

Natura Impact Report for the Kilkenny City & Environs Development Plan 2014-2020 Appropriate Assessment (AA)



Planning Department
Kilkenny Borough &
County Councils
13th June 2014

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1 Introduction

The Planning and Development Acts 2000 – 2013 require a Planning Authority to make a Development Plan for its functional area every six years. The Kilkenny City & Environs Development Plan 2014-2020 (referred to in this report as the Plan) covers an area with a population of 24,423 (CSO, 2011). The plan is comprised of a written statement and maps, and sets out the overall strategy for development, and a Core Strategy, for the proper planning and sustainable development of the county. A separate plan has been prepared for the county area.

A Strategic Environmental Assessment (SEA) has been undertaken to assess the impacts of the Plan on a number of environmental considerations including biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage, landscape and the interrelationship between these considerations, whenever applicable.

This Natura Impact Report sets out information on the assessment and process of collating data and finding of potential significant impacts on the conservation objectives of any Natura 2000 sites within or within the sphere of influence of the Plan in accordance with Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC, (November, 2001). It also sets out, where necessary mitigation measures to preclude negative effects. The impacts assessed include the indirect and cumulative impacts of approving the plan, considered with any current or proposed activities, developments or objectives impacting on the site.

Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79/409/ECC) form an EU-wide network of sites known as Natura 2000. In Ireland, Natura 2000 sites include candidate Special Areas of Conservation (cSAC), Special Protection Areas (SPA), and proposed Special Protection Areas (pSPA); SACs pertain to habitats in Annex I and species listed in Annex II of the Habitats Directive, while SPAs relate to the protection and conservation of birds and their habitats under Annex I of the Birds Directive. The conservation objectives of particular Natura 2000 sites have been assigned by the National Parks and Wildlife Service (NPWS) of the Department of Arts, Heritage and the Gaeltacht; these are the objectives or aims which have been put in place in order to maintain or restore the favourable conservation status or condition of the Annex I habitat or Annex I or II species for which the designated or classified site has been selected.

1.1 Legislative Background & Guidelines

The requirement to carry out an appropriate assessment stems from article 6(3) & (4) of the Habitats Directive - *Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora*.

The European Habitats Directive (Council of the European Communities 1992) was transposed into Irish legislation by the *European Communities (Natural Habitats) Regulations 1997* and amended in 1998 and 2005. A court case taken by the European Commission against Ireland found that Ireland was not fulfilling its obligations to carry out appropriate assessments of plans - *Case C-418/04 Commission of the European Communities v Ireland, (December 2007)*, 'failure

of a member state to fulfil obligations – Directive 92/43/EEC – Conservation of natural habitats and of wild fauna and flora – Article 6 – Transposition and application’.

Following from the judgement of the European Commission the Department of the Environment, Heritage and Local Government issued a circular outlining the requirement to carry out appropriate assessments in relation to land use plans, including development plans - *Appropriate Assessment of Land Use Plans – Circular Letter SEA 1/08 & NPWS 1/08, 15 February 2008*. In December 2009 the Department of the Environment, Heritage and Local Government published the *Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities*. Section 57 of the *Planning and Development Act 2010* amends the *Planning and Development Act 2000* by the inclusion of Part XAB relating to Appropriate Assessment. The *European Communities (Birds and Natural Habitats) Regulations 2011* is a revised transposition of the Birds and Habitats Directives into Irish law and addresses ECJ Judgments C-183/05 & C-418/04; these regulations set out the strict protection of sites designated to protect wild birds of resident and migratory species and their habitats (Special Protection Areas) and protect the habitats of other species of fauna, flora, and to protect specified habitat-types.

Habitats Directive - 92/43/EEC

Article 6(3) requires:

‘Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site’s conservation objective. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public’.

Article 6(4) relates to finding of a negative assessment:

‘If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted. Where the site concerned hosts a priority natural habitat type and/or a priority species the only considerations which may be raised are those relating to 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’.

1.2 Methodology of the Appropriate Assessment

This Habitats Directive Assessment for the *Kilkenny City & Environs Development Plan 2014 – 2020* has been informed by the legislative and guidance framework as set out in Section 1.1 above. The scope of the Assessment is confined to the effects on the internationally important habitats and species for which the site is classified. The level of detail of the Assessment is for that of a development plan, not a project. The determination of impacts is with regard to those

objectives which may have significant effects on site integrity for the designated species and habitats.

The Habitats Directive promotes a hierarchy of avoidance, mitigation and compensatory measures. The assessment has followed the staged approach set out in *Assessment of plans and projects significantly affecting Natura 2000 sites – Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC*, November 2001 and *Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities*, DEHLG, 2009, as follows:

- **Stage One – Screening:**
Process to identify the likely impacts on the integrity of a Natura 2000 site, having regard to its conservation objectives, of a plan, either alone or in combination with other projects or plans, and considers whether these impacts are likely to be significant.
- **Stage Two - Appropriate Assessment:**
The consideration of the impact on the integrity of the Natura 2000 site of the plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts.
- **Stage Three - Assessment of Alternative Solutions:**
A process which examines alternative ways of achieving the objectives of the plan that avoid adverse impacts on the integrity of the Natura 2000 site.
- **Stage Four - Assessment where no Alternative Solutions exist & where Adverse Impacts Remain:** Assessment of compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the plan should proceed.

Screening

Screening examines the likely effects of a plan and considers whether it can be objectively concluded that these effects will not be significant. This assessment comprises four steps:

- Step 1: Description of Plan and plan area characteristics
- Step 2: Identification of relevant Natura 2000 sites, and compilation of information on their qualifying interests and conservation objectives.
- Step 3: Assessment of likely effects – direct, indirect and cumulative that have the potential for significant effects on the Natura 2000 site.
- Step 4: Screening conclusion and statement.

Guidance in relation to screening:

- Any land use plan proposed under the *Planning and Development Acts 2000-2013* must be screened for potential impact on Natura 2000 sites.
- Screening can be used to establish which policies and objectives have potential to have significant effects, and ones that require further attention at AA stage.
- Screening should include any Natura 2000 sites within the likely zone of impact of the plan; a distance of 15km is recommended.

- The integrity of the site involves its ecological functions. The decision as to whether it is adversely affected should focus on and be limited to the site's conservation objectives.
- The screening assessment should be carried out in the absence of any consideration of mitigation measures that form part of a project or plan.
- Once the screening matrix has been completed, the decision could be in the form of one of two statements: (1) It can be objectively concluded that there are not likely to be significant effects on the Natura 2000 site; or (2) The information provided either suggests that significant effects are likely or that sufficient uncertainty remains to indicate that an appropriate assessment should be carried out.
- Outcomes - following the screening assessment, if it can be concluded at this stage that there are unlikely to be significant effects on the Natura 2000 site, it should be good practice to complete the finding of no significant effects report.

1.3 Consultation

Scoping for the Screening of the Kilkenny City & Environs Development Plan 2014-2020 was initiated in August 2012.

This followed on from a meeting held with the NPWS Conservation Ranger in March 2011 to flag general issues of concern for the Natura 2000 network within County Kilkenny in relation to the preparation of a Variation (Core Strategy) to the Kilkenny City & Environs Development Plan 2008-2014. The issues highlighted at that meeting included:

- Water quality and adequate treatment of wastewater.
- Cumulative Effects
- Effects particularly of multi-unit housing developments, which may be located at geographically remote distances from the site, but which have hydrological connections with the site, through abstractions from, or discharges to, watercourses such as drainage ditches, streams, or tributaries.
- Proposed designation of the Nore SPA for the protection of the Kingfisher, species listed on the E.U. Birds Directive.

An informal conversation was held with the Regional Ecologist Dr. Linda Patton on 5th September, 2012 in relation to the process and examples of best practice in relation to Appropriate Assessment.

A written response received from the Department of Arts, Heritage and the Gaeltacht was received on 13th July 2012 in relation to SEA Scoping which sets out the following guidance in relation to the Appropriate Assessment:

Please note that the draft Plans should be screened for appropriate assessment. The Departmental guidance document on Appropriate Assessment is available on the NPWS web site at <http://www.npws.ie/media/npws/publications/codesofpractice/AA%20Guidance%2010-12-09.pdf>.

We also refer you to the EU Commission guidance entitled "Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the

provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC” which can be downloaded from

http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/natura_2000_assess_en.pdf.

It is particularly important that the appropriate assessment procedure, commencing with stage 1 screening, should take place in consultation with the teams working on the draft Plan and SEA as each process can help inform the other to ensure that the objectives and policies in the draft Plan will have no significant effects on any Natura 2000 site. The appropriate assessment should examine the effects of policies, objectives and any indicative maps or zonings, as well as cumulative impacts with other plans and projects both within and outside of the Plan area. In order to carry out the appropriate assessment you will need to collect information about the relevant Natura 2000 sites including their conservation objectives. These may be available on our web site www.npws.ie or can be obtained by requesting them by completing the data request form on our website at

<http://www.npws.ie/media/npws/publications/Data%20request%20form.doc>.

We recommend that you consult with other relevant Local Authorities to determine if there are any projects or plans which, in combination with this proposed Plan, could impact on any Natura 2000 sites.

Kindly forward any further information received; or in the event of a decision being made a copy of same should be forwarded to the following address as soon as it issues: The Manager, Development Applications Unit, Department of Arts, Heritage and the Gaeltacht.

The EPA submitted an ‘EPA SEA Scoping Submission to the Kilkenny County Development Plan 2014-2020’ on 12th March 2012, part of which relates to the preparation of an Appropriate Assessment, as follows:

You are referred to the requirements of Article 6 of Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, the Habitats Directive. Appropriate Assessment, in accordance with the Directive, is required for:

“Any plan or project not directly connected with or necessary to the management of the site (Natura 2000 sites) but likely to have significant effect thereon, either individually or in combination with other plans or projects, shall be subject to Appropriate Assessment of its implications for the site in view of the sites conservation Objectives...”. The LA should consult with the National Parks and Wildlife Service (NPWS) with regard to screening of the Plan for Appropriate Assessment. Where Appropriate Assessment is required, any findings or recommendations should be incorporated into the SEA Environmental Report and Plan, as appropriate.

In order to determine the requirement for an Appropriate Assessment the following Guidance is referenced.

European Commission, 2000. Managing Natura 2000 Sites – The provisions of Article 6 of the ‘Habitats’ Directive 92/43/EEC

http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/provision_of_art6_en.pdf

European Commission, 2002. Assessment of plans and projects significantly affecting Natura 2000 sites - Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC

http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/natura_2000_assess_en.pdf

National Parks and Wildlife Service, 2009. *Appropriate Assessment of Plans and Projects in Ireland*

<http://www.npws.ie/en/media/NPWS/Publications/CodesofPractice/AA%20Guidance.pdf> National Parks and Wildlife Service, *Natura 2000 Screening Protocol – Water Service Plans and Projects* <http://www.npws.ie/en/>

A submission was received during the pre-draft consultation period from An Taisce stating that the plans should be subjected to a Strategic Environmental Assessment and Appropriate Assessment.

1.3.1 Draft Development Plan

The Draft City & Environs Development Plan was placed on public display from the 14th of June to the 23rd of August 2013. The Draft Plan was referred to all the Statutory Authorities, including the Department of Environment, Community and Local Government, the Department of Arts, Heritage and the Gaeltacht and adjoining Local Authorities. Submissions were received in relation to the Draft Plan and the Natura Impact Report from the EPA and the Department of Arts, Heritage and the Gaeltacht. These submissions were considered in the Manager’s Report of 29th November 2013 (see extract below) and influenced the making of the Plan. The submission from the EPA resulted in the inclusion of a new Objective in the Plan to establish an environmental management plan for the River Nore Linear Park. The Department responsible for Environment did not make a recommendation for any changes to be made to the NIR.

Submission D23b – Department of Arts, Heritage and the Gaeltacht

Summary of Issues raised:

- 9) The version number and date of any conservation objectives should be given.
- 10) With regard to Table 3.2 and kingfisher territories it should be noted that these territories can change over time.
- 11) The font size should be increased.

Manager’s Response

- 9) Section 2.2.4, pg. 16 of the City NIR states the conservation objectives for the River Barrow and Nore cSAC. This is based on NPWS Conservation Objectives Version 1.0 of the 19th July 2011.
- 10) This will be noted in Table 3.2 in the SPA section
- 11) Noted, this will be changed in the final version.

Recommended change:

- 9) In Table 2.2.4.1 clarify the site code and name for the River Nore SAC as follows: Site Code 002162, *Version 1.0, dated 19th July 2011.*
- 10) Amend Table 3.2 to state that the data used was dated 2010 and kingfisher territories can change over time.
- 11) Change font size of final NIR report.

Submission d13b Environmental Protection Agency	
Summary of Issues raised	Manager's Response
<p>13) Consideration should be given to establishing an environmental management plan for the River Nore Linear Park.</p> <p>17) The objective in Section 8.2.6.1 in relation to the implementation of the Joint Waste management plan for the south east region is acknowledged. Consideration should be given to taking into account the requirements of the SEA and Habitats Directives.</p> <p>35) The Plan should highlight that an EIA and/or Appropriate Assessment of certain projects may be required.</p>	<p>13) There is a habitat management plan in place for the River Nore Linear Park, which was created in conjunction with the NPWS. An objective should be added in both plans to establish an environmental management plan for the River Nore Linear Park.</p> <p>17) An SEA and AA will be carried out as part of the Draft Waste Management Plan for the Southern Waste Region. The text in Section 8.2.6 Waste management should be updated.</p> <p>35) The Plan sets out the requirements for Appropriate Assessment in Section 1.3. The requirements for EIA are set out in legislation and there is no necessity to restate them in the Plan.</p>
<p>Recommended change:</p> <p>13) Amend County Plan Section 7.4.1.1 Nore Linear Park as follows: Objective: <i>"To establish an environmental management plan for the River Nore Linear Park."</i></p> <p>17) Update Section 8.2.6 Waste Management as follows: <i>"The JWMP was evaluated in 2012 and the outcome of that evaluation is that the Plan needs to be reviewed. The review will take place commenced in 2013, under the new Regional structures where Kilkenny will form part of an expanded Southern Region. The replacement plan will have regard to the national waste management policy as outlined in A Resource Opportunity, Waste Management Policy in Ireland¹.</i> Section 4 of the Waste Management Amendment Act 2001 provides that the Development Plan in force in an area shall be deemed to include the objectives contained in the <i>relevant</i> waste management plan made by the local authority."</p> <p>35) No change recommended.</p>	

1.3.2 Proposed Amendments to the Draft Plan

The proposed amendments to the Draft Plan, Environmental Report and NIR were placed on public display from the 14th of February to the 14th of March 2014. The proposed amendments were referred to all the Statutory Authorities, including the Department of Environment, Community and Local Government, the Department of Arts, Heritage and the Gaeltacht and adjoining Local Authorities. No submissions were received in relation to the amendments to the NIR specifically (see Manager's Report of 11th April 2014).

¹ Department of the Environment, Community and Local Government, [A Resource Opportunity, Waste Management Policy in Ireland](#), 2012

1.4 Relationship between the Appropriate Assessment process and the Plan

Appropriate Assessment (AA) needs to be fully integrated with the various stages of the development plan process in order to ensure that the ecological implications of the plan do not impact upon any areas designated as Natura 2000 sites.

