE) and Environmental Protection Agency (EPA)</p>	<p>HH1: No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan</p>	<p>Wicklow County Council, EPA¹, HSA</p>

¹ Environmental Protection Agency

	R1: Area of brownfield lands developed over the Local Area Plan's lifespan	R1: Reduced availability of brownfield land (subject to availability on the open market, the demand for such land and the ability for such lands to be sustainably re-used) at the end of the Local Area Plan's lifespan	Development Management Process of Wicklow County Council.
Water	<p>WS1: Classification of Overall Status (comprised of ecological and chemical status) under the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (SI No. 272 of 2009)</p> <p>WS2: Poor, Sufficient, Good and Excellent classifications of bathing water as set by Directive 2006/7/EC</p> <p>WG1: Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC</p> <p>WF: Number of developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk</p>	<p>WS1: To achieve 'good status'² in all bodies of surface waters by 2015 and to not knowingly allow deterioration in the status of any surface water</p> <p>WS2: To achieve - as a minimum - the 'Sufficient' classification as set by Directive 2006/7/EC, and where possible to achieve the 'Good' or 'Excellent' classifications</p> <p>WG1: Compliance with Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC</p> <p>WF: Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk in compliance with <i>The Planning System and Flood Risk Management Guidelines</i> for Planning Authorities</p>	<p>EPA</p> <p>EPA</p> <p>EPA</p> <p>Development Management Process of Wicklow County Council.</p>

² Good status as defined by the WFD equates to approximately the following in the current national schemes of classification as set out by the EPA

- *Q4* in the biological classification of *rivers*;
- *Mesotrophic* in the classification of *lakes*; and,
- *Unpolluted* status in the Assessment of Trophic Status of *Estuaries and Bays* in Ireland (ATSEBI).

Material Assets	<p>Waste Water Infrastructure</p> <p>WW1: Number of new developments granted permission which can be adequately served with waste water treatment over the lifetime of the Plan</p> <p>WW2: Preparation of a Water Services Strategic Plan - in compliance with the Water Services Act - for Blessington</p> <p>Drinking Water Quality</p> <p>DW1: Number of non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health</p> <p>DW2: Preparation of a Water Services Strategic Plan - in compliance with the Water Services Act - for the functional area of the Council</p>	<p>WW1: All new developments granted permission to be connected to and adequately served by waste water treatment over the lifetime of the Plan</p> <p>WW2: For the Council to prepare a Water Services Strategic Plan in compliance with the Water Services Act</p> <p>DW1: No non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health as a result of implementing the Plan</p> <p>DW2: For the Council to prepare a Water Services Strategic Plan in compliance with the Water Services Act</p>	<p>Development Management Process of Wicklow County Council.</p> <p>Wicklow County Council</p> <p>EPA, EPA Remedial Action List and the Council.</p> <p>Wicklow County Council</p>
Air and Climatic Factors	<p>AQ1: Percentage of population within the Town travelling to work or school by public transport or non-mechanical means</p> <p>AQ2: Average distance travelled to work or school by the population of the Town</p>	<p>AQ1: An increase in the percentage of the population travelling to work or school by public transport or non-mechanical means</p> <p>AQ2: A decrease in the average distance travelled to work or school by the population of the Town</p>	<p>Central Statistics Office/POWCAR Data</p>
	Archaeological Heritage		

Cultural Heritage	<p>AH1: Percentage of entries to the Record of Monuments and Places - including Zones of Archaeological Potential - (and their context of the above within the surrounding landscape where relevant) protected</p> <p>Architectural Heritage</p> <p>AH2: Percentage of entries to the Record of Protected Structures (and/or their context within the surrounding landscape where relevant) protected</p> <p>AH2B: Number of additions to the Record of Protected Structures and the number of additional ACAs</p>	<p>AH1: Protect entries to the Record of Monuments and Places - including Zones of Archaeological Potential - (and their context of the above within the surrounding landscape where relevant)</p> <p>AH2: Protect entries to the Record of Protected Structures (and/or their context within the surrounding landscape where relevant)</p> <p>AH2B: Make Additions to the Record of Protected Structures and make additional ACAs, where appropriate</p>	<p>Development Management/ Enforcement Process in the Council; Complaints from statutory consultees.</p> <p>Wicklow County Council.</p>
Landscape	<p>L1: Number of complaints received from statutory consultees regarding avoidable impacts on the landscape resulting from development which is granted permission under the Plan</p>	<p>L1: No developments permitted which result in avoidable impacts on the landscape resulting from development which is granted permission under the Plan</p>	<p>Development Management/ Enforcement Process in the Council; Complaints from statutory consultees</p>

Section 11

SEA Summary Table

11.1 Summary Table

Below is a summary table outlining how likely significant effects (if unmitigated) are linked to relevant mitigation measure(s) (as set out in section 9 above) - which have been integrated into the Plan - and indicator(s), which will be used for monitoring.

Likely Significant effect, if unmitigated	Mitigation Measure reference(s) from the plan included following SEA as set out in section 9	Primary Indicator(s) for Monitoring
Loss of biodiversity with regard to Natura 2000 Sites	BD2	B1 Conservation status of habitats and species as assessed under Article 17 of the Habitats Directive
Loss of biodiversity with regard to ecological connectivity and stepping stones	BD1, BD3, BD4	B3 Percentage of relevant habitats and designated ecological sites lost as a result of implementation of the DP.
Spatially concentrated deterioration in human health arising from exposure to incompatible land uses	S1 , E2, S2,	HH1 Occurrence (any) of a spatially concentrated deterioration in human health arising from environmental factors as identified by the Health Service Executive (HSE) and Environmental Protection Agency (EPA)
Pollution and/or contamination of soils	S1,	R1 Area of brownfield lands developed over the Development Plan's lifespan
Adverse impacts upon the quality of surface waters	S1, BD3, S2	WS Classification of Overall Status (comprised of ecological and chemical status) under the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (SI No. 272 of 2009)
Adverse impacts upon ground water quality	S1, S2,	WG Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC
Flooding	S3, S4, S5	WF Number of developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk
Inadequate waste water treatment for new populations	S1, S2	WW To serve new development with appropriate waste water treatment
Reduction in water quality which	S1	DW1 Number of non-compliances with the 48 parameters identified

would present a potential danger to human health & Inadequate drinking water supply for new populations		in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health DW2 Preparation of a Water Services Strategic Plan - in compliance with the Water Services Act - for the functional area of the Council
Increases in greenhouse gas emissions and increases in car dependency	E1, S1	AQ1 Percentage of population within the Town travelling to work or school by public transport or non-mechanical means AQ2 Average distance travelled to work or school by the population of the Town
Effects on entries to the Record of Monuments and Places	BD1	AH1 Percentage of entries to the Record of Monuments and Places - including Zones of Archaeological Potential - (and their context of the above within the surrounding landscape where relevant) protected AH2 Percentage of entries to the Record of Protected Structures (and/or their context within the surrounding landscape where relevant) protected
Effects on entries to the Records of Protected Structures and Architectural Conservation Areas	BD1, BD7	AH1 Number of additions to the Record of Protected Structures and the number of additional ACAs
Visual impacts on the landscape or on 'views and prospects to be preserved	S1, E2,	AH2 Number of complaints received from statutory consultees regarding avoidable impacts on the landscape resulting from development which is granted permission under the Plan

Note: The mitigation measures detailed under section 9.3 were recommended by the SEA for inclusion in the Local Area Plan for Blessington. As the Blessington Local Area Plan must conform to the policies and objectives of the Wicklow County Development Plan (CDP) 2016 the plan does not include a repetition of the policies, objectives or strategies as set out in the CDP. Where standards or objectives for a particular development are not included in the Local Area Plan, the provisions of the CDP are to apply. A brief summary of objectives of note, relevant to the Blessington Local Area Plan is set out in Appendix III.

