

# SEA STATEMENT

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FOR

**VARIATIONS  
TO THE**

**NORTH TIPPERARY COUNTY DEVELOPMENT PLAN  
(AS VARIED)**

**AND THE**

**SOUTH TIPPERARY COUNTY DEVELOPMENT PLAN  
(AS VARIED)**

**STRATEGIC ENVIRONMENTAL ASSESSMENT**

**for: Tipperary County Council**

Civic Offices,  
Nenagh,  
County Tipperary



Comhairle Contae Thiobraid Árann  
Tipperary County Council

**by: CAAS Ltd.**

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# Section 1 Introduction

## 1.1 Introduction and Legislative Context

This is the Strategic Environmental Assessment (SEA) Environmental Report for the Variations to the South Tipperary County Development Plan (as varied) and North Tipperary County Development Plan (as varied).

SEA is a systematic process of predicting and evaluating the likely environmental effects of implementing a 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.

Directive 2001/42/EC of the European Parliament and of the Council of Ministers, of 27<sup>th</sup> 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 tourism. The SEA Directive was transposed into Irish Law through the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 and the Planning and Development (Strategic Environmental Assessment) Regulations 2004. The Regulations have been amended by the European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011 and the Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011.

## 1.2 Content of the SEA Statement

Where SEA is undertaken, the Regulations require that a Statement is made available to the public and the competent environmental

authorities after the finalisation of the Variations. This Statement is referred to as an SEA Statement.

The SEA Statement is required to include information summarising:

- a) how environmental considerations have been integrated into the Variations;
- b) how the following have been taken into account during the preparation of the Variations:
  - the environmental report,
  - submissions and observations made to the planning authority on the Proposed Variations and Environmental Report, and
  - any transboundary consultations (these are not relevant to this SEA).
- c) the reasons for choosing the Variations 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 Variations.

## 1.3 Implications of SEA for the Variations

SEA has been undertaken on the Variations and the findings of the SEA are expressed in an Environmental Report, the first published version of which accompanied the Proposed Variations on public display. The Environmental Report was updated in order to take account of:

- Recommendations contained in submissions; and
- Changes to the Proposed Variations that were made on foot of submissions.

Tipperary County Council have taken into account the findings of all relevant SEA output during their consideration of the Proposed Variations and before the Variations were adopted.

## Section 2 How Environmental Considerations were integrated into the Variations

### 2.1 Introduction

Environmental considerations were integrated into the Variations through:

1. Consultations;
2. Communication of environmental sensitivities throughout the SEA process;
3. Appropriate Assessment;
4. Consideration of alternatives;
5. Integration of environmental considerations; and
6. Integration of individual SEA and AA provisions into the Variations.

### 2.2 Consultations

As environmental authorities identified under the Planning and Development (SEA) Regulations, as amended, the following authorities were sent SEA scoping notices 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 the Tipperary County Council: Environmental Protection Agency, Department of Communications, Energy and Natural Resources, Department of Agriculture, Fisheries and Food, Department of the Environment, Community and Local Government, Department of Arts, Heritage and the Gaeltacht and all adjoining planning authorities.

Detail on submissions made on foot of the SEA scoping notice is provided under Section 3.2.

Further detail is provided on submissions that were made on the Proposed Variations and SEA Environmental Report while they were on public display (see Section 3.3).

### 2.3 Communication of environmental sensitivities throughout the SEA process

Environmental considerations were integrated into the Variations before they were placed on public display. Individual sensitivities that were mapped by the SEA and considered by the

Planning Team preparing the Variations included the following:

- European Sites (Special Areas of Conservation and Special Protection Areas)
- Natural Heritage Areas, proposed Natural Heritage Areas and Margaritifera Sensitive Areas
- Soil type sensitivities
- The Status of Surface and Ground Waters
- Various entries to the Water Framework Directive's Register of Protected Areas
- Aquifer Productivity and Vulnerability
- Source Protection Areas
- Water Services Capacity and Demand
- Landscape sensitivities
- Land cover sensitivities
- Cultural heritage (archaeological and architectural) sensitivities

A number of these sensitivities are indicated on Figure 2.1 and Figure 2.2

### 2.4 Appropriate Assessment

Stage 2 Appropriate Assessment (AA) has been undertaken alongside the Variations. The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC).

The AA concluded that the Variations will not affect the integrity of the Natura 2000 network<sup>1</sup>.

The preparation of the Variations, SEA and AA has taken place concurrently and the findings of the AA have informed both the Variations and the SEA.

### 2.5 Consideration of Alternatives

Consideration of and integration of environmental considerations into alternatives, including sequencing, (see Section 4) and ultimately into the Variations will contribute

<sup>1</sup> Except as provided for in Section 6(4) of the Habitats Directive, viz. There must be:  
(a) no alternative solution available;  
(b) imperative reasons of overriding public interest for the plan/programme/project to proceed; and  
(c) adequate compensatory measures in place.

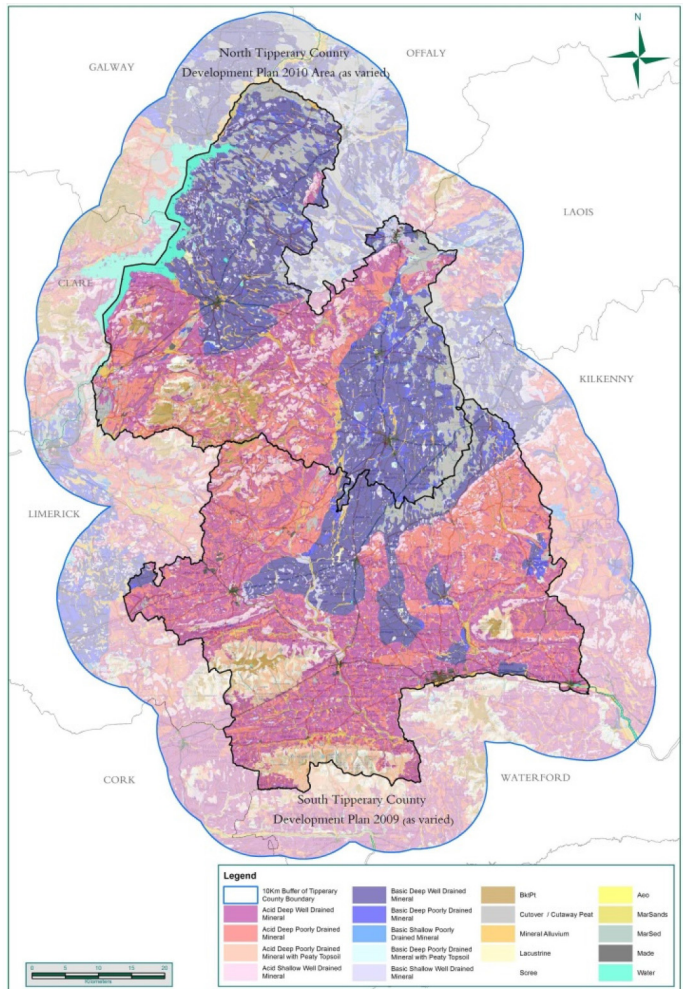
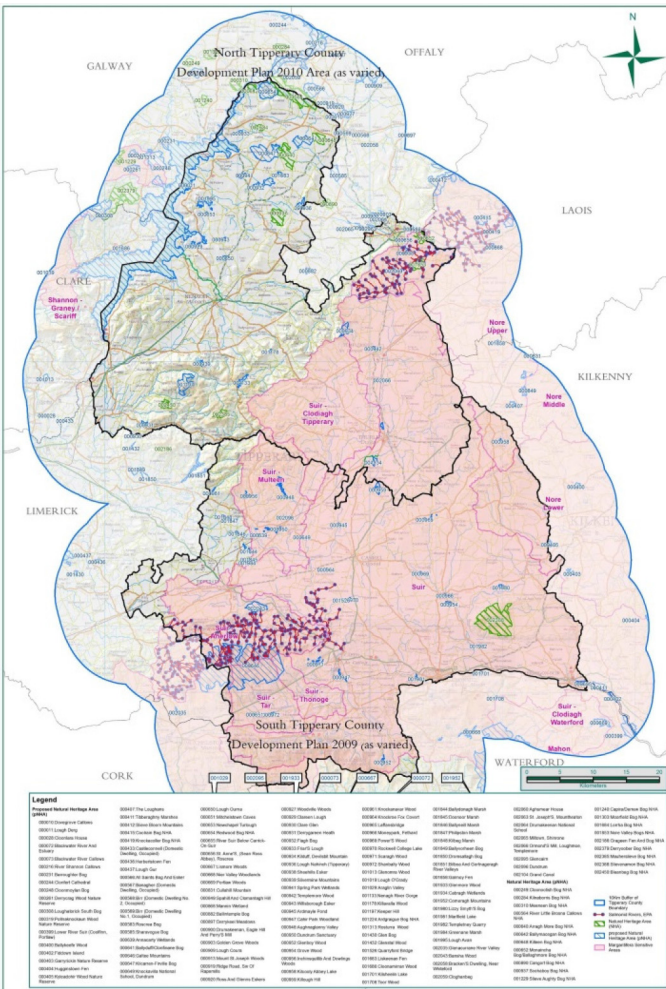
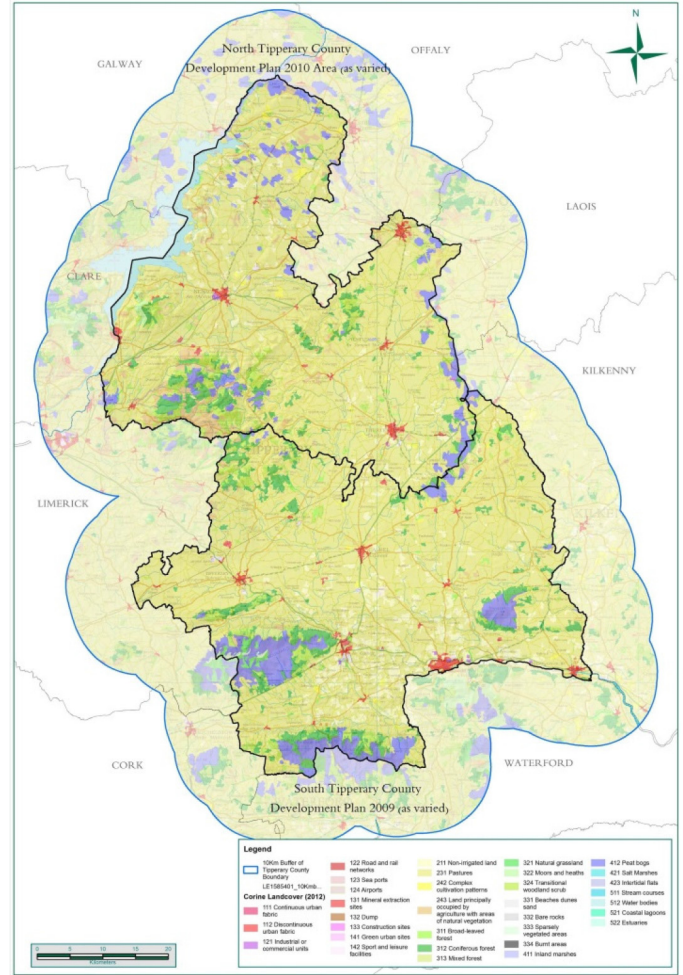
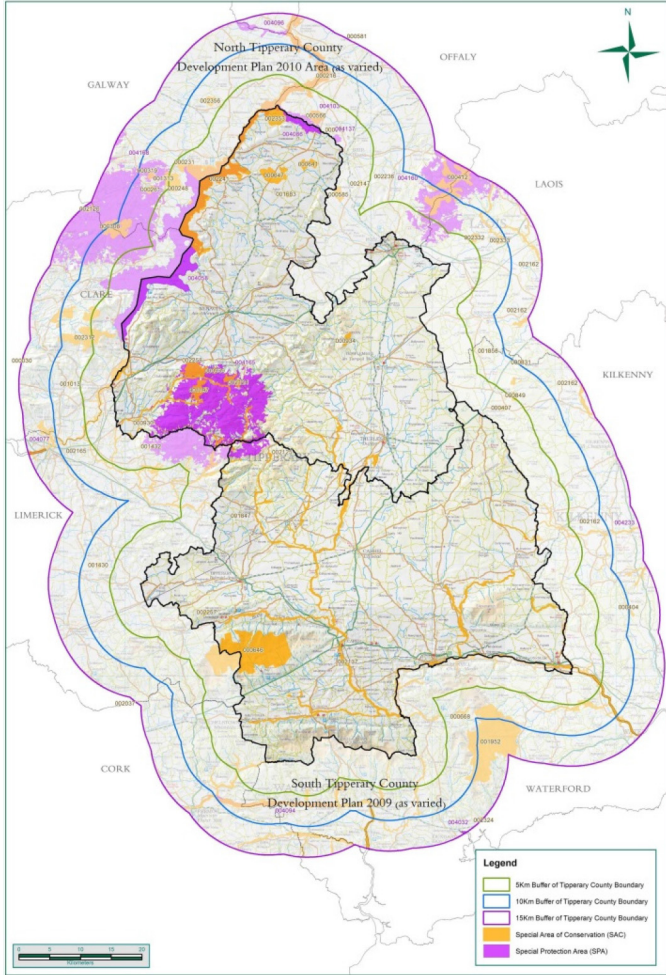
towards the protection and management of the environment over the lifetime of the Variations.

## **2.6 Integration of individual SEA and AA provisions into the Variations**

Various provisions have been integrated into the text of the Variations through the Variations-preparation and SEA and AA processes. These include the measures that are detailed on Table 2.1.

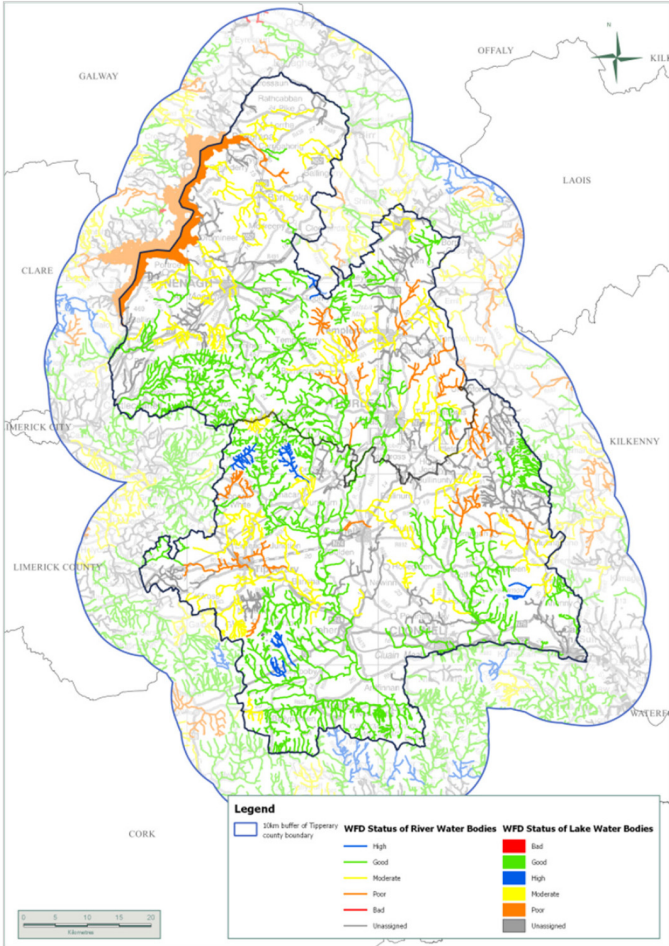


**Figure 2.1 Selection of Individual Environmental Sensitivities taken into account (1)**

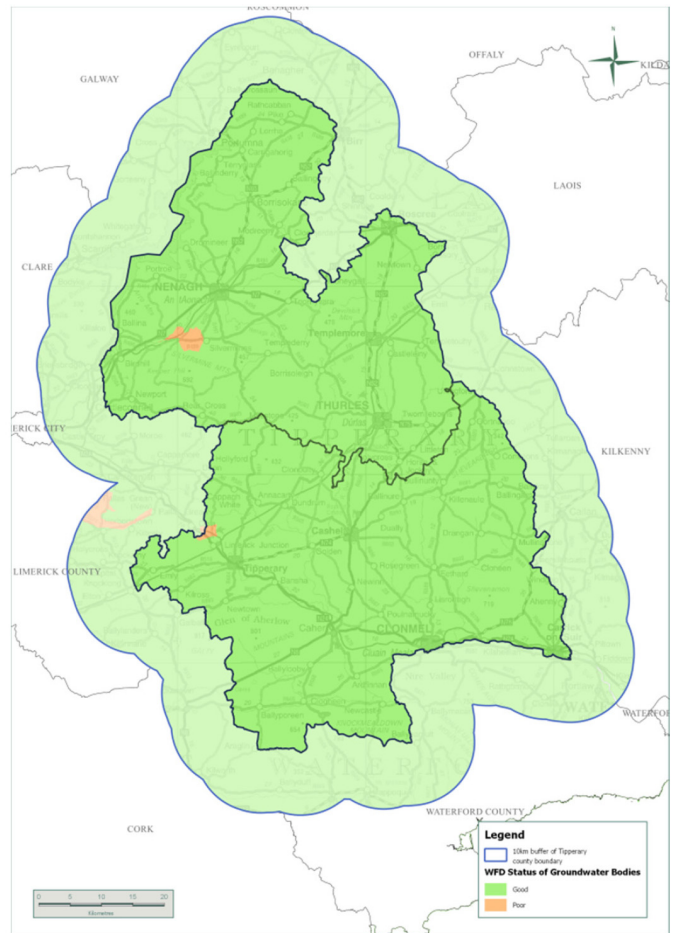




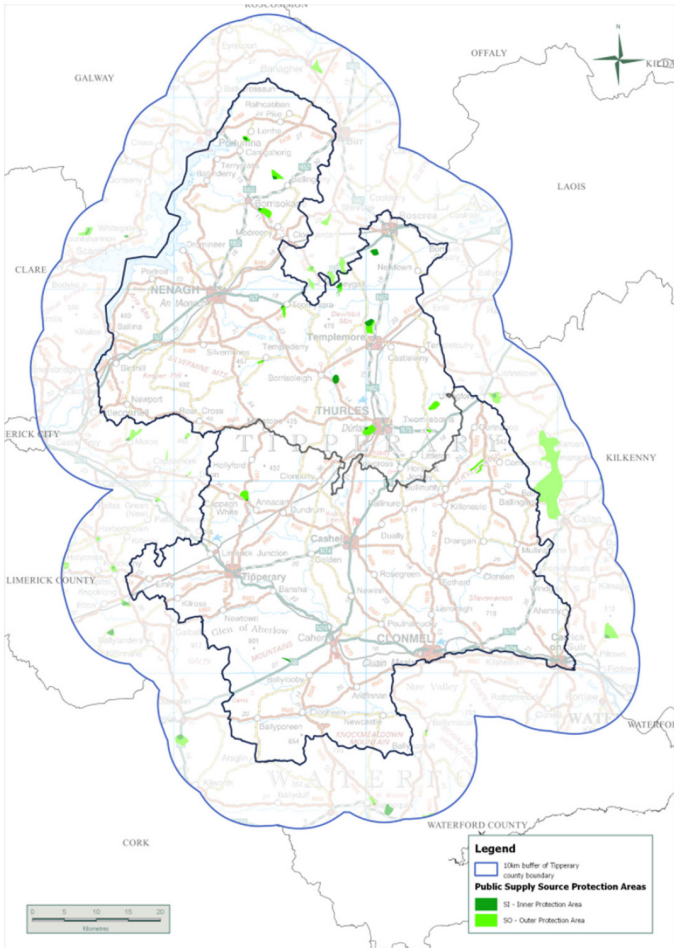
**Figure 2.2 Selection of Individual Environmental Sensitivities taken into account (2)**



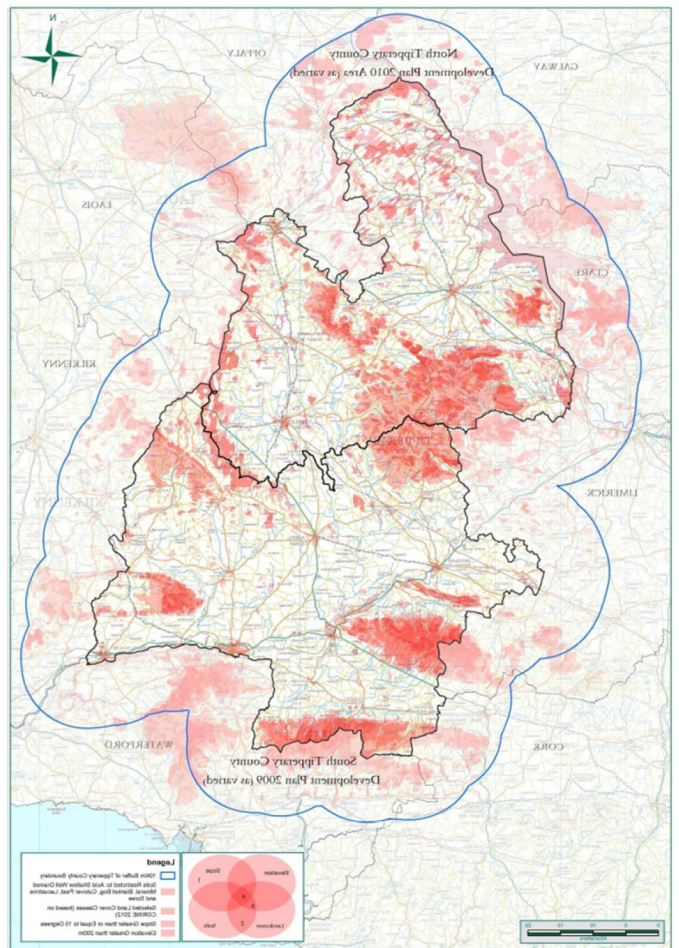
**WFD Status of Surface Water Bodies**



**WFD Status of Ground Water Bodies**



**Source Protection Areas**



**Landscape Sensitivities**

**Table 2.1 Environmental Effects and Selected Mitigation**

Environmental Component <sup>2</sup>	Potential Effect, if unmitigated	Individual SEA and AA provisions <i>The Variations requires that developments shall demonstrate compliance with the provisions laid out below as relevant and appropriate.</i>	Mitigating provisions already included within the existing Plan	Residual Adverse Effects
All	<ul style="list-style-type: none"> <li>See those listed below</li> </ul>	<p><b>Construction and Environmental Management Plans</b></p> <p>Construction Environment Management Plans (CEMPs) shall be prepared in advance of the construction of larger projects and implemented throughout. Such plans shall incorporate relevant mitigation measures which have been integrated into the Plan and any lower tier Environmental Impact Statement or Appropriate Assessment. CEMPs typically provide details of intended construction practice for the proposed development, including:</p> <ol style="list-style-type: none"> <li>location of the sites and materials compound(s) including area(s) identified for the storage of construction refuse,</li> <li>location of areas for construction site offices and staff facilities,</li> <li>details of site security fencing and hoardings,</li> <li>details of on-site car parking facilities for site workers during the course of construction,</li> <li>details of the timing and routing of construction traffic to and from the construction site and associated directional signage,</li> <li>measures to obviate queuing of construction traffic on the adjoining road network,</li> <li>measures to prevent the spillage or deposit of clay, rubble or other debris,</li> <li>alternative arrangements to be put in place for pedestrians and vehicles in the case of the closure of any public right of way during the course of site development works,</li> <li>details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels,</li> <li>containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained; such bunds shall be roofed to exclude rainwater,</li> <li>disposal of construction/demolition waste and details of how it is proposed to manage excavated soil,</li> <li>a water and sediment management plan, providing for means to ensure that surface water runoff is controlled such that no silt or other pollutants enter local water courses or drains,</li> <li>details of a water quality monitoring and sampling plan.</li> <li>if peat is encountered - a peat storage, handling and reinstatement management plan.</li> <li>measures adopted during construction to prevent the spread of invasive species (such as Japanese Knotweed).</li> <li>appointment of an ecological clerk of works at site investigation, preparation and construction phases.</li> </ol>	-	<ul style="list-style-type: none"> <li>See those listed below</li> </ul>
<b>Biodiversity and flora and fauna</b>	<ul style="list-style-type: none"> <li>Arising from both construction and operation of development and associated infrastructure: loss of/damage to biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and</li> </ul>	<p><b>Protection of Biodiversity including the Network of European Sites</b></p> <p>Proposed developments shall contribute, as appropriate, towards the protection of designated ecological sites including candidate Special Areas of Conservation (cSACs) and Special Protection Areas (SPAs); Wildlife Sites (including Natural Heritage Areas, proposed Natural Heritage Areas and Nature Reserves); Salmonid Waters; Flora Protection Order sites; Wildfowl Sanctuaries (see S.I. 192 of 1979); Freshwater Pearl Mussel catchments; and Tree Preservation Orders (TPOs).</p> <p>Proposed developments shall contribute towards compliance with relevant EU Environmental Directives and applicable National Legislation, Policies, Plans and Guidelines, including the following and any updated/superseding documents:</p> <ul style="list-style-type: none"> <li>EU Directives, including the Habitats Directive (92/43/EEC, as amended)<sup>3</sup>, the Birds Directive (2009/147/EC)<sup>4</sup>, the Environmental Liability Directive (2004/35/EC)<sup>5</sup>, the Environmental Impact</li> </ul>	<p><b>POLICY LH5</b>  <b>POLICY LH6</b>  <b>POLICY LH7</b>  <b>POLICY LH9</b>  <b>POLICY LH11</b>  <b>OBJECTIVE SO7-2</b></p>	<ul style="list-style-type: none"> <li>Loss of an extent of non-protected habitats and species arising from the replacement of semi-natural land covers with artificial surfaces.</li> <li>Losses or damage to ecology (these would be in compliance with relevant legislation).</li> </ul>

<sup>2</sup> The SEA Directive identifies a number of environmental topics which must be considered in the assessments being undertaken for plans and programmes. These topics are listed in this column and comprise biodiversity and flora and fauna, population and human health, soil, water, air and climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape.

<sup>3</sup> Including Annex I habitats, Annex II species and their habitats and Annex IV species and their breeding sites and resting places (wherever they occur).



SEA Statement for Variations to the North Tipperary CDP and South Tipperary CDP

Environmental Component <sup>2</sup>	Potential Effect, if unmitigated	<p align="center"><b>Individual SEA and AA provisions</b></p> <p align="center"><i>The Variations requires that developments shall demonstrate compliance with the provisions laid out below as relevant and appropriate.</i></p>	Mitigating provisions already included within the existing Plan	Residual Adverse Effects
	<p>non-designated habitats; and disturbance to biodiversity and flora and fauna</p> <ul style="list-style-type: none"> <li>Habitat loss, fragmentation and deterioration, including patch size and edge effects.</li> <li>Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species.</li> </ul>	<p>Assessment Directive (2011/92/EU as amended by 2014/52/EU), the Water Framework Directive (2000/60/EC) and the Strategic Environmental Assessment Directive (2001/42/EC).</p> <ul style="list-style-type: none"> <li>National legislation, including the Wildlife Acts-2010<sup>6</sup>, the European Communities (Environmental Impact Assessment) Regulations 1989 (SI No. 349 of 1989) (as amended), the European Union (Water Policy) Regulations 2003 (as amended), the Planning and Development Act 2000 (as amended), the European Communities (Birds and Natural Habitats) Regulations 2011 (SI No. 477 of 2011) and the European Communities (Environmental Liability) Regulations 2008<sup>7</sup>.</li> <li>National policy guidelines (including any clarifying Circulars or superseding versions of same), including the Landscape and Landscape Assessment Draft Guidelines 2000, the Environmental Impact Assessment Sub-Threshold Development Guidelines 2003, Strategic Environmental Assessment Guidelines 2004 and the Appropriate Assessment Guidance 2010.</li> <li>Catchment and water resource management Plans, including the relevant River Basin Management Plan(s).</li> <li>Biodiversity Plans and guidelines, including Actions for Biodiversity 2011-2016: Ireland's 2<sup>nd</sup> National Biodiversity Plan (including any superseding version of same).</li> <li>Ireland's Environment 2016 (EPA, 2016, including any superseding versions of same), and to make provision where appropriate to address the report's goals and challenges.</li> </ul> <p><b>Appropriate Assessment</b></p> <p>All projects and plans arising from the Plan (including any associated improvement works or associated infrastructure) will be screened for the need to undertake Appropriate Assessment under Article 6 of the Habitats Directive. A project will only be authorised after the competent authority has ascertained, based on scientific evidence, Screening for Appropriate Assessment, and a Stage 2 Appropriate Assessment where necessary, that:</p> <ul style="list-style-type: none"> <li>The project will not give rise to significant adverse direct, indirect or secondary effects on the integrity of any European Site (either individually or in combination with other plans or projects); or</li> <li>The project will have significant adverse effects on the integrity of any European Site (that does not host a priority natural habitat type/and or a priority species) but there are no alternative solutions and the project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of the network of European Sites; or</li> <li>The project will have a significant adverse effect on the integrity of any European site (that hosts a natural habitat type and/or a priority species) but there are no alternative solutions and the project must nevertheless be carried out for imperative reasons for overriding public interest, restricted to reasons of human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of the network of European Sites.</li> </ul>		

<sup>4</sup> Including Annex I species and other regularly occurring migratory species, and their habitats (wherever they occur).

<sup>5</sup> Including protected species and natural habitats.

<sup>6</sup> Including species of flora and fauna and their key habitats.

<sup>7</sup> Including protected species and natural habitats.

SEA Statement for Variations to the North Tipperary CDP and South Tipperary CDP

Environmental Component <sup>2</sup>	Potential Effect, if unmitigated	<p align="center"><b>Individual SEA and AA provisions</b></p> <p align="center"><i>The Variations requires that developments shall demonstrate compliance with the provisions laid out below as relevant and appropriate.</i></p>	Mitigating provisions already included within the existing Plan	Residual Adverse Effects
		<p><b>Annex I Species</b> The developer should liaise with the National Parks and Wildlife Services if Annex I species are present at or in the vicinity of the site.</p> <p><b>European Sites</b> No projects giving rise to significant cumulative, direct, indirect or secondary impacts on European 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 the Plan (either individually or in combination with other plans or projects<sup>8</sup>).</p> <p><b>Freshwater Pearl Mussel</b> Applications for development shall be accompanied by an assessment of potential impacts, mitigation and residual impacts upon the freshwater pearl mussel. Cumulative impacts should be considered in this assessment.</p> <p><b>Biodiversity and Ecological Networks</b></p> <ul style="list-style-type: none"> <li>• Proposed developments shall contribute towards the protection and enhancement of biodiversity and ecological connectivity, including woodlands, trees, hedgerows, semi-natural grasslands, rivers, streams, wetlands, other landscape features and associated wildlife where these form part of the ecological network and/or may be considered as ecological corridors or stepping stones in the context of Article 10 of the Habitats Directive.</li> <li>• Where trees or hedgerows have to be removed there should be suitable planting of native species in mitigation. Where possible hedgerows and trees should not be removed during the nesting season (i.e. March 1st to August 31st).</li> <li>• Birds nests can only be intentionally destroyed under licence issued under the Wildlife Acts 1976-2000.</li> <li>• Bat roosts may be present in trees, buildings and bridges. Bat roosts can only be destroyed under licence under the Wildlife Acts and a derogation under the Habitats Regulations and such a licence would only be given if suitable mitigation measures were implemented.</li> <li>• Applications for development shall be accompanied by an assessment of potential impacts, mitigation and residual impacts upon the otters (including potential interactions with food sources and aquatic and terrestrial habitats), bats (including potential interactions with roosts, foraging sites and lighting) and birds (including flight paths)</li> </ul> <p><b>Non-Designated Sites</b> Proposed developments shall contribute towards the protection of non-designated habitats and species, as appropriate.</p> <p><b>Riparian Zone and Waterbodies and Watercourses</b> Proposed developments shall contribute towards the protection of waterbodies and watercourses, including rivers, streams, associated undeveloped riparian strips, wetlands and natural floodplains, from inappropriate development.</p> <p><b>Alien invasive species</b> Cooperate as relevant with the National Parks and Wildlife Service in protecting against the accidental introduction of such species during development.</p>		

<sup>8</sup> Except as provided for in Section 6(4) of the Habitats Directive, viz. There must be:

- a) no alternative solution available,
- b) imperative reasons of overriding public interest for the project to proceed; and
- c) Adequate compensatory measures in place.

SEA Statement for Variations to the North Tipperary CDP and South Tipperary CDP

Environmental Component <sup>2</sup>	Potential Effect, if unmitigated	<p align="center"><b>Individual SEA and AA provisions</b></p> <p align="center"><i>The Variations requires that developments shall demonstrate compliance with the provisions laid out below as relevant and appropriate.</i></p>	Mitigating provisions already included within the existing Plan	Residual Adverse Effects
		<p><b>Fisheries</b> Where potential impacts on fishery components (such as water quality, surface water hydrology, aquatic habitats including spawning and nursery grounds and the riparian zone) are identified, Inland Fisheries Ireland shall be consulted in order to ensure that impacts are mitigated in compliance with relevant legislation.</p> <p><b>Roads</b> Where roads are being improved and upgraded the opportunity will be taken where possible to address inadequate existing mitigation measures or impeded passage, for example the inclusion of mammal underpasses or dry ledges where there is poor culvert design).</p> <p><b>Amenity/Tourism/Recreation Development</b> It is normal practice in the Council to ensure that:</p> <ul style="list-style-type: none"> <li>• Any increase in visitor numbers are managed to avoid significant negative effects including loss of habitat and disturbance; and</li> <li>• Any projects are a suitable distance from the edge of sensitive habitats such as rivers and streams<sup>9</sup>.</li> </ul> <p><b>Drainage or Reclamation of Wetlands</b> The Council will implement the relevant parts of the Planning and Development (Amendment) (No. 2) Regulations 2011 and the European Communities (Amendment to Planning and Development) Regulations 2011 which require planning permission to be applied for where the area impacted by works relating to the drainage or reclamation of a wetland exceeds 0.1 hectares or where such works may have a significant effect on the environment. Such planning applications would need to be supported by an Appropriate Assessment where necessary.</p> <p><b>Light Pollution</b> To ensure that external lighting and lighting schemes are designed so that light spillage is minimised, thereby protecting the amenities of nearby properties and wildlife, including protected species.</p>		
<b>Population and human health</b>	<ul style="list-style-type: none"> <li>• Potential interactions if effects upon environmental vectors such as water and air are not mitigated</li> </ul>	<p><b>Human Health</b> Where proposed developments would be likely to have a significant adverse effect on the amenities of the area through pollution by noise, fumes, odours, dust, grit or vibration, or cause pollution of air, water and/or soil, the Council shall ensure the introduction of mitigation measures in order to eliminate adverse environmental impacts or reduce them to an acceptable operating level.</p> <p><b>Radon</b> Ensure the implementation of the specific guidance on radon prevention measures for new homes as contained within the existing Building Regulations (including any updated/superseding regulations that may be published within the lifetime of this Plan).</p>	<p><b>POLICY TI12</b> <b>POLICY TI13</b> <b>POLICY ED13</b></p>	<ul style="list-style-type: none"> <li>• Potential interactions with residual effects on environmental vectors. This has been mitigated by provisions which have been integrated into the Plan, including those relating to sustainable mobility and infrastructural provision.</li> </ul>
<b>Soil</b>	<ul style="list-style-type: none"> <li>• Damage to the hydrogeological and ecological function of the soil resource.</li> </ul>	<p><b>Geological Sites</b> Proposed developments shall contribute shall contribute towards the protection and maintenance of the character, integrity and conservation value of features or areas of geological interest.</p> <p><b>Soil</b> Proposed developments shall contribute Ensure that adequate soil pollution prevention measures are undertaken where appropriate.</p> <p><b>Soil and Contamination</b> Ensure that adequate soil pollution prevention measures are undertaken where appropriate. Adequate and appropriate investigations shall be carried out into the nature and extent of any soil and groundwater</p>	<p><b>POLICY LH10</b> <b>OBJECTIVE SO7-5</b></p>	<ul style="list-style-type: none"> <li>• Loss of an extent of soil function arising from the replacement of semi-natural land covers with artificial surfaces.</li> </ul>

<sup>9</sup> In general, pedestrian and cycle routes need ecological assessment in their planning and design and should not target sensitive ecological sites or parts of sites, as such routes have potential for disturbance to habitats and species, including as a result of noise, lighting, etc. Otherwise their development may not be consistent with nature conservation objectives and legal compliance requirements.

SEA Statement for Variations to the North Tipperary CDP and South Tipperary CDP

Environmental Component <sup>2</sup>	Potential Effect, if unmitigated	<p align="center"><b>Individual SEA and AA provisions</b></p> <p align="center"><i>The Variations requires that developments shall demonstrate compliance with the provisions laid out below as relevant and appropriate.</i></p>	Mitigating provisions already included within the existing Plan	Residual Adverse Effects
		contamination and the risks associated with site development work, where brownfield development is proposed.		
<b>Water</b>	<ul style="list-style-type: none"> <li>• Adverse impacts upon the status of water bodies arising from changes in quality, flow and/or morphology.</li> <li>• Increase in the risk of flooding.</li> </ul>	<p>Also see measures under soil above and material assets below.</p> <p><b>Water Framework Directive and associated legislation</b></p> <p>Proposed developments shall contribute towards the protection of existing and potential water resources, and their use by humans and wildlife, including rivers, streams, wetlands, groundwater and associated habitats and species in accordance with the requirements and guidance in the EU Water Framework Directive 2000 (2000/60/EC), the European Union (Water Policy) Regulations 2003 (as amended), the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (SI No. 272 of 2009), the Groundwater Directive 2006/118/EC and the European Communities Environmental Objectives (groundwater) Regulations, 2010 (S.I. No. 9 of 2010) and other relevant EU Directives, including associated national legislation and policy guidance (including any superseding versions of same).</p> <p><b>River Basin Management Plan(s)</b></p> <p>Proposed developments shall support the implementation of the relevant recommendations and measures as outlined in the relevant River Basin Management Plan(s) (including the upcoming national River Basin Management Plan), and associated Programmes of Measures, as well as relevant recommendations contained in the Water Quality in Ireland 2010-2012 (EPA, 2015, and any updated/superseding document). These recommendations include the need for a catchment management approach to protecting and managing waters to maintain and improve water quality status. Proposals for development shall not have an unacceptable impact on the water environment, including surface waters, groundwater quality and quantity, river corridors and associated woodlands.</p> <p><b>Constrained Land Use Strategy – Flooding</b></p> <p>This Constrained Land Use Strategy that will contribute towards flood risk management at various locations, has been integrated into Section 5 of the Settlement Plan Guide</p>	<p><b>POLICY LH8</b>  <b>POLICY LH12</b>  <b>POLICY ED6</b>  <b>POLICY TI11</b>  <b>POLICY CEF8</b>  <b>POLICY TI9</b></p>	<ul style="list-style-type: none"> <li>• Increased loadings as a result of development to be in compliance with River Basin Management Plans.</li> <li>• Flood related risks remain due to uncertainty with regard to extreme weather events.</li> </ul>
<b>Air and climatic factors</b>	<ul style="list-style-type: none"> <li>• Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts).</li> <li>• Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts)</li> <li>• Increases in waste levels.</li> </ul>	<p><b>CAFÉ Directive</b></p> <p>Promote the preservation of best ambient air quality compatible with sustainable development in accordance with the EU Ambient Air Quality and Cleaner Air for Europe (CAFE) Directive (2008/50/EC) and ensure that all air emissions associated with new developments are within Environmental Quality Standards as out in the Air Quality Standards Regulations 2011 (SI No. 180 of 2011) (or any updated/superseding documents).</p> <p><b>National Climate Change Adaptation Framework and Mitigation Plan</b></p> <p>To implement relevant provisions contained in the 'National Climate Change Adaptation Framework - Building Resilience to Climate Change' (DECLG, 2012) and support the recommendations of the National Mitigation Plan (in particular aspects relating to land use, transport and energy efficiency).</p> <p><b>Green Infrastructure</b></p> <p>Encourage and facilitate, in consultation with relevant stakeholders, the development of green infrastructure that recognises the synergies that can be achieved with regard to the following:</p> <ul style="list-style-type: none"> <li>• Provision of open space amenities</li> <li>• Sustainable management of water</li> <li>• Protection and management of biodiversity</li> <li>• Protection of cultural heritage</li> <li>• Protection of protected landscape designations.</li> </ul>	<p><b>POLICY CEF1</b></p>	<ul style="list-style-type: none"> <li>• Residual wastes to be disposed of in line with higher level waste management policies.</li> </ul>



SEA Statement for Variations to the North Tipperary CDP and South Tipperary CDP

Environmental Component <sup>2</sup>	Potential Effect, if unmitigated	<p align="center"><b>Individual SEA and AA provisions</b></p> <p align="center"><i>The Variations requires that developments shall demonstrate compliance with the provisions laid out below as relevant and appropriate.</i></p>	Mitigating provisions already included within the existing Plan	Residual Adverse Effects
<p><b>Material Assets</b></p>	<ul style="list-style-type: none"> <li>Emissions to air including greenhouse gas emissions and other emissions.</li> </ul>	<p><b>Irish Water</b> Collaborate with and support, as relevant and appropriate, Irish Water in its new role as the lead authority for water services.</p> <p><b>Sufficient Capacity</b> Development will only be permitted in instances where there is sufficient capacity in the public water and waste water infrastructure.</p> <p><b>Waste Water Treatment or Network Issues</b> Tipperary County Council will seek to collaborate with Irish Water to resolve any waste water treatment or network issues. These issues will include those relating to the following:</p> <ul style="list-style-type: none"> <li>Waste water treatment plant capacity;</li> <li>Waste water treatment plant operating issues; and</li> <li>Waste water collection network issues including infiltration.</li> </ul> <p><b>Focus on Urban Waste Water Discharges in Ireland</b> In conjunction with Irish Water, implement relevant recommendations set out in the EPA (2016) publication Urban Waste Water Treatment in 2015 (and any subsequent update).</p> <p><b>Urban Waste Water Treatment Regulations</b> Collaborate with Irish Water in contributing towards compliance with the relevant provisions of the Urban Waste Water Treatment Regulations 2001 and 2004 and the Waste Water Discharge (Authorisation) Regulations 2007.</p> <p><b>Drinking Water Regulations</b> Collaborate with Irish Water in contributing towards compliance with the European Communities (Drinking Water) Regulations (No. 2) 2007 and compliance of water supplies comply with the 48 parameters identified in these Regulations.</p> <p><b>The Provision and Quality of Drinking Water in Ireland</b> The Council, in conjunction with Irish Water, shall have regard to the EPA (2016) publication Drinking Water Report for Public Water Supplies 2015 (and any subsequent update) in the establishment and maintenance of water sources in the County.</p> <p><b>EPA's Remedial Action List</b> The Council, in conjunction with Irish Water, shall undertake recommendations made by the EPA arising from any failure to meet drinking water standards and any enlistment on the EPA's Remedial Action List.</p> <p><b>Construction Waste</b> Construction wastes arising will be managed and disposed of in a way that ensures the provisions of the Waste Management Acts and new Southern Waste Management Plan. Construction Waste Management Plans will be implemented where relevant to minimise waste and ensure correct handling and disposal of construction waste streams in accordance with the Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects, Department of the Environment, July 2006.</p> <p><b>Waste Creation</b> Proposed developments shall support the minimisation of waste creation and promote a practice of reduce, reuse and recycle where possible.</p> <p><b>Waste Disposal</b> Proposed developments shall safeguard the environment by seeking to ensure that residual waste is disposed of appropriately.</p> <p><b>Construction and Environmental Management Plans</b> see top of this table</p>	<p><b>POLICY T18</b> <b>POLICY T16</b> <b>POLICY T17</b> <b>POLICY T110</b></p>	<ul style="list-style-type: none"> <li>An extent of travel related greenhouse gas and other emissions to air. This has been mitigated by provisions which have been integrated into the Plan, including those relating to sustainable mobility.</li> </ul>

SEA Statement for Variations to the North Tipperary CDP and South Tipperary CDP

Environmental Component <sup>2</sup>	Potential Effect, if unmitigated	<p align="center"><b>Individual SEA and AA provisions</b></p> <p align="center"><i>The Variations requires that developments shall demonstrate compliance with the provisions laid out below as relevant and appropriate.</i></p>	Mitigating provisions already included within the existing Plan	Residual Adverse Effects
<b>Cultural Heritage</b>	<ul style="list-style-type: none"> <li>Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities.</li> </ul>	<p><b>Protection of Archaeological and Architectural Heritage</b></p> <p>Proposed developments shall contribute towards:</p> <ul style="list-style-type: none"> <li>The protection and sympathetic enhancement of archaeological heritage, in particular by implementing the relevant provisions of the Planning and Development Act 2000 (as amended) and the National Monuments Act, 1930 (as amended).</li> <li>The protection of archaeological sites and monuments and their settings, archaeological objects and underwater archaeological sites that are listed in the Record of Monuments and Places, in the ownership/guardianship of the State, or that are subject of Preservation Orders or have been registered in the Register of Historic Monuments. Contribute, as appropriate, towards the protection and preservation of archaeological sites, which have been identified subsequent to the publication of the Record of Monuments and Places.</li> <li>The protection of architectural heritage by complying, as appropriate, with the legislative provisions of the Planning and Development Act 2000 (as amended) in relation to architectural heritage and the policy guidance contained in the Architectural Heritage Protection Guidelines 2011 (and any updated/superseding document).</li> <li>The protection and preservation of underwater archaeological sites.</li> </ul> <p><b>Archaeological and Architectural Heritage Surveys and Assessments</b></p> <p>Any surveys and assessments required shall take into account cumulative effects and consider cross-County border impacts such as those which might occur along the County Tipperary and County Kilkenny borders - with particular reference to those areas around Slievenamon and the Lingaun River Valley – including Rathclarish, Ahenny, Kilcash (in County Tipperary) and Kilkieran, Knockroe and Killamery (in County Kilkenny).</p>	<p><b>POLICY LH13</b>  <b>POLICY LH14</b>  <b>POLICY LH15</b>  <b>OBJECTIVE SO7-3</b>  <b>OBJECTIVE SO7-4</b>  <b>POLICY LH16</b>  <b>OBJECTIVE SO7-6</b></p>	<ul style="list-style-type: none"> <li>Potential alteration to the context and setting of architectural heritage however these will occur in compliance with legislation.</li> <li>Potential alteration to the context and setting of archaeological heritage however this will occur in compliance with legislation.</li> <li>Potential loss of unknown archaeology however this loss will be mitigated by measures integrated into the Variations.</li> </ul>
<b>Landscape</b>	<ul style="list-style-type: none"> <li>Occurrence of adverse visual impacts and conflicts with the appropriate protection of statutory designations relating to the landscape.</li> </ul>	<p><b>Landscape Designations</b></p> <p>Contribute towards the protection of county and local level landscape designations from incompatible developments. Proposals for development that have the potential to significantly adversely impact upon these designations shall be accompanied by an assessment of the potential landscape and visual impacts of the proposed development - demonstrating that landscape and visual impacts have been anticipated and avoided to a level consistent with the sensitivity of the landscape and the nature of the designation.</p>	<p><b>POLICY LH1</b>  <b>POLICY LH2</b>  <b>POLICY LH3</b>  <b>POLICY LH4</b>  <b>OBJECTIVE SO7-1</b>  <b>POLICY TI14</b>  <b>POLICY SS3 (iii)</b>  <b>POLICY ED3</b></p>	<ul style="list-style-type: none"> <li>None. The Variations contributes towards the protection of landscape designations. The County's landscapes will change overtime as a result of natural changes in vegetation cover combined with new developments.</li> </ul>

## 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 Tipperary County Council on the Environmental Report and SEA process have been taken into account during the preparation of the Variations.

### 3.2 SEA Scoping Submissions

As part of the scoping process for preparation of the Variations, environmental authorities<sup>10</sup> were notified that a submission or observation in relation to the scope and level of detail of the information to be included in the environmental report could be made to the Council.

A detailed submission was made by the Environmental Protection Agency. Specific comments were provided by the Environmental Protection Agency under the following headings:

- SEA WebGIS Search and Reporting Tool
- Recent SEA Related Guidance
- Water Framework Directive
- Groundwater Vulnerability
- Provision of Adequate and Appropriate Critical Infrastructure
- Potential for Cumulative Effects
- Climate Change Adaptation
- Adequate & Appropriate Objectives and where needed Mitigation Measures to address Environmental Sensitivities
- Flood Risk Assessment and Management
- Designated Sites
- The protection of and possible enhancement of Undesignated Biodiversity
- Alternatives
- Radon
- Additional Considerations
- Environmental Authorities

Acknowledgments of receipt of SEA Scoping Reports relating to the Variations were received from Kilkenny County Council and Clare County Council.

<sup>10</sup> The following authorities were notified: Environmental Protection Agency, Department of Communications, Energy and Natural Resources, Department of Agriculture, Fisheries and Food, Department of the Environment, Community and Local Government, Department of Arts, Heritage and the Gaeltacht and all adjoining planning authorities.

The EPA submission helped in the development and refinement of the Variations and the scope of the SEA and AA.

### 3.3 Submissions on the Environmental Report

Furthermore, submissions were made on the Proposed Variations and associated environmental assessment documents while these documents were on public display. These submissions resulted in updates being made to two mitigation measures that were included as follows (**green text** is the text that was added on foot of submissions):

#### **River Basin Management Plan(s)**

Proposed developments shall support the implementation of the relevant recommendations and measures as outlined in the relevant River Basin Management Plan(s) (**including the upcoming national River Basin Management Plan**), and associated Programmes of Measures, as well as relevant recommendations contained in the Water Quality in Ireland 2010-2012 (EPA, 2015, and any updated/superseding document). **These recommendations include the need for a catchment management approach to protecting and managing waters to maintain and improve water quality status.** Proposals for development shall not have an unacceptable impact on the water environment, including surface waters, groundwater quality and quantity, river corridors and associated woodlands.

#### **National Climate Change Adaptation Framework and Mitigation Plan**

To implement relevant provisions contained in the 'National Climate Change Adaptation Framework - Building Resilience to Climate Change' (DECLG, 2012) **and support the recommendations of the National Mitigation Plan (in particular aspects relating to land use, transport and energy efficiency).**

Changes to the Proposed Variations made on foot of submissions were proposed as Material Alterations and were screened for the need to undertake further SEA and AA. Full SEA and AA were determined not to be required and the changes did not change the conclusions of the SEA or the AA undertaken on the original Proposed Variations.

### **3.4 Environmental Report**

The Proposed Variations and accompanying documents (including SEA Environmental Report and AA Natura Impact Report) were placed on public display, having integrated all recommendations arising from the SEA and AA processes.

Responses to submissions made on the Environmental Report during the period of public display were integrated into a Chief Executive's Report and considered by Tipperary County Council.

Changes to the original Proposed Variations that were placed on public display were examined for the need to undertake SEA and AA. It was determined, taking into account the provisions that were already integrated into the Draft Strategy, that the changes would not be likely to result in significant environmental effects nor would they impact upon the Natura 2000 network of sites.

Tipperary County Council have taken into account the findings of all relevant SEA output during their consideration of the Proposed Variations and before the Variations were adopted.

On adoption of the Variations, the original Environmental Report which had been placed on public display alongside the Proposed Variations, was updated to become a final Environmental Report which is consistent with the adopted Variations, taking into account recommendations included in the submissions as well as changes that were made to the original Proposed Variations that were placed on public display.



## **Section 4 Reasons for choosing the selected alternative in light of other alternatives considered**

### **4.1 Introduction**

As per the requirements of the SEA Directive, the SEA considers reasonable alternatives, which are capable of being implemented for the Variations, taking into account the objectives and the geographical scope of the Plan.

### **4.2 Need for the Variations**

Having consideration to the single administrative area of Tipperary, created as a result of the amalgamation of the two counties and the material differences in the existing North and South Tipperary County Development Plans, it has been decided to vary both of the existing Plans in order to make them consistent with each other and with all relevant and current, national and regional planning and environmental guidance and legislation. With this in mind Tipperary County Council varied the North and South Tipperary Development Plans in order to harmonise policies through a new 'written statement' (Variation No. 2). Another Variation (No. 3) was made to integrate a renewable energy strategy into the Plans. The next step in policy harmonisation is the preparation of new settlement plans through a Variation process to each of the Development Plans.

The North and South Tipperary County Development Plans provide for zoning and development objectives for each town and village across the County (with the exception of those covered by Town Plans or LAPs). There are 116 settlements that are part of the Variation, each with specific zonings and development objectives. The key objective of the Variations is to ensure that these zonings and/or objectives provide a development framework which is fit for purpose for the future development of the individual towns and villages which is cognisant of the needs of the residents while protecting and preserving the character, heritage and amenity of these communities and making a positive contribution and improvement to the population's quality of life.

### **4.3 Identification of where Alternatives are available**

In the first instance, each settlement was assessed to determine whether the consideration of alternatives was relevant. There are four different types of circumstances in this regard and these are detailed below:

#### **1. Alternatives not Applicable**

This category applies to settlements where the variation generally proposes to continue the type, location and extent of existing land-use zoning or designations.

#### **2. Alternative not Available**

This category applies to settlements where alternatives are not available due to factors that cannot be readily or reasonably altered; including, but not limited to, the existing configuration of roads, water services, existing built fabric or environmental constraints.

#### **3. Alternatives not Significant**

This category applies to settlements where the variation proposes clarifications or additional that will not modify the type, location and extent of existing land-use zoning or designations.

#### 4. Assessable Alternatives

This category applies to settlements where alternatives of layout, location, type, phasing or density exist.

Settlements where the conditions described in option 4 "Assessable Alternatives" occur were deemed to require an assessment of alternatives in 38 circumstances. In all other 78 circumstances alternatives were deemed to be not applicable, available or significant. Settlements requiring a consideration of alternatives are listed on Table 4.1 below.

**Table 4.1 Settlements for which Assessment of Alternatives is required**

No.	Service Centres and Local Service Centres	Nodes
1	Ardfinnan	Grange (Clonmel)
2	Ballyclerihan	Ballinderry
3	Ballyporeen	Ballingarry (node)
4	Clogheen	Ballinree
5	Kilsheelan	Kilcommon Upper
6	Ballina	Killusty
7	Borrisokane	Ballycahill
8	Cloughjordan	Clonakenny
9	Newport	Drom
10	Newtown	Drumbane
11	Toomevara	Horse & Jockey
12	Bansha	Knock
13	Cappawhite	Loughmore
14	Dundrum	
15	Golden	
16	Ballingarry (Service Centre)	
17	Borrisoleigh	
18	Twomileborris	
19	Lisronagh	
20	Rearcross	
21	Terryglass	
22	Lattin	
23	Drangan	
24	Glengoole	
25	Kilcash	

#### 4.4 Summary of Assessment of Alternatives

##### Significant Positive Effects Common to all Alternatives

By providing for development within existing development boundaries and facilitating the use of existing utilities and brownfield sites, all alternatives would be likely to contribute towards a reduced need to develop more sensitive, undeveloped areas elsewhere in the wider County that are further from established settlements and less well serviced. This would be likely to result in significant positive environmental effects on the following environmental components:

- Biodiversity and flora and fauna
- Population and human health
- Soil (especially soil on greenfield lands)
- Water (status of rivers and groundwater)
- Flood risk
- Sustainable mobility and associated effects (energy usage and emissions to air including noise and greenhouse gases)
- Material Assets (provision of adequate and appropriate waste water and drinking water services and waste management)
- Cultural Heritage (architectural and archaeological heritage)
- Amenities

Although significant positive environmental effects would occur under each of the alternatives, the extent to which they would occur varies across each of the alternatives and this is addressed under the evaluation of each of the alternatives below.

### Potentially Significant Adverse Effects Common to all Alternatives

All of the alternatives provide for development of the relevant settlements. Such development would have the potential to conflict with environmental components – to different degrees. Potentially significant adverse environmental effects arising from this conflict are common to all alternatives and are described on Table 4.2. For the Variation, these effects will be mitigated by both provisions integrated into the Variations and existing provisions already in force through the County Development Plans.

Although potentially significant adverse environmental effects would occur under each of the alternatives, the extent to which they would occur varies across each of the alternatives and this is addressed under the evaluation of each of the alternatives below.

**Table 4.2 Potentially Significant Adverse Environmental Effects common to all alternatives**

Environmental Component	Potential Effect
Biodiversity and Flora and Fauna	<ul style="list-style-type: none"> <li>o Arising from both construction and operation of development and associated infrastructure: loss of/damage to biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna</li> <li>o Habitat loss, fragmentation and deterioration, including patch size and edge effects.</li> <li>o Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species.</li> </ul>
Population and Human Health	<ul style="list-style-type: none"> <li>o Potential interactions if effects upon environmental vectors such as water and air are not mitigated</li> </ul>
Soil	<ul style="list-style-type: none"> <li>o Damage to the hydrogeological and ecological function of the soil resource.</li> </ul>
Water	<ul style="list-style-type: none"> <li>o Adverse impacts upon the status of water bodies arising from changes in quality, flow and/or morphology.</li> <li>o Increase in the risk of flooding.</li> </ul>
Material Assets	<ul style="list-style-type: none"> <li>o Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts).</li> <li>o Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts)</li> <li>o Increases in waste levels</li> </ul>
Air and Climatic Factors	<ul style="list-style-type: none"> <li>o Emissions to air including greenhouse gas emissions and other emissions.</li> </ul>
Cultural Heritage	<ul style="list-style-type: none"> <li>o Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities.</li> </ul>
Landscape	<ul style="list-style-type: none"> <li>o Occurrence of adverse visual impacts and conflicts with the appropriate protection of statutory designations relating to the landscape.</li> </ul>

### Best Environmental Alternatives and Selected Alternatives

The table below details the alternatives that were considered for each of the relevant settlements. The SEA Environmental Report provides further detail on the environmental consequences of each of these alternatives. The alternative that is likely to give rise to the least environmental effect is indicated in **bolded text**. The purpose of the assessment is to contribute to the decision-making process for Plan variation for each settlement where alternatives are available. The **Best** environmental alternative was selected for inclusion as part of the Variations in all circumstances.

<b>Town Name</b>	<b>Alternatives</b> ( <b>Best</b> environmental alternative marked in <b>bold</b> )
Ardfinnan	<b>Higher density of residential lands</b> Lower density of residential lands
Ballyclerihan	Variation that does not reduce the amount of land zoned Agriculture <b>Variation that reduces the amount of land zoned Agriculture</b>
Ballyporeen	Variation to zoning that does not integrate flood risk management considerations or reduce zoning in the town <b>Variation to zoning that integrates flood risk management considerations and reduces zoning in the town</b>
Clogheen	Variation to zoning that does not integrate flood risk management considerations <b>Variation to zoning that integrates flood risk management considerations</b>
Kilsheelan	<b>Higher density of residential lands</b> Lower density of residential lands
Ballina	Variation to zoning that does not integrate flood risk management considerations <b>Variation to zoning that integrates flood risk management considerations</b>
Borrisokane	Variation to zoning that does not consolidate zoning <b>Variation to zoning that consolidates zoning including omission of an extent of agricultural lands</b>
Cloughjordan	Variation to zoning that does not integrate flood risk management considerations or phasing <b>Variation to zoning that integrates phasing and flood risk management considerations</b>
Newport	Variation to zoning that does not integrate flood risk management considerations <b>Variation to zoning that integrates flood risk management considerations</b>
Newtown	<b>Town Centre uses in centre including provision of higher density</b> Lower density Residential uses in centre
Toomevara	Variation that does not reduce zoning to the west of the town <b>Variation that reduces zoning to the west of the town</b>
Bansha	Variation that does not change Business and Enterprise zoned lands re: permissible uses <b>Variation that changes Business and Enterprise zoned lands re: permissible uses (only dry uses to be considered)</b>
Cappawhite	Variation that does not reduce the amount of land zoned <b>Variation that reduces the amount of land zoned</b>
Dundrum	Variation that does not integrate flood risk management considerations or limit development until adequate levels of water services are provided <b>Variation that integrates flood risk management considerations and limits development until adequate levels of water services are provided</b>
<b>Golden</b>	Variation to zoning that does not integrate flood risk management considerations <b>Variation to zoning that integrates flood risk management considerations</b>
Ballingarry (Service Centre)	Variation that does not reduce the amount of land zoned as Residential and Business and Enterprise <b>Variation that reduces the amount of land zoned as Residential and Business and Enterprise</b>
Borrisoleigh	Variation that does not integrate flood risk management considerations <b>Variation that integrates flood risk management considerations</b>
Twomileborris	Variation that does not integrate flood risk management considerations <b>Variation that integrates flood risk management considerations</b>
Lisronagh	Variation to zoning that does not integrate phasing <b>Variation to zoning that integrates phasing</b>
Rearcross	Variation that does not reduce the amount of Residential lands zoned <b>Variation that reduces the amount of Residential lands zoned</b>
Terryglass	Variation that includes land zoned as Integrated Tourism <b>Variation that does not include land zoned as Integrated Tourism</b>
Lattin	Variation to zoning that does not reduce OSA zoning <b>Variation to zoning that reduces OSA zoning</b>
Drangan	Variation that does not reduce the amount of land zoned as Residential <b>Variation that reduces the amount of land zoned as Residential</b>
Glengoole	Variation that does not reduce the amount of land zoned as Residential <b>Variation that reduces the amount of land zoned as Residential</b>
Kilcash	Variation that does not reduce the amount of land zoned as Residential <b>Variation that reduces the amount of land zoned as Residential</b>
Grange (Clonmel)	Variation that does not reduce the area encompassed by the settlement boundary <b>Variation that reduces the area encompassed by the settlement boundary</b>
Ballinderry	Variation that does not reduce the area encompassed by the settlement boundary



<b>Town Name</b>	<b>Alternatives</b> ( <b>Best</b> environmental alternative marked in <b>bold</b> )
	<b>Variation that reduces the area encompassed by the settlement boundary</b>
Ballingarry (node)	Variation that does not reduce the area encompassed by the settlement boundary
	<b>Variation that reduces the area encompassed by the settlement boundary</b>
Ballinree	Variation that does not reduce the area encompassed by the settlement boundary
	<b>Variation that reduces the area encompassed by the settlement boundary</b>
Kilcommon Upper	Variation that does not reduce the area encompassed by the settlement boundary
	<b>Variation that reduces the area encompassed by the settlement boundary</b>
Killusty	Variation that does not reduce the area encompassed by the settlement boundary
	<b>Variation that reduces the area encompassed by the settlement boundary</b>
Ballycahill	Variation that does not reduce the area encompassed by the settlement boundary
	<b>Variation that reduces the area encompassed by the settlement boundary</b>
Clonakenny	Variation that does not reduce the area encompassed by the settlement boundary
	<b>Variation that reduces the area encompassed by the settlement boundary</b>
Drom	Variation that does not reduce the area encompassed by the settlement boundary
	<b>Variation that reduces the area encompassed by the settlement boundary</b>
Drumbane	Variation that does not reduce the area encompassed by the settlement boundary
	<b>Variation that reduces the area encompassed by the settlement boundary</b>
Horse & Jockey	Variation that does not reduce the area encompassed by the settlement boundary
	<b>Variation that reduces the area encompassed by the settlement boundary</b>
Knock	Variation that does not reduce the area encompassed by the settlement boundary
	<b>Variation that reduces the area encompassed by the settlement boundary</b>
Loughmore	Variation that does not reduce the area encompassed by the settlement boundary
	<b>Variation that reduces the area encompassed by the settlement boundary</b>

**Table 4.3 Summary of Effects Arising from Selected Alternative**

<b>Environmental Component</b>	<b>Significant Positive Effect, likely to occur</b>	<b>Potential Effect, if unmitigated</b>	<b>Residual Adverse Effects</b>	<b>Relevant SEO Codes</b>
Biodiversity and Flora and Fauna	<ul style="list-style-type: none"> <li>Facilitates lower overall effects on ecology (including designated sites, ecological connectivity, habitats) – due to increased utilisation of lands within existing development boundaries and use of existing utilities and brownfield sites.</li> <li>Facilitates protection of ecology with respect to the provision of water services.</li> <li>Facilitates contribution towards the protection of ecology as a result of contributing towards the protection of environmental vectors, including air and water.</li> </ul>	<ul style="list-style-type: none"> <li>Arising from both construction and operation of development and associated infrastructure: loss of/damage to biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna</li> <li>Habitat loss, fragmentation and deterioration, including patch size and edge effects.</li> <li>Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species.</li> </ul>	<ul style="list-style-type: none"> <li>Loss of an extent of non-protected habitats and species arising from the replacement of semi-natural land covers with artificial surfaces.</li> <li>Losses or damage to ecology (these would be in compliance with relevant legislation).</li> </ul>	<b>B1 B2 B3</b>
Population and Human Health	<ul style="list-style-type: none"> <li>Facilitates protection of human health with respect to the provision of water services and the provision of transport infrastructure integrated with land use planning – and associated interactions with sustainable mobility, emissions and energy usage.</li> <li>Facilitates contribution towards the protection of human health as a result of contributing towards the protection of environmental vectors, including air and water.</li> </ul>	<ul style="list-style-type: none"> <li>Potential interactions if effects upon environmental vectors such as water and air are not mitigated</li> </ul>	<ul style="list-style-type: none"> <li>Potential interactions with residual effects on environmental vectors. This has been mitigated by provisions which have been integrated into the Plan, including those relating to sustainable mobility and infrastructural provision.</li> </ul>	<b>PHH1</b>
Soil	<ul style="list-style-type: none"> <li>Facilitates lower overall effects on soil – due to increased utilisation of lands within existing development boundaries and use of existing utilities and brownfield sites.</li> <li>Facilitates protection of soil with respect to the provision of water services.</li> </ul>	<ul style="list-style-type: none"> <li>Damage to the hydrogeological and ecological function of the soil resource.</li> </ul>	<ul style="list-style-type: none"> <li>Loss of an extent of soil function arising from the replacement of semi-natural land covers with artificial surfaces.</li> </ul>	<b>S1</b>
Water	<ul style="list-style-type: none"> <li>Facilitates lower effects on ground and surface waters due to higher levels of development within established and serviced settlement centres that have installed/upgraded water services capable of delivering Water Framework Directive targets.</li> </ul>	<ul style="list-style-type: none"> <li>Adverse impacts upon the status of water bodies arising from changes in quality, flow and/or morphology.</li> <li>Increase in the risk of flooding.</li> </ul>	<ul style="list-style-type: none"> <li>Increased loadings as a result of development to be in compliance with River Basin Management Plans.</li> <li>Flood related risks remain due to uncertainty with regard to extreme weather events.</li> </ul>	<b>W1 W2 W3</b>
Material Assets	<ul style="list-style-type: none"> <li>Provides for planned infrastructure including water services infrastructure and transport infrastructure.</li> <li>Make most use of existing water services and drainage infrastructure.</li> </ul>	<ul style="list-style-type: none"> <li>Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts).</li> <li>Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts)</li> <li>Increases in waste levels</li> </ul>	<ul style="list-style-type: none"> <li>Residual wastes to be disposed of in line with higher level waste management policies.</li> </ul>	<b>M1 M2</b>

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<b>Environmental Component</b>	<b>Significant Positive Effect, likely to occur</b>	<b>Potential Effect, if unmitigated</b>	<b>Residual Adverse Effects</b>	<b>Relevant SEO Codes</b>
Air and Climatic Factors	<ul style="list-style-type: none"> <li>Facilitates contribution towards a shift from car to more sustainable and non-motorised transport modes.</li> <li>Facilitates contribution towards reducing congestion and associated adverse effects on air quality.</li> <li>Facilitates contribution towards reductions in travel related greenhouse gas and other emissions to air.</li> </ul>	<ul style="list-style-type: none"> <li>Emissions to air including greenhouse gas emissions and other emissions.</li> </ul>	<ul style="list-style-type: none"> <li>An extent of travel related greenhouse gas and other emissions to air. This has been mitigated by provisions which have been integrated into the Plan, including those relating to sustainable mobility.</li> </ul>	<b>C1</b>
Cultural Heritage	<ul style="list-style-type: none"> <li>Contribution towards the protection of cultural heritage by facilitating compliance with protection legislation.</li> </ul>	<ul style="list-style-type: none"> <li>Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities.</li> </ul>	<ul style="list-style-type: none"> <li>Potential alteration to the context and setting of architectural heritage however these will occur in compliance with legislation.</li> <li>Potential alteration to the context and setting of archaeological heritage however this will occur in compliance with legislation.</li> <li>Potential loss of unknown archaeology however this loss will be mitigated by measures integrated into the Variations.</li> </ul>	<b>CH1 CH2</b>
Landscape	<ul style="list-style-type: none"> <li>Contribution towards the protection of cultural heritage by facilitating compliance with objectives relating to landscape management and protection.</li> </ul>	<ul style="list-style-type: none"> <li>Occurrence of adverse visual impacts and conflicts with the appropriate protection of statutory designations relating to the landscape.</li> </ul>	<ul style="list-style-type: none"> <li>None. The Variations contribute towards the protection of landscape designations. The County's landscapes will change overtime as a result of natural changes in vegetation cover combined with new developments.</li> </ul>	<b>L1</b>

## 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 details the measures that will be used in order to monitor the likely significant effects of implementing the Plan as varied.

Monitoring can enable, at an early stage, the identification of unforeseen adverse effects and the undertaking of appropriate remedial action.

### 5.2 Indicators and Targets

Monitoring is based around indicators that allow quantitative measures of trends and progress over time relating to the Strategic Environmental Objectives identified in Section 5 and used in the evaluation. Each indicator to be monitored is accompanied by the target(s) that were identified with regard to the relevant strategic actions.

Table 5.1 overleaf shows the indicators and targets which have been selected for monitoring the likely significant environmental effects of implementing the Plan as varied, if unmitigated.

The Monitoring Programme may be updated to deal with specific environmental issues - including unforeseen effects - as they arise. Such issues may be identified by the Council or identified to the Council by other agencies.

### 5.3 Sources

Measurements for indicators generally come from existing monitoring sources. Existing monitoring sources include those maintained by the relevant authorities including the Council, the Environmental Protection Agency, the National Parks and Wildlife Service and the Central Statistics Office.

Internal monitoring of the environmental effects of grants of permission in the Council will provide monitoring of various indicators and targets on a *grant of permission* basis.

The likely significant effects of development proposals on environmental sensitivities are further determined during the development management process. By documenting this determination - e.g. whether a proposed development will impact upon a Protected Structure, for example - while granting permissions, or at a later date, the requirement to monitor the effects of implementing the Plan as varied can be achieved.

Where significant effects - including positive, negative, cumulative and indirect - have the potential 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 should be identified and recorded and should feed into the monitoring evaluation.

### 5.4 Reporting

Article 10 of the SEA Directive requires Member States to monitor the significant environmental effects of the implementation of plans "*in order, inter alia, to identify at an early stage unforeseen adverse effects and to be able to undertake appropriate remedial action.*" Existing monitoring arrangements may be used if appropriate, to avoid duplication of monitoring [Source: Chapter 7 Implementation of SEA Directive (2001/42/EC): Assessment of the Effects of Certain Plans and Programmes on the Environment Guidelines for Regional Authorities and Planning Authorities. DoEHLG 2004].

A stand-alone Monitoring Report on the significant environmental effects of implementing the County Development Plan (including the Variations) will be prepared in advance of the review of the County Development Plan.

### 5.5 Thresholds

Thresholds at which corrective action will be considered include:

- Court cases taken by the Department of Arts, Heritage and the Gaeltacht regarding impacts upon archaeological heritage including entries to the RMP;
- Complaints received from statutory consultees regarding avoidable environmental impacts resulting from development which is granted permission under the Plan as varied; and
- Fish kills.

**Table 5.1 Selected Indicators, Targets and Monitoring Sources**

Environmental Component	Selected Indicator(s)	Selected Target(s)	Source and Frequency of Monitoring
<b>Biodiversity, Flora and Fauna</b>	B1: Conservation status of habitats and species as assessed under Article 17 of the Habitats Directive	B1: Maintenance of favourable conservation status for all habitats and species protected under National and International legislation to be unaffected by implementation of the Plan as varied <sup>11</sup>	<ul style="list-style-type: none"> <li>Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).</li> <li>Department of Arts, Heritage and the Gaeltacht report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive (every 6 years).</li> <li>Department of Arts, Heritage and the Gaeltacht's National Monitoring Report for the Birds Directive under Article 12 (every 3 years).</li> <li>Consultations with the NPWS (at monitoring evaluation - see Section 5.4).</li> </ul>
	B2: Percentage loss of functional connectivity without remediation resulting from development provided for by the Plan as varied	B2: No significant ecological networks or parts thereof which provide functional connectivity to be lost without remediation resulting from development provided for by the Plan as varied	<ul style="list-style-type: none"> <li>Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).</li> <li>CORINE mapping resurvey (every c. 5 years)</li> </ul>
	B3i: Number of significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites resulting from development provided for by the Plan as varied B3ii: Number of significant impacts on the protection of listed species	B3i: Avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites resulting from development provided for by the Plan as varied B3ii: No significant impacts on the protection of listed species	<ul style="list-style-type: none"> <li>Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).</li> <li>Consultations with the NPWS (at monitoring evaluation - see Section 5.4).</li> </ul>
<b>Population and Human Health</b>	PHH1: Occurrence (any) of a spatially concentrated deterioration in human health arising from environmental factors resulting from development provided for by the Plan as varied, as identified by the Health Service Executive and Environmental Protection Agency	PHH1: No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan as varied	<ul style="list-style-type: none"> <li>Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).</li> <li>Consultations with EPA and Health Service Executive (at monitoring evaluation - see Section 5.4).</li> </ul>
<b>Soil</b>	S1i: Soil extent and hydraulic connectivity	S1i: To minimise reductions in soil extent and hydraulic connectivity	<ul style="list-style-type: none"> <li>Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).</li> </ul>
<b>Water</b>	W1: 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)	W1: Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve <i>good status</i> <sup>12</sup>	<ul style="list-style-type: none"> <li>Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).</li> <li>Data issued under the Water Framework Directive Monitoring Programme for Ireland (multi-annual).</li> </ul>
	W2: Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC	W2: Not to affect the ability of groundwaters to comply with Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC	<ul style="list-style-type: none"> <li>Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).</li> <li>Data issued under the Water Framework Directive Monitoring Programme for Ireland (multi-annual).</li> </ul>

<sup>11</sup> Except as provided for in Section 6(4) of the Habitats Directive, viz. There must be:

- no alternative solution available;
- imperative reasons of overriding public interest for the plan to proceed; and
- adequate compensatory measures in place.

<sup>12</sup> 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*; and
- Mesotrophic in the classification of lakes.

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Environmental Component	Selected Indicator(s)	Selected Target(s)	Source and Frequency of Monitoring
	W3: Number of incompatible developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk	W3: 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 for Planning Authorities</i>	<ul style="list-style-type: none"> <li>Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).</li> </ul>
<b>Material Assets</b>	M1: Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan as varied	M1: All new developments granted permission to be connected to and adequately and appropriately served by waste water treatment over the lifetime of the Plan as varied	<ul style="list-style-type: none"> <li>Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).</li> </ul>
	M2: 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 as a result of implementing the Plan as varied	M2: 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 as varied	<ul style="list-style-type: none"> <li>EPA The Provision and Quality of Drinking Water in Ireland reports (multi-annual).</li> <li>EPA Remedial Action List (every quarter).</li> </ul>
	M3i: Total collected and brought household waste M3ii: Packaging recovered (t) by self-complying packagers	M3i: Minimise increases in and, where possible, reduce household waste generation M3ii: Maximise increases in packaging recovered (t) by self-complying packagers	<ul style="list-style-type: none"> <li>EPA National Waste Reports</li> <li>EPA Ireland's Environment Reports</li> </ul>
<b>Air and Climatic Factors</b>	C1: Percentage of population travelling to work, school or college by public transport or non-mechanical means	C1: An increase in the percentage of the population travelling to work, school or college by public transport or non-mechanical means	<ul style="list-style-type: none"> <li>Consultations with the Sustainable Energy Authority of Ireland</li> </ul>
<b>Cultural Heritage</b>	CH1: Percentage of entries to the Record of Monuments and Places - including Zones of Archaeological Potential (and the context of the above within the surrounding landscape where relevant) - protected from significant adverse effects arising from new development granted permission under the Plan as varied	CH1: 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) from significant adverse effects arising from new development granted permission under the Plan as varied	<ul style="list-style-type: none"> <li>Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).</li> <li>Consultation with Department of Arts, Heritage and the Gaeltacht (at monitoring evaluation - see Section 5.4).</li> </ul>
	CH2: Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects arising from new development granted permission under the Plan as varied	CH2: Protect entries to the Record of Protected Structures and Architectural Conservation Areas and their context from significant adverse effects arising from new development granted permission under the Plan as varied	<ul style="list-style-type: none"> <li>Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).</li> <li>Consultation with Department of Arts, Heritage and the Gaeltacht (at monitoring evaluation - see Section 5.4).</li> </ul>
<b>Landscape</b>	L1: Number of complaints received from statutory consultees regarding avoidable adverse visual impacts on the landscape resulting from development which is granted permission under the Plan as varied	L1: No developments permitted which result in avoidable adverse visual impacts on the landscape resulting from development which is granted permission under the Plan as varied	<ul style="list-style-type: none"> <li>Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).</li> </ul>