As the AA process has been managed by part of the Forward Planning team, interaction has occurred from the early stages of writing of the draft plan to impress the importance of protection of the Natura 2000 network in the city and that the plan should be formulated to avoid adverse impacts on these sites. In addition the Strategic Environmental Assessment process has been taken into account in the appropriate assessment process.

The screening of objectives and the assessment of objectives in the context of mitigation measures and potential impacts of the designated sites, has been an iterative process throughout each stage of the plan-making process.

2 Stage 1 – Screening

2.1 Brief Description of the Plan

The Kilkenny City & Environs Development Plan 2014-2020 was prepared under the provisions of the Planning and Development Acts 2000-2013 to develop and improve the City & Environs (hereafter referred to as the City) in a sustainable manner. A separate Development Plan will cover Kilkenny County.

The area to be included in this Plan is shown on Map 1. There are four main neighbourhoods in the City; Eastern Environs, Loughboy, Western Environs and Loughmacask. The Eastern Environs and Loughboy are largely built out. There are two large brownfield sites available for redevelopment in the city centre at present; the Smithwick's site west of the River Nore, which was formerly a brewery, and the old mart site, east of the River Nore.

The Plan contents are best described through a list of the chapter headings:

1. Introduction
2. Demographic and Socio-Economic Trends
3. Core Strategy
4. Economic Development
5. Housing and Community
6. Recreation, Tourism & the Arts
7. Heritage
8. Infrastructure
9. Renewable Energy Strategy
10. Transport
11. Requirements for Developments

As the Core Strategy included in Chapter 3 of the Plan outlines, the focus for new development will be in the neighbourhoods of Loughmacask and the Western Environs. The estimated population increase for the whole city and environs is 2,077.

The main objectives and ethos of the Plan can be summarised in the Council's Mission Statement (section 1.8) as follows: *"Kilkenny Local Authorities aim to work in partnership with the people of Kilkenny and relevant agencies to deliver quality services and to promote sustainable economic, social and cultural development for current and future generations."*

The Plan provides a land use framework for the sustainable development of Kilkenny City and Environs. The Plan will set the strategic context for any lower-tier plans, such as Local Area Plans to be prepared in the city. In its making, the Plan will have regard to all relevant planning and environmental policy and legislation including European Union directives, Ministerial guidelines and other national, regional and county plans and policies.

In particular, the South East Regional Planning Guidelines (RPGs) provide a context for the making of the Plan. The RPGs allocated a projected population growth figure for the city as a hub, which must be adhered to. This population projection is translated into a housing land requirement, or a 'pot' of zoned land, which must be distributed.

The Plan will set the strategic context for any lower-tier plans, such as Local Area Plans (LAPs) to be prepared in the city. There is one LAP in place for Loughmacask, and two other LAPs for the Western Environs and the City Centre have been incorporated into the Plan.

2.1.1 Projects and Plans with potential for ‘in combination’ effects

Some other plans and projects which may pose in-combination effects include:

Table 2.1.1: Projects and Plans with potential for ‘in combination’ effects

<i>Strategic Planning</i>	<i>Anticipated effects</i>
National Development Plan, Ireland 2007–2013	Potential for positive and negative effects on integrity of Natura 2000 sites
Our Sustainable Future – A Framework for Sustainable Development for Ireland	Potential for positive and negative effects on integrity of Natura 2000 sites
National Spatial Strategy 2002– 2020	Potential for positive and negative effects on integrity of Natura 2000 sites
National Planning Guidelines	Potential for positive and negative effects on integrity of Natura 2000 sites
Rural Development Programme	Potential for positive effects on Natura 2000 sites; incentives for landowners with land within or adjacent to Natura 2000 sites
Regional Planning Guidelines for the South-East Region (2010–2022)	No anticipated negative impacts on integrity of Natura 2000 sites
Kilkenny County Development Plan 2014– 2020	Potential for positive and negative effects on integrity of Natura 2000 sites
Ministerial Guidelines and Directives: Architectural Heritage Protection, Childcare Facilities, Development Plans, Landscapes, Retail Planning, Strategic Environmental Assessment, Sustainable Residential Development in Urban Areas and Sustainable Rural Housing, The Planning System and Flood Risk Management.	Potential for positive and negative effects on integrity of Natura 2000 sites
Kilkenny 2002-2012, A Strategy for Economic, Social and Cultural Development	Potential for positive and negative effects on integrity of Natura 2000 sites
Smarter Travel, A sustainable Transport Future, A new transport policy for Ireland 2009-2020	Potential for positive and negative effects on integrity of Natura 2000 sites
<i>Water Quality</i>	
South Eastern River Basin Management Plan 2010	Positive effects on some Natura 2000 sites

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EU Water Framework Directive	Positive effects on some Natura 2000 sites
South East River Basin Management Plan (water Matters) 2009-2015	Positive effects on some Natura 2000 sites
Freshwater Pearl Mussel Nore River Basin Management Plan;	Positive effects on some Natura 2000 sites
National Action Plan for Sustainable Use of Pesticides	Positive effects on some Natura 2000 sites
Invasive Species	
EU Strategy on Invasive Alien Species	Positive effects on Natura 2000 sites
Climate Change	
National Climate Change Strategy 2007-2012	Positive effects on Natura 2000 sites
Economics/ Agri-food and fisheries	
Food Harvest 2020, A vision for Irish agri-food and fisheries	Positive effects on Natura 2000 sites
Biodiversity	
EU 2020 Biodiversity Strategy	Positive effects on Natura 2000 sites
County Kilkenny Draft Biodiversity Action Plan	Positive effects on Natura 2000 sites
County Kilkenny Heritage Plan	Positive effects on Natura 2000 sites

The Regional Planning Guidelines for the South-East Region (2010–2022) has been screened in accordance with Article 6 of the Habitats Directive; as this plan translates the objectives and policies of national and higher level plans as appropriate to the region it is considered that some of the potential for negative impacts of the higher level plans for the South East Regional has been addressed through the mitigation measures that form part of the regional planning guidelines.

The Kilkenny City & Environs Development Plan 2014-2020 and other plans and projects in combination have potential to significantly affect the Natura 2000 site(s) in their vicinity. Since a Development Plan sets the framework for development and proper planning within the city, there is potential for impacts on a number of environmental considerations including on the city's biodiversity, water quality and infrastructure, soil air and noise elements and material assets such as water and wastewater infrastructure, and interrelationships between elements. While these will be addressed in the Strategic Environmental Assessment (SEA) of the Plan, the policies and objectives of the Plan were assessed for their potential significant effects on the integrity of Natura 2000 sites, by virtue of the sites' conservation objectives.

2.2 Natura 2000 Sites

2.2.1 Overview

This section sets out in table and map format the Natura 2000 sites both Kilkenny City & Environs and also within a distance of 15km of Kilkenny City & Environs, as is currently recommended in the Guidance for Planning Authorities (DoEHLG, Dec 2009).

2.2.2 Natura 2000 sites in Kilkenny City & Environs and within 15km of the City

Listed below are the Natura 2000 sites within Kilkenny City & Environs and also within 15km of the city.

Table 2.2.2: Natura 2000 sites in Kilkenny City & Environs and within 15km of the city

Site Name	cSAC Site Code	SPA Site Code
Sites within Kilkenny City & Environs		
River Barrow & Nore	002162	-----
River Nore	002162	0004233
Sites within 15km of the City		
Thomastown Quarry	002252	-----

Set out in the following pages is a brief description of the Natura 2000 sites both within Kilkenny City & Environs and within 15km of the city. The information is derived from the NPWS Protected Site Synopses available on <http://www.npws.ie/en/ProtectedSites/>. Table 2.2.4.1 sets out the qualifying interests, conservation objectives and threats to the integrity of Natura 2000 sites within the city and within 15km of the city.

2.2.3 Brief Description of the Natura 2000 sites

2.2.3.1 Sites in Kilkenny City & Environs

• River Barrow and River Nore cSAC (002162)

This site consists of the freshwater stretches of the Barrow/Nore River catchments as far upstream as the Slieve Bloom Mountains and the tidal elements and estuary as far downstream as Creadun Head in Waterford. The site passes through eight counties – Offaly, Kildare, Laois, Carlow, Kilkenny, Tipperary, Wexford and Waterford. Major towns along the edge of the site include Mountmellick, Portarlinton, Monasterevin, Stradbally, Athy, Carlow, Leighlinbridge, Graiguenamanagh, New Ross, Inistioge, Thomastown, Callan, Bennettsbridge, Kilkenny and Durrow.

The site is a candidate SAC selected for the following habitats and species listed on the E.U. Habitats Directive – (a) priority habitats on Annex I - alluvial wet woodlands and petrifying springs, (b) habitats listed on Annex I - old oak woodlands, floating river vegetation, estuary, tidal mudflats, *Salicornia* mudflats, Atlantic salt meadows, Mediterranean salt meadows, dry heath and eutrophic tall herbs, and (c) species listed on Annex II – Sea Lamprey, River Lamprey,

Brook Lamprey, Freshwater Pearl Mussel, Nore Freshwater Pearl Mussel, Crayfish, Twaite Shad, Atlantic Salmon, Otter, *Vertigo moulinsiana* and the plant Killarney Fern.

Eutrophic tall herb vegetation occurs in association with the various areas of alluvial forest and elsewhere where the flood-plain of the river is intact. Floating River Vegetation is well represented in the Barrow and in the many tributaries of the site. Dry Heath at the site occurs in pockets along the steep valley sides of the rivers especially in the Barrow Valley and along the Barrow tributaries where they occur in the foothills of the Blackstairs Mountains.

Dry Heath at the site generally grades into wet woodland or wet swamp vegetation lower down the slopes on the river bank. Saltmeadows occur at the southern section of the site in old meadows where the embankment has been breached, along the tidal stretches of in-flowing rivers below Stokestown House, in a narrow band on the channel side of Common Reed beds and in narrow fragmented strips along the open shoreline. *Salicornia* and other annuals colonising mud and sand are found in the creeks of the saltmarshes and at the seaward edges of them. The estuary and the other Habitats Directive Annex I habitats within it form a large component of the site.

Seventeen Red Data Book plant species have been recorded within the site, most in the recent past. The site is very important for the presence of a number of EU Habitats Directive Annex II animal species including Freshwater Pearl Mussel, Freshwater Crayfish, Salmon, Twaite Shad, three Lamprey species - Sea, Brook and River, the marsh snail *Vertigo moulinsiana* and Otter. This is the only site in the world for the hard water form of the Pearl Mussel *M. m. durrovensis* and one of only a handful of spawning grounds in the country for Twaite Shad. The freshwater stretches of the River Nore main channel is a designated salmonid river. The upper stretches of the Barrow and Nore are very important for spawning. The site is of ornithological importance for a number of E.U. Birds Directive Annex I species including Greenland White-fronted Goose, Whooper Swan, Bewick's Swan, Bartailed Godwit, Peregrine and Kingfisher.

Landuse at the site consists mainly of agricultural activities – many intensive, principally grazing and silage production. Slurry is spread over much of this area. Arable crops are also grown. The spreading of slurry and fertiliser poses a threat to the water quality of the salmonid river and to the populations of Habitats Directive Annex II animal species within the site. Many of the woodlands along the rivers belong to old estates and support many non-native species. Little active woodland management occurs. Fishing is a main tourist attraction; both commercial and leisure fishing takes place on the rivers. There is net fishing in the estuary and a mussel bed also. Other recreational activities such as boating, golfing and walking, particularly along the Barrow towpath are also popular. There is a golf course on the banks of the Nore at Mount Juliet and GAA pitches on the banks at Inistioge and Thomastown. There are active and disused sand and gravel pits throughout the site. Several industrial developments, which discharge into the river, border the site. New Ross is an important shipping port. Shipping to and from Waterford and Belview ports also passes through the estuary. The main threats to the site and current damaging activities include high inputs of nutrients into the river system from agricultural runoff and several sewage plants, overgrazing within the woodland areas, and invasion by non-native species, for example Cherry Laurel and Rhododendron. The water quality of the site remains vulnerable. Good quality water is necessary to maintain the populations of the Annex II animal species listed above. Good quality is dependent on controlling fertilisation of the grasslands, particularly along the Nore. It also requires that sewage be properly treated before discharge. Drainage activities in the catchment can lead to flash floods which can damage the many Annex II species present. Capital and maintenance dredging within the lower reaches of the system pose a threat to migrating fish species such as lamprey and shad. Land reclamation also poses a threat to the salt meadows and the populations of legally protected species therein.

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

• **River Nore SPA (0004233)**

The River Nore SPA is a long, linear site that includes the following river sections: the River Nore from the bridge at Townparks, (north-west of Borris in Ossory) to Coolnamuck (approximately 3 km south of Inistioge) in Co. Kilkenny; the Delour River from its junction with the River Nore to Derrynaseera bridge (west of Castletown) in Co. Laois; the Erkina River from its junction with the River Nore at Durrow Mills to Boston Bridge in Co. Laois; a 1.5 km stretch of the River Goul upstream of its junction with the Erkina River; the Kings River from its junction with the River Nore to a bridge at Mill Island, Co. Kilkenny. The site includes the river channel and marginal vegetation.

For a large part of its course the River Nore traverses Carboniferous limestone plains; it passes over a narrow band of Old Red Sandstone rocks below Thomastown.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive of special conservation interest for the following species: Kingfisher. The River Nore SPA is of high ornithological importance as it supports a nationally important population of Kingfisher, a species that is listed on Annex I of the E.U. Birds Directive.

A survey in 2010 recorded 22 pairs of Kingfisher (based on 16 probable and 6 possible territories) within the SPA. Other species which occur within the site include Mute Swan (35), Mallard (267), Cormorant (14), Grey Heron (45), Moorhen (14), Snipe (17) and Sand Martin (1,029) – all figures are peak counts recorded during the 2010 survey.

The main threats to the site and current damaging activities include high inputs of nutrients into the river system from agricultural run-off and several sewage plants, and invasion by non-native species. The water quality of the site remains vulnerable. Good quality is dependent on controlling fertilisation of the grasslands, along the Nore. It also requires that sewage be properly treated before discharge.

2.2.3.2 Sites within 15km of the City

• **Thomastown Quarry cSAC (002252)**

Thomastown Quarry is situated along the R700 road about 1 km north of Thomastown, Co. Kilkenny. It comprises a disused limestone quarry in which an excellent diversity of calcareous habitat types has developed. The site is a candidate SAC selected for petrifying springs, a habitat listed on Annex I of the E.U. Habitats Directive.