Appendix 1

Summary Scoping Submissions

The Environmental Protection Agency (EPA), the Department of the Environment, Community and Local Government (DECLG), The Department for Agriculture, Marine and Food, The Department Communications Energy and Natural Resources, the Department of Arts, Heritage and Gaeltacht Affairs and Kildare County Council were all sent a preliminary SEA scoping report and notice indicating that submissions or observations in relation to the scope and level of detail of information to be included in the environmental report could be made in regard to the Local Area Plan.

A summary of the written submissions received and noted on the scope of the SEA is set out below:

1) Environmental Protection Agency:

This submission included an SEA Guidance document and SEA Pack to assist in undertaking an environmental assessment as per the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. No. 436 of 2004).

Specific Issues required to be considered:

- ⇒ Provision of adequate and appropriate critical service infrastructure in advance of permission for development being considered.
- ⇒ Protection of designated national and international conservation sites (Poulaphuca Reservoir SPA, Wicklow Mountains SPA/SAC and Red Bod (SAC) in particular.
- ⇒ Protection of surface and ground water quality.

General Guidance:

The SEA process Guidance Document was received which included details of environmental issue which were to be integrated into the Blessington Local Area Plan including:

Water Related Issues, Biodiversity, Air Noise and Climatic Factors, Energy Conservation and Renewable Energy, Landscape Character Assessment, Geology, Human Health and Quality of Life, Transportation, Tourism, Infrastructure Planning, Urban Waste Water Discharge Licensing, Waste Management, Environmental Impact Assessment in relation to SEA.

This submission also included the EPA SEA pack which comprises a combination of guidance, checklists and reference material for use in the SEA and Plan making process.

2) Department of Arts, Heritage and Local Government:

This submission highlighted the issues of protected species that occur outside designated sites. The Environmental Report should include species protected under the Wildlife Acts of 1976-2010 which may occur anywhere in the country, and not necessarily inside a designated area.

Reference is also made to the data of the National Parks and Wildlife Service (NPWS) at www.npws.ie and the data of the National Biodiversity Data Centre at <http://www.biodiversityireland.ie/>

Recommend that the preliminary draft mitigation measures listed in the scoping report include protected species.

3) Kildare County Council

The principle issues raised in this submission in relation to the preparation of the Blessington Local Area Plan and SEA where listed as follows:

SPA Poulaphouca reservoir

- ⇒ disturbance or removal of feeding grounds of whooper swans in lands not designated by the SPA status but integral to the conservation of the species and the SAC due to recreational activities within and adjacent to the lakes (should be covered in NIS)
- ⇒ -water quality

Red Bog

- ⇒ Water table vulnerability
- ⇒ water quality

Appendix 2:

Site Synopsis of relevant protected Habitats within or within close proximity to the Blessington Plan Area:

Sites Included:

Poulaphuca Reservoir cSPA and pNHA

SITE SYNOPSIS

SITE NAME: POULAPHOUCA RESERVOIR SPA

SITE CODE: 004063

Poulaphouca Reservoir SPA, located in the western foothills of the Wicklow Mountains, was created in 1944 by damming of the River Liffey for the purpose of generating electricity from hydropower. The reservoir covers an area of approximately 20 square kilometres and is the largest inland water body in the mid-east and south-east regions. The reservoir receives water from two main sources, the River Liffey at the northern end, and the Kings River at the southern end. The exit is into the River Liffey gorge at the western end. Underlying the reservoir are sands and gravels deposited during the last glaciation. The shores of the lake are mostly sandy. When water levels are low the exposed lake muds are colonised by an ephemeral flora of annual plant species. Wet grassland areas occur in sheltered bays around the lake but especially in the northern part. Reed Canary-grass (*Phalaris arundinacea*) is the main grass species present, but other plant species characteristic of wet grasslands occur, including Creeping Bent (*Agrostis stolonifera*), Meadowsweet (*Filipendula ulmaria*), Yellow Iris (*Iris pseudacorus*) and Water Mint (*Mentha aquatica*). Sedges (*Carex* spp.) are locally common, while Rusty Willow (*Salix cinerea* subsp. *oleifolia*) scrub is often found associated with the wet grassland. In some places the water washes against grassy banks which are generally less than a metre high, and in a few places there are steep sand and clay cliffs, up to 15 m high - these are remnants of the old River Liffey channel. In many places the banks are actively eroding, and a strip of conifers has been planted around much of the perimeter of the reservoir in an attempt to stabilize the banks.

Poulaphouca Reservoir is of international importance for its Greylag Goose population, which is one of the largest in the country. The site provides the main roost for the birds, with feeding occurring mostly on improved grassland outside of the site. An average peak of 1,058 individuals occurred during the five seasons 1995/96 to 1999/00. A range of other waterfowl species occur in relatively low numbers, including Whooper Swan (34), Wigeon (262), Teal (136), Mallard (283), Goldeneye (36), Cormorant (16), Great Crested Grebe (11), Curlew (118) and Mute Swan (17). The site is also used by Grey Heron (12).

The reservoir attracts roosting gulls during winter, most notably a large population of Lesser Black-backed Gull (1,116), which in Ireland is rare in winter away from the south coast. Black-headed Gull (1,245) and Common Gull (229) also occur.

Breeding birds at the site include Great Crested Grebe (several pairs), which is localised in its distribution in eastern Ireland, as well as Snipe and Lapwing.

The principal interest of the site is the Greylag Goose population, which is of international importance. A range of other wildfowl species also occurs, including

Whooper Swan, a species that is listed on Annex I of the E.U. Birds Directive. The site is also notable as a winter roost for gulls, especially Lesser Black-backed Gull.

2.3.2005

Conservation Objectives for Poulaphouca Reservoir SPA [004063]

The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of habitats and species of community interest. These habitats and species are listed in the Habitats and Birds Directives and Special Areas of Conservation and Special Protection Areas are designated to afford protection to the most vulnerable of them. These two designations are collectively known as the Natura 2000 network.

European and national legislation places a collective obligation on Ireland and its citizens to maintain habitats and species in the Natura 2000 network at favourable conservation condition. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites.

The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Favourable conservation status of a habitat is achieved when:

- its natural range, and area it covers within that range, are stable or increasing, and
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable.

The favourable conservation status of a species is achieved when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Objective: To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA:

- | | |
|-----------------------|-------------|
| ♦ <i>Anser anser</i> | [wintering] |
| ♦ <i>Larus fuscus</i> | [wintering] |

Citation:

NPWS (2011) *Conservation objectives for Poulaphouca Reservoir SPA [004063]. Generic Version 4.0.* Department of Arts, Heritage & the Gaeltacht.

For more information please go to: www.npws.ie/protectedsites/conservationmanagementplanning

Appendix III

Wicklow County Development Plan 2010-2016 SEA Mitigation Measures

Mitigation Topic	Measure	Provisions Integrating Considerations into the Plan
Designated Sites	Ecological	Objectives: BD1, BD2, BD8 and BD7
Ecological Connectivity		Objectives: BD3, BD4, BD5, BD6 and BD9
Human Health		Objectives: AE1, AE2, AE3, NP1, NP2, NP3, NP4 and EMP 14 Also see measures related to water quality, flooding, waste water treatment and drinking water supply and quality.
Brownfield Development		Provisions of Chapter 4 Population, Housing and Settlement, Provisions of Chapter 5 Urban Development and Objectives EMP8, RUR4 and RW4
Status of Surface and Groundwaters		Objectives: RH3, AGR1, AGR4, FTY2, FSH1, WW3, WT1, WT2, WT3, WT4, WT5 and WT6
Flooding		Goals 7 and 10 and Objectives FL1, FL2, FL3, FL4, FL5 and FL6
Water Services (Waste Water and Drinking Water)		Objectives: WS1, WS2, WS3, WS4, WS5, WW1, WW2, WW3, WW5, WW7 and WW8
Greenhouse gas emissions and car dependency		Objectives: PT1, PT2, PT3, PT4, PT5, PT6, PT7, PT8, PT9, CW1, CW2, CW3, CW4, CW5, TE1 and TE2
Archaeological Heritage		Objectives: AR1, AR2, AR3, AR4, AR5 and AR6
Architectural Heritage		Objectives: AH1, RPS1, RPS2, RPS3, RPS4, RPS5, VA1, VA2, VA3, ACA1, ACA2, ACA3, ACA4 and ACA5
Landscape		Objectives: LA1, LA2, LA3 and VP1

Source: Table 2.1: Mitigation Measures, SEA Statement of the Wicklow County Development Plan 2010-2016

WW2 of Chapter 12 of CDP 2010-2016: "To ensure that all foul water generated is collected and discharged after treatment in a safe and sustainable manner, having regard to the standards and requirements set out in EU and national legislation and guidance documents. The Planning Authority will continue to monitor the cumulative effect of grants of planning permission on available waste water treatment capacity under the terms of the relevant Waste Water Discharge Licence. Where there is inadequate capacity within a Waste Water Treatment Plant to accommodate new development or where the Waste Water Treatment Plant does not meet the terms of the relevant Waste Water Discharge License to the Planning Authority will:

- (a) Refuse planning permission for the development, or
- (b) Consider granting permission with conditions limiting the commencement of development until facilities are suitably upgraded, so long as this is planned to occur within a reasonable timeframe (not more than 3 years) in accordance with the Local Authority's Water Services Investment Programme."

WT1 of Chapter 17 of CDP 2010-2016: "To implement the *EU Water Framework Directive* and associated River Basin and Sub-Basin Management Plans and the EU Groundwater Directive to ensure the protection, improvement and sustainable use of all waters in the County, including rivers, lakes, ground water, coastal and estuarine waters, and to restrict development likely to lead to a deterioration in water quality."

WT3 of Chapter 17 of CDP 2010-2016: "To prevent development that would pollute water bodies and in particular, to regulate the installation of effluent disposal systems in the vicinity of water bodies that provide drinking water or development that would exacerbate existing underlying water contamination."

WT4 of Chapter 17 of CDP 2010-2016: "To minimise alterations or interference with river/stream beds, banks and channels, except for reasons of overriding public health and safety (e.g. to reduce risk of flooding); a buffer of 10m along watercourses should be provided free of built development, with riparian vegetation generally being retained in as natural a state as possible. In all cases where works are being carried out, to have regard to Regional Fisheries Board 'Requirements for the protection of fisheries habitat during the construction and development works at river sites'."

FL9 of Chapter 12 of CDP 2010-2016: "For developments adjacent to all watercourses of a significant conveyance capacity or where it is necessary to maintain the ecological or environmental quality of the watercourse, any structures (including hard landscaping) must be set back from the edge of the watercourse to allow access for channel clearing/maintenance/vegetation. A minimum setback of up to 10-15m will be required either side depending on the width of the watercourse"

FL7 of Chapter 12 of CDP: "To require all new developments to include proposals to deal with rain and surface water collected on site and where deemed necessary, to integrate attenuation and SUDS measures."

Appendix IV
SEA
Environmental Report – Non Technical Summary
Of the
Blessington Local Area Plan
2013 - 2019



**Non Technical Summary
for the
SEA (Environmental Report)
of the
Blessington Local Area Plan
2013 - 2019**



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1.1 Introduction:

This is the Non-Technical Summary of the Environmental Report of the Blessington Local Area Plan 2013 – 2019 Strategic Environmental Assessment (SEA). The purpose of the Environmental Report is to provide a clear understanding of the likely environmental consequences of decisions regarding the future development of Blessington.

1.2 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.

1.3 Why is it needed?

The SEA is being carried out in order to comply with the provisions of the SEA Regulations and in order to improve planning and environmental management within the Plan area. The output of the process will be an Environmental Report, which should be read in conjunction with the Plan.

1.4 How does it work?

All of the main environmental issues within Blessington are assembled and presented to the team who are preparing the new Plan. This helps them to devise a plan that protects whatever is sensitive in the environment. It also helps to identify wherever there are environmental problems in the 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 possible alternative versions of the Plan. This helps to determine what plan strategy is least likely to harm the environment.

1.5 What is included in the Environmental Report, which accompanies the Local Area Plan?

The Environmental Report contains the following information:

- A description of the environment and the key environmental issues;
- A description and assessment of alternatives for the Plan;
- An assessment of the Plans policies and objectives; and,
- Mitigation measures which will aid compliance with important environmental protection legislation - e.g. the Water Framework Directive, the Habitats Directive - and which will avoid/reduce the environmental effects of implementing the Plan.

1.6 What happens at the end of the process?

When the Local Area Plan is adopted a document must be made public, referred to as the SEA Statement. The SEA Statement must include information on how environmental considerations have been integrated into the Plan and why the preferred alternative was chosen for the Plan in light of the other alternatives - this introduces accountability, credibility and transparency into the Plan-making process.

2. The Draft Blessington Local Area Plan

2.1 Hierarchy of Plans

The Draft Blessington Local Area Plan exists in a hierarchy of plans flowing from national level (National Spatial Strategy 2002-2020) to regional level (Regional Planning Guidelines for the Greater Dublin Area 2010-2022), to County level (Wicklow County Development Plan 2010-2016). It is through the County Development Plan that these higher order strategies, as well as other national and regional policies (e.g. relating to transportation and the environment) are translated to a 'local level'.

2.2 Vision for Blessington

A key aim of the Draft Blessington Local Area Plan is to set out a vision and overall strategy for the future development of the settlement and from this vision, all policies and objectives can be developed and implemented with the overall aim of achieving this vision.

The key elements of the vision for Blessington are to:

- *Improve the quality of life of the resident population of Blessington by planning for and encouraging the provision of high quality housing and employment, social and community facilities, and a range of recreational options, in a quality environment;*
- *Regulate pressures from both urban and rural development, in particular sporadic development in rural areas and development pressures emanating from south-west Dublin by providing a sustainable settlement and growth strategy to create a compact urban form and to enhance the physical, economic and social profile of Blessington;*
- *Develop the tourism potential of Blessington as a visitor / tourist destination in itself and in its role as a 'gateway' to the west of the County and Wicklow Mountains.*
- *Protect the heritage of the existing town of Blessington and its environs along with its identity, in terms of its built and natural heritage and landscape conservation in the area.*

The above vision must be carried in a manner capable of achieving the projected population target for the plan area of 7,500 whilst also meeting the economic and retail requirements of the plan area up to and including 2022.

3. Summary of Baseline Environment/Existing Environmental Problems facing the plan area

3.1 Introduction

The Environmental Report contains a range of baseline information under key environmental headings relevant to the plan area such as Biodiversity (Flora and Fauna), Population and Human Health, Landscape/Geology/Soil, Water Quality, Air and Climatic Factors, Material Assets, Cultural Assets and Climate Change and Sustainability.

Each of the above key environmental headings were assessed in the context of Blessington in order to establish an overall picture of the current state of the environment. This information was collated and Geographical Information Systems were used in order to produce a baseline environment map which highlighted areas within the proposed plan boundary that would be most sensitive. In order to produce this map all relevant components of the baseline environment were assigned a weighting based on their status i.e. Natura 2000 sites were given a weighting of 10 while the Architectural Conservation Area within the Town Centre was assigned a weighting of 4. This Baseline Map is reproduced in Figure 3.2 below.

3.2 Description of the Baseline Map Produced

The baseline map below in figure 3.2 helped identify the key areas within the plan boundary that were most sensitive to development. As can be seen from this map the most sensitive area identified to future development was the lakes and lakeshore/Poulaphuca Reservoir to the east of the plan boundary due to its designation as a proposed natural heritage area, a special protection area, sensitivity of surface waters and its location within the Area of Outstanding Natural Beauty landscape categorisation of the Wicklow County Development Plan 2010 - 2016.

The other most notably sensitive area included Glen Ding Wood to the west of the town centre, the existing ecological networks following the path of the Blessington stream where corridors with the identified important Local Biodiversity Areas were also highlighted. The sensitivity of the town centre area was also noted in recognition of its designation as an Architectural Conservation Area and the existing protected buildings within this area. Issues relating to flooding were also highlighted along the Naas Road to the west and towards the south west of the plan area following the outlet to the Blessington Lake.

3.3 Summary of Environmental Problems identified.

The most prominent environmental problems facing the plan area were identified as being:

- The insufficient capacity of the existing Waste Water Treatment Plant to serve future growth within the plan Area.
- The protection of designated sites and ecological corridors and Habitats within the plan area.
- The provision of individual waste water treatment systems within the more rural areas of the plan.
- The extent of quarry activities within the plan area and its impact on soils and local archaeology.
- The protection of existing ground and surface water bodies.
- Impacts on the local landscape from development in particular the visual impact of new housing along the lakeshore.
- The protection of natural and built heritage.

Page 42 of the Environmental Reports provides a detailed description of the findings of the Baseline Map as shown below in figure 3.2. The areas of land and issues identified as being problematic within the plan area were then used in order to identify the most suitable lands for the required land uses of the plan. Where land uses were proposed that had the potential to conflict with the protection of sensitive lands, mitigation measures were developed in order to protect these lands or guide development on these lands in an appropriate manner. This was carried out through the introduction of a number of objectives/mitigation measures as set out in section 9 of the plan.

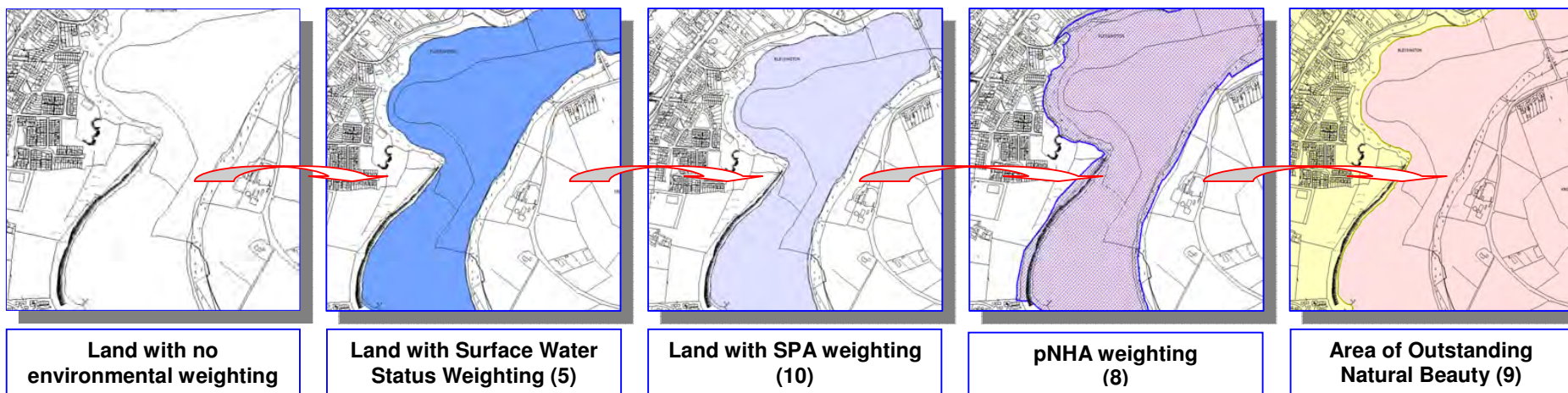
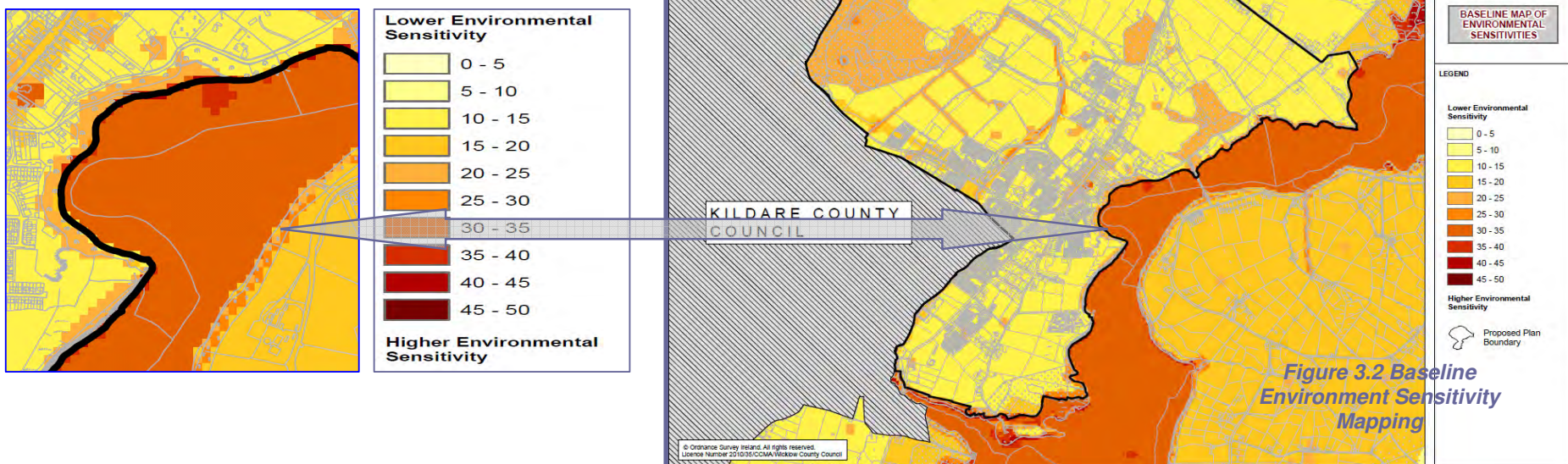


Figure 3.1 Sample of Overlay Mapping to Produce the Baseline Map (Sensitivity of the receiving environment)

Note: The addition of the above weightings set out in figure 3.1 above provide an overall sensitivity for Poulaphuca Reservoir that falls within the range 30 – 35 indicating that the receiving environment in this area is highly sensitive.



4.0 Strategic Environmental Objectives

The Local Area Plan is subject to a number of high level national, international and regional environmental protection policies and objectives. A series of Strategic Environmental Objectives (SEO's), see table below, have been derived from these sources, which cover the range of environmental aspects and reflect a local dimension.

Examples of Strategic Environmental Objectives include the aim of the EU Habitats Directive - which is to contribute towards ensuring bio-diversity through the conservation of natural habitats and of wild fauna and flora in the European territory of Member States – and the purpose of the Water Framework Directive - which is to establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater. The strategy and policies in the Local Area Plan must be consistent with these objectives and the Plan must be capable of implementing these objectives at a local level for Blessington.

SEO B1	To ensure compliance with the Habitats Directive and National Biodiversity Plan with regard to protected species and habitats both within and outside of designated sites in accordance with the provisions of Articles 6 and 10 of the Habitats Directive.
SEO B2	To avoid significant adverse impacts, including direct, cumulative and indirect impacts, to relevant habitats, geological features, species or their sustaining resources in designated ecological sites such as Poulaphouca Reservoir pNHA and SPA by development adjacent to this site.
SEO B3	To ensure compliance with Article 10 of the Habitats Directive with regard to the management of features of the landscape – by sustaining, enhancing or - where relevant - preventing the loss of ecological networks or parts thereof which provide significant connectivity between areas of local biodiversity
SEO HH1	To protect human health from hazards or nuisances arising from exposure to incompatible land uses in particular from the re-use of brown field lands in areas where previous uses may have contaminated lands such as existing quarry lands.
SEO R1	Maximise the sustainable re-use of brownfield lands, and maximise the use of the existing built environment rather than developing greenfield lands
SEO S1	To prevent pollution and/or contamination of soil within the plan area of Blessington.
SEO Code W-S	To maintain and improve, where possible, the quality of Streams, Rivers, Lakes and other surface waters within and adjoining the plan area of Blessington.
SEO Code W-G	To prevent pollution and contamination of ground waters
SEO Code W-F	To prevent development on lands which pose - or are likely to pose in the future - a significant flood risk
SEO Code WW	To serve new development with appropriate waste water treatment
SEO Code DW	To serve development within the Plan area with drinking water that is both wholesome and clean
SEO Code AQ1	To reduce travel related greenhouse emissions to air
SEO Code AQ2:	To reduce car dependency within the plan area by way of, inter alia, encouraging modal change from car to more sustainable forms of public transport and encouraging development which will not be dependent on private transport
SEO Code AH1	To protect the archaeological heritage of Blessington including entries to the Record of Monuments and Places — and the context of the above within the surrounding landscape where relevant
SEO Code AH2	To preserve and protect the special interest and character of Blessingtons architectural heritage including entries to the Record of Protected Structures, and their context within the surrounding landscape where relevant
SEO Code L1	To protect and avoid significant adverse impacts on the landscape of Blessington including landscape features such as the Lake Shore and Glen Ding Wood.

Based on these objectives a range of environmental targets and indicators was devised. Targets set aims and thresholds which should be taken into consideration to effectively assess the impact of the Draft Plan on the environment, and indicators are measures used to track the achievements of the environmental protection objectives in the Local Area Plan and to monitor the impact of the Local Area Plan on the environment. The targets and indicators are set out in Section 4 of the Environmental Report.

5.0 Alternative Plan Scenarios

One of the critical roles of a SEA is to facilitate an evaluation of the likely environmental consequences of a range of alternative strategies for facilitating the future development of the Blessington area within the constraints imposed by intrinsic environmental conditions. 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. For the purposes of the environmental assessment of the Blessington Local Area, three alternative Plan scenarios were developed.

5.1 Key Characteristics of the Alternative Plan Scenarios developed

Scenario 1: Minimal Development Envelope

- Provides for a 200m buffer along the lakeshore of the Poulaphuca Reservoir and restrict lands within this zone to agricultural or conservation and amenity uses only.
- Protects existing ecological linkages and Local Bio-diversity areas within the plan area.
- Provides for a conservation and amenity zoning at Glen Ding Wood, to the east of the plan area adjacent to and forming part of Doran's Pit.
- Provides for strict monitoring of existing and future quarry activities
- Provides for a new amenity park and employment zone at Roadstone to the north of the town, promoting the conservation and enhancement of existing lands.

Scenario 2: Moderate Development Envelope

- Characteristics of this scenario are similar to scenario 1 with the following exceptions;
- The 200m buffer along the Poulaphuca Reservoir has been reduced to 100m Buffer zone with agricultural zonings within this area.
- This plan scenario provides a further c. 60 - 100m of lower order uses adjacent to the buffer zone in the form of Active Open Space lands
- A slightly reduced open space and amenity park zone has been provided to the north east of the plan area in recognition of the findings of the local biodiversity study carried out and from on the ground site inspections.
- The provision of a larger employment zoning area at Roadstone to the northwest of the town centre providing for a lower density employment development and with the increased lands forming a new amenity park area linked to Glending Woods by pedestrian walks.
- A recognition of the existing permissions for quarrying activities at Glen Ding with all remaining lands forming part of the Woodland Conservation Zone.
- The provision of residentially zoned lands adjacent to the Blessington Stream, provided for through the justification test.

Scenario 3: Maximum Development Envelope

- This scenario (see figure 6.3) represents a further intensification of development and associated impacts set out in scenario 2 with the further encroachment of development into virgin/rural lands to the north and south and east of the plan area.
- Provision of extensive residential development along the Lakeshore with little or no provision for a buffer zone to the Poulaphuca Reservoir.
- Provision of an Integrated Tourism and Leisure development at Burgage Mor to the south of the town maximizing the tourism potential of the lake.
- Provision of low-density residential development with individual wastewater treatment facilities along the lakeshore and within lands zoned for agricultural lands.
- Expansion of existing quarry lands at Roadstone to the north of the town.

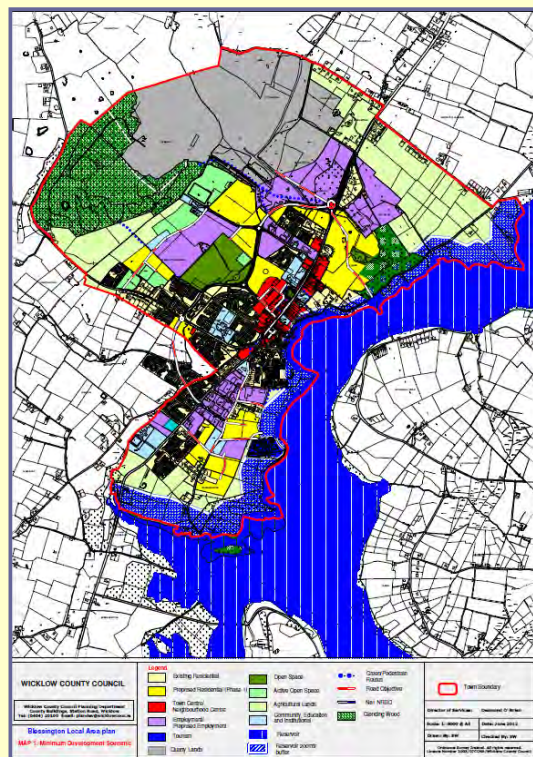


Figure 5.1 Minimal Development Scenario

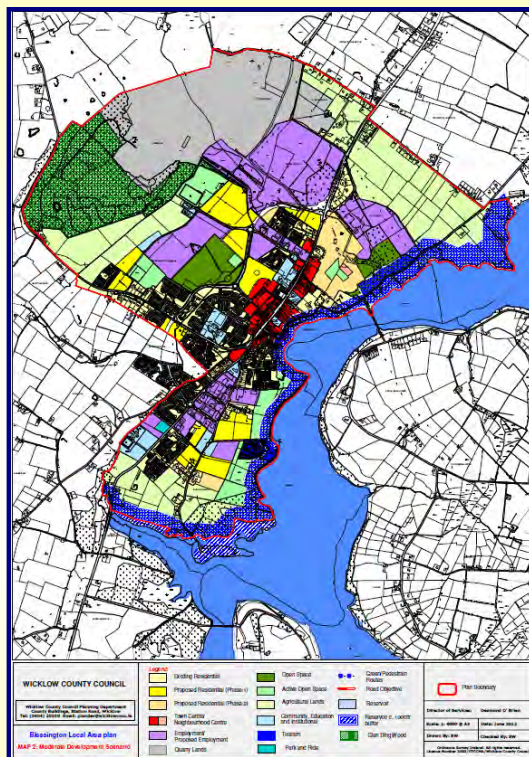


Figure 5.2 Moderate Development Scenario

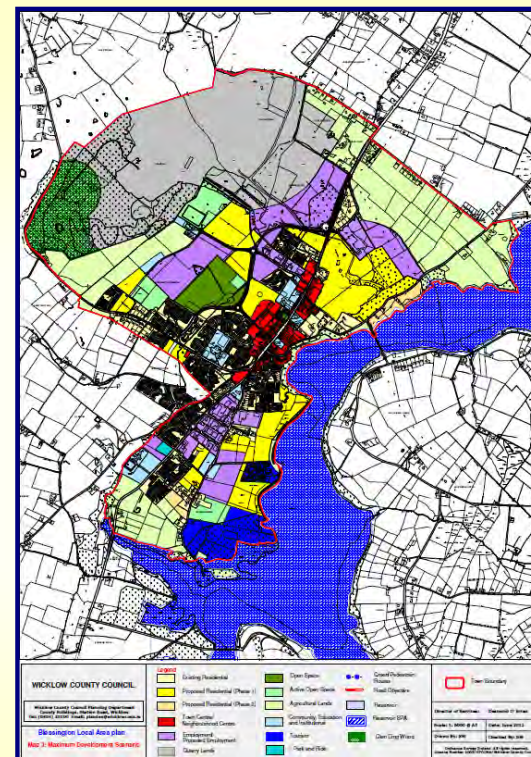


Figure 5.3 Minimal Development Scenario

5.2 Evaluation of Alternative Plan Scenarios

In order to identify the extent to which environmental sensitivities are likely to be impacted upon by implementation of the Plan alternatives, each plan scenario was measured against the Environmental Protection Objectives detailed in Section 4 above. In addition to this measurement technique overlay mapping which weighs environmental sensitivities and maps them overlapping each other as shown under Section 3 above was used once again. In this instance each alternative plan scenario was mapped and overlaid on top of the established baseline sensitivity map of the receiving environment with the following results:

- ⇒ Scenario three would be likely to result in more adverse environmental impacts than each of the other two Scenarios.
- ⇒ If mitigated, Scenarios 1 and 2 would be likely to result in a lesser frequency and magnitude of impacts than Scenario 3.
- ⇒ Scenario 3 is the scenario with the greatest amount of high and acute vulnerability areas covered by development pressure areas and the only scenario for which extremely vulnerable areas are covered by development pressure areas.

5.3 The preferred Alternative:

On the basis of the above analysis Scenario 1 would be likely to improve the status of a number of the SEOs and emerges as the most environmentally sustainable option. If unmitigated, Scenarios 2 and 3 would be likely to result in a number of adverse environmental impacts. Having regard to Planning considerations, Scenario 2 provides a better balance between environmental protection and economic and social development and therefore provides for the most overall sustainable option. Under Scenario 2, potential conflicts with environmental objectives can largely be offset by appropriate mitigation measures as indicated.

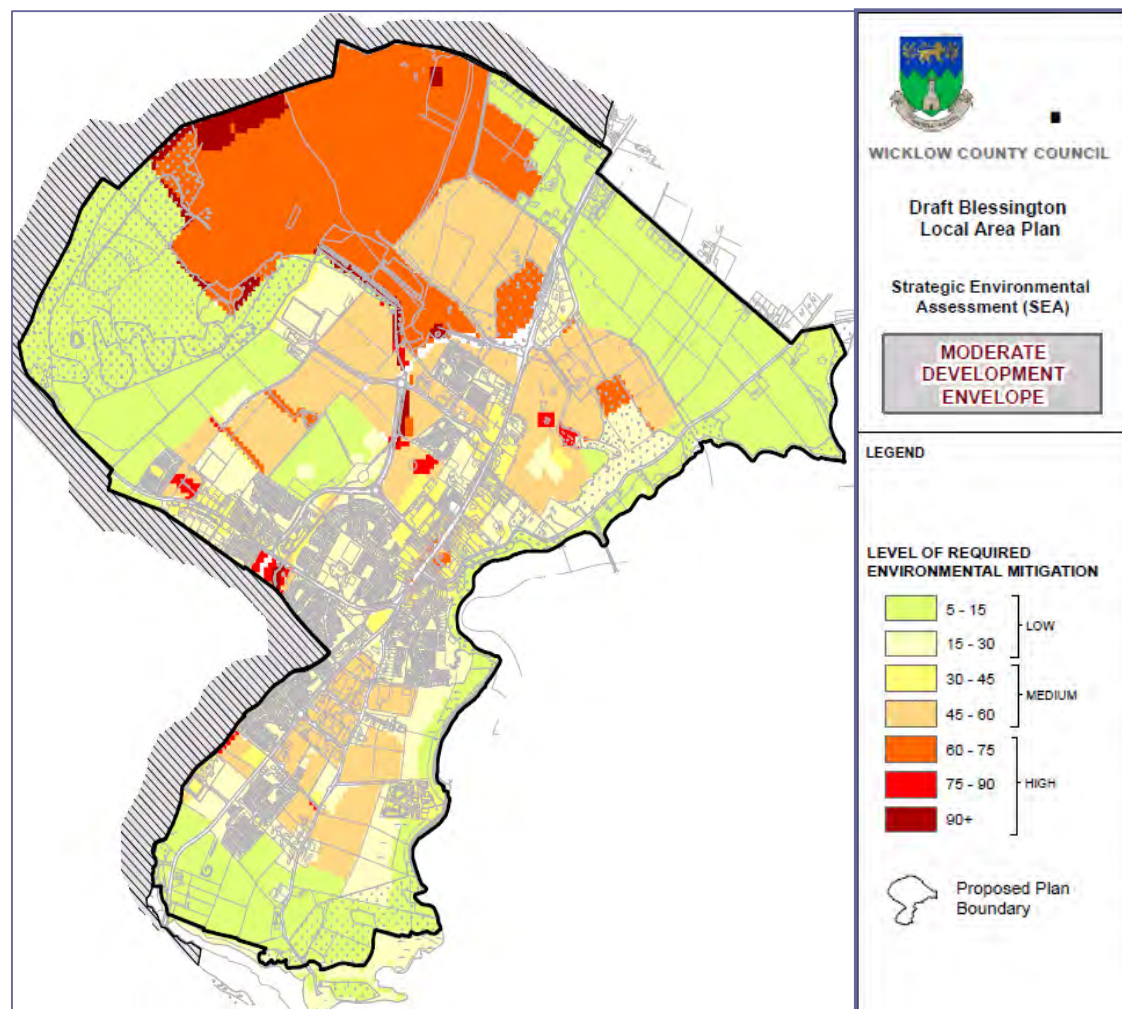


Figure 5.4 Scenario 2: Moderate Development Envelope

5.4 What the Map tells us?

Figure 5.4 above highlights areas within the plan area where potential conflicts with environmental objective may occur which can largely be offset by appropriate mitigation as discussed earlier and as set out in section 9 of the Environmental Report. The areas highlighted as requiring a high level of mitigation are identified as being the quarry lands to the north of the plan area alongside the provision of a large employment zoning adjoining the N81. It should be noted that while this area is zoned for employment purposes a very low plot ratio has been applied to these lands with the plan requiring these lands to be developed in the form of a employment and amenity park zoning with the majority of these lands being developed as natural green and woodland space with amenity walks. Other areas of note relate to the path of the streams in Blessington which have been protected with appropriate buffers and the redevelopment of lands to the north east of the plan area in recognition of the local biodiversity identified in this area. The plan through appropriate zoning and mitigation has ensured that the majority of this area is protected with only the very infant planting adjoining the Mart Site being rezoned for development.

Overall the Map indicates a plan which requires low to medium mitigation with the majority of land uses being proposed in appropriate areas, where any conflicts occur appropriate mitigation through local area plan objectives has been implemented either within the plan itself or through the provisions of the County Development Plan.

6. Assessment of the Blessington Local Area Plan:

6.1 Introduction

The Environmental Report is required to include information on the likely significant effects on the environment of the Blessington Local Area Plan 2013 - 2019. Matrices were used to evaluate each of the proposed Plan aims and objectives once the preferred plan alternative had been identified.

This section of the Environmental Report evaluated the Local Area Plan provisions. Strategic Environmental Objectives (SEO's) are used for this purpose as outlined under section 4 above. Use has also been made of the environmental baseline descriptions and the maps of the individual environmental components and the overlay of environmental sensitivities provided in section 3 above. The interactions between the SEOs and the provisions of the Plan determine the likely significant effects of implementing the Plan.

A summary of the findings of this assessment is set out below based on the impact of the overall plan on the receiving environment. While the majority of impacts were found to be either positive or neutral, particular attention has been paid to the identification of Draft Plan objectives that conflict with the SEOs of the Environmental Report, and the measures that have been adopted to mitigate or offset these effects.

6.2 Likely significant effects of the Blessington Local Area Plan

Population and Human Health

Overall, the SEA indicates that the Draft Plan has a positive or neutral impact on the SEO's relating to population growth on appropriate lands within a healthy and high quality environment (SEO's HHI, R1, WW, DW, WF, AQ1, AQ2. Of key importance to the achievement of this objective is the fact that the Draft Plan provides enough zoned land to meet the needs of projected population targets for the lifetime of the current plan.

The proposed zonings are located on lands that can be easily serviced and which are closest to the town centre. This results in the promotion of a compact urban form and sustainable transportation and land use pattern, which reduces the need to travel and which provides access to housing, employment, health, educational and amenity space. This development pattern consequently promotes a healthy and high quality living environment.

Biodiversity Flora and Fauna

One of the most important SEO's is that which relates to the protection of biodiversity (SEO's B1, B2, B3). Overall, the evaluation of the Draft Plan objectives is deemed to have a positive or neutral impact on the SEO's to maintain and enhance biodiversity. While the objectives of the Wicklow County Development Plan 2010-2016 are applicable to the Blessington Local Area Plan in this regard additional objectives of the plan namely the objectives set out in section 8 Built and Natural Heritage and objectives S1 to S5 of chapter 7 services infrastructure.

Notwithstanding the above, it should be noted that a significant number of Draft Plan objectives were found to potentially conflict with the SEOs to maintain and enhance biodiversity. These effects are described below:

- The zoning of the Lands for development in particular within the Action Area Plans in close proximity to the lakeshore have the potential to conflict with the SEO B3 to protect ecological networks. The potentially harmful effects on the habitats and connectivity are mitigated through the introduction of objectives within each Action Area and the objectives of section 8 of the plan.
- Chapter 4 sets out objectives for the promotion of enterprise and employment. In general, industrial activities can result in emissions which can have adverse effects on air, water and land, which can in turn have a cumulative impact on biodiversity. However, these effects can be successfully mitigated through the environmental objectives set out in the Draft Plan.
- Objectives for the promotion of tourism and recreation activities can have damaging effects on natural heritage. However, these effects can be successfully mitigated through the environmental objectives set out in the Draft Plan.
- Objectives for the development of new roads can be detrimental to natural heritage, both in a direct and a cumulative manner (whereby increased car usage results in emissions harmful to natural heritage). It is difficult to mitigate the harmful effect of new roads on non-designated sites, however the requirements of the Habitats Directive will safeguard the protection of Natura 2000 sites.

The Draft Plan includes specific environmental protection objectives relevant to Blessington in addition to those set out in the Wicklow County Development that successfully mitigate any potential harmful effects.

Water Resources

Overall, the SEA indicates that the Draft Plan has a positive or neutral impact on the SEOs (SEO's WS, WG, WF, WW, DW) to achieve a 'good' quality status in all water bodies within the plan area, in line with the target dates set out in the Eastern River Basin Management Plan 2009-2015.

Lands immediately adjoining the existing streams in Blessington have been provided with a minimum buffer of 10m throughout while the lakeshore and Poulaphuca Reservoir have been provided with a minimum 100m buffer with further protection afforded through the designation of lands adjoining this buffer as Active Open Space.

In addition to the above the plan through objectives set out in the Wicklow County Development Plan restrict development on zoned lands unless adequate waste water treatment is available.

The promotion of employment and enterprise and tourism have the potential to conflict with the SEO to achieve 'good' quality status in all water bodies within the plan area, in line with the target dates set out in the Eastern River Basin Management Plan 2009-2015:

All of the above potentially negative effects are mitigated by the objectives of the Wicklow County Development Plan and section 7 of the Blessington LAP.

Material Assets

Overall, the SEA indicates that the Draft Plan has a positive or neutral impact on the SEOs (DW, WW) to serve new development with appropriate waste water and drinking water.

In this regard the plan promotes a compact urban form that can be easily serviced by the expansion of existing infrastructure. The plan also contains mitigation limiting the amount of development to the capacity of existing public infrastructure.

Flooding

Overall, the SEA indicates that the Draft Plan has a positive or neutral impact on the SEO (WF) to prevent development on lands which pose or are likely to pose in the future a significant flood risk. In accordance with the 'Flood Risk Management Guidelines for Planning Authorities' (DoEHLG, OPW, 2009), a Flood Risk Assessment (FRA) of the Draft Plan has been prepared. This assessment has ensured that inappropriate development has been avoided in areas that are at risk of flooding. This, in combination with objectives of the County Development Plan and those set out in section 7 of the Draft Plan, ensure that flood risk has been reduced and mitigated throughout the plan area.

Cultural Heritage

Overall, the SEA indicates that the Draft Plan has a positive or neutral impact on the SEOs (AH1, AH2) to protect and conserve architectural and archaeological heritage. Notwithstanding this, the SEA assessment did identify that the following objectives could be detrimental to the achievement of the SEOs:

- Objectives relating to Blessington town centre and the identification of opportunity sites within the plan area could conflict with the character of the ACA.
- Objectives for the promotion of increased tourism and recreation can result in damaging effects on natural and built heritage.

All potentially damaging effects on cultural heritage can be successfully mitigated by the objectives of the Wicklow County Development Plan and those of the Blessington LAP in particular the objectives set out in section 8.

Landscape

Overall, the SEA indicates that the Draft Plan has a positive or neutral impact on the SEO (L1) to protect scenic landscapes. The SEA process identified that the following objectives of the Draft Plan required mitigation in order to ensure achievement of the SEO:

- Significant green buffers c. 100m have been provided along the lakeshore with lands within the designated Action Area Plans in close proximity to these areas providing for Active Open Space uses adjoining the buffer zone further protecting the lakeshore.
- The lands within and immediately adjoining Glen Ding Wood have been designated as a conservation and amenity zone.

Climate

Overall, the SEA indicates that the Draft Plan has a positive or neutral impact on the SEOs (AQ1, AQ2) to minimise greenhouse gas emissions.

In addition, the Draft Plan promotes a compact urban form which facilitates mixed use, 'walkable' neighbourhoods, with increased walking and cycling facilities. This land use pattern reduces dependency on private vehicular use and contributes to the reduction in greenhouse gases.

Notwithstanding this, the SEA assessment did identify that objectives for the development of new roads and transportation infrastructure is likely to have the combined effect of increasing private vehicular use which consequently increases greenhouse gas emissions.

Objectives for the development of employment and enterprise promote industrial activities that could result in noxious emissions. The objectives of the Wicklow County Development Plan alongside the provisions of the Draft Plan aim to mitigate potentially damaging effects on the environment.

Air Quality

The environmental assessment of the Draft Plan for the achievement of good air quality yielded the same results as the test for the environmental objectives to minimise greenhouse gas emissions.

Soils

Overall, the SEA indicates that the Draft Plan has a neutral or beneficial impact on the SEO (S1) to prevent pollution or contamination of soil within the plan area of Blessington. Key to the achievement of this objective is the promotion of a compact settlement form maximising the use of the existing built environment. This, in combination with objectives that protect designated and non-designated natural heritage areas, has an overall effect of positively contributing to the quality of soils in the plan area.

Potentially harmful effects are mitigated by the objectives of the Wicklow County Development Plan and the objectives of the Blessington Local Area Plan.

6.3 Assessment of Likely Environmental Effect of Draft Blessington Local Area Plan 2013-2019

Taking account of the above assessment, it is concluded that the overall effect of the Blessington Local Area Plan 2013 - 2019 on the environment is likely to be beneficial or neutral. Any likely significant adverse effects on the environment have been prevented, reduced or offset.

7.0 Monitoring

The SEA Directive requires that the significant environmental effects of the implementation of plans and programmes are monitored. The Environmental Report puts forward proposals for monitoring the Plan, which are adopted alongside the 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 Local Area Plan is achieving its environmental objectives and targets - measures which the Local Area 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 come from a range of existing monitoring sources and from a series of meaningful indicators that could be derived from the Development Management system. A preliminary monitoring evaluation report on the effects of implementing the Local Area Plan will be prepared within two years of the making of the plan. The Council is 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.