



# **SEA STATEMENT**

**Of the**

**Greystones-Delgany  
and Kilcoole Local Area Plan  
2013-2019 and Variation No. 3  
of Wicklow County  
Development Plan 2010-2016  
Strategic Environmental  
Assessment**

**September 2013**

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## Section 1 Introduction

### 1.1 Terms of Reference

This is the Strategic Environmental Assessment 'Statement' for the Greystones-Delgany and Kilcoole Local Area Plan 2013-2019 and Variation No.3 of the Wicklow County Development Plan 2010-2016 prepared in accordance with the requirements of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI 436 of 2004).

### 1.2 SEA Definition

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 insure that these effects are appropriately addressed at the earliest appropriate stage of decision-making on a par with economic and social considerations.

### 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). Both sets of Regulations became operational on 21 July 2004.

The SEA Directive and the instruments transposing it into Irish Law require that after the adoption of a plan or programme, the plan or programme making authority is required to make a Statement available to the public, the competent environmental authorities and, where relevant, neighbouring countries. This Statement is referred to as a SEA Statement (DEHLG, 2004)<sup>1</sup>.

### 1.4 Content of the SEA Statement

The SEA Statement is required to include information summarising:

- a) How environmental considerations have been integrated into the Local Area Plan and Variation No.3 of the Wicklow County Development Plan 2010-2016,
- b) How:
  - the Environmental Report,
  - submissions and observations made to the planning authority on the proposed Local Area Plan/Variation No.3 of the Wicklow County Development Plan and Environmental Report, and
  - any transboundary consultationshave been taken into account during the preparation of the Local Area Plan / Variation No.3 of the Wicklow County Development Plan,
- c) The reasons for choosing the Local Area Plan / Variation No.3 of the Wicklow County Development Plan as adopted, in the light of the other reasonable alternatives dealt with, and
- d) The measures decided upon to monitor the significant environmental effects of implementation of the Local Area Plan / Variation No.3 of the Wicklow County Development Plan.

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<sup>1</sup> Department of the Environment, Heritage and Local Government (2004) Implementation of SEA Directive (2001/42/EC): Guidelines for Regional Authorities and Planning Authorities Dublin: Government of Ireland.

### 1.5 Implications of SEA for the Local Area Plan / Variation No. 3

As a result of the aforementioned legislation, the Greystones-Delgany and Kilcoole Local Area Plan (LAP) 2013-2019 and associated Variation No. 3 to the County Development Plan were required to undergo SEA. The findings of the SEA were expressed in an Environmental Report, which was submitted to the Elected Members alongside the proposed Draft Local Area Plan / Draft Variation No.3. The purpose of the Environmental Report is to provide a clear understanding of the likely environmental consequences of adopting the Local Area Plan / Variation No.3.

Changes made to the proposed Draft LAP / Draft Variation No.3 were evaluated for their environmental consequences and the Environmental Report was updated to become the final Environmental Report.

The Draft LAP / Draft Variation No.3 and the associated Environmental Report were placed on public display on the 19<sup>th</sup> December 2012 to 08<sup>th</sup> February 2013. Addendum I to the Environmental Report<sup>2</sup> was included in the Manager's Report circulated to Elected Members. Addendum I proposed updates to the Environmental Report as a result of submissions, as appropriate.

Further to the display of the Draft LAP / Draft Variation No.3, the elected members resolved to make amendments to the LAP / Variation. On assessment of the proposed amendments, there were a number of amendments that were considered to be 'material' and therefore required to be placed on public display, which occurred from the 7<sup>th</sup> May 2013 to the 4<sup>th</sup> June 2013.

The proposed amendments to the Draft LAP / Draft Variation No. 3 were evaluated for their environmental consequences. Addendum II to the Environmental Report<sup>3</sup> was published alongside the proposed amendments.

Following the consultation period on the proposed amendments and associated Environmental Report - Addendum II and the receipt of submissions, the Manager prepared his second report. Addendum III to the Environmental Report<sup>4</sup> was included with the Manager's Report circulated to Elected Members. Addendum III proposed updates to the Environmental Report as a result of submissions, as appropriate.

In the adoption of the Local Area Plan / variation No. 3, the elected members made a number of 'Further Modifications' to the proposed amendments<sup>5</sup>. No further analysis of these 'further modifications' was necessitated as Sections 13 (6)(c)(i) and 20 (3)(q)(i) of the Planning and Development Act 2000 (as amended) precludes the making of any further changes at this stage of plan making / plan variation other than minor changes that are not likely to have significant effects on the environment or adversely affect the integrity of a European site,

On adoption of the Draft Local Area Plan/Proposed Variation No.3 of the Wicklow County Development Plan, Addendum I, Addendum II and Addendum III were used to update the original Environmental Report into a final Environmental Report, which accompanies the adopted Plan / variation.

At each stage of the process the Elected Members took into account the findings of the Environmental Report and/or the Addendum as appropriate.

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<sup>2</sup> Which provided analysis of and responses to the submissions on the Environmental Report which were made during this first period of public display

<sup>3</sup> Which provided an environmental assessment of the proposed amendments

<sup>4</sup> Which provided (a) analysis of and responses to the submissions on the Environmental Report – Addendum II which were made during the second period of public display and (b) an environmental assessment of any further modifications that the Manager was recommending to the proposed amendments

<sup>5</sup> These 'further modification' were in addition to or in lieu of those recommended by the Manager in his second report.

## Section 2

### How Environmental Considerations were integrated into the Local Area Plan / Variation No. 3

#### 2.1 Consultations

The Environmental Protection Agency (EPA), the Department of the Environment, Community and Local Government (DECLG), the Department of Communications, Energy and Natural Resources (DCENR), the Department of Agriculture, Fisheries and Food (DAFF) and the Department of the Arts, Heritage and the Gaeltacht (DAHG) were all sent a preliminary SEA 'scoping report' indicating that submissions or observations in relation to the scope and level of detail of the information to be included in the environmental report could be made to Wicklow County Council. Written submissions were then received on the scope of the SEA from the EPA, the DAHG, and Inland Fisheries Ireland.

Further information on the aforementioned submissions is provided under Section 3.2.

#### 2.2 Environmental Sensitivities

##### 2.2.1 Identification and Mapping

Environmental 'sensitivities' in the area in question were identified and mapped in order to identify which areas of the plan area would be most vulnerable, under threat or sensitive to development and would suffer the most adverse effects if future development were to be accommodated in those areas unmitigated.

The sensitivities considered included the following:

- Designated ecological sites;
- Land cover;
- Soil Type;
- Water Framework Directive (WFD) Risk Assessments for Rivers, Lakes, Ground, Coastal and Transitional Waters;
- WFD Register of Protected Areas;
- EPA River Water Quality Monitoring;
- GSI Aquifer Vulnerability and Productivity;
- Flooding Data;
- Waste Water Treatment capacity and demand;
- Drinking water supply;
- Drinking water quality;
- Archaeological Heritage;
- Architectural Heritage;
- Landscape Character Areas; and,
- Protected Views and Prospects.

### **2.2.2. Early communication**

The 'sensitivities' were communicated to the Plan-making team on a regular basis from the outset of the Plan preparation process. Identifying areas with the most limited carrying capacity within the Plan area helped future growth to be diverted away from these areas.

### **2.2.3 Overlay mapping**

A Geographical Information System (GIS) was used in order to weight the above sensitivities and map them overlapping each other - this allowed the identification of where most sensitivities occur.

Environmental sensitivities are indicated by colours, which range from low environmental sensitivity (light yellow) to high environmental sensitivity (red). 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 (See Figure 2.6).

## **2.3 Early Identification and Evaluation of Alternatives**

A range of potential alternative scenarios for the future development of the plan area were identified at an early stage in the process and evaluated for their likely significant environmental effects (see Sections 6 & 7 of the ER).

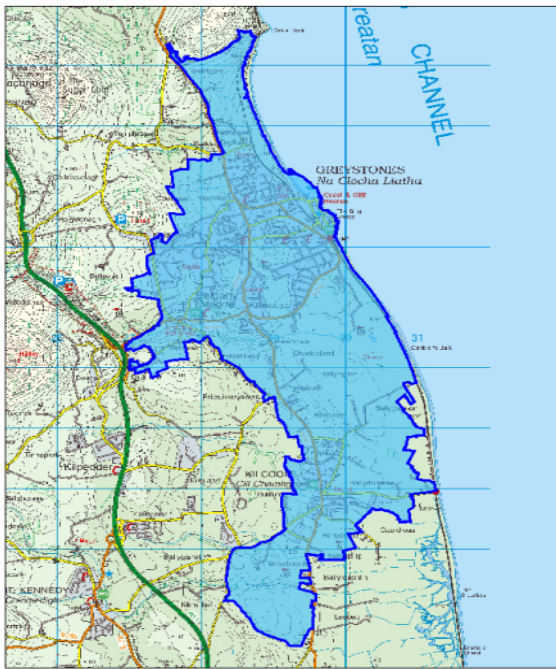
The environmental sensitivities and overlay mapping shown in Figures 2.1 to 2.5 were used in order to predict and evaluate the environmental effects of implementing the alternatives.

Communication of the findings of this evaluation helped the Plan-making team to make an informed choice as to which alternative was to be put before the Elected Members as the proposed Plan.

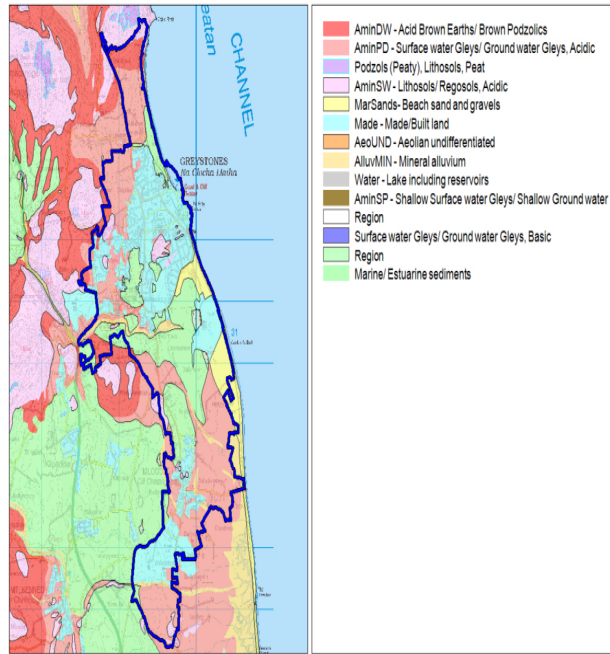
Communication of this evaluation to the Elected Members through the Environmental Report helped the Elected Members to make an informed choice with regard to the making of the Local Area Plan.

Mitigation measures which arose from the evaluation and which were integrated into the Local Area Plan are detailed under Section 2.4 of this report.





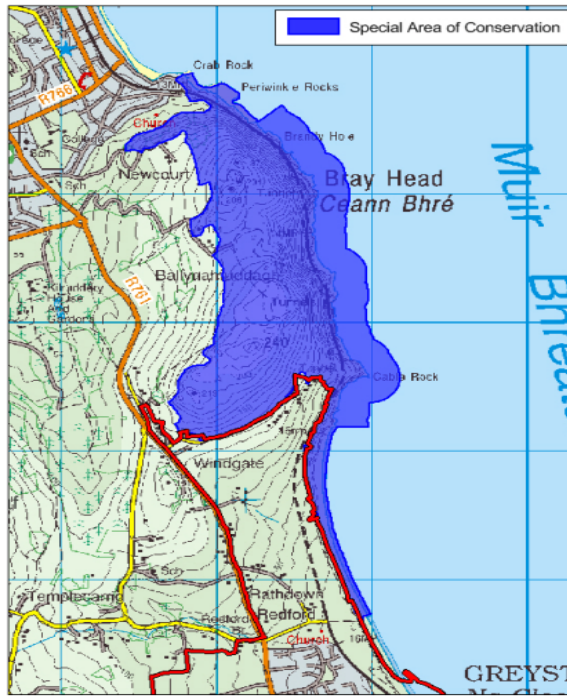
Proposed Greystones-Delgany & Kilcoole Plan Area



Soil Map



Geology



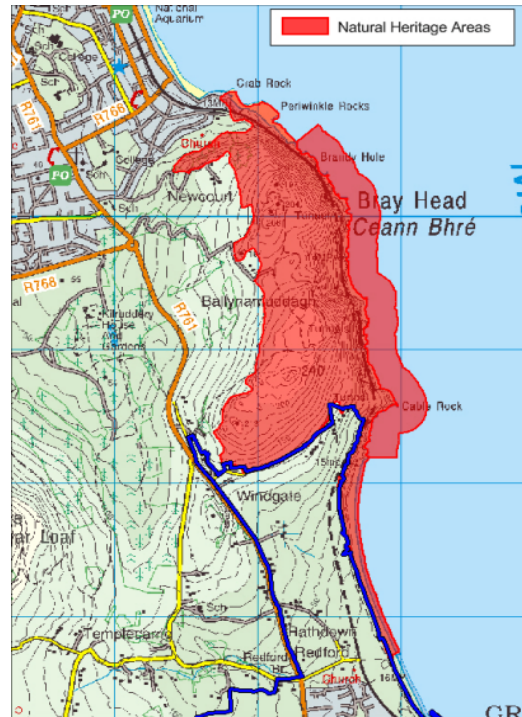
Natura 2000 sites within plan boundary

Figure 2.1 Environmental Sensitivities





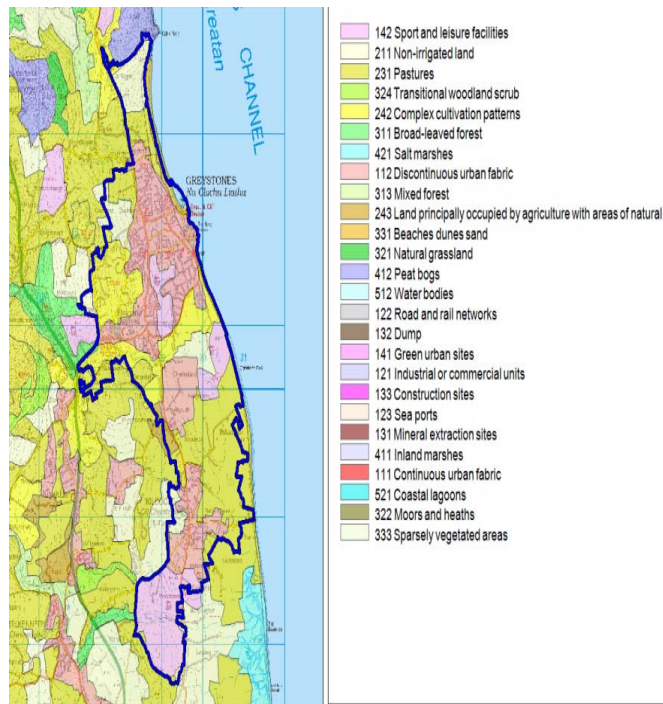
Natura 2000 sites outside plan



NHAs within plan boundary



NHAs outside plan boundary



Corine Land Cover

Figure 2.2 Environmental Sensitivities





Local Biodiversity Areas



Air Quality



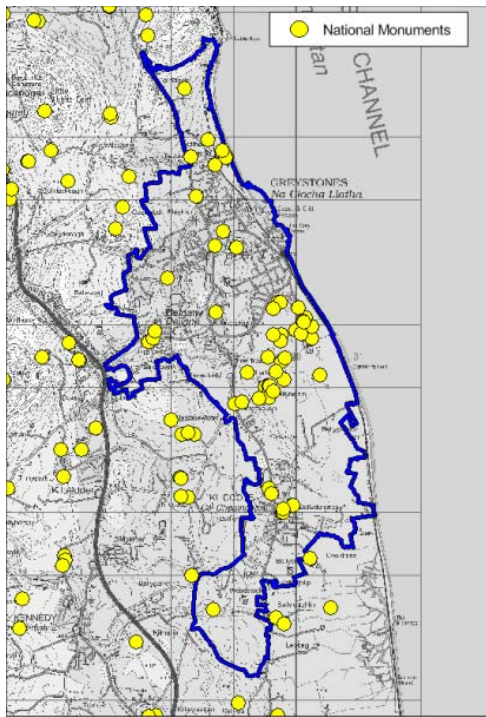
Water Bodies



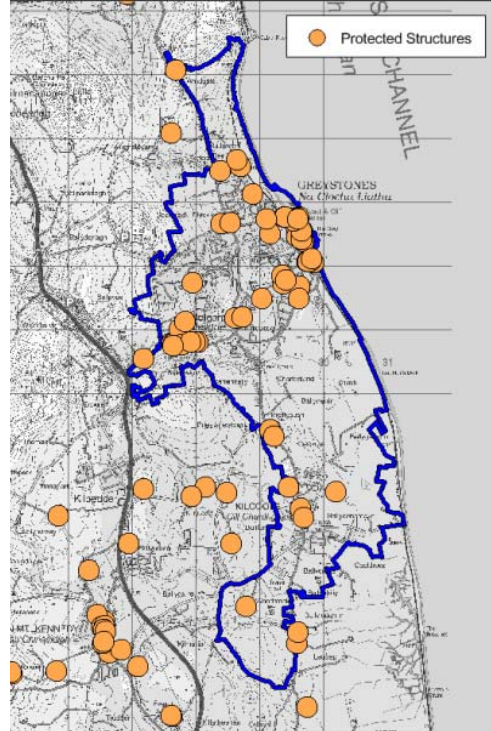
Flood Extents

Figure 2.3 Environmental Sensitivities





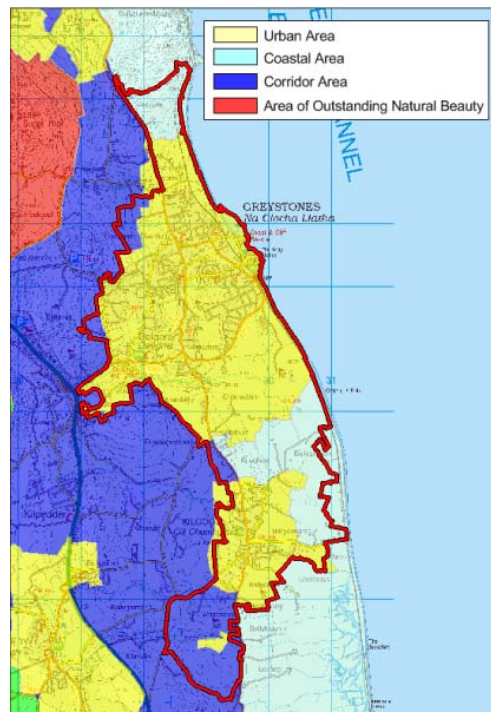
Recorded Monuments



Protected Structure

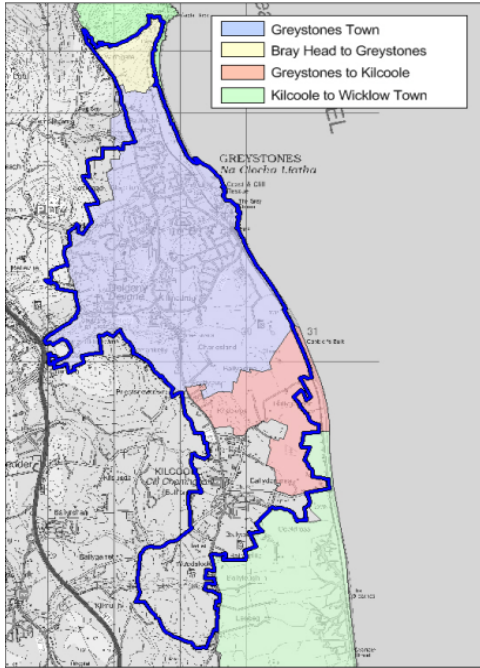


Architectural Conservation Area

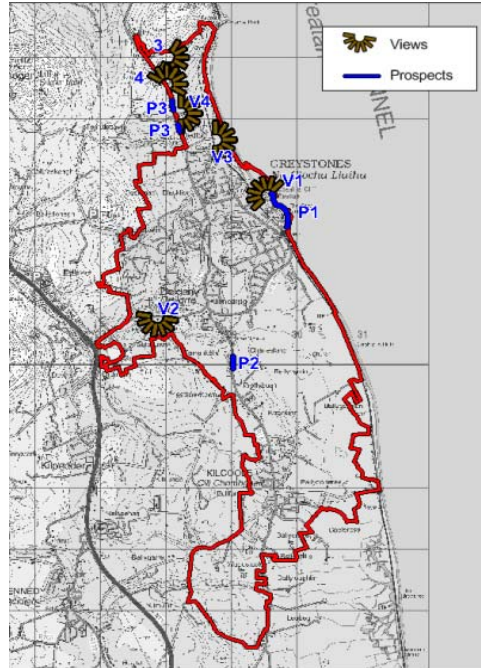


Landscape Category

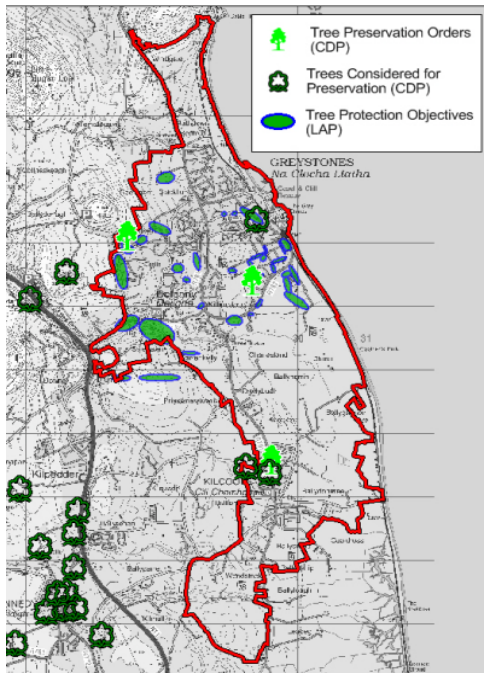
Figure 2.4 Environmental Sensitivities



Coastal Cells



Views & Prospects



Trees Considered for Preservation & Tree Protection Objectives

Figure 2.5 Environmental Sensitivities



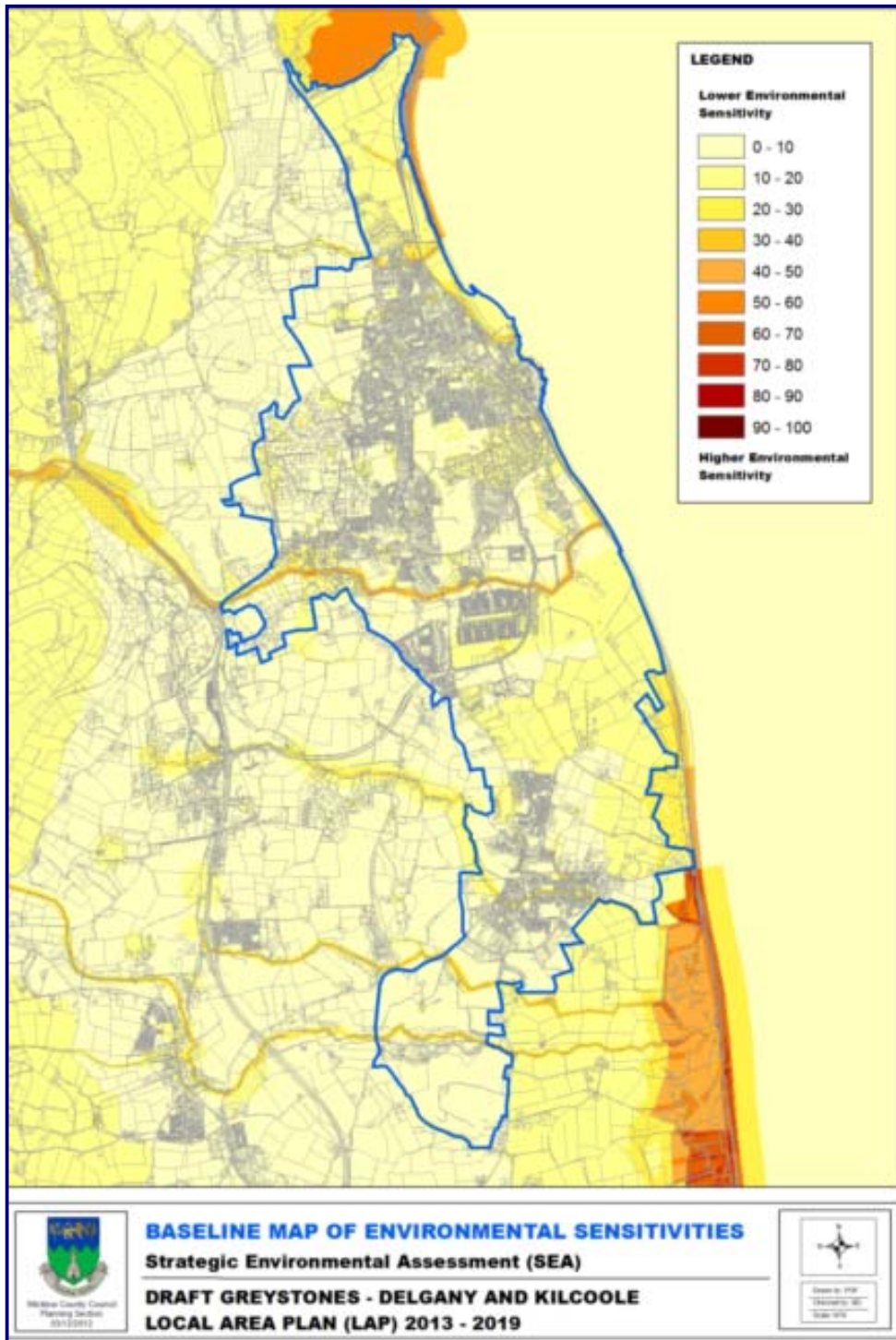


Figure 2.6 Overlay Mapping to derive overall Environmental sensitivity

## 2.4 Mitigation

### 2.4.1 Introduction

In order to comply with various statutory requirements and in order to comply with the requirements of the statutory consultees, mitigation measures<sup>6</sup> were recommended to be integrated into the Plan / Variation.

As the Greystones-Delgany & Kilcoole Local Area Plan/Variation No.3 must conform to the policies and objectives of the Wicklow County Development Plan (CDP) 2010 - 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/Variation No.3 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 the plan area

The wide range of topics these mitigation measures cover include:

- Designated Ecological Sites
- Ecological Connectivity
- Human Health
- Brownfield Development
- Status of Surface and Groundwaters
- Flooding
- Water Services (Waste Water and Drinking Water)
- Greenhouse gas emissions and car dependency
- Archaeological Heritage
- Architectural Heritage
- Landscape

Mitigation measures generally benefit multiple environmental components i.e. a measure providing for the protection of surface water resources could beneficially impact upon the protection of biodiversity, flora and fauna, drinking water resources, human health and provision of appropriate waste water treatment infrastructure.

The mitigation measures are identified in Section 9 of the Environmental Report and this identification is reproduced in Table 2.1 (a & b) below. The reference codes identified are those which accompany the relevant measures in both the Plan and Section 8 of the Environmental Report. As set out above, the Greystones-Delgany and Kilcoole Local Area Plan must conform to the policies and objectives of the Wicklow County Development Plan (CDP) 2010 – 2016. Table 2.1 (b) also provides a brief breakdown of the relevant mitigation measures contained in the County Development Plan 2010 – 2016.

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<sup>6</sup> Mitigation measures are measures envisaged to prevent, reduce and, as fully as possible, offset any significant adverse impacts on the environment of implementing a human action, be it a plan, programme or project. Mitigation measures can be roughly divided into those that: prevent effects; reduce the magnitude or extent, probability and/or severity of effect; repair effects after they have occurred, and; compensate for effects, balancing out negative impacts with other positive ones. Where there are likely to be significant negative effects, consideration should be given in the first instance to preventing these effects or, where this is not possible, to reducing the effects.



Mitigation Measure Topic	Objectives of the Greystones-Delgany & Kilcoole Local Area Plan
Population	RES1,RES2,RES3,RE7
Tourism	TOUR1,TOUR2
Social Infrastructure	SOC1,SOC8,SOC9,SOC10 &SOC11
Services	TS1,TS2,TS3
Flooding	TS4,TS5,TS6
Roads and Transportation	TS7,TS9,TS10,TS11,TS12
Heritage	HER1,HER2,HER3,HER4,HER5,HER6,HER7,HER8,HER9,HER10,HER11,HER12 HER13,HER14
Transport	TC2
Waste Management	S1,

Table 2.1 (a) Greystones –Delgany & Kilcoole Specific Mitigation Objectives.

The following sets out relevant objectives of the Wicklow County Development Plan 2010 – 2016 that would be applicable to the Greystones-Delgany and Kilcoole Local Area Plan. Table 2.1 (b) below provides an extract of the measures integrated into the County Development Plan as mitigation measures.

**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’.”

**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.”

**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”

**AE1-AE3** of Chapter 13 of CDP:

**AE1:** To regulate and control activities likely to give rise to emissions to air (other than those activities which are regulated by the EPA).

**AE2:** To require proposals for new developments with the potential for the accidental release of chemicals or dust generation, to submit and have approved by the Local Authority construction and/or operation management plans to control such emissions.

**AE3:** To require activities likely to give rise to air emissions to implement measures to control such emissions, to install air quality monitors and to provide an annual air quality audit.

**SG1-SG6** of Chapter 17 of CDP:

**SG1:** Geological and soil mapping where available shall be utilised to inform planning decisions relating to settlement, excavation, flooding, food production value and carbon sequestration, to identify prime agricultural lands (for food production), degraded/contaminated lands (which may have implications for water quality, health, fauna), lands with unstable soils / geology or at risk of landslides, and those which are essential for habitat protection, or have geological significance.

**SG2:** ‘Sites of Geological Importance’ will be protected from inappropriate development at or in the vicinity of the site, such that would adversely affect their existence, or interpretation

**SG3:** The Council will consult with the Geological Survey of Ireland as it deems necessary, when dealing with any proposals for major developments, which will entail ‘significant’ ground excavation, such as quarrying, road cuttings, tunnels, major drainage works, and foundations for industrial or large buildings and complexes.

**SG4:** To facilitate public access to ‘Sites of Geological Importance’, on the principle of “agreed access” subject to appropriate measures being put in place to ensure public health and safety

**SG5:** The Council will support efforts by the Geological Survey of Ireland, and other interested bodies regarding promotion of the interpretation of geological heritage in Wicklow, and will encourage the development of a “Wicklow Rock Trail”, Leopard or other similar geo-tourism initiatives.

**SG6:** To facilitate the exploitation of mineral resources, in an environmentally sensitive manner, in accordance with the policies and control measures set out in Chapter 8.

**Table 2.1 (b) Wicklow County Development Plan SEA mitigation measures (source table 2.1 SEA Statement of the Wicklow County Development Plan 2010 – 2016)**

<b>Mitigation Topic</b>	<b>Measure</b>	<b>Provisions Integrating Considerations into the Plan</b>
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

## Section 3 Environmental Report and Submissions & Observations

### 3.1 Introduction

This section details how both the Environmental Report and submissions and observations made to the planning authority on the Environmental Report and into the SEA process generally have been taken into account during the preparation of the Plan.

### 3.2 SEA Scoping Submissions

The Environmental Protection Agency (EPA), the Department of the Environment, Community and Local Government (DECLG), the Department of Communications, Energy and Natural Resources (DCENR), the Department of Agriculture, Fisheries and Food (DAFF), the Department of the Arts Heritage and the Gaeltacht (DAHG) were all sent SEA scoping reports indicating that submissions or observations in relation to the scope and level of detail of the information to be included in the environmental report could be made to Wicklow County Council. A written response was received on the scope from the EPA, the DAHG and Inland Fisheries Ireland (through DCENR).

The following written submissions were received from the Environmental Authorities with specific reference to the SEA process and the production of the Environmental Report. The content of these submissions was taken into account in formulating the environmental report.

#### 1) Environmental Protection Agency:

This submission included a 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 areas of significant landscape character and designated national and international conservation sites
- ⇒ Protection of designated and undesignated biodiversity sites
- ⇒ Protection and improvement of surface water quality
- ⇒ Protection of groundwater vulnerability
- ⇒ There are merits in combining both LAPs in the context of addressing potential cumulative/in combination effects arising from the development of both plan areas.

#### ***General Guidance:***

The SEA process Guidance Document was received which included details of environmental issue which were to be integrated into the Greystones-Delgany and Kilcoole 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 the Gaeltacht:**

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](http://www.npws.ie) and the data of the National Biodiversity Data Centre at <http://www.biodiversityireland.ie/>

It was recommended that a Biodiversity Strategic Environmental Objective 'SEO' would be included in the SEA that would cover habitats and species both within and outside of designated sites. With regard to the SEOs for Water, careful consideration of the requirements of protected species which are listed on Annex II of the Habitats Directive should be considered. The SEOs and targets should be compatible with the relevant River Basin Management Plans.

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

## **3) Inland Fisheries Ireland:**

The Local Area Plan is transversed by the Three Trouts and Kilcoole Streams which have been deemed important salmonid systems which constitute natural heritage features. The river network supports a number of species listed under the EU Habitats Directive, including Sea Trout, Brown Trout, Common Eel and Sea Lamprey.

It was recommended that sufficient treatment capacity must be available both within the receiving sewerage system locally and downstream at the relevant waste water treatment plant over the duration of the plan.

It was recommended that a disturbance of riparian habitats should be minimised, an undisturbed buffer zone between development area and the river bank should be maximised (10 minimum).

It was recommended that priority needs to be given to the protection and conservation of salmonid systems and watercourses shall be maintained in their natural state.

It was recommended that compliance with the "Guidelines for the Planning System and Flood Risk Management" would be integrated within the plan.

### **3.3 Environmental Report Submissions and Observations:**

#### **3.3.1 Addendum I**

This addendum dealt with issues raised in submissions to the Draft LAP / Draft Variation and associated Environmental Report. The EPA, the Department of Arts, Heritage and the Gaeltacht and Inland Fisheries Ireland (IFI) made follow up submissions at this stage. The EPA and the Department Of Arts Heritage and the Gaeltacht raised issues specifically relating to the environmental report. The IFI repeated the issues that they raised previously in their scoping submission. In addition there was reference made to objective "HER3" which was assessed in the Managers Report. It was considered unnecessary to summarise the comments from the IPI in the following section.

The following section provides a summary of the issues raised by the statutory consultees.  
**Department of Arts, Heritage and Gaeltacht**

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### **Summary of Issues Raised**

1. Table 3.1 includes a brief description of the Bray Head cSAC which extends into the southerly aspect of the LAP area. It is unclear as to the impact of coastal erosion protection works on cliffs and resident sand martins. As the sand martins require a specialised location for nesting and return to the same area each year it is not easy to mitigate for loss of nesting habitat of this species.

2. It is suggested that the SEO relating to 'Biodiversity' would be reviewed; in addition to its targets and indicators, to ensure that protected species under the Wildlife Acts are adequately addressed in the SEA.

### **Environmental Protection Agency (EPA)**

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#### **Summary of Issues Raised**

##### Non-Technical Summary

Consideration should be given to including a section on the evolution of the Plan area in the absence of the plan in accordance with the SEA Regulations (Schedule (2B) (b) S.I. No.436 of 2004).

##### Existing Environment

1. The inclusion of Table 3.13 'Environmental Baseline Weighting' and associated cumulative sensitivity map Table 3.19 'Environmental Baseline Mapping' is noted. It is suggested that there would be merits in allocating a higher score in relation to the areas that are susceptible to flooding.

2. In relation to water quality status under the Eastern River Basin Management Plan, the need to protect high and good quality waters for deterioration should be reflected by assigning a potentially greater weighting.

##### Environmental Objectives

1. In relation to the Biodiversity Objective SEO B1, consideration should be given to splitting this objective into a number of sub-objectives. This is in order to reflect the need to protect/conservate the integrity of designated and non-designated sites within and adjacent to the plan area. In addition it is considered that the protection/maintenance of ecological corridors should also be considered.

2. In relation to 'Material Assets' consideration should be given to including an SEO for providing/maintaining a safe and secure drinking water supply

3. In relation to the 'Environmental Protection Objectives' consideration should be given to the inclusion of additional relevant objectives and associated targets and indicators for assessing Energy and Water Conservation.

4. In relation to the energy and water conservation, it is considered that these are environmental components which do not warrant a specific inclusion as part of the SEOs. It is considered that SEO MAT 1 addresses the water conservation and SEO objectives AQ1 and AQ2 addresses the energy conservation.

##### Assessment of Environmental Effects

1. It is acknowledged that a number of the core issues are contained in the three Alternatives in Chapter 6 of the Environmental Report. The housing requirements for both plan areas should be developed in a phased and coordinated manner and in line with the ability to provide adequate and appropriate critical service infrastructure.



2. The evaluation of the Alternatives as described in 'Chapter 7: Evaluation of Alternative Plan Scenarios' is noted and the preferred strategy is likely to reflect a combination of the alternative development scenarios developed. Given that Alternative 3 – 'Expansion' has been assessed as the least favourable alternative it should be clarified whether the preferred alternative will reflect 'Alternative 1 - Most Environmentally Friendly' and 'Alternative 2 – Concentric and Compact' to a greater degree than development proposed under Alternative 3. The incorporation of Alternative 3, should be closely linked to providing robust mitigation measures to mitigate for any significant adverse effects which may arise

#### Mitigation Measures

1. The mitigation measures proposed should be directly linked to the specific relevant effects identified in the Environmental Report. It is suggested that there would be merits in providing a summary table outlining how each significant effect is linked directly to relevant mitigation measures, monitoring measures and where appropriate to a specific policy or objective in the plan.

2. Under Section 9.2 'Population', RES 2 should include information in relation to the timing, phasing of development and extent of lands included at each separate phase. It should also be clarified which phases are proposed for development during the lifetime of this plan. The relationship of the phasing of development to the Action Plans should also be further described.

3. Objective TS 12 appears to take into account of pedestrian and cycle routes only, consideration should also be given to incorporating ecological corridors into an integrated green infrastructure strategy. The potential for disturbance to existing ecological corridors/linkages should be assessed in proposals to extend and develop the green route network

4. With the proposed re-development of the harbour consideration should be given to reviewing existing traffic management plans to ensure that the proposed increase in population within the plan area and traffic generated by commuters into the Plan area for recreational/business purposes are taken into account. The potential effects of dredging and construction activities associated with the harbour development and provision of appropriate sea defences should be taken into account the potential impact on coastal erosion/deposition/marine hydrological regimes adjacent to the plan area

5. It is suggested that Environmental Management Plans would be established for the development of the action area plans to ensure that environmental vulnerabilities/sensitivities identified within the SEA/AA/FRA are fully integrated as appropriate

6. In relation to Appendix 1 SEA Matrix Assessment while it is noted that the table includes comments on key mitigation measures associated with particular objectives there are no mitigation measures in relation to the Greystones/North Beach Action Plan in particular. This should be clarified or consideration should be given to include a separate matrix for the mitigation measures associated with the development of action plan areas.

#### Monitoring:

Consideration should be given to tabulating the SEOs for the Plan and including a summary of the Objectives, Targets and Indicators proposed and including the frequency of monitoring proposed. The Monitoring Programme should be flexible to take account of specific environmental issues as they arise. The actual internal departments responsible for collecting, collating and analysing the data should be identified as soon as possible after the plan has been adopted. The monitoring requirements should also be described in more detail.

### Changes due to submissions from statutory consultees:

The information contained in the submissions outlined above was taken into account and the following amendments were recommended:

#### 1. Amendment to Table 4.2:

<b>Environmental Objectives</b>	<b>Target</b>	<b>Indicator</b>	<b>Responsible Authority</b>
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	Maintenance of favourable conservation status for all habitats and species protected under the national and international legislation.	<b>Conservation status of habitats and species as assessed under Article 10 and Article 17 of the Habitats Directive</b>	NPWS/WCC

#### 2. Non-Technical Report:

**New Heading:** Evolution of the Plan Area in the absence of the Plan

If there was no plan for the plan area there would be no framework directing developments to appropriate locations in and around the plan area and planning applications would be assessed on an individual and piecemeal basis. In such a scenario, impacts, and cumulative impacts in particular, would not be captured adequately which could result in a negative impact on the local environment.

#### 3. Table 4.6 Material Assets

<b>SEO MAT 1</b>	<b>Target</b>	<b>Indicator</b>	<b>Responsible Authority</b>
To make best use of existing water services Infrastructure <b>and to provide/maintain a safe and secure drinking water supply.</b>	Promoting development at locations served by existing water services infrastructure	The percentage of houses connected to the main infrastructure systems and the percentage of houses served by septic tank.	WCC/Department of Environment, Community and Local Government

#### 4. Insert new bullet point to section 6.2 page 75 of the SEA report as follows:

The residential requirements of the plan area shall be carried out in a coordinated approach with the necessary infrastructure-roads, water and waste water services being provided in tandem with the residential development.

#### 3.3.2 Addendum II

Further to the display of the Draft LAP / Draft Variation No.3, the elected members resolved to make amendments to the LAP / Variation. On assessment of the proposed amendments,

there were a number of amendments that were considered to be 'material' and therefore required to be placed on public display, which occurred from the 7<sup>th</sup> May 2013 to the 4<sup>th</sup> June 2013.

The proposed amendments to the Draft LAP / Draft Variation No. 3 were evaluated for their environmental consequences. Addendum II to the Environmental Report<sup>7</sup> was published alongside the proposed amendments.

### 3.3.3 Addendum III

Following the consultation period on the proposed amendments and associated Environmental Report - Addendum II and the receipt of submissions, the Manager prepared his third report. Addendum III to the Environmental Report<sup>8</sup> was included with the Manager's Report circulated to Elected Members. Addendum III proposed updates to the Environmental Report as a result of submissions, as appropriate.

#### Department of Arts, Heritage and Gaeltacht

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The Department welcomes the proposed amendments. It is noted that the proposed change to the SEA indicator for Biodiversity, Flora and Fauna (SEO B1) does not actually include species protected under the Wildlife Acts. Such species include bats which can occur in non-designated sites (e.g. trees, bridges) or sites considered under Article 10 of Habitats Directive. The proposed amendment to the indicator refers to 'Conservation status of habitats and species as assessed under Article 10 and 17 of the Habitats Directive'.

#### Changes due to comments from statutory consultees

The following update to the Environmental Report is considered appropriate:

<b>Environmental Objectives</b>	<b>Target</b>	<b>Indicator</b>	<b>Responsible Authority</b>
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	Maintenance of favourable conservation status for all habitats and species protected under the national and international legislation.	<b><i>The Conservation Status of biodiversity in the plan area as assessed through the review of relevant local records through actions of the County Wicklow Biodiversity Action Plan</i></b>  Conservation status of habitats and species as assessed under Article 10 and Article 17 of the Habitats Directive	NPWS/WCC

<sup>7</sup> Which provided an environmental assessment of the proposed amendments

<sup>8</sup> Which provided (a) analysis of and responses to the submissions on the Environmental Report – Addendum II which were made during the second period of public display and (b) an environmental assessment of any further modifications that the Manager was recommending to the proposed amendments

## **Section 4**

### **Alternative Plan Scenarios Considered**

#### **4.1 Introduction**

This section describes the alternative scenarios considered for the Draft Local Area Plan / Variation No. 3. It summarises the evaluation of the likely significant environmental effects of each scenario that is contained in the Environmental Report and identifies the reasons for choosing the Plan, as adopted, in the light of the other reasonable alternatives examined.

#### **4.2 Description of the Alternative Scenarios**

The environmental consequences of 3 alternative scenarios for the Draft Local Area Plan / Draft Variation were examined. All scenarios were required to meet the obligations set for the plan area by the Planning and Development Act, the National Spatial Strategy, the Regional Planning Guidelines for the Greater Dublin Area 201-2016 and the County Development Plan 2016 and any other higher order development strategies.

##### **4.2.1 Alternative 1 'Environmental Friendly'**

This alternative sets out a development strategy that aims to achieve a high level of protection to the environment. The greenbelt has been expanded on lands at the edges of the plan area. These greenbelt areas reflect lands that are elevated and which contain a number of listed views and prospects. The greenbelt also covers lands which contain rivers and flood prone areas.

This scenario reflects the importance of the riparian habitats with a 50 metre buffer along all rivers and a 60 metre buffer along the Three Trouts River.

In order to protect urban biodiversity and to preserve public open space areas, the green areas within established residential areas have been zoned "open space". Lands that are undeveloped and that are affected by views and prospects are zoned "open space" where possible.

The lands north and south of the Charlesland Estate are identified as "Parkland". A walking route should be created linking these parklands and further expanded into the Kilcoole plan area.

Lands zoned for high density residential development should be centrally located and in close proximity to the town centre of Greystones and Kilcoole and lands zoned medium density residential development should be centrally located and in close proximity to neighbourhood centres.

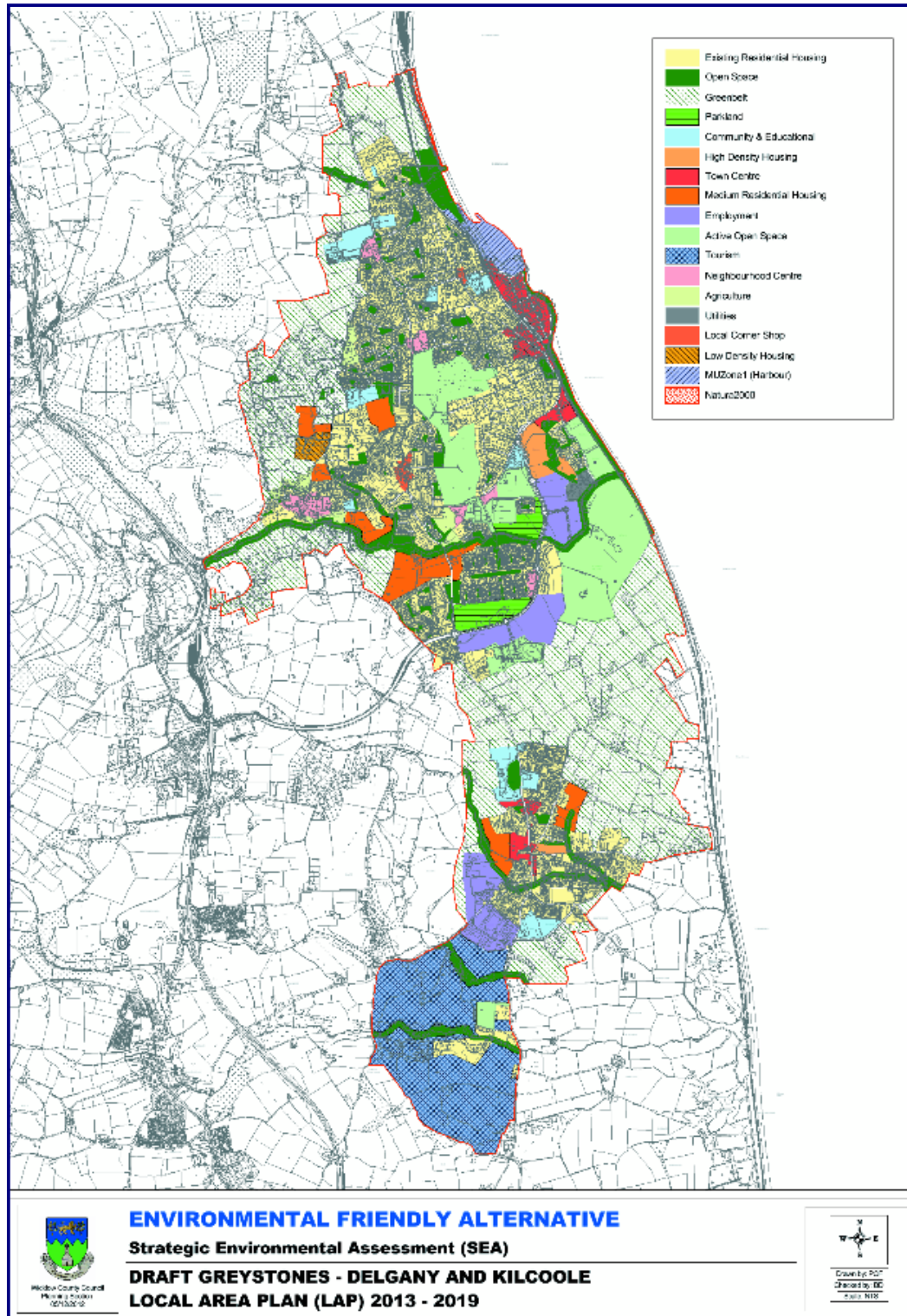


Figure 4.1 –Alternative 1 – Environmental Friendly Alternative

#### **4.2.2 Alternative 2: 'Concentric & Compact'**

This alternative sets out a development strategy that aims to achieve a concentric and compact settlement form.

The concentric model is based on urban form whereby urban expansion extends in a radial pattern outwardly from the centre;

In order to protect riparian habitats a 30metre buffer has been introduced along all rivers where possible. A 40m buffer was introduced along the Three Trouts River to reflect the fact that this area is an important habitat system and an area rich in biodiversity as outlined in the Local Biodiversity Study 2006. These buffers are indicated as "Open Space" zone;

The Greystones Golf Club lands have been zoned a mixture of high density residential development and medium density residential development;

Lands zoned for high density residential development are centrally located in close proximity to the town centre and public transport links;

Infill Residential Development is encouraged on underutilised lands in established residential areas;

In order to protect urban biodiversity and to preserve public open space areas, public open space in housing estates has been zoned specifically "open space";

Lands at the outer edges of the boundaries of the plan area are considered to be less suitable for development and the majority of these areas have been zoned agriculture to further protect the lands along the edge of the plan.

This alternative is centred on the premises that development expands from the centre of the urban area outwards. There is consideration taken of the natural heritage of the area in relation to buffer zones etc however the emphasis is not as extensive as it is in Alternative 1.



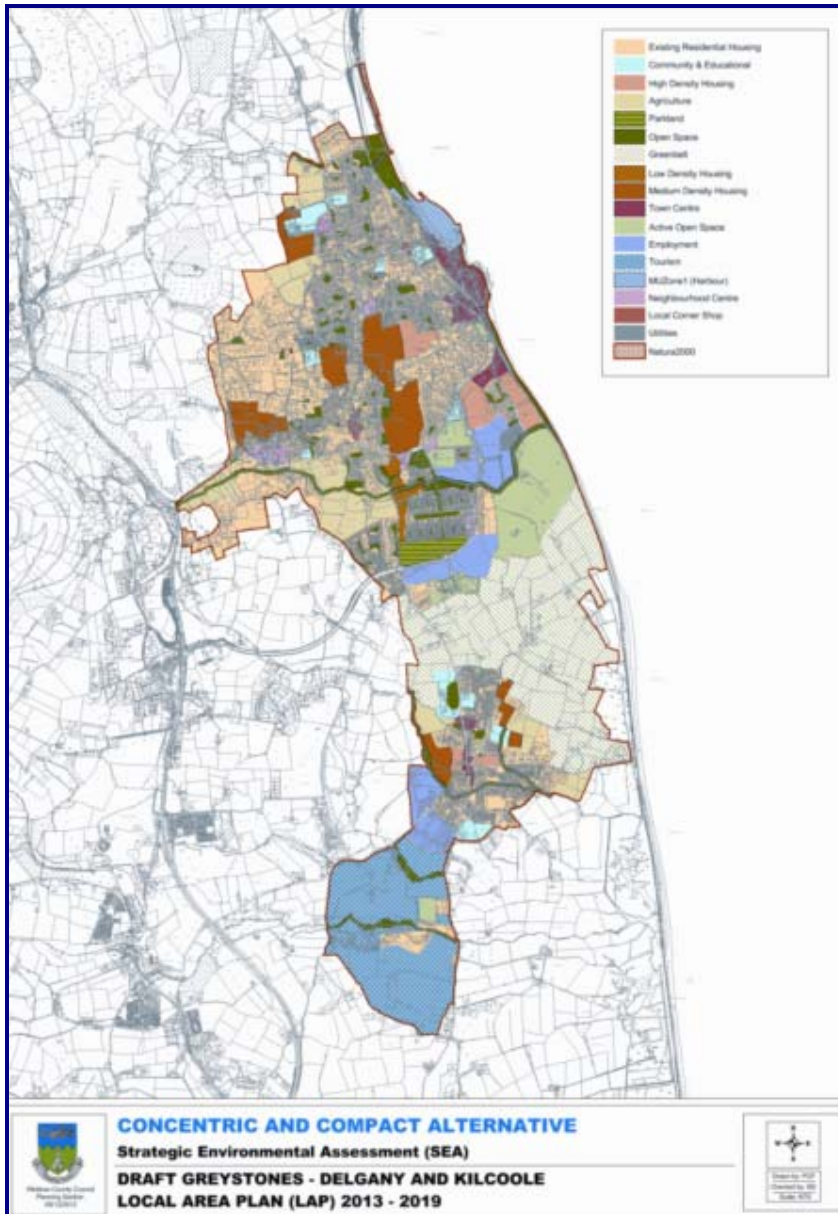


Figure 4.2 –Alternative 2 –Concentric and Compact Alternative

#### 4.2.3 Alternative 3 ‘Expansion’

This alternative sets out development strategies that result in urban sprawl. The key components of this strategy compared to that of the previous alternatives are:

The vast majority of new development required in this alternative would be occurring outside of the existing “built envelope” of the towns i.e. new housing occurring at low-medium densities on greenfield lands rather than on brownfield or infill sites;

In this alternative there is minimal new residential development in the two town centres;

In order to protect riparian habitats a 20m buffer has been introduced along all rivers where possible, a 30m buffer has been introduced along the Three Trouts River to reflect the fact that this area is an important habitat system and an area rich in biodiversity as outlined in the Local Biodiversity Study 2006. These buffers are indicated as “Open Space” zone;

New residential developments occurring on the periphery of the towns are located where infrastructural services can be accessed and accommodated;

This alternative allows for the expansion of the plan area which results in a more sporadic pattern of development with the least sustainable transport pattern.

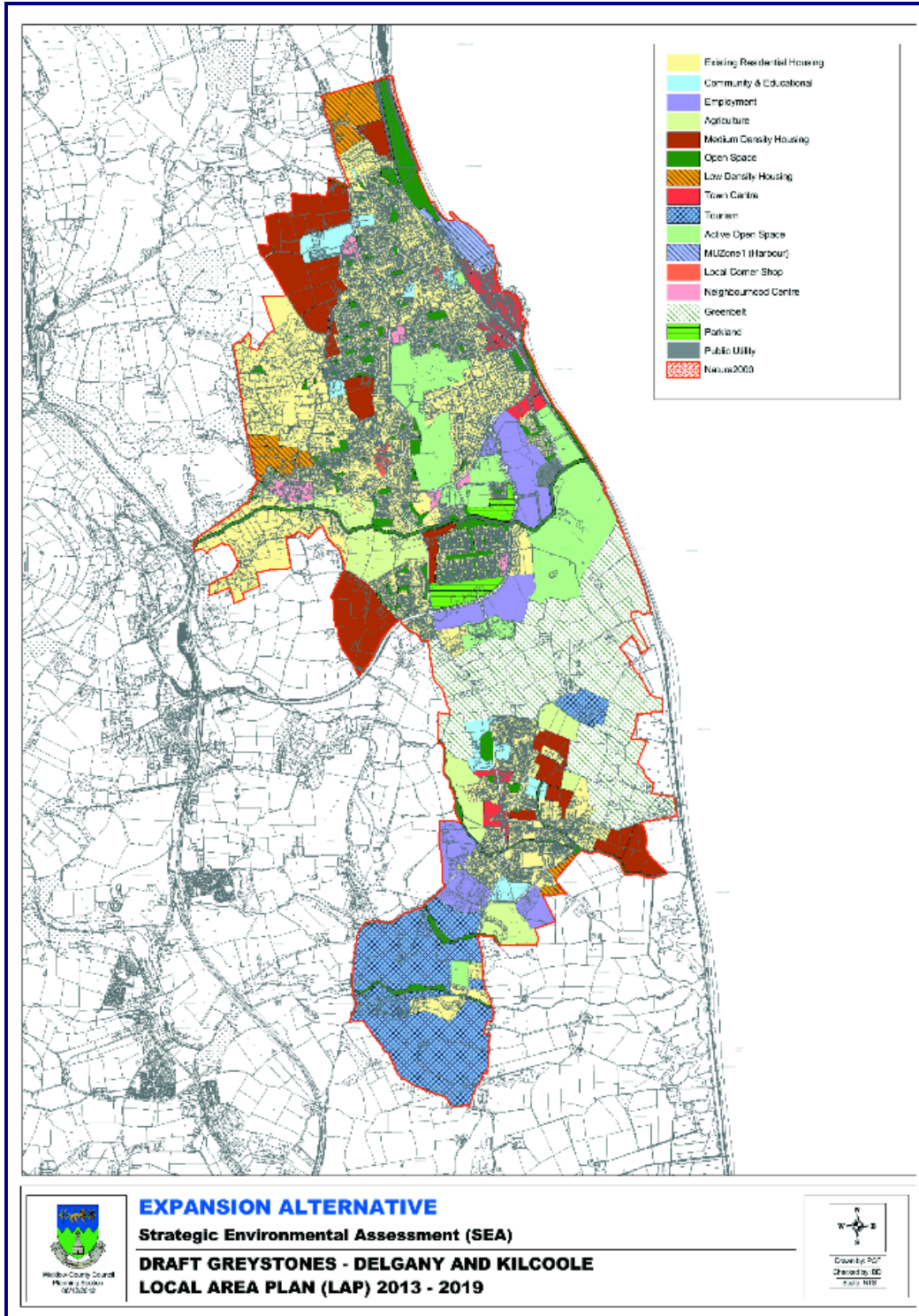


Figure 4.3 –Scenario 3 –Expansion Alternative

### 4.3 Evaluation of Alternative Plans

#### 4.3.1 Methodology

##### 4.3.1.1 Existing Environment and Overlay Mapping

In order to identify the extent to which environmental sensitivities are likely to be impacted upon by implementation of the 3 alternatives, use was made of environmental baseline data and overlay mapping (see Figures 2.1 to 2.5 of this report).

##### 4.3.1.2 Strategic Environmental Objectives (SEOs)

Based on an understanding of the existing and emerging environmental conditions in the Greystones-Delgany and Kilcoole plan area a series of Strategic Environmental Objectives (SEOs) were identified and developed in order to assess the likely environmental effects which would be caused by implementation of each of the 3 alternative scenarios described above.

The alternatives are evaluated using compatibility criteria (table 4.1) in order to determine how they are likely to affect the status of these SEOs.

Table 4.2 brings together all the SEOs, which have been developed from international, national and regional policies, which generally govern environmental protection objectives.

The SEOs and the alternative scenarios are arrayed against each other 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 a SEO the relevant SEO code is examined. As can be seen in the table below Alternative 3 results in a number of conflicts.

The alternatives have been evaluated at a strategic level, through an assessment that measures the compatibility of each alternative with the environmental goals. The findings of this assessment are summarised in Table 4.1 and is described as follows:

**Table 4.1 Compatibility of Alternatives with SEA Environmental Goals**

Alternative	Soil	Biodiversity, Flora and Fauna	Population and Human Health	Climatic and Air Factors	Water Resources	Material Assets	Cultural Assets	Landscapes
1. The Environmental Alternative	Green	Green	Green	Yellow	Green	Green	Green	Green
2. The Concentric and Compact Alternative	Green	Green	Green	Green	Yellow	Green	Green	Yellow
3. The Expansion Alternative	Red	Red	Red	Red	Red	Red	Green	Red

Green	Alternative is consistent with environment goal
Red	Alternative is in conflict with environmental goal
Yellow	Neutral/Uncertain

**Table 4.2 Strategic Environmental Objectives**

<b>SEO SOIL1:</b>	Maximise the sustainable re-use of brownfield sites and maximise the use of the existing built environment
<b>SEO SOIL2</b>	To prevent pollution and/or contamination of soil within the plan area
<b>SEO B1:</b>	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
<b>SEO PHH1</b>	Create a healthy environment
<b>SEO PHH2:</b>	Promote a high quality living environment
<b>SEO AQ1:</b>	To reduce travel related greenhouse emissions and other noxious emissions to air
<b>SEO AQ2:</b>	Achieve Environmentally friendly building designs
<b>SEO W-S:</b>	To maintain and improve, where possible, the quality of Streams, Rivers, Lakes and other surface waters within and adjoining the plan area in line with the target dates set out in the Eastern River Basin Management Plan 2009-2015.
<b>SEO W-G:</b>	To prevent pollution and contamination of ground waters
<b>SEO W-F:</b>	To prevent development on lands which pose –or are likely to pose in the future-a significant flood risk
<b>SEO MAT 1</b>	To make best use of existing water services Infrastructure and to provide/maintain a safe and secure drinking water supply
<b>SEO MAT 2:</b>	Make the best use of existing road and transportation infrastructure
<b>SEO AH1:</b>	To protect the archaeological heritage of Greystones-Delgany and Kilcoole including entries to the Record of Monuments and Places and in the context of their surrounding landscapes where relevant
<b>SEO AH2:</b>	To preserve and protect the special interest and character of Greystones-Delgany and Kilcoole architectural heritage including entries to the Record of Protected Structures and their context within the surrounding landscape where relevant
<b>SEO L1:</b>	To protect and avoid significant adverse impacts on the landscape of the plan area
<b>SEO L2</b>	The protection of listed views and prospects



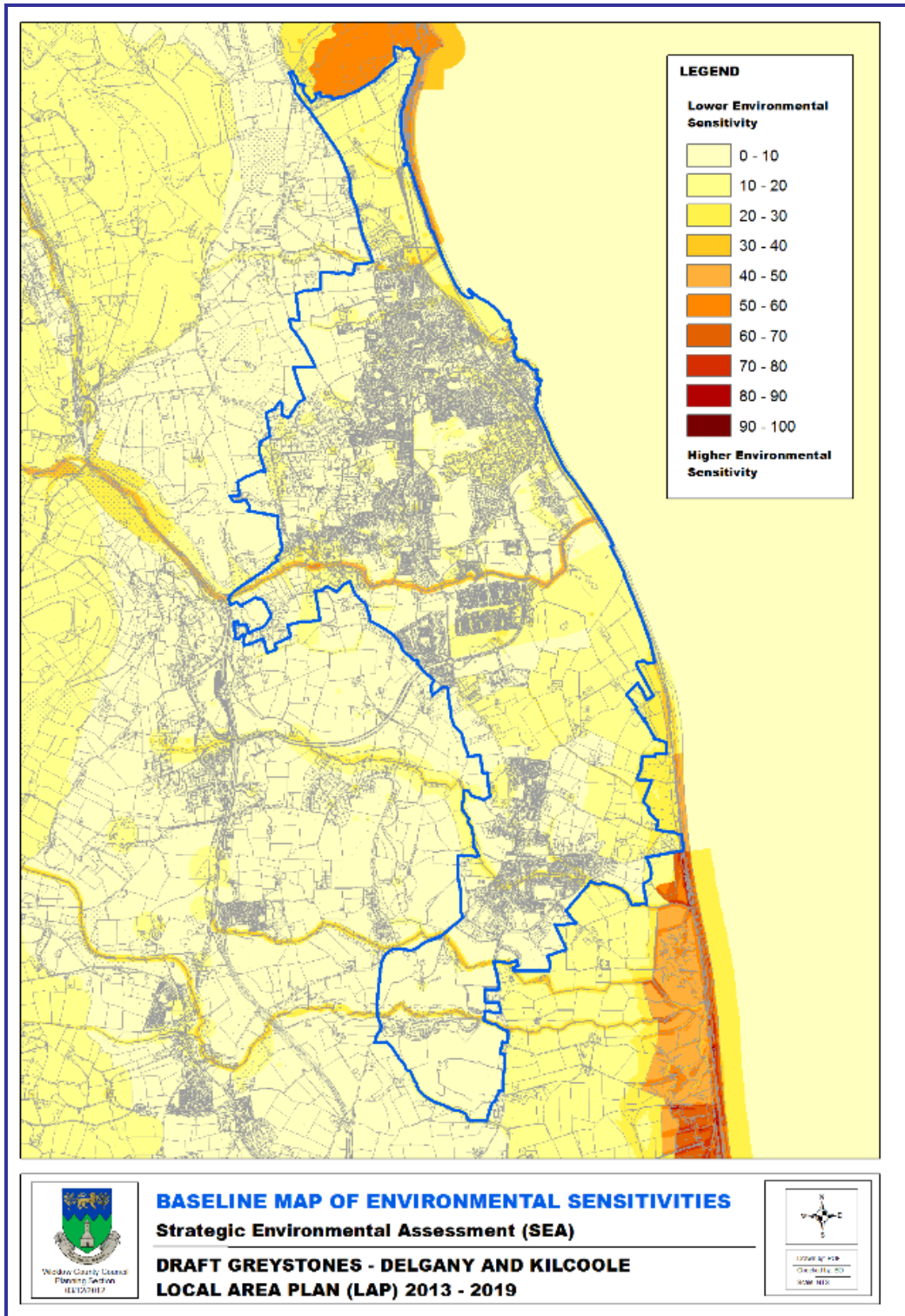


Figure 4.4 –Baseline Map of Environmental Sensitivities

## **4.4 Evaluation of Plan Alternatives<sup>9</sup>**

### **4.4.1 Introduction**

This section summarises where each development scenario is likely to give rise to environmental impacts within the plan area. Each scenario as set out above in Section 4.2 was overlaid on top of the above baseline sensitivity map in Figure 4.4 in order to identify the most likely environmental impacts each varying scenario would have on the plan areas receiving environment.

### **4.4.2 Alternative 1 ‘Environmental Friendly’**

#### **⇒ Likely Environmental Effects**

This alternative has the least environmental impact (See Figure 4.5). Alternative 1 is the ‘Environmental’ alternative which makes a significant contribution to the protection and enhancement of the environment. There is a high level of protection that conserves biodiversity, soils and water resources. The environmental alternative has been prepared in strict adherence to environmental goals and as such results in the highest degree of environmental protection. This alternative affords strict protection to designated and non-designated sites, including Natura 2000 sites, urban habitats and riparian habitats and introduces green belt along the fringes of the plan area.

This plan scenario is centred on developments to be located in close proximity to town centres and provides a high level of protection to the scenic landscape. The resultant settlement pattern is tightly concentrated around the existing town centres promoting sustainable patterns of mobility with new zonings also being accompanied by strong environmental objectives.

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<sup>9</sup> Footnotes like this are used in this section in order to identify instances where interactions between the relevant Scenario and the relevant SEOs occur. The nature of these interactions is identified on Table 7.1 of the ER.



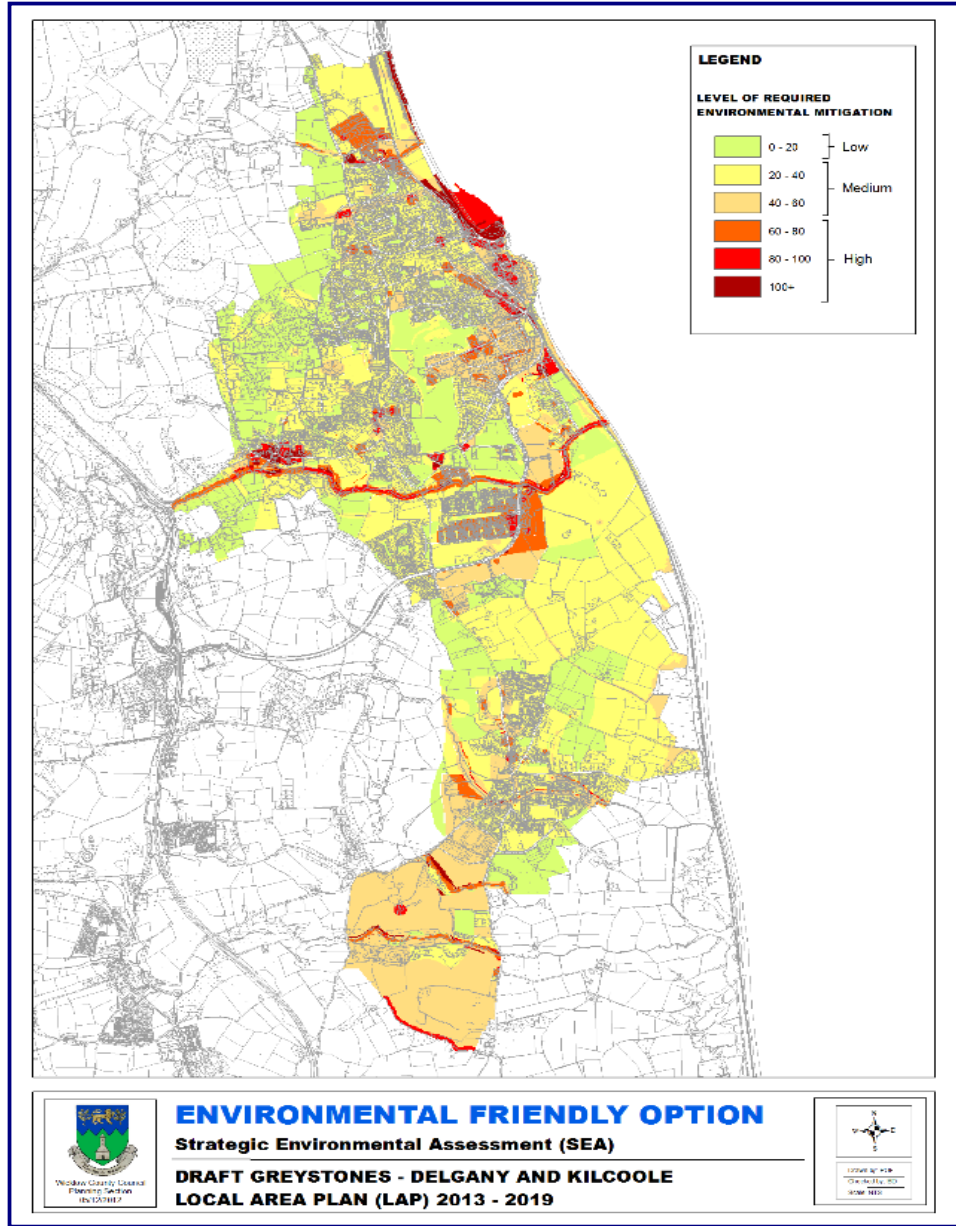


Figure 4.5 –Environmental Sensitivities-Environmental Friendly

#### 4.4.3 Alternative 2 – ‘Concentric & Compact’

##### Likely Environmental Effects

This plan alternative bears similarities to Alternative 1 however there is not the same level of emphasis on the protection of the environment, there are fewer and narrower, with less buffer zones provided in relation to watercourses. This plan provides for a more expansive plan area where development is centred in close proximity to existing town centres but also in proximity to Neighbourhood centres.

This plan promotes a compact urban form and sustainable land use pattern.

This approach maximises the use of the existing built environment and in combination with objectives that protect designated and non-designated sites it has an overall effect of positively contributing to the receiving environment (see figure 4.6).

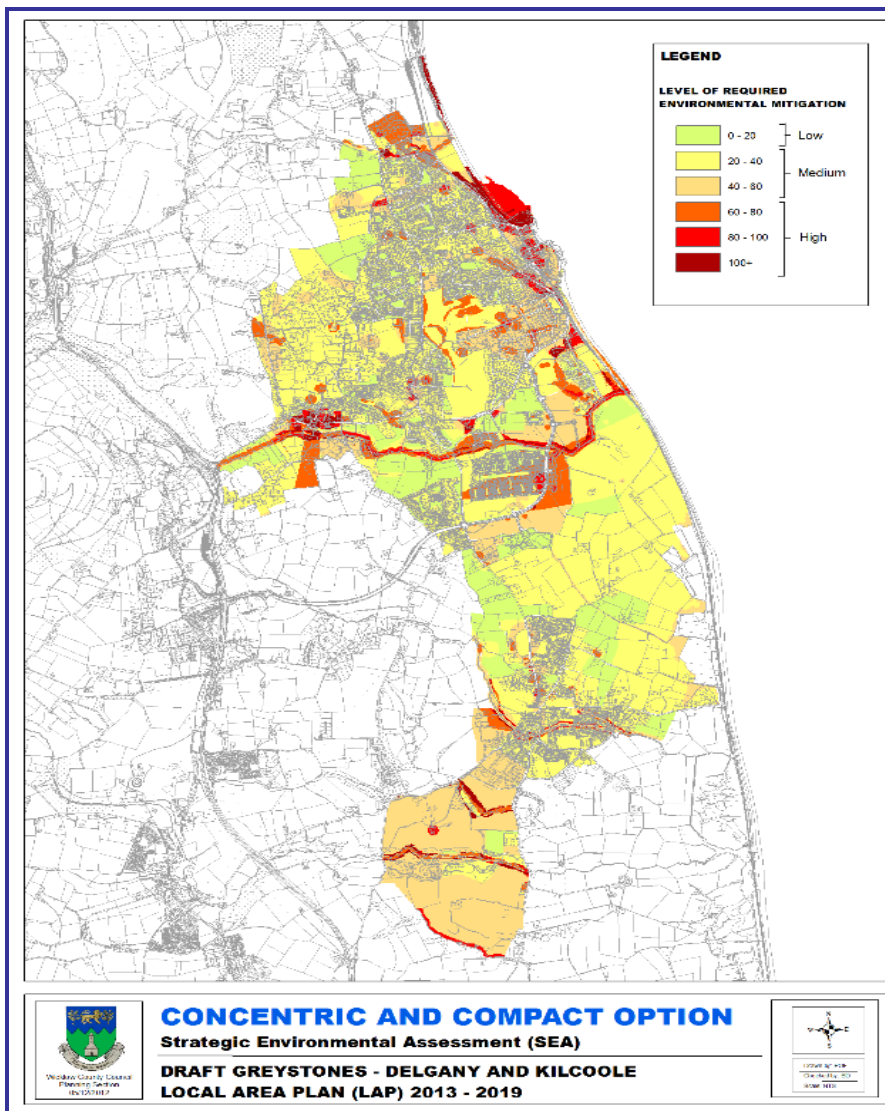


Figure 4.6 –Environmental Sensitivities-Concentric and Compact Alternative

#### 4.4.4 Alternative 3 – ‘Expansion’

##### Likely Environmental Effects

This plan alternative promotes the spread of development on undeveloped lands which compromises the soil quality and uses up this non-renewable resource. This alternative has also an impact on the levels of run-off/flooding etc when the lands are developed.

This approach would have a negative impact on the biodiversity of the plan area mainly due to the expansion of development into rural/virgin lands.

Due to the expansion of the plan area away from established urban and neighbourhood centres there will be greater dependency on private car journeys rather than utilising public transport or walking which would result in less use of healthy movement options. The dependency on car journeys increases the level of car emissions which would have a negative environmental impact. Overall this alternative would negatively impact on the environment (see figure 4.7)

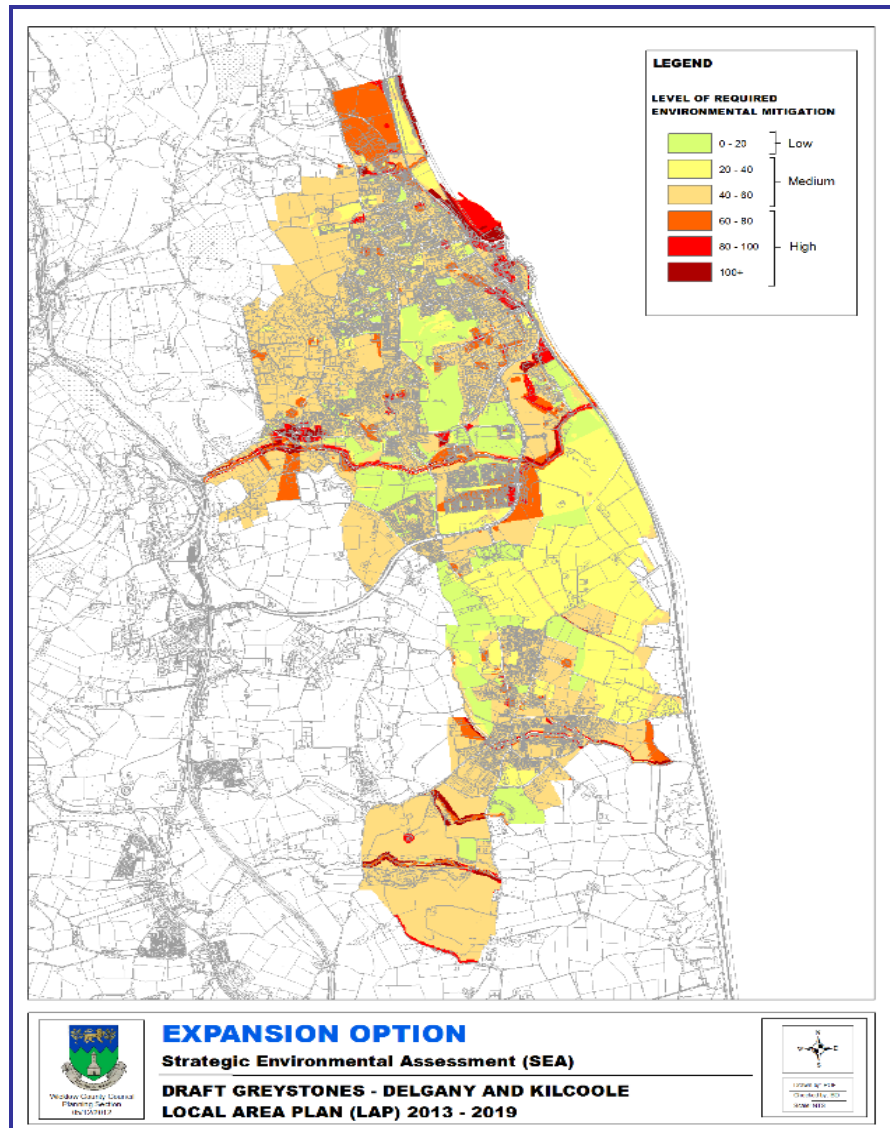


Figure 4.7 –Environmental Sensitivities-Expansion Alternative

#### **4.5 Reasons for choosing the Plan in light of the other reasonable alternatives dealt with**

##### **The measurements indicate the following:**

- ⇒ If not mitigated Alternative 3 would be likely to result in more adverse environmental impacts than each of the other two Alternatives.
- ⇒ If mitigated, Alternative 1 and 2 would be likely to result in a lesser frequency and magnitude of impacts than Alternative 3.
- ⇒ Alternative 3 is the scenario with the greatest amount of development on the fringe of the plan area

#### **4.6 The preferred Alternative:**

On the basis of the above analysis Alternative 1 and Alternative 2 would be likely to improve the status of a number of the SEOs and as a result these two alternatives emerge as the most environmentally sustainable options. If unmitigated, Alternative 3 would be likely to result in a number of adverse environmental impacts. Having regard to the aspiration of providing a balanced approach between Social, Economic and Environmental considerations, it was deemed necessary to integrate some of the elements of these alternatives in the framing of the plan. For example, the plan provides for the zoning of residential development to the north of the plan area (Blacklion) although the zoning of these lands conflicts with a number of SEOs; however the environmental objectives can largely be offset by appropriate mitigation measures as indicated in the section to follow. Taking into consideration the requirements of higher order plans (RPGs 2010 – 2022 and CDP population targets) it was considered appropriate to zone these lands as they were situated in close proximity to existing community and educational facilities.

The key areas identified as requiring mitigation relate to lands adjoining the Tree Trouts Stream, lands zoned for Employment to the south of the plan, 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 Draft Local Area Plan for Greystones Delgany and Kilcoole:** The Local Area Plan that has emerged from the Plan preparation corresponds most closely to the concentric and compact settlement pattern but also includes key sections of the other alternatives assessed.

**Variation No.3 of the Wicklow County Development Plan:** As this variation to the County Development Plan was required to ensure consistency between the Local Area Plan and the Wicklow County Development Plan, it was not considered necessary nor practical to have a number of alternatives for the variation as the extent of the variation was determined by the Local Area Plan Boundary.



## **Section 5      Monitoring Measures**

### **5.1      Introduction**

The SEA Directive requires that the significant environmental effects of the implementation of plans and programmes are monitored. This section and Section 10 of the Environmental Report puts forward proposals for monitoring the impacts of implementation of the Local Area Plan/Variation No.3. 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.

### **5.2      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 Local Area Plan / Variation No. 3 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 Local Area Plan can help work towards - which were identified with regard to the relevant legislation. The table below (5.1) illustrates that the indicators and targets, which have been selected with regard to the monitoring of the plan.

### **5.3      Sources**

In compliance with the SEA Directive and the DECLG 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 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 Record Monuments and Places, entries to the Record of Protected Structures 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.

### **5.4      Reporting**

The ongoing monitoring of the Greystones-Delgany and Kilcoole 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.

### **5.5      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.

### **5.6      Thresholds**

Thresholds at which corrective action will be considered 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 plan.

**Table 5.1 Monitoring Measures**

<b>Environmental Component</b>	<b>Environmental Objectives</b>	<b>Target</b>	<b>Indicator</b>	<b>Responsible Authority</b>
<b>Soils: Maintain quality of soils</b>	<b>SEO SOIL1:</b> Maximise the sustainable re-use of brownfield sites and maximise the use of the existing built environment	Development of brownfield sites during lifetime of the plan	Number of new developments on brownfield sites	Geological Survey of Ireland/EPA & WCC
	<b>SEO SOIL2:</b> To prevent pollution and/or contamination of soil within the plan area	No significant instances of pollution and/or contamination of soil	Number of instances of pollution and/or contamination	Geological Survey of Ireland/EPA & WCC

<p><b>Biodiversity, Flora and Fauna: Maintain and enhance biodiversity</b></p>	<p><b>SEO B1:</b> 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</p>	<p>Maintenance of favourable conservation status for all habitats and species protected under national and international legislation</p>	<p>The Conservation Status of biodiversity in the plan area as assessed through the review of relevant local records through actions of the County Wicklow Biodiversity Action Plan</p> <p>Conservation status of habitats and species as assessed under Article 10 and Article 17 of the Habitats Directive</p>	<p>NPWS/WCC</p>
<p><b>Population and Human Health: To provide for population growth on appropriate lands within a healthy, high quality environment</b></p>	<p><b>SEO PHH1:</b> Create a healthy environment</p>	<p>No spatial concentrations of health problems arising from environmental factors as a result of implementing the plan.</p>	<p>Occurrence 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>WCC/HSE</p>
	<p><b>SEO PHH2:</b> Promote a high quality living environment</p>	<p>Create a settlement pattern/sustainable mixed use development pattern</p> <p>Increase modal shift to public transport, walking and cycling</p>	<p>Amount of mixed use developments</p> <p>Amount of cycleways and pathways</p> <p>Regularity of trains</p>	<p>WCC/CSO/Department of Education and Skills/HSE/Department of Jobs, Enterprise and Innovation/Live Register/NTA</p>



		Access to health and education facilities Access to employment	The number of schools and health care facilities Amount of jobs	
<b>Climatic and Air Factors: To achieve good air quality and</b>	<b>SEO AQ1:</b> To reduce travel related greenhouse emissions and other noxious emissions to air	An increase in the percentage of the population travelling to work or school by public transport or non-mechanical means	Percentage of population within the plan area travelling to work or school by public transport or non-mechanical means	NTA/WCC & EPA
		AQ1(2) A decrease in the average distance travelled to work to work or by school by the population of the plan area	AQ1(2) Average distance travelled to work or school by the population of the plan area	
	<b>SEOAQ2:</b> Achieve Environmentally friendly building designs	Compliance with Part L(Amendment) of the Building Energy Regulations S.I.No.259 of 2008	Amount of properties meeting targets.	WCC

<p><b>Water Resources: 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.</b></p>	<p><b>SEO W-S:</b> To maintain and improve, where possible, the quality of Streams, Rivers, Lakes and other surface waters within and adjoining the plan area in line with the target dates set out in the Eastern River Basin Management Plan 2009-2015.</p>	<p>To achieve/maintain good status in all bodies of surface waters by 2015 and to not knowingly allow deterioration in the status of any surface water.</p>	<p>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>EPA, WCC, Eastern River Basin District Protect</p>
	<p><b>SEO W-G:</b> To prevent pollution and contamination of ground waters</p>	<p>Compliance with Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC</p>	<p>Groundwater Quality standards and Thresholds Values under Directive 2006/11/ec</p>	<p>EPA, WCC, Eastern River Basin District Protect</p>
	<p><b>SEO W-F:</b> To prevent development on lands which pose –or are likely to pose in the future-a significant flood risk</p>	<p>(1). Minimize 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. (2). All new developments to incorporate SUDS design</p>	<p>(1). Number of developments granted planning permission on lands which pose or are likely to pose in the future a significant flood risk. (2). Provision of SUDS Compliant drainage plans for proposed developments in study area</p>	<p>(1). EPA, WCC, Eastern River Basin District Protect. (2). OPW/WCC</p>
<p><b>Material Assets: Make most efficient use of the existing Infrastructure, Wastewater</b></p>	<p><b>SEO MAT 1:</b> To make best use of existing water services Infrastructure and to</p>	<p>Promoting development at locations served by existing water services</p>	<p>The percentage of houses connected to the main infrastructure</p>	<p>WCC/Department of Environment, Community and Local</p>

<b>and Water Infrastructure</b>	provide/maintain a safe and secure drinking water supply	infrastructure	systems and the percentage of houses served by septic tank.	Government
	<b>SEO MAT 2:</b> Make the best use of existing road and transportation infrastructure	Promoting development at locations served by existing road and transportation infrastructure	Amount of new developments located along existing roads and located within reach of high quality public transport links.	WCC/NTA
<b>Cultural Heritage-Protection and conservation of architectural and archaeological heritage</b>	<b>SEO AH1:</b> To protect the archaeological heritage of Greystones-Delgany and Kilcoole including entries to the Record of Monuments and Places and in the context of their surrounding landscapes where relevant	Protect entries to the Record of Monuments and Places (and in the context of their surrounding landscapes where relevant)	The number of deletions from the RMP during the plan period.	WCC/Department of Arts, Heritage and the Gaeltacht
	<b>SEO AH2:</b> To preserve and protect the special interest and character of Greystones-Delgany and Kilcoole architectural heritage including entries to the Record of Protected Structures and their context within the surrounding landscape where relevant	Protect entries to the Record of Protected Structures and/or their context within the surrounding landscapes where relevant.	The number of deletions from the RPS during the plan period.	WCC/Department of Arts, Heritage and the Gaeltacht

<b>Protect scenic landscapes</b>	<b>SEO L1:</b> To protect and avoid significant adverse impacts on the landscape of the plan area	No significant disruption of the landscape resulting from development which is granted permission under the plan.	Number of complaints received from statutory consultees regarding avoidable impacts on the landscape resulting from development which is granted planning permission under the plan	WCC
	<b>SEO L2</b> The protection of listed views and prospects	No significant disruption of designated views and prospects	Number of developments permitted located within the designated views and prospects	WCC