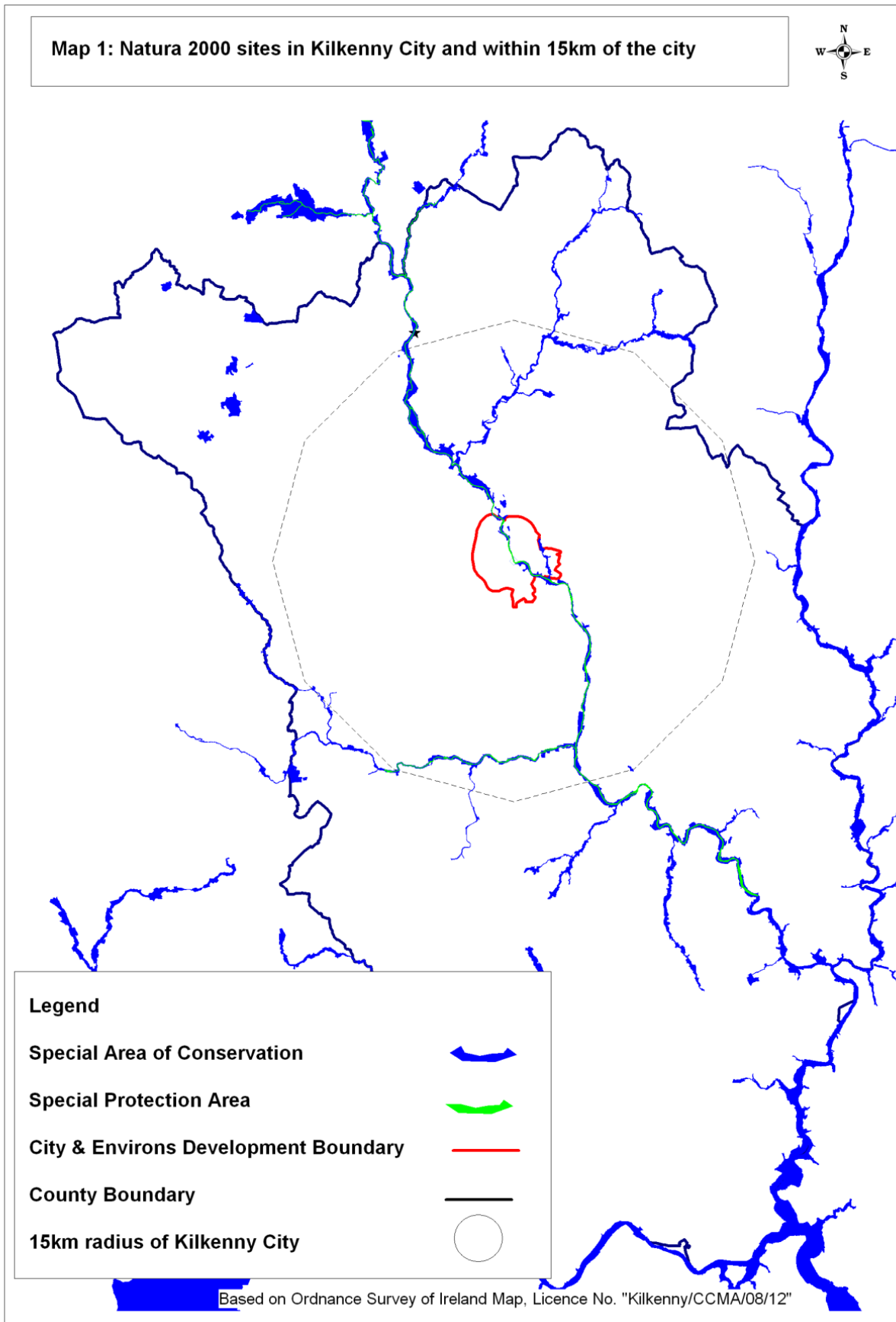
Bare rock accounts for a significant area of the site, occurring both on cliff faces and the quarry floor. These rocky surfaces are well covered with lichens and mosses.

Seepage lines or springs are a feature of the site and of particular importance is the presence of petrifying springs with tufa formations.

Alkaline fen vegetation has developed over some of the seepage areas and also around the various ponds that occur on the quarry floor. The fen vegetation is quite species rich. The ponds support populations of the Common Frog and Common Newt, both legally protected species.

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Despite its small size, this site has an excellent diversity of calcareous habitats, including petrifying springs, a habitat with priority status on Annex I of the E.U. Habitats Directive.



2.2.4 Natura Sites, Qualifying Interests and Threats to Site Integrity

This section sets out in table form the Natura 2000 sites, firstly within the city and secondly within 15km of the city, together with their qualifying interest, the conservation objectives of the site, and threats to the site integrity based on their qualifying interests (the Conservation Status of the qualifying interests is set out in Appendix 1, and discussed briefly in section 2.2.5). In writing this section the information available from the National Parks and Wildlife Section has been examined, including the Site Synopsis, Natura 2000 Standard Data form, Conservation Objectives, and where available the Conservation Plan or Conservation Statement for the site. In addition *The Status of EU Protected Habitats and Species in Ireland 2008* has been consulted along with the information available at the time of writing this report for the conservation status of habitats and species examined under the third report by the NPWS for the period 2007-2013.

Table 2.2.4.1: Natura 2000 sites within County Kilkenny, Qualifying Interests and Threats to Site Integrity

Kilkenny City : Candidate Special Areas of Conservation			
Site code & name	Qualifying interests	Conservation Objectives	Threats to site integrity
002162 Version 1.0, 19 th July 2011 River Barrow and River Nore cSAC	<p>Annex I - priority habitat</p> <ul style="list-style-type: none"> ▪ Alluvial wet woodlands - Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) (91E0) ▪ Petrifying springs - Petrifying springs with tufa formation (<i>Cratoneurion</i>) (7220) <p>Annex I</p> <ul style="list-style-type: none"> ▪ Old oak woodlands - Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in British Isles (91A0) ▪ Floating river vegetation - Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation (3260) ▪ Estuary – (1130) ▪ Tidal mudflats - <i>Spartina</i> swards (<i>Spartinion maritimae</i>) (1320) ▪ <i>Salicornia</i> mudflats - <i>Salicornia</i> and other annuals colonizing mud and sand (1310) ▪ Atlantic salt meadows - (<i>Glauco-Puccinellietalia maritimae</i>) (1330) ▪ Mediterranean salt meadows (<i>Juncetalia</i> 	<p>Objective: Individual Habitat and Species Objectives to maintain and/ or restore the favourable conditions of the Annex I habitats and Annex II species for which the cSAC has been selected.</p> <p>Alluvial wet woodlands - (91E0) Petrifying springs (7220) Old oak woodlands (91A0) Floating river vegetation (3260) Estuary – (1130) Tidal mudflats (1320) <i>Salicornia</i> mudflats (1310) Atlantic salt meadows (1330) Mediterranean salt meadows (1410) Dry heath (4030) Eutrophic tall herbs (6430) Sea Lamprey (1095) River Lamprey (1099) Brook Lamprey (1096) Freshwater Pearl Mussel – (1029) Nore Freshwater Pearl Mussel – (1990) Crayfish (1092) Twaite Shad (1103) Atlantic Salmon (1106)</p>	<ul style="list-style-type: none"> ▪ Fragmentation, abundance of alien invasive species, sub-optimal grazing regimes, drainage. ▪ Land reclamation, drainage. ▪ Invasive alien species, sub-optimal grazing. ▪ Eutrophication, overgrazing, excessive fertilisation, afforestation, introduction of invasive alien species. ▪ Aquaculture, fishing, coastal development and water pollution. ▪ Aquaculture, fishing, bait digging, removal of fauna, reclamation of land, coastal protection works and invasive species. <p>Hard coastal defence structures, sea-level rise.</p> <ul style="list-style-type: none"> ▪ Invasive species, natural erosion, accretion cycles and storms. ▪ Overgrazing by sheep or cattle, and erosion. Presence of common cordgrass invasive species. Loss of habitats due to infilling and reclamation. ▪ Over-grazing by cattle or sheep ▪ Infilling and reclamation. ▪ Afforestation, over-burning, over-grazing, under-grazing and bracken invasion. ▪ Invasive species, arterial drainage and agricultural improvement at the river

	<p>maritimi) (1410)</p> <ul style="list-style-type: none"> ▪ Dry heath - European dry heaths (4030) ▪ Eutrophic tall herbs - Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels (6430) <p>Annex II</p> <ul style="list-style-type: none"> ▪ Sea Lamprey - <i>Petromyzon marinus</i> (1095) ▪ River Lamprey - <i>Lampetra fluviatilis</i> (1099) ▪ Brook Lamprey – <i>Lampetra planeri</i> (1096) ▪ Freshwater Pearl Mussel – <i>Margaritifera margaritifera</i> (1029) ▪ Nore Freshwater Pearl Mussel – (<i>Margaritifera durrovensis</i>) (1990) ▪ Crayfish – <i>Austropotamobius pallipes</i> (1092) ▪ Twaite Shad – <i>Alosa fallax</i> (1103) ▪ Atlantic Salmon – <i>Salmo salar</i> (1106) ▪ Otter – <i>Lutra lutra</i> (1355) ▪ Desmoulin’s Whorl Snail - <i>Vertigo moulinsiana</i> (1016) ▪ Killarney Fern – <i>Trichomanes speciosum</i> (1421) 	<p>Otter (1355) Desmoulin’s Whorl Snail (1016) Killarney Fern (1421)</p>	<p>edge.</p> <ul style="list-style-type: none"> ▪ Weirs restricting access to spawning beds. Channel maintenance which removes silt deposits and gravel shoals used by lampreys. ▪ Poor substrate quality due to increased growth of algal and macrophyte vegetation as a result of severe nutrient enrichment, as well as physical siltation. ▪ Poor quality of river substrate. ▪ Introduction of diseases transmitted by introduced American crayfish. ▪ Restricted access to spawning grounds due to weirs. ▪ Diseases, parasites, water pollution. ▪ Road kill, fishing nets and lobster pots. ▪ Drainage of wetlands and riparian management, spread of urban development. ▪ Modifications to the site’s hydrology, through pollution, or woodland clearance.
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Special Protection Area

Site code & name	Qualifying interests	Conservation Objectives	Threats to site integrity
<p>River Nore</p> <p>0004233 SPA Version 4.0 16th April 2012</p>	<p>Kingfisher (<i>Alcedo atthis</i>)</p>	<p>Objective: To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: <i>Alcedo atthis</i> [breeding]</p>	<ul style="list-style-type: none"> ▪ Disturbance, Water Quality, Invasive Species.

Within 15km of the City: Candidate Special Area of Conservation

Site code & name	Qualifying interests	Conservation Objectives	Threats to site integrity
<p>002252</p> <p>Thomastown Quarry</p>	<p>Priority status - Listed in Annex I of HD</p> <ul style="list-style-type: none"> ▪ Petrifying springs with tufa formation (<i>Cratoneurion</i>) (7220) 	<p>Objective: To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected: [7220] * Petrifying springs with tufa formation (<i>Cratoneurion</i>)</p>	<p>Land reclamation Drainage Abandonment</p>

2.2.5 Conservation Status of Natura 2000 Habitats and Species

The conservation status of habitats and species within the Natura 2000 sites in Kilkenny City and in those within a 15km of the City were examined having regard to the information available from the National Parks and Wildlife Service and from Bird Watch Ireland (listed in full in Appendix 1).

The National Parks and Wildlife Service are currently in the process of producing the draft 3rd Irish Report on the implementation of the EU Habitats Directive, and have held public consultation on the conservation status of species and habitats. At the time of writing this report, the conservation status of five habitats and species were publically available and have been taken into account in this assessment. The second report (2001 – 2006) The Status of EU Protected Habitats and Species in Ireland, 2008 focused on a first assessment of conservation status of all habitats and species of Community interest. The third report (2007 – 2013) repeats the conservation status assessments undertaken in 2007; the basic structure of the assessments is the same as that in the 2nd report, but there are changes in the detail of the data requested by the European Commission. The six-yearly reports required by the Habitats Directive are intended to track improvement in the conservation status of these habitats and species since the Directive came into force in 1994.

Within the city of the 13 types of habitats in Natura 2000 sites, the conservation status was not favourable in 2008 – with 5 habitats rated as ‘Bad’ and 8 listed as ‘Poor’, none received ‘Good’ status. The species within the sites were rated as follows – 5 ‘Bad’, 3 ‘Poor’ and 3 ‘Good’, with the Kingfisher listed on the Amber list (medium conservation concern). As per the draft 3rd report of the NPWS the habitats and species listed at the time of writing this report were as follows – 1 ‘Unfavourable Bad’, 1 Unfavourable Bad – Improving subject to maintenance of current levels of activity’, 1 ‘Unfavourable Bad’, 1 ‘Stable’ and 1 ‘Good’.

The habitat at the Natura 2000 site at Thomastown, (outside of the boundaries of the plan for the city, but within 15km) was rated as ‘bad’; this has changed to ‘Stable’ under draft 3rd report of the NPWS.

The majority of habitats and species listed in Natura 2000 sites in the city are water related; this was acknowledged during the Habitats Screening Report for Variation 2 of the Kilkenny City & Environs Development Plan 2008-2014 and the protection for Natura 2000 sites was strengthened in the plan particularly with regard to impacts on sites through hydrological pathways at sites within are geographically remote from the Natura 2000 site. The Kilkenny City & Environs Development Plan 2014-2020 has built upon this protection and further strengthened it; in addition the strive towards the maintenance and/ or restoration of good water status in accordance with the Water Framework Directive will have benefits for the environment and water dependent habitats and species.

3.0 Assessment of Likely Effects

The purpose of this Habitats Directive Screening is to determine whether the Kilkenny City & Environs Development Plan 2014-2020 is likely to have any significant impacts on the conservation objectives or qualifying interests of the Natura 2000 sites in the city or within 15km of the city boundaries.

This section sets out the elements of the plan that have been identified as likely to give rise to significant effects on Natura 2000 sites. The preliminary screening of objectives of the plan is set out in Appendix 2 of this report. The potential impacts were assessed in the absence of any mitigation measures, and the precautionary principle that the potential for effects cannot be ruled out, rather than the certainty of the effects occurring was applied. The proposed amendments to the Draft Plan were also screened for AA and SEA purposes (See Proposed Amendments to Draft City & Environs Development Plan, Volume II, 14th Feb 2014).

3.1 Overview of elements in the plan that are likely to give rise to impacts on Natura 2000 sites

- Settlement Strategy – sets out strategy for hierarchical distribution of population.
- Economic Development - provides for economic development and zoning.
- Sets out strategic locations for optimal location of economic concentration and development.
- Spatial distribution of retail development within the city.
- Objectives for development of riverside walks.
- Objectives to facilitate infrastructure projects including waste and broadband.
- Transport objectives for development which facilitates cycling, bus parking and road development.
- Provision of zoning.

3.1.1 Plan Objectives that are Likely to Give Rise to Impacts on Natura 2000 sites

The relevant objectives are listed according to the chapter they appear in, in the Plan.

Chapter 3 Core Strategy

Objective (objectives are identified by a number and a letter)

- | | |
|----|---|
| 3B | To implement the vision, policy and objectives of the Western Environs Local Area Plan 2004 for the development of the area. |
| 3C | To prepare a master plan/ urban design framework for the Smithwick's site and Bateman Quay during the lifetime of the development plan. |
| 3D | To take a fresh analysis of the development strategy for the City & Environs immediately following the agreed masterplan for the Smithwick's lands and taking account of the current and projected economic performance of the City and County. |

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3E To implement the provisions of sections 2 of the City Centre LAP relating to transport, car parking, urban design and land uses.

3F To implement the provisions of Section 3 of the City Centre LAP relating to the urban design frameworks and land uses for specific sites.

Zoning Objectives:

Agriculture : Housing on lands Zoned for Agriculture: On lands zoned for agriculture, housing will be restricted to the following categories of persons:

- Immediate members of farmer's families (sons & daughters) and/or
- Persons whose primary employment is in agriculture, horticulture, forestry or bloodstock, or other rural based activity in the area which they wish to build.

The basis of this policy is to preserve the existing agricultural use of the areas zoned for this purpose, to prevent speculation in land and to prevent urban generated development which would interfere with the operation of farming and prejudice the future planning and development of the area.

Existing / Phase 1 Low-density Residential: To protect, provide and improve residential amenities at low density. Low density housing is defined as not more than 10 units per ha (4 per acre) on average and must have regard to the character of the area.

Existing Residential / Phase 1 / Phase 2 Residential: To protect, provide and improve residential amenities.

General Business: To provide for general development.

Neighbourhood Centres: To provide for local shopping, non retail services, community and social needs.

Recreation, Amenity, Open Space/ Green links/ Biodiversity Conservation: To preserve, provide and improve recreational open space and to allow for green links and biodiversity conservation.

Community Facilities: To protect, provide and improve community facilities.

Industrial/Warehousing: To provide for industrial employment and related uses.

Industrial/ Technology Park: To provide for industry and information technology-related industrial and office development and ancillary services. The purpose is to encourage mainly services type employment on a campus environment.

Business Park: To provide for commercial activity including industry, information technology-related industrial and office development and ancillary services and retail warehousing.

Mixed Use: To consolidate and facilitate the development of inner suburban sites for mixed use development which will allow for commercial and residential uses.

Agricultural Trade: To develop a centre of excellence and one stop shop for agricultural related trade and activities with an emphasis on high value added activities, by providing for and improvement of agricultural trade, related uses and ancillary activities and services and to provide for industrial employment and related uses.

Chapter 4 Economic Development

- 4C To ensure an adequate amount of employment land on a campus type environment is available within the City for ICT and technology office based industry at the appropriate strategic locations.
- 4D To deliver and implement the 6 projects associated with the Medieval Mile proposals during the lifetime of the Plan 2014 – 2020 for the city and county.
- 4E To ensure that an adequate quantity and range of land is available for enterprise development and that the appropriate infrastructure is provided.
- 4J To improve convenience market share retained within the county to 80% post 2020
- 4K To improve comparison market share retained within the county to 75% post 2020
- 4L To increase convenience trade draw from 8% to 15% post 2020
- 4M To maintain comparison trade draw at 58% post 2020

Chapter 5 Housing and Community

- 5A To implement the Housing Strategy contained in Appendix B of the Development Plan.

Chapter 6 Recreation

- 6B Complete the River Nore Linear Park within the lifetime of the Plan.

Chapter 8 Infrastructure and Environment

- 8A Implement the programme as outlined in the Water Services Investment Programme.
- 8B Prioritise the upgrading of the Purcellsinch wastewater treatment plant.
- 8I To implement the Joint Waste Management Plan for the South East Region.

Chapter 9 Renewable Energy Strategy

- 9A Investigate the feasibility of installing anaerobic digestion facilities at the Purcellsinch wastewater treatment plant.

Chapter 10 Transport

- 10A To review the Mobility Management Plan (2009) and adopt a new MMP for the period 2015-2020.
- 10B Complete the demarcation of the Gateways as depicted on Figure 10.1 and prioritise pedestrian and cyclist movement within the Gateways.
- 10C To re-examine options for pedestrian prioritisation in the city centre following implementation of the Central Access Scheme.

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- 10D Complete the improvements to the back lanes, including the lane from Fr. Murphy Square to Robertshill.
- 10E Plan for the provision of the Greensbridge Way and the Ossory Bridge connection.
- 10G To facilitate parking provision for tourist buses within the city.
- 10J To preserve free from development proposed road realignment/improvement lines and associated corridors where such development would prejudice the implementation of National Roads Authority or Council plans (See Figure 10.2 Road hierarchy).
- 10K Reserve the line of Phase 2 and Phase 3 of proposed Central Access Scheme free from development and to complete Phase 1 of the Central Access Scheme within the plan period (See Figure 3.3).
- 10L To widen the Castlecomer Road to provide for two lanes south bound and one lane north bound carriageway (See Figure 3.3).
- 10M Reserve the proposed line of the western by-pass for the city from the Castlecomer Road to the Waterford Road free from development, including for a river crossing and seek approval from An Bord Pleanála for Phase 1 of the Western By-pass, the Kilkenny Northern Ring Road Extension (See Figure 3.3).
- 10N Reserve the proposed line of a new road link from the Callan Road to the Waterford Road roundabout free from development (See Figure 3.3).
- 10O Provide a second entrance to the Hebron Industrial Estate from the Hebron Road (See Figure 3.3).
- 10P Complete the R697 Kells Road Improvement Scheme from Upper Patrick St. to the Kells Road Roundabout .
- 10Q Complete the R712 Road Improvement Scheme from the Old Dublin Road Roundabout to the Leggettsrath Roundabout.
- 10R The development of the lands located on the Waterford Road (known as the Murphy machinery lands, see Figure 3.3) to be dependent on an alternative access to the national route
- 10S Prepare and implement traffic management and calming schemes for the City & Environs in line with the 3 year Roads Programmes.
- 10T Complete the Bohernatounish Road Traffic Management Scheme
- 10U Complete the Outrath Road Improvement Scheme
- 10V Complete improvement works from the Parade Plaza to Dean Street under the Medieval Mile Project.

3.2 Likely direct, indirect or secondary impacts of the project; changes to the site; and impacts on the Natura 2000 site

Criteria for assessment of likely impacts on the Natura 2000 sites:

- Describe any likely direct, indirect or secondary impacts of the plan (either alone or in combination with other plans or projects) on the Natura 2000 site by virtue of:
 - size and scale; land-take; distance from the Natura 2000 site or key features of the site; resource requirements (water abstraction etc.); emissions (disposal to land, water or air); excavation requirements; transportation requirements; duration of construction, operation, decommissioning, etc.; other.
- Describe any likely changes to the site arising as a result of:
 - reduction of habitat area; disturbance to key species; habitat or species fragmentation; reduction in species density; changes in key indicators of conservation value (water quality etc.); climate change.
- Describe any likely impacts on the Natura 2000 site as a whole in terms of:
 - interference with the key relationships that define the structure of the site; interference with key relationships that define the function of the site.

The table below lists the Natura 2000 sites found in Kilkenny City & Environs and within 15km of the city.

The Kilkenny City & Environs Development Plan 2014-2020 sets out a hierarchical structure for the concentration of population, economic development, community services and infrastructure in the city within the wider framework of the Regional Planning Guidelines for the Southeast Region.

The qualifying interests and threats to the site integrity as set out in table 2.2.4.1, together with the description of the site and qualifying interests as set out earlier in this report are referred to in assessing the likely direct, indirect or secondary impacts or likely changes to the sites as per the criteria outlined above.

Table 3.2: Likely direct, indirect or secondary impacts on Natura 2000 sites

Candidate Special Area of Conservation		
Site Name	Potential Impacts arising from the Plan	AA required
River Barrow and River Nore cSAC 002162	The River Barrow and River Nore cSAC has the potential for significant adverse effects from development from a number of sources, including potential for impacts both direct, indirect and loss of habitats and disturbance of species and introduction of invasive species. The River Nore flows from north to south through the centre of the city. In addition	Yes

	<p>there are many hydrological links with the site throughout the city and environs area.</p> <p>Direct loss of habitat resulting from bankside vegetation removal or drainage works along the river affects the overall riparian habitat on which qualifying interests and the biodiversity of the site depends.</p> <p>The plan may result in alterations to the hydrological regime or physical environment of the site from discharges to watercourses or groundwater resources. Potential also exists for contamination through diffuse and point source runoff from development during the construction or operational phases of developments located adjacent to the site. Drainage works, hydro schemes and transportation works also have potential for a significant adverse effect on the integrity of the site.</p> <p>A reduction in water quality through sedimentation or contamination by pollutants would directly affect all aquatic plant and animals. This would have knock-on effect throughout the food chain on invertebrates, birds, fish and mammals. Many of the associated habitats and species are dependent on high water quality. Runoff and contamination events would have negative consequences for the qualifying interests and conservation objectives of the site.</p>	
Special Protection Area		
Site Name	Potential Impacts arising from the Plan	AA required
River Nore 004233 SPA	<p>The report carried out on behalf of the NPWS 'Assessment of the distribution and abundance of Kingfisher Alcedo at this and other riparian birds on six SAC river systems in Ireland', 2010 indicates that there is a probable Kingfisher territory to the north of Kilkenny city, but does not indicate a possible or probable territory in the city or environs area. However the report indicates sightings of Kingfisher at the north of the plan area. It is noted that Kingfisher territories can change over time.</p> <p>Possible territories also exist downstream of the plan area near Thomastown.</p> <p>However potential exists for impacts on the Natura 2000 site from:</p> <ul style="list-style-type: none"> - Proposals for walks along the river and amenity 	Yes

	<p>schemes improving access to the river also have the potential for impacts on water quality and disturbance.</p> <ul style="list-style-type: none"> - Alterations to the hydrological regime or physical environment of the site from discharges to watercourses or groundwater resources. Potential also exists for contamination through diffuse and point source runoff from development during the construction or operational phases of developments located adjacent to the site. - Runoff and contamination events would have negative consequences for the qualifying interests and conservation objectives of the site. 	
Natura Site within 15km of Plan area		
Site Name	Potential Impacts arising from the Plan	AA required
Thomastown Quarry cSAC 002252	Thomastown Quarry is located approximately 15km south east of Kilkenny City adjacent to the development boundary for the district town of Thomastown. The conservation objectives for the site are groundwater dependent. Potential exists for impacts from abstraction for water supply to serve the city and environs; however the EIS prepared for the Kilkenny City Regional Water Supply Scheme shows that the zone of contribution from the sites of abstraction at Dunmore and Kilkeran will not impact on the conservation objectives of the site. It is unlikely, given the conservation objectives for this site and the distance from the plan area that impacts on the Natura 2000 will occur.	No

3.2.1 Conclusion of Screening of the likely direct, indirect or secondary impacts on Natura 2000 sites

Having regard to the foregoing, having assessed the potential threats to the site in relation to the identified objectives likely to give rise to impacts on Natura 2000 sites as a result of the Kilkenny City & Environs Development Plan 2014-2020, and also having regard to the qualifying interests and conservation objectives of the Natura 2000 sites listed above it is considered:

- (i) In relation to Thomastown Quarry (002252) unlikely that there will be:

- a) direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the Natura 2000 site by virtue of: - size and scale, land-take; distance from the Natura 2000 site or key features of the site; resource requirements (water abstraction etc.); emissions (disposal to land, water or air); excavation requirements; transportation requirements; duration of construction, operation, decommissioning, etc.; other, or
- b) changes to the site arising as a result of: - reduction of habitat area; disturbance to key species; habitat or species fragmentation; reduction in species density; changes in key indicators of conservation value (water quality etc.); climate change, or
- c) impacts on the Natura 2000 site as a whole in terms of: - interference with the key relationships that define the structure of the site; or interference with key relationships that define the function of the site.

A 'Finding of No Significant Impacts' table has been completed in this regard and is included in Appendix 3 of this report.

- (ii) In relation to the River Barrow and River Nore cSAC (002162) and the River Nore SPA (004233), the screening process has identified that the Natura 2000 sites within the city have the potential to be adversely affected by the implementation of the Kilkenny City & Environs Development Plan 2014-2020 from a number of objectives as set out in the plan. Many of the qualifying interests of the Natura 2000 sites in the City are water dependent and so negative effects on water quality and quantity may have significant effects on the integrity of Natura 2000 sites.

4.0 Stage 2 - Appropriate Assessment

4.1 Introduction

The main objective of this stage (Stage 2) in the AA is to determine whether the Plan would result in significant adverse impacts to the integrity of any Natura 2000 site with respect to the site’s structure, function and/or conservation objectives.

The Stage 1 Screening has created a list of sites with potential to be affected by the Plan. Therefore, a Stage 2 Appropriate Assessment is required. The potential adverse effects considered at this stage will either be effects occurring as a result of the application of the Plan alone or in-combination with other plans, programmes and/or projects.

In total, two sites have been identified that may be adversely affected through the implementation of the Plan and both of the sites potentially affected by the Plan have been designated for habitats and species that are dependent on groundwater and surface water quality and availability.

Table 4.1 Natura 2000 sites subject to Stage 2 Appropriate Assessment

Rivers	SPAs
River Barrow & Nore cSAC (002162)	River Nore (0004233)

4.2 Potential Significant Effects

As outlined in the EU document “Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC”, and the national guidance document ‘Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities’, impacts that could potentially occur through the implementation of the Plan can be categorised under a number of headings

- Loss/Reduction of habitat area – as a result of developments such as transport infrastructure.
- Disturbance to key species – from works such as increased public access to protected sites and increased recreational pressure such as development of footpaths and cycleways.
- Habitat or species fragmentation – from developments such as telecommunications developments or recreational developments.
- Reduction in species density
- Changes in key indicators of conservation value such as decrease in water quality and quantity – through inadequate wastewater treatment, or runoff of pollutants during construction and operational phases of development.

The Development Plan is a high level plan that provides a framework for the sustainable development within Kilkenny City & Environs. Whilst some projects are site specific, such as

road development works and zonings, the Plan does not prescribe the particular locations for developments. Overall, the Plan underpins the development of housing, retail, employment and recreation with supporting transport, water, waste, energy and communication infrastructure within the city.

4.2.1 Reduction of Habitat Area

Direct habitat loss is caused where there is complete removal of a habitat type. Habitat loss can also occur through the reduction of habitat quality and a loss of important habitat functions. It can arise from the introduction of invasive species, toxic contamination or physical alteration. Natura 2000 sites in Kilkenny city are vulnerable in relation to water quality as the habitats and species are sensitive to changes in groundwater flow or surface water run-off (River Barrow and Nore cSAC and River Nore SPA).

There is potential that the designated sites within the functional area of the plan may be either directly or indirectly adversely affected in this manner through the implementation of the Plan. Development either in isolation or in combination with other similar developments can potentially lead to significant adverse impacts on the environment with long term consequences. Construction of riverside amenities could lead to loss of habitats if inappropriately located within the boundaries of a designated site. Installation of linear infrastructure such as roads and other transportation links or water and wastewater pipelines can have a negative impact over a wide distance where such infrastructure crosses designated sites. Impacts can include habitat or species fragmentation where, for example, electricity supply lines interrupt the flight paths of birds or newly installed bridges disturb the migration of salmon.

A review of the zoning maps for the city shows that the majority of the lands adjacent to the designated sites of the River Nore are zoned for open space 'to preserve, provide and improve recreational open space and to allow for green links and biodiversity conservation', however there is an existing developed area in the city centre zoned for existing and general business uses, and an area zoned to the east for industrial technology park and many of the lands within the development plan boundary have hydro-geological links to the designated sites, which could have potential impacts on sites. Whilst direct habitat loss through inappropriate development is unlikely it cannot be ruled out completely.

4.2.2 Fragmentation

Habitat and species fragmentation can occur through the breaking up of or loss of habitats resulting in interference with existing ecological units. Fragmentation can also result from impediments to the natural movements of species. This is relevant where important corridors for movement or migration are likely to be disrupted such as along river corridors during construction as it could form a barrier to the free movement of species from one habitat to another.

Installation of linear infrastructure e.g. roads and other transportation links, water and wastewater pipelines, electricity supply lines, can have a negative impact over a wide distance where such infrastructure crosses designated sites. Impacts can include habitat or species fragmentation where, for example, newly installed bridges disturb the migration of salmon. Disturbance impacts to birds, can also lead to fragmentation of bird populations from riverside

development such as walking and cycling paths, increases in access points to rivers, road improvements and bridges and drainage works; research undertaken by Birdwatch Ireland show that the Kingfisher on the River Nore are vulnerable to disturbance in this regard.

4.2.3 Disturbance to Key species

Disturbance to species supported within a Natura 2000 site is likely to increase where there is an increase in activity levels from recreation and amenity or from developments within or adjacent to designated areas. Sources of disturbance include noise, vibration, light, construction and operation activities or other sources of disturbance arising from recreation and amenity – including riverside walks and water sports, from the inappropriate timing of works or proximity to settlements. The Natura 2000 sites potentially affected include the River Barrow and River Nore cSAC and the River Nore SPA.

4.2.4 Changes in Key Indicators of Conservation Value

Key indicators of conservation value for the Natura 2000 sites in County Kilkenny are surface water and groundwater quality and quantity. Impacts on Natura 2000 sites may occur where there are hydro-geological connections between the sites and development areas, even where a development or activity occurs at a location which is geographically remote from the designate site. Implementation of the Plan may result in alterations to the hydrological regime or physical environment of sites through abstraction, drainage, and discharges to watercourses or groundwater resources. Of particular importance will be the provision of water supplies and the disposal of wastewater.

The EIS prepared for the Kilkenny City Regional Water Supply Scheme shows that the slight reduction in the level of the water table throughout parts of the limestone aquifer at Kilkieran and the sand and gravel aquifer at Dunmore is an essential part of the development and cannot be mitigated. The groundwater model predicts that the drawdown associated with the long term operation of the wellfields will be of 0.3m within 500m and 0.1m within 1.5km of the proposed wellfield at Dunmore. The drawdown at Kilkieran is predicted to extend to 1m up to 1.5km south of the wellfield and 750m north of the wellfield. The project is pending assessment of the EIS by An Bord Pleanála.

There are two public wastewater treatment schemes within the city, of varying size and complexity – Kilkenny City Purcellsinch Secondary WWTP (with a design p.e. of 107,650, and current p.e. loading of 54,504), and Kilkenny Sion Road primary WWTP with design p.e. and loading of 21. The Purcellsinch EIS application for a major upgrade has been given approval by An Bord Pleanála

The EPA publishes reports on the status of waste water treatment in Ireland. The latest of these is an Update Report to the *Focus on Urban Waste Water Discharges in Ireland, Urban Waste Water Treatment*. This sets out which plants have treatment that is not appropriate based on the effluent results and/or have taken less than the recommended numbers of samples. The plants are categorised into Pass or Fail. In both 2010 and 2011, Purcellsinch passed. This compares favourably to 2009 when it failed.

The Water Framework Directive established a framework for the protection of all waters including rivers, lakes, estuaries, coastal waters, groundwater, canals and other artificial bodies for the benefit of everyone. For the purposes of implementing the WFD, Ireland has been divided into eight river basin districts that are drained by a large river or number of rivers. County Kilkenny is located in the South Eastern River Basin District. The South East River Basin Management Plan (*Water Matters*) 2009-2015 was published in 2010.

Water in the District has been divided into groundwater, rivers, lakes, estuarine and coastal waters, which are in turn divided into specific waterbodies. Each waterbody is categorised in terms of its water quality status as follows: High, good, moderate, poor, bad, yet to be determined. The Environmental Protection Agency manages the monitoring of all waterbodies, and the latest information on the status of each waterbody is available at <http://gis.epa.ie/Envision/>.

Groundwater is categorised as good status throughout the city.

The South East River Basin Management Plan noted that two rivers in the county were classified as Bad status, The River Nore south of Thomastown and the River Gowran, which is a tributary of the Barrow, neither of which are located within the city. As at May 2013, no river in the city is classified as Bad status, but the Nore at Brewery bridge is classified as Poor. Information on trends in river water quality is available from the EPA Report on River Water Quality in County Kilkenny. This shows that since 2008, river water quality has remained relatively stable, with a decrease in the number of unpolluted rivers, but also a decrease in the number of seriously polluted rivers.

4.3 Mitigation Measures

The importance of the protection of the environment, biodiversity and protected species and habitats formed an important part of the plan making process; however a number of objectives are included in the plan, which have potential to result in significant adverse effects on the integrity of the Natura 2000 network within the Plan area. In order to prevent, offset or negate these effects, it is necessary to propose mitigation measures to prevent such significant adverse effects.

A number of the objectives in the plan have as their focus the protection of the environment, water and Natura 2000 sites; these are listed below and provide the main basis of the mitigatory measures in relation to the elements of the plan which are likely to give rise to impacts on Natura 2000 sites.

4.3.1 List of Mitigatory objectives for the protection of the environment

Chapter 1

- 1A To implement the provisions of Articles 6(3) and 6(4) of the EU Habitats Directive.
- 1B To ensure that any plan or project within the functional area of the Planning Authority is subject to appropriate assessment in accordance with the Guidance [*Appropriate*](#)

[Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities](#), 2009² and is assessed in accordance with Article 6 of the Habitats Directive in order to avoid adverse impacts on the integrity and conservation objectives of the site. These objectives will apply to all plans and projects whether public or private and across all sectors of development.

Chapter 6 Recreation

6C To establish an environmental management plan for the River Nore Linear Park.

Chapter 7 Heritage

- 7B To protect and, where possible, enhance the natural heritage sites designated under EU Legislation and National Legislation (Habitats Directive, Birds Directive, European Communities (Birds and Natural Habitats) Regulations 2011 and Wildlife Acts). This protection will extend to any additions or alterations to sites that may arise during the lifetime of this plan.
- 7C To protect and, where possible, enhance the plant and animal species and their habitats that have been identified under European legislation (Habitats and Birds Directive) and protected under national Legislation (European Communities (Birds and Natural Habitats) Regulations 2011 (SI 477 of 2011), Wildlife Acts 1976-2010 and the Flora Protection Order (SI94 of 1999).
- 7D To prepare and support the implementation of a Green Infrastructure Strategy for Kilkenny city and environs, to include for a tree planting programme.
- 7E To protect and, where possible, enhance wildlife habitats and landscape features which act as ecological corridors/networks and stepping stones, such as river corridors, hedgerows, gardens and road verges, and to minimise the loss of habitats and features of the wider countryside (such as ponds, wetlands, trees) which are not within designated sites. Appropriate mitigation and/or compensation measures to conserve biodiversity, landscape character and green infrastructure networks will be required where habitats are at risk or lost as part of a development.
- 7F The Council will promote the planting of native tree and shrub species, by committing to using native species (of local provenance wherever possible) in its landscaping work and on Council property.

Chapter 8 Infrastructure and Environment

- 8C Meet in full the requirements of the E.U. [Urban Waste Water Treatment](#), [Water Framework](#) Directives and the [Drinking Water Regulations](#).
- 8E To promote compliance with environmental standards and objectives established—
- for bodies of surface water, by the European Communities (Surface Waters) Regulations 2009; and
 - for groundwater, by the European Communities (Groundwater) Regulations 2010;

² *ibid*

which standards and objectives are included in the South East River Basin Management Plan.

4.3.2 Objectives Screened in under Stage 1 and Mitigation Measures

Table 4.3.2 Objectives Likely to Give Rise to Significant Impacts on Natura 2000 and Mitigation Measures

Objectives likely to give rise to impacts on Natura 2000 sites	Mitigatory Measures (Plan objectives listed in 4.3.1 above)
Objective 3B To implement the vision, policy and objectives of the Western Environs Local Area Plan 2004 for the development of the area.	1A, 1B 7B, 7C, 7D, 7E, 8C, 8E
Objective 3C To prepare a master plan/ urban design framework for the Smithwick's site and Bateman Quay during the lifetime of the development plan.	1A, 1B, 6C, 7B, 7C, 7D, 7E, 7F, 8C, 8E
Objective 3E To implement the provisions of sections 2 of the City Centre LAP relating to transport, car parking, urban design and land uses.	1A, 1B, 7B, 7C, 7D, 7E, 7F, 8C, 8E
Objective 3F To implement the provisions of Section 3 of the City Centre LAP relating to the urban design frameworks and land uses for specific sites.	1A, 1B, 7B, 7C, 7D, 7E,
3.4.5 Zoning Objectives	
Housing on lands Zoned for Agriculture On lands zoned for agriculture, housing will be restricted to the following categories of persons: - Immediate members of farmer's families (sons & daughters) and/or - Persons who primary employment is in agriculture, horticulture, forestry or bloodstock, or other rural based activity in the area which they wish to build. The basis of this policy is to preserve the existing agricultural use of the areas zoned for this purpose, to prevent speculation in land and to prevent urban generated development which would interfere with the operation of farming and prejudice the future planning and development of the area.	1A, 1B 7B, 7C, 7E,
Low-density Residential To protect, provide and improve residential amenities at low density. Low density housing is defined as not more than 10 units per ha (4 per acre) on average and must have regard to the character of the area.	1A, 1B 7B, 7C, 7D, 7E, 8C, 8E
Residential To protect, provide and improve residential amenities.	1A, 1B, 7B, 7C, 7D, 7E, 8C, 8E
General Business To provide for general development.	1A, 1B, 7B, 7C, 7D, 7E, 8C, 8E
Neighbourhood Centres To provide for local shopping, non retail services, community and social	1A, 1B, 7B, 7C, 7D, 7E, 8C, 8E

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needs.	
Recreation, Amenity, Open Space/ Green links/ Biodiversity Conservation To preserve, provide and improve recreational open space and to allow for green links and biodiversity conservation	1A, 1B, 6C, 7B, 7C, 7D, 7E, 7F
Community Facilities To protect, provide and improve community facilities.	1A, 1B, 7B, 7C, 7D, 7E
Industrial/Warehousing To provide for industrial employment and related uses.	1A, 1B, 7B, 7C, 7D, 7E, 8C, 8E
Industrial/ Technology Park To provide for industry and information technology-related industrial and office development and ancillary services. The purpose is to encourage mainly services type employment on a campus environment.	1A, 1B, 7B, 7C, 7D, 7E, 8C, 8E
Business Park To provide for commercial activity including industry, information technology-related industrial and office development and ancillary services and retail warehousing.	1A, 1B 7B, 7C, 7D, 7E, 8C, 8E
Mixed Use To consolidate and facilitate the development of inner suburban sites for mixed use development which will allow for commercial and residential uses.	1A, 1B, 7B, 7C, 7D, 7E, 8C, 8E
Agricultural Trade To develop a centre of excellence and one stop shop for agricultural related trade and activities with an emphasis on high value added activities, by providing for and improvement of agricultural trade, related uses and ancillary activities and services and to provide for industrial employment and related uses.	1A, 1B 7B, 7C, 7D, 7E, 8C, 8E
Objective 4C To ensure an adequate amount of employment land on a campus type environment is available within the City for ICT and technology office based industry at the appropriate strategic locations.	1A, 1B, 7B, 7C, 7D, 7E, 8C, 8E
Objective 4D To deliver and implement the 6 projects associated with the Medieval Mile proposals during the lifetime of the Plan 2014 – 2020 for the city and county.	1A, 1B, 6C, 7B, 7C, 7D, 7E, 7F, 8C, 8E
Objective 4E To ensure that an adequate quantity and range of land is available for enterprise development and that the appropriate infrastructure is provided.	1A, 1B, 7B, 7C, 7D, 7E, 8C, 8E
Objectives 4J – 4M To improve convenience market share retained within the county to 80% post 2020 To improve comparison market share retained within the county to 75% post 2020 To increase convenience trade draw from 8% to 15% post 2020 To maintain comparison trade draw at 58% post 2020	1A, 1B 7B, 7C, 7E, 8C, 8E

Objective 5A To implement the Housing Strategy contained in Appendix B of the Development Plan.	1A, 1B, 7B, 7C, 7D, 7E, 7F, 8C, 8E
Objective 6B Complete the River Nore Linear Park within the lifetime of the Plan.	1A, 1B, 6C, 7B, 7C, 7D, 7E, 7F
Objective 8A Implement the programme as outlined in the Water Services Investment Programme.	1A, 1B, 7B, 7C, 7E, 8C, 8E
Objective 8B Prioritise the upgrading of the Purcellsinch wastewater treatment plant.	1A, 1B, 7B, 7C, 7E, 8C, 8E
Objective 8I To implement the Joint Waste Management Plan for the South East Region.	1A, 1B, 7B, 7C, 7E,
Objective 9A Investigate the feasibility of installing anaerobic digestion facilities at the Purcellsinch wastewater treatment plant.	1A, 1B, 7B, 7C, 7E, 8C, 8E
Objective 10A To review the Mobility Management Plan (2009) and adopt a new MMP for the period 2015-2020.	1A, 1B, 7B, 7C, 7D,
Objective: 10B Complete the demarcation of the Gateways as depicted on Figure 10.1 and prioritise pedestrian and cyclist movement within the Gateways. 10C To re-examine options for pedestrian prioritisation in the city centre following implementation of the Central Access Scheme. 10D Complete the improvements to the back lanes, including the lane from Fr. Murphy Square to Robertshill. 10E Plan for the provision of the Greensbridge Way and the Ossory Bridge connection.	1A, 1B, 6C, 7B, 7C, 7D, 7E, 7F, 8E
Objective 10G To facilitate parking provision for tourist buses within the city.	1A, 1B, 7B, 7C, 7E, 8E
Objective 10J To preserve free from development proposed road realignment/improvement lines and associated corridors where such development would prejudice the implementation of National Roads Authority or Council plans (See Figure 10.2 Road hierarchy). 10K Reserve the line of Phase 2 and Phase 3 of proposed Central Access Scheme free from development and to complete Phase 1 of the Central Access Scheme within the plan period. (See Figure 3.3). 10L To widen the Castlecomer Road to provide for two lanes south	1A, 1B, 7B, 7C, 7D, 7E, 7F, 8C, 8E

10M	bound and one lane north bound carriageway (See Figure 3.3). Reserve the proposed line of the western by-pass for the city from the Castlecomer Road to the Waterford Road free from development, including for a river crossing and seek approval from An Bord Pleanála for Phase 1 of the Western By-pass, the Kilkenny Northern Ring Road Extension (See Figure 3.3).	
10N	Reserve the proposed line of a new road link from the Callan Road to the Waterford Road roundabout free from development (See Figure 3.3).	
10O	Provide a second entrance to the Hebron Industrial Estate from the Hebron Road (See Figure 3.3).	
10P	Complete the R697 Kells Road Improvement Scheme from Upper Patrick St. to the Kells Road Roundabout.	
10Q	Complete the R712 Road Improvement Scheme from the Old Dublin Road Roundabout to the Leggettsrath Roundabout.	
10R	The development of the lands located on the Waterford Road (known as the Murphy machinery lands, see Figure 3.3) to be dependent on an alternative access to the national route	
10S	Prepare and implement traffic management and calming schemes for the City & Environs in line with the 3 year Roads Programmes.	
10T	Complete the Bohernatounish Road Traffic Management Scheme	
10U	Complete the Outrath Road Improvement Scheme	
10V	Complete improvement works from the Parade Plaza to Dean Street under the Medieval Mile Project.	

4.3.3 Mitigatory Measures of the Plan for the Protection of Natura 2000 Sites

The following section sets out the measures in the plan that acts cumulatively to protect the individual Natura 2000 sites. The list and tables do not cover all of the objectives, development management standards (standards which will be applied to any proposed development) or sections of the plan of a protective or mitigatory nature but identifies those that address specific sensitivities of the sites in relation to the qualifying interests of the sites and identified potential impacts from the plan.

Many of these measures have been included specifically to protect qualifying interests of Natura 2000 sites; however the measures listed also relate to the environment outside of the designated sites as the integrity of Natura 2000 sites is strengthened by ecological corridors and stepping stones outside of the sites and many of the qualifying interests are dependent on factors such as good water quality which may be impacted upon from developments outside of the designated site boundaries.

Note: not all objectives, development management standards or text have individual reference numbers/ codes in the plan; therefore in the interests of clarity the wording of the plan has been assigned a letter (see below) for ease of reference for this section of this report.

4.3.3.1 Objectives, Development Management Standards and text of the Plan that provide for the protection of Natura 2000 sites and for the environment

(A) 1.3 Appropriate Assessment

Text: The impacts assessed must include the indirect and cumulative impacts of the plan or project. Therefore whether a plan or project is located within, or is at a geographically remote area from a Natura 2000 site, if significant impacts cannot be ruled out then the plan or project must be subject to an appropriate assessment.

Articles 6(3) and 6(4) of the Habitats Directive and Section 177 of the Planning and Development Act 2000 (as amended), require that any plan or project with the potential to impact on the integrity of a Natura 2000 site must be screened to determine if appropriate assessment of the plan or project is required. In the event that the screening indicates that potential significant impacts cannot be ruled out then the plan or project will require an appropriate assessment.

Objectives

1A To implement the provisions of Articles 6(3) and 6(4) of the EU Habitats Directive.

1B To ensure that any plan or project within the functional area of the Planning Authority is subject to appropriate assessment in accordance with the Guidance [Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities](#), 2009³ and is assessed in accordance with Article 6 of the Habitats Directive in order to avoid adverse impacts on the integrity and conservation objectives of the site.

These objectives will apply to all plans and projects whether public or private and across all sectors of development.

(B) 1.5 Structure of the Plan

Objective

1C To implement the Development Management Standards as set out in the Plan as appropriate.

(C) 6.1.2.1 River Nore Linear Park

Objective

6C To establish an environmental management plan for the River Nore Linear Park.

6.1.3 Riverside Development

Text: Factors that will be taken into account when considering proposals affecting the rivers include:

- Any landscape or nature, built heritage or archaeological designation for the area,
- Any proposals to increase the extent of public access,
- The extent of any environmental improvements to the water environment and its surroundings,
- The nature of any recreation use proposed; and
- Any conflict or compliance with proposals for walking or cycling routes.

³ ibid

6.1.3.1 Development associated with Water Sports

Text: The Councils will normally only permit proposals for development associated with water sports adjacent to waterways where all the following criteria are met.

- The proposed facilities are compatible with any existing use of the water, including non-recreational uses;
- It will not have adverse impacts on any Natura 2000 site, will not result in damage to sites of nature conservation importance or features of the archaeological and built heritage;
- The development can be satisfactorily integrated into its landscape or townscape surroundings;
- The development will not have an unacceptable impact on visual amenity; and
- The development will not result in over intensification of use leading to pollution, excessive noise and nuisance.

Development Management Standard:

Most development associated with water sports such as slipways, boathouses, toilet and changing facilities, parking areas and access will require planning permission, and all will require screening for Appropriate Assessment. The Councils will require a high quality of design both in terms of layout, buildings and other structures and in the treatment of boundaries either adjacent to the road or the actual waterway. The Councils will normally require details of landscaping and surface treatments to accompany all planning applications. The Council will require that development along rivers set aside land for recreation routes that could be linked to the wider network of green infrastructure, subject to environmental considerations and compliance with the Habitats Directive.

(D) 7.2.1 Rare and Protected Species and their Habitats

Objective

7B To protect and, where possible, enhance the natural heritage sites designated under EU Legislation and National Legislation (Habitats Directive, Birds Directive, European Communities (Birds and Natural Habitats) Regulations 2011 and Wildlife Acts). This protection will extend to any additions or alterations to sites that may arise during the lifetime of this plan.

7C To protect and, where possible, enhance the plant and animal species and their habitats that have been identified under European legislation (Habitats and Birds Directive) and protected under national Legislation (European Communities (Birds and Natural Habitats) Regulations 2011 (SI 477 of 2011), Wildlife Acts 1976-2010 and the Flora Protection Order (SI94 of 1999).

Development Management standard

Ensure that an ecological impact assessment is carried out for any proposed development likely to have a significant impact on rare and threatened species including those species protected by law and their habitats. Ensure appropriate avoidance and mitigation measures are incorporated into development proposals as part of any ecological impact assessment.

(E) 7.2.2 Green Infrastructure

Objective

7D To prepare and support the implementation of a Green Infrastructure Strategy for Kilkenny city and environs, as resources allow.

(F) *7.2.3 Nature Conservation Outside of Internationally and Nationally Protected Areas*

Objective

7E To protect and, where possible, enhance wildlife habitats and landscape features which act as ecological corridors/networks and stepping stones, such as river corridors, hedgerows, gardens and road verges, and to minimise the loss of habitats and features of the wider countryside (such as ponds, wetlands, trees) which are not within designated sites. Where the loss of habitats and features of the wider countryside is unavoidable as part of a development, to ensure that appropriate mitigation and/or compensation measures are put in place, to conserve and enhance biodiversity and landscape character and green infrastructure networks.

(G) *7.2.5 Woodlands, Trees and Hedgerows*

Development management standards

- To protect existing woodlands, trees and hedgerows which are of amenity or biodiversity value and/or contribute to the landscape character of the city and environs, and to ensure that proper provision is made for their protection and management, when undertaking, approving or authorising development.
- To ensure that when undertaking, approving or authorising development that sufficient information is provided to enable an assessment of impacts on woodlands, trees, and hedgerows.
- Require the planting of native broadleaved species, and species of local provenance, in new developments as appropriate. See Appendix G for a list of native trees and shrubs.

Objective

7F The Council will promote the planting of native tree and shrub species, by committing to using native species (of local provenance wherever possible) in its landscaping work and on Council property.

(H) *7.2.6 Inland Waters, Rivers, Streams, Wetlands and Groundwater*

Development management standard

- To consult with Inland Fisheries Ireland and the National Parks and Wildlife Service prior to undertaking, approving or authorising any works or development which may have an impact on rivers, streams and waterways.
- Proposals must demonstrate that they will not adversely affect any habitats and/or species of interest or compromise the river's function as a green infrastructure corridor.

(I) *7.2.7 Invasive Species*

Text: Invasive non-native plant and animal species (animals and plants that are introduced accidentally or deliberately into a natural environment where they are not normally found) are a significant threat to biodiversity. They can negatively impact on native species, can transform habitats and threaten ecosystems causing serious

problems to the environment, buildings and the economy. The current estimate of the annual cost of invasive species in Ireland is €261 million. There is potential for the spread of invasive species during development works and recreational activities. A number of invasive species are prevalent in Kilkenny. For more information on invasive species see (www.invasivespeciesireland.com). The Council will raise awareness of, and promote best practise in the control of, invasive species.

Development management standard

Ensure, as far as is possible, that the potential for spread of invasive species is examined as part of any application.

(J) *7.2.8 Native Plant Species*

Text: Where possible, the use of native plants and seeds from indigenous seed sources should be used on all developments and landscape projects/treatments. This is important as it:

- Contributes to national commitments on the conservation of biological diversity by establishing native habitats and reducing the planting and dispersion of non-native plants
- Ensures a reduction in the threat posed by the importation of pests and diseases carried on non-native (and non-indigenously sourced) plant material, which have potential for major impact on native flora and fauna, the landscape, agriculture and forestry
- Restores or compensates for loss of habitat
- Maintains regional identity, landscape character and diversity

Development Management Standard

To promote the use of native plants and seeds from indigenous seed sources in all landscape projects

(K) *8.1.4.1 Water Services Objectives:*

8A Implement the programme as outlined in the Water Services Investment Programme.

8B Prioritise the upgrading of the Purcellsinch wastewater treatment plant.

8C Meet in full the requirements of the E.U. [Urban Waste Water Treatment](#), [Water Framework](#) Directives and the [Drinking Water Regulations](#).

(L) *Pollution Control Development Management Standards*

- To ensure that developments which are subject to the requirements of the Air Pollution Act 1987 and Air Pollution (Licensing of Industrial Plant) Regulations 1988 or any subsequent regulations meet appropriate emission standards and other relevant national and international standards.
- To seek to minimise noise and dust through the planning process by ensuring that the design of developments incorporate measures to prevent or mitigate the transmission of dust, noise and vibration, where appropriate.
- To ensure that lighting is carefully and sensitively designed
- To require that the design of external lighting minimises the incidence of light spillage or pollution into the surrounding environment.

(M) 8.2.3 Water Quality

- 8E To promote compliance with environmental standards and objectives established—
- for bodies of surface water, by the European Communities (Surface Waters) Regulations 2009; and
 - for groundwater, by the European Communities (Groundwater) Regulations 2010;
- which standards and objectives are included in the South East River Basin Management Plan.
- 8F To complete the mapping of source protection areas and to map Source Protection Areas for any new public water supply schemes as appropriate.
- 8G To ensure that Source Protection Areas are identified for any multiple unit housing developments with private water supplies.

Water Quality Development Management Standards

- In cases where a connection to the public sewer is not possible, to assess applications for houses in accordance with the EPA manual entitled *Code of Practice – Wastewater Treatment and Disposal Systems serving Single Houses* (p.e. ≤ 10), also referred to as EPA 2009 or such guidance as may replace this guidance. The person carrying out the assessment will be suitably qualified and in the local authority's opinion, be competent to do so.
- To ensure that all industrial development is appropriately located, to seek effluent reduction and 'clean production' where feasible, and require that waste water treatment facilities are adequate, and that effluents are treated and discharged in a satisfactory manner.
- To have regard to the Groundwater Protection Scheme and the Water Services Acts 2007 & 2012 in decision-making on the location, nature and control of developments and activities in order to protect groundwater.

(N) 8.2.5 Surface Water Drainage

Development Management Standards

- Development must, so far as is reasonably practicable, incorporate the maximum provision to reduce the rate and quantity of runoff e.g.:-
 - Hard surface areas (car parks, etc.), should be constructed in permeable or semi-permeable materials,
 - On site storm water ponds to store and/or attenuate additional runoff from the development should be provided,
 - Soak-aways or french drains should be provided to increase infiltration and minimise additional runoff.
 - The Planning Authority will normally require that all new large scale developments (such as commercial, mixed use and apartment schemes), and in smaller developments where feasible, include rainwater harvesting and/or grey water recycling in their design.
- Individual developments shall be obliged, in all cases where surface water drainage measures are required, to provide a surface water drainage system separated from the foul drainage system.

- In the case of single dwellings or extensions, except in circumstances where an existing surface water drainage system is available to the proposed site for development and which, in the opinion of the planning authority has adequate capacity to accommodate the identified surface water loading, surface water shall be disposed of, in its entirety within the curtilage of the development site by way of suitably sized soak holes.
- For all green-field developments in general the limitation of surface water run-off to pre-development levels will be required. Where a developer can clearly demonstrate that capacity exists to accommodate run-off levels in excess of green-field levels then the planning authority shall give consideration to such proposals on a case by case basis.
- In the case of brown-field development, while existing surface water drainage measures will be taken into account, some attenuation measures for surface water may be required at the discretion of the planning authority in the interests of balanced and sustainable development.
- In line with the above Kilkenny Local Authorities will consider all drainage proposals consistent with SuDS (Sustainable Drainage Systems).
- For developments adjacent to watercourses of a significant conveyance capacity any structures (including hard landscaping) must be set back from the edge of the watercourse to allow access for channel clearing/maintenance. A setback of 5m-10m is required depending on the width of the watercourse. Development consisting of construction of embankments, wide bridge piers, or similar structures will not normally be permitted in or across flood plains or river channels.
- All new development must be designed and constructed to meet the following minimum flood design standards:-
 - Where streams open drains or other watercourses are being culverted - the minimum permissible culvert diameter is 900mm. (Access should be provided for maintenance as appropriate.)
 - To give adequate allowance for climate change in designing surface water proposals a multiplication factor of 1.2 shall be applied to all river return periods up to 100 years except in circumstances where the OPW have provided advice specifying the particular multiplication factor for return periods up to 100 years. In the case of rainfall a multiplication factor of 1.1 shall be applied to rainfall intensities to make allowance for climate change requirements.
 - In the design of surface water systems, regard shall be had to the Greater Dublin Regional Code of Practice for Drainage Works and associated GSDS technical documents.

(O) *11.16 Tree and Hedgerow Preservation*

Text: To ensure that trees and hedgerows are protected on a site which has been the subject of a grant of planning permission, a cash lodgement/bond may be required, the amount of which shall be determined by the Planning Authority.

The replacement of hedgerows/trees shall have due regard to the ecological function of hedgerows as a wildlife corridor. When planting new hedgerows a mixture of native

species shall be proposed and this shall occur at the commencement of building works and should link to existing hedgerows to aid ecological networks.

Tables 4.3.3.1: Mitigatory Measures to ensure protection of Natura 2000 sites

Site	River Barrow and River Nore cSAC (002162)
Sensitivity/ Threat	<ul style="list-style-type: none"> • Loss of habitat from development/ drainage/ recreation. • Disturbance from development/ drainage/ hydro schemes. • Changes to water quality or levels
Mitigation – Development Management Standards & Text of Plan	Measures (A) – (O) as listed above (inclusive)

Site	River Nore SPA (004233)
Sensitivity/ Threat	<ul style="list-style-type: none"> • Loss of habitat and disturbance from development/ recreation. • Disturbance from development/ recreation. • Changes to water quality.
Mitigation – Development Management Standards & Text of Plan	Measures (A) – (O) as listed above (inclusive)

4.4 Assessment of Mitigation Measures – timescale, effectiveness and implementation

Implementation of Mitigation Measures

The mitigation measures as outlined above – the objectives, development management standards and text of the plan will be applied to any development proposal within the area of the plan for Kilkenny City. Any plan, project or development proposal, both private and public, will be required to demonstrate how it will meet these standards and comply with the plan provisions through the development management process.

As part of the development management process – applications will be referred for comment to relevant statutory authorities for comments – including the National Parks and Wildlife Service and An Taisce. In addition monitoring of environmental standards will be carried out by the Environmental Protection Agency and Inland Fisheries Ireland. The Local Authority is required to demonstrate how it meets the requirements of various higher level directives and regional plans, such as the Water Framework Directives. From 2014 Irish Water will be the new water authority with responsibility for prioritisation of investment in water and wastewater projects.

Timescale of Mitigation Measures

The provisions of the development plan are effective for six years from the date of adoption of the plan. The mitigation measures will be implemented in most cases as development proposals and projects arise over the life of the plan. In general planning permissions last for five years

from the date of grant of permission; the conditions attached to the grant of permission are valid both during construction of the development and over the life of the development.

Effectiveness of the Mitigation Measures

The plan promotes the strategic importance of the Appropriate Assessment process through its eminent position in chapter one of the plan and proposals for protection of the wider environment throughout the plan, in addition to specific references and objectives for the protection of Natura 2000 sites. The overall approach to the protection of the wider environment serves indirectly to maintain the integrity and conservation status of the Natura 2000 sites through preservation and extension of the green infrastructure networks which support species that depend on the Natura 2000 habitats and also for the protection and improvement of water quality in the county, which underpins the integrity of many of the Natura 2000 sites.

Two years after the adoption of the plan the Planning Authority is required to carry out a review of the progress of the provisions of the plan and will produce the Manager's Report on Progress of the Development Plan; which will highlight the effectiveness of achieving the objectives of the plan.

4.5 Appropriate Assessment Conclusion

The assessment process for this report has resulted in a conclusion that mitigatory measures identified in Stage 2 are adequate to ensure that the integrity of the sites in the Natura 2000 network will not be significantly affected as a result of potential impacts of the objectives contained within the Kilkenny City & Environs Development Plan 2014-2020. Therefore, Stage 3 (assessment of Alternative Solutions) and Stage 4 (Where no alternatives exist, an assessment of compensatory measures) are not necessary.

The assessment has been carried out by the Forward Planning Team with independent specialist ecological input from CAAS. This document has been produced by Kilkenny County Council to inform the development plan strategy and objectives in accordance with best practice to the meet the statutory requirements under the EU Habitats Directive.

5. AA Conclusion Statement

5.1 Summary of how the findings of the AA were factored into the Plan

As the AA process has been managed by the Forward Planning team of the Planning Department within the Council, interaction has occurred from the early stages of writing of the plan to impress the importance of protection of the Natura 2000 network within the city and environs and that the plan should be formulated to avoid adverse impacts on these sites.

Consultation with the Environmental Authorities and other statutory authorities has informed the making of the Plan from Draft Plan through to its final adoption. The AA has informed the plan as it has been developed, and informed decisions in order to avoid encroachment and impacts on the designated site boundaries of the Natura 2000 sites within the plan area and its catchment.

In addition the Strategic Environmental Assessment process has been taken into account in the appropriate assessment process. The screening of objectives and the assessment of objectives in the context of mitigation measures and potential impacts of the designated sites is an iterative process throughout each stage of the plan-making process.

5.2 Reasons for choosing the plan as adopted, in light of other reasonable alternatives considered as part of the AA process

A Stage 3 (Alternative Solutions) assessment was not required for this Development Plan.

As part of the Strategic Environmental Assessment process, 3 alternative Plans were put forward:

Alternative 1: Focus on Loughmacask and Western Environs

Alternative 1 continues to concentrate growth into the two neighbourhoods of Loughmacask and the Western Environs, with no growth being allocated elsewhere. This alternative concentrates populations into locations where there are existing Local Area Plans in place to provide for future residential and commercial development, linked to infrastructural provision. Investment in key infrastructure can be concentrated into these two small areas.

Alternative 2: Dispersed growth

This scenario is one in which the 'pot' of zoned land would be distributed throughout the city, around its fringes, without prioritisation. Development would be allowed to proceed in an ad hoc manner and would follow market forces to a great extent. Most development would occur on greenfield sites.

Alternative 3: Consolidation of city and neighbourhoods

In this alternative, the 'pot' of zoned land is mainly allocated to the Loughmacask and Western Environs neighbourhoods, but growth is also encouraged in small parcels located throughout

the remainder of the city. This alternative allows for the creation of new, well-planned neighbourhoods but also allows for infilling and consolidation in the remainder of the city.

Preferred Alternative

Alternative 3 'Consolidation of city and neighbourhoods' emerged as the preferred alternative and scored highly in terms of positive impacts on environmental and planning policy objectives. This scenario was the preferred alternative for the following reasons:

- It contributes towards the development of a compact and balanced city with resulting economies of scale in terms of service provision.
- It conforms to high level planning objectives and the protection of the environment.
- The compact nature of development allows for efficient public transport links and the prevention of unplanned and unnecessary urban sprawl.
- The rural environment surrounding the city is protected with a clear demarcation between rural and urban areas.
- Population is increased within the city centre as infill sites are utilised which will consolidate the urban core.
- It ensures the vitality and viability of the core of the city centre.

By complying with appropriate mitigation measures - including those which have been integrated into the Plan - potential adverse environmental effects which could arise as a result of implementing this scenario would be likely to be avoided, reduced or offset.

5.3 Declaration that the plan as adopted will not have an adverse effect on the integrity of a Natura 2000 site(s)

The policies and objectives of the plan have been devised to anticipate and avoid the need for developments that would be likely to significantly and adversely affect the integrity of any Natura 2000 sites. Furthermore, such developments as will be permitted on foot of the provisions of this plan shall be required to conform with mitigatory measures contained in the Plan and to the relevant regulatory provisions for the prevention of pollution, nuisance or other environmental effects likely to significantly and adversely affect the integrity of Natura 2000 sites.

Having incorporated mitigation measures, it is considered that the Kilkenny City & Environs Development Plan will not have a significant adverse effect on Natura 2000 sites, and that the integrity of the Natura 2000 sites will not be adversely affected.

References

Council of European Communities, 1992, *Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wildlife and flora Habitats Directive - 92/43/EEC.*

Department of Environment, Heritage and Local Government, 2009, *Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities.*

Department of the Environment, Heritage and Local Government, 2008, *Appropriate Assessment of Land Use Plans – Circular Letter SEA 1/08 & NPWS 1/08.*

Department of Environment, Heritage and Local Government, 2007, *Circular PD 7/09 Waste Water Discharge (Authorisation) Regulations SI No. 684 of 2007.*

Department of the Environment, Heritage and Local Government, 2010, *Draft European Communities (Birds and Natural Habitats) Regulations 2010.*

Department of Environment and Local Government, 2010, *Planning & Development Act 2000-2012*

Department of Environment, Heritage and Local Government, 2008, *The Status of EU Protected Habitats and Species in Ireland.*

Department of Environment, Heritage and Local Government, *Waterford Harbour Pollution Reduction Programme*, 2009

Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy

E. A. Moorkens (1999) Conservation Management of the Freshwater Pearl Mussel *Margaritifera margaritifera*. Part 1: Biology of the species and its present situation in Ireland. *Irish Wildlife Manuals*, No. 8.

EPA, *Second Update Report on data presented in the EPA Report “Focus on Urban Waste Water Discharges in Ireland”* Urban Waste Water Treatment, 2012

EPA, *Focus on Urban Waste Water Discharges in Ireland*, Urban Waste Water Treatment, 2012

EPA, *Update Report on data presented in the EPA Report “Focus on Urban Waste Water Discharges in Ireland”* Urban Waste Water Treatment in 2010, 2012

Environmental Protection Agency, *Integrated Water Quality Report 2011 – South East Ireland Report on River Water Quality in County Kilkenny 2011*

European Commission, 2001, *Assessment of plans and projects significantly affecting Natura 200 sites- Methodological guidance on the provisions of Article 6(3) and 6 (4) of the Habitats Directive 92/43/EEC.*

European Commission, 2000, *Managing Natura 2000 sites – The provisions of Article 6 of the ‘Habitats’ Directive 92/43/EEC (2000).*

Kilkenny County Council, 2009, *Water Services Investment Programme.*

Kilkenny County Council, 2008, *Kilkenny County Development Plan 2008-2014.*

Kilkenny County Council, RPS Consultants, *Kilkenny City Water Supply Improvement Scheme Environmental Impact Statement*, May 2010.

National Parks and Wildlife Service, Cummins, S et. Al, *Assessment of the distribution and abundance of Kingfisher Alcedo atthis and other riparian birds on six SAC river systems in Ireland*, 2010.

Natura Impact Report

South Eastern River Basin District, South East River Basin Management Plan (Water Matters) 2009-2015, 2010

South East Regional Authority, *Regional Planning Guidelines for the South East Region 2010-2022*, 2010

The Heritage Council, Fossit, Julie A., 2000, *A Guide to Habitats in Ireland*.

Websites:

www.epa.ie Environmental Protection Agency

www.environ.ie Department of Environment, Heritage and Local Government

www.npws.ie National Parks and Wildlife Service

www.birdwatchireland.ie Bird Watch Ireland

APPENDICES

Appendix 1 - Qualifying Interests and Conservation Status of Natura 2000 Habitats and Species

The National Parks and Wildlife Service are currently in the process of producing the draft 3rd Irish Report on the implementation of the EU Habitats Directive, and are holding public consultation on the conservation status of species and habitats. At the time of writing this report the conservation status of 5 number habitats and species were publically available and have been taken into account in this assessment. The second report (2001 – 2006) The Status of EU Protected Habitats and Species in Ireland, 2008 focused on a first assessment of conservation status of all habitats and species of Community interest. The third report (2007 – 2013) repeats the conservation status assessments undertaken in 2007; the basic structure of the assessments is the same as that in the 2nd report, but there are changes in the detail of the data requested by the European Commission. The six-yearly reports required by the Habitats Directive are intended to track improvement in the conservation status of these habitats and species since the Directive came into force in 1994.

Table A1.1 - Natura 2000 sites in Kilkenny City & within 15km of the City

Code	Habitat Name	Conservation Status (2008)	Overall Trend in Conservation Status (2013)
(7220)	Petrifying springs with tufa formation (Cratoneurion)	Bad	Stable
(91E0)	Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, <i>Alnion incanae</i> , <i>Salicion albae</i>)	Bad	Unfavourable – Bad due to the assessment of three of the four parameters (Area, Structure and Functions, and Future Prospects) as Unfavourable – Bad.
(91J0)	Yew Woodlands - <i>Taxus baccata</i> woods of the British Isles	Bad	Unfavourable Bad improving
(1330)	Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>)	Poor	
(1410)	Mediterranean salt meadows (<i>Juncetalia maritimi</i>)	Poor	
(3260)	Floating river vegetation - water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation	Bad	
(91A0)	Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in British Isles	Bad	If current levels of planting and non-native species removal are maintained, the overall condition of sessile oak woodlands will continue to improve.
(6430)	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	Poor	
(1130)	Estuary	Poor	
(1320)	Tidal mudflats - <i>Spartina</i> swards (<i>Spartinion maritimae</i>)	Poor	
(1310)	<i>Salicornia</i> mudflats - <i>Salicornia</i> and other annuals colonizing mud and sand	Poor	
(4030)	Dry heath - European dry heaths	Poor	
(6430)	Eutrophic tall herbs - Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	Poor	
Species			
1095	Sea Lamprey (<i>Petromyzon marinus</i> -)	Poor	

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1099	River Lamprey (<i>Lampetra fluviatilis</i> -)	Good	
1096	Brook Lamprey (<i>Lampetra planeri</i> -)	Good	
1029	Freshwater Pearl Mussel (<i>Margaritifera margaritifera</i> -)	Bad	
1092	Crayfish (<i>Austropotamobius pallipes</i> -)	Poor	
1103	Twaite Shad (<i>Alosa fallax</i> -)	Bad	
1106	Atlantic Salmon (<i>Salmo salar</i> -)	Bad	
1355	Otter (<i>Lutra lutra</i> -)	Poor	Good
(1990)	Nore Freshwater Pearl Mussel – (<i>Margaritifera durrovensis</i>)	Bad	
(1016)	Desmoulin’s Whorl Snail - <i>Vertigo moulinsiana</i>	Bad	
(1421)	Killarney Fern – <i>Trichomanes speciosum</i>	Good	
Birds ⁴			
	Kingfisher (<i>Alcedo atthis</i>)	Amber List	

⁴ BirdWatch Ireland and the RSPB NI have agreed a list of priority bird species for conservation action on the island of Ireland. These Birds of Conservation Concern in Ireland are published in a list known as the BoCCI List. In this BoCCI List, birds are classified into three separate lists (Red, Amber and Green), based on the conservation status of the bird and hence conservation priority. The Red List birds are of high conservation concern, the Amber List birds are of medium conservation concern and the Green List birds are not considered threatened. Specific criteria are used to classify a bird into one of these three categories.

Appendix 2 Preliminary Screening Assessment of the Likely Effects of the Objectives of the Kilkenny City & Environs Draft Development Plan 2014-2020 on Natura 2000 sites

The purpose of this Habitats Directive Screening is to determine whether the Kilkenny City & Environs Draft Development Plan 2014-2020 is likely to have any significant impacts on the conservation objectives or qualifying interests of the Natura 2000 sites in Kilkenny City or within 15km of the city.

As part of the screening exercise all the objectives of the Draft Development Plan were screened for their potential impact upon any of the identified Natura 2000 sites. The reasons for screening in of objectives is based on the potential for objectives to result in:

- i. Potential for negative changes in key indicators of conservation value (water quality etc),
- ii. Potential disturbance to key species,
- iii. Potential reduction of habitat areas,
- iv. Potential habitat or species fragmentation, or
- v. Have a potential negative influence on climate change.

The potential impacts have been assessed in the absence of mitigation measures contained in the draft Plan, and the precautionary principle that the potential for effects cannot be ruled out, rather than the certainty of them occurring has been applied.

Table A2: Screening of Kilkenny City & Environs Draft Development Plan 2014-2020 Objectives

Objective	Potential Impact on integrity of Natura 2000 sites?	Screen In/ Out	Reason for Screening In/ Out (note: refer to points (i)-(v) above for reasons for screening in)
<p>1.3 Appropriate Assessment To implement the provisions of Articles 6(3) and 6(4) of the EU Habitats Directive. To ensure that any plan or project within the functional area of the Planning Authority is subject to appropriate assessment in accordance with the <i>Guidance Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities, 2009</i> and is assessed in accordance with Article 6 of the Habitats Directive in order to avoid adverse impacts on the integrity and conservation objectives of the site. These objectives will apply to all plans and projects whether public or private and across all sectors of development.</p>	NO	OUT	No Potential Impacts
<p>1.5 Structure of the Plan To implement the Development Management Standards as set out in the Plan as appropriate.</p>	YES	OUT	Potential for impacts is avoided by virtue that the standards require

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			best practice and to safeguard the environment.
1.6.1 Climate Change To prepare a Climate Change Adaptation plan following the adoption of the Development Plan.	YES	OUT	Positive Impacts Only
1.7.2 URBACT – LINKS Programme To develop a consultation process for plans and projects proposed by the local authority.	NO	OUT	No Potential Impacts
To restore and conserve St. Mary’s Church using eco restoration practices and methodologies.	NO	OUT	No Potential Impacts
3.4.1 Western Environs To implement the vision, policy and objectives of the Western Environs Local Area Plan 2004 for the development of the area.	YES	IN	(i) (ii) (iii) (iv) (v)
3.4.3 City Centre Area To prepare a master plan/ urban design framework for the Smithwick’s site and Bateman Quay during the lifetime of the development plan.	YES	IN	(i) (ii) (iii) (iv) (v)
To implement the provisions of sections 2 of the City Centre LAP relating to transport, car parking, urban design and land uses.	YES	IN	(i) (ii) (iii) (iv) (v)
To implement the provisions of Section 3 of the City Centre LAP relating to the urban design frameworks and land uses for specific sites.	YES	IN	(i) (ii) (iii) (iv) (v)
3.4.5 Zoning Objectives			
Agriculture To conserve and protect agricultural land from interference from non-agricultural uses. To prevent premature development of agricultural land adjacent to development areas.	NO	OUT	No Potential Impacts
Housing on lands Zoned for Agriculture On lands zoned for agriculture, housing will be restricted to the following categories of persons: - Immediate members of farmer’s families (sons & daughters) and/or - Persons who primary employment is in agriculture, horticulture, forestry or bloodstock, or other rural based activity in the area which they	YES	IN	(i) (ii) (iii) (iv) (v)

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wish to build. The basis of this policy is to preserve the existing agricultural use of the areas zoned for this purpose, to prevent speculation in land and to prevent urban generated development which would interfere with the operation of farming and prejudice the future planning and development of the area.			
Low-density Residential To protect, provide and improve residential amenities at low density. Low density housing is defined as not more than 10 units per ha (4 per acre) on average and must have regard to the character of the area.	YES	IN	(i) (ii) (iii) (iv) (v)
Residential To protect, provide and improve residential amenities.	YES	IN	(i) (ii) (iii) (iv) (v)
General Business To provide for general development.	YES	IN	(i) (ii) (iii) (iv) (v)
Neighbourhood Centres To provide for local shopping, non retail services, community and social needs.	YES	IN	(i) (ii) (iii) (iv) (v)
Recreation, Amenity, Open Space/ Green links/ Biodiversity Conservation <i>To preserve, provide and improve recreational open space and to allow for green links and biodiversity conservation</i>	YES	IN	(i) (ii) (iii) (iv) (v)
Community Facilities To protect, provide and improve community facilities.	YES	IN	(i) (ii) (iii) (iv) (v)
Industrial/Warehousing To provide for industrial employment and related uses.	YES	IN	(i) (ii) (iii) (iv) (v)
Industrial/ Technology Park To provide for industry and information technology-related industrial and office development and ancillary services. The purpose is to encourage mainly services type employment on a campus environment.	YES	IN	(i) (ii) (iii) (iv) (v)

Business Park To provide for commercial activity including industry, information technology-related industrial and office development and ancillary services and retail warehousing.	YES	IN	(i) (ii) (iii) (iv) (v)
Mixed Use To consolidate and facilitate the development of inner suburban sites for mixed use development which will allow for commercial and residential uses.	YES	IN	(i) (ii) (iii) (iv) (v)
Agricultural Trade To develop a centre of excellence and one stop shop for agricultural related trade and activities with an emphasis on high value added activities, by providing for and improvement of agricultural trade, related uses and ancillary activities and services and to provide for industrial employment and related uses.	YES	IN	(i) (ii) (iii) (iv) (v)
4 Economic Development			
4.4.1 Third and Fourth Level Education and Research Development To increase co-operation between Kilkenny Local Authorities, existing third level institutions and the proposed Technological University for the South East to support employment creation, innovation and lifelong learning.	NO	OUT	No Potential Impacts
4.4.2 Agri-Food To ensure the highest standards of environmental protection in the assessment of planning applications for all development proposals.	NO	OUT	Positive Impacts Only
4.4.3 Services Development To ensure an adequate amount of employment land on a campus type environment is available within the City for ICT and technology office based industry at the appropriate strategic locations.	YES	IN	(i) (ii) (iii) (iv) (v)
4.4.4 Tourism, Arts and Leisure To deliver and implement the 6 projects associated with the Medieval Mile proposals during the lifetime of the Plan 2014 – 2020 for the	YES	IN	(i) (ii) (iii) (iv) (v)

city and county.			
4.5 Strategic Locations for Enterprise and Employment			
4.5.1 Kilkenny City To ensure that an adequate quantity and range of land is available for enterprise development and that the appropriate infrastructure is provided.	YES	IN	(i) (ii) (iii) (iv) (v)
4.7 Review of Retail Potential - 4.7.1.3 Out of Centre No further retail parks will be granted permission in and around the City and Environs over the period 2014 – 2020.	NO	OUT	No Potential Impacts
4.8 Spatial Distribution of New Retail Development To improve convenience market share retained within the county to 80% post 2020 To improve comparison market share retained within the county to 75% post 2020 To increase convenience trade draw from 8% to 15% post 2020 To maintain comparison trade draw at 58% post 2020	YES	IN	(i) (ii) (iii) (iv) (v)
5 Housing and Community			
5.1.1 Travellers To implement the Housing Strategy contained in Appendix B of the Development Plan.	YES	IN	(i) (ii) (iii) (iv) (v)
To require 20% of the land zoned for residential use, or for a mixture of residential and other uses, be made available for the provision of social housing.	NO	OUT	No Potential Impacts
To require that a mixture of residential unit types and sizes are developed to reasonably match the requirements of different categories of households within the city and county.	NO	OUT	No Potential Impacts
Complete the review of the Traveller Accommodation programme.	NO	OUT	No Potential Impacts
To implement the Kilkenny Travellers Horse	NO	OUT	Positive Impacts

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project			Only
To redevelop the Wetlands halting site as a group housing scheme.	NO	OUT	Positive Impacts Only
To implement the provisions of the Traveller Accommodation programme	NO	OUT	Positive Impacts Only
Education & Childcare			
<p>5.6.1 Childcare Facilities</p> <p>The Councils will facilitate the provision of childcare and early childhood education facilities in a sustainable manner in appropriate locations which include the following: larger new housing estates, industrial estates and business parks, in the vicinity of schools, neighbourhood and district centres and adjacent to public transport facilities.</p>	NO	OUT	No Potential Impacts
<p>5.6.2.1 Primary & Post-Primary Schools</p> <p>The Councils will liaise with the Department of Education and Skills, and all providers of education, to assist where possible in the development of adequate education centres, and to identify and facilitate the provision of suitable sites for new educational facilities as the need arises.</p>	NO	OUT	No Potential Impacts
<p>Social Capital</p> <p>To integrate the planning and sustainable development of the county with regard to the social, community and cultural requirements of the county and its population.</p>	NO	OUT	No Potential Impacts
<p>5.9 Library Service</p> <p>To progress and achieve the completion and opening of the new City Library at County Hall.</p>	NO	OUT	No Potential Impacts
6 Recreation			
<p>6.1 Provision of Public Open Space & Recreational Facilities</p> <p>The Council shall seek the preservation and improvement of amenities and recreational amenity facilities, and shall facilitate and provide for the extension of recreational amenities in the</p>	YES	OUT	Objective contains safeguard to protect the environment and heritage

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city where appropriate, and subject to environmental, heritage and financial considerations.			
6.1.2 Hierarchy of Open Space Urban Recreation - Parks			
6.1.2.1 Regional and City Parks and Corridors River Nore Linear Park Complete the River Nore Linear Park within the lifetime of the Plan.	YES	IN	(i) (ii) (iii) (iv)
To establish an environmental management plan for the River Nore Linear Park	No	Out	Positive impacts only.
6.2 Public Rights of Way The Council shall preserve and protect existing public rights of way which give access to seashore, uplands, riverbank or other places of natural beauty or recreational use.	NO	OUT	No Potential Impacts
To undertake a survey of existing public rights of way in the city and establish a register within the life of the Plan.	NO	OUT	No Potential Impacts
To provide a skate park within the City & Environs during the lifetime of the Plan	No	Out	No potential impacts
6.7 Arts and Cultural Development To develop an arts venue within the county to fulfil a multiplicity of artistic uses.	NO	OUT	No Potential Impacts
To implement the Kilkenny Local Authorities Arts Strategy.	NO	OUT	No Potential Impacts
7 Heritage			
7.1 Introduction To implement, in partnership with the Kilkenny Heritage Forum and all relevant stakeholders, a County Heritage Plan and County Biodiversity Plan.	YES	OUT	Positive Impacts Only
Natural Heritage			
7.2.1.3 Rare and Protected Species and their Habitats To protect and, where possible, enhance the plant and animal species and their habitats that have been identified under European legislation (EU	YES	OUT	Positive Impacts Only

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Habitats Directive, EU Birds Directive).			
To protect and where possible enhance the natural heritage sites designated in National legislation (the Wildlife Acts and the Flora Protection Order). This protection will extend to any additions or alterations to sites that may arise during the lifetime of this plan.	YES	OUT	Positive Impacts Only
7.2.2 Green Infrastructure To prepare and support the implementation of a Green Infrastructure Strategy for Kilkenny city and environs, to include for a tree planting programme.	YES	OUT	Positive Impacts Only
7.2.3 Nature Conservation Outside of Internationally and Nationally Protected Areas To protect and, where possible, enhance wildlife habitats and landscape features which act as ecological corridors/networks and stepping stones, such as river corridors, hedgerows, gardens and road verges, and to minimise the loss of habitats and features of the wider countryside (such as ponds, wetlands, trees) which are not within designated sites. Where the loss of habitats and features of the wider countryside is unavoidable as part of a development, to ensure that appropriate mitigation and/or compensation measures are put in place, to conserve and enhance biodiversity and landscape character and green infrastructure networks.	YES	OUT	Positive Impacts Only
7.2.5.1 Hedgerows The Council will promote the planting of native tree and shrub species, by committing to using native species (of local provenance wherever possible) in its landscaping work and on Council property.	YES	OUT	Positive Impacts Only
To carry out a TPO for lands identified around the former Ayresfield House on the Granges Road	Yes	OUT	Positive Impacts only.
7.3 Built Heritage			
7.3.2 Industrial Archaeology Protect archaeological sites and monuments (including their setting), underwater archaeology, and archaeological objects, including those that are listed in the Record of Monuments and Places, and in the Urban Archaeological Survey of County Kilkenny or newly discovered sub-surface and	NO	OUT	No Potential Impacts

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underwater archaeological remains.			
7.3.3 Conservation Plans To facilitate and support the implementation of existing conservation plans, as resources allow.	NO	OUT	No Potential Impacts
7.4 Architectural Heritage			
7.4.5 The National Inventory of Architectural Heritage To ensure the protection of the architectural heritage of Kilkenny City & Environs by including all structures considered to be of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest in the Record of Protected Structures. To respond to the Ministerial recommendation to include in the Record of Protected Structures, structures which have been identified as being of Regional, National or International significance in the National Inventory of Architectural Heritage survey of the city and county published in 2006. To carry out a review of the Record of Protected Structures for the functional area of Kilkenny City and Environs	NO	OUT	No Potential Impacts
7.4.6.1 <i>General Objectives for all ACAs in Kilkenny City and Environs</i> To ensure the preservation of the special character of each ACA particularly with regard to building scale, proportions, historical plot sizes, building lines, height, general land use, building materials, historic street furniture and paving. To designate ACAs where appropriate and provide a local policy framework for the preservation of these areas.	NO	OUT	No Potential Impacts
8 Infrastructure and Environment			
8.1.4.1 Water Services Objectives: Implement the programme as outlined in the Water Services Investment Programme.	YES	IN	(i) (ii) (iii) (iv)
Prioritise the upgrading of the Purcellsinch wastewater treatment plant.	YES	IN	(i) (ii) (iii) (iv)
Meet in full the requirements of the E.U. Urban Waste Water Treatment, Water Framework Directives	YES	OUT	No Potential Impacts

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and the Drinking Water Regulations.			
8.2 Environment			
8.2.1.5 Pollution Control Objective To update Noise Mapping in accordance with revised or updated thresholds for Noise Mapping.	NO	OUT	No Potential Impacts
8.2.3 Water Quality			
8.2.3.3 Water Quality Objectives To promote compliance with environmental standards and objectives established— for bodies of surface water, by the European Communities (Surface Waters) Regulations 2009; for groundwater, by the European Communities (Groundwater) Regulations 2010; which standards and objectives are included in the South East River Basin Management Plan.	NO	OUT	Positive Impacts Only
To complete the mapping of source protection areas and to map Source Protection Areas for any new public water supply schemes as appropriate.	NO	OUT	No Potential Impacts
To ensure that Source Protection Areas are identified for any multiple unit housing developments with private water supplies.	NO	OUT	No Potential Impacts
8.2.4.1 Flood Management Objective To adopt a comprehensive risk-based planning approach to flood management to prevent or minimise future flood risk. In accordance with the Guidelines, the avoidance of development in areas where flood risk has been identified shall be the primary response.	NO	OUT	No Potential Impacts – concentrates on avoidance of development as primary response.
8.2.6.1 Waste Management Objective To implement the Joint Waste Management Plan for the South East Region.	YES	IN	(i) (ii) (iii) (iv) (v)
8.2.7.1 Seveso Objective To control the following for the purposes of reducing the risk or limiting the consequences of a major accident: • The siting of Major Accident Hazard sites • The modification of an existing Major Accident Hazard site	NO	OUT	No Potential Impacts

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• Development in the vicinity of a Major Accident Hazard site			
8.4.3.2 <i>Telecommunications Antennae Objective</i> To set up and maintain a register of approved telecommunications structures which will provide a useful input to the assessment of future telecommunications developments and would also be useful from the point of view of maximising the potential for future mast sharing and co-location.	NO	OUT	No Potential Impacts
9 Renewable Energy Strategy			
9.5 Bioenergy objective Investigate the feasibility of installing anaerobic digestion facilities at the Purcellsinch wastewater treatment plant.	YES	IN	(i) (ii) (iii) (iv)
9.7 Solar energy objective The Planning Authority will make available advice on Passive Solar Design in preplanning consultations for domestic and commercial buildings.	NO	OUT	No Potential Impacts
9.9 Sustainability & Energy Efficiency in Buildings To review the progress of the <i>Climate Change Strategy</i> , report on the progress to date and thereafter develop a Climate Change Adaptation strategy and action plan in line with national policy.	YES	OUT	Positive Impacts Only
10 Transport			
10.1.1 Kilkenny's Mobility Management Plan Sustainable Transport Objective To review the Mobility Management Plan (2009) and adopt a new MMP for the period 2015-2020.	YES	IN	(i) (ii) (iii) (iv)
10.1.2.2 Pedestrian Movement Walking and Cycling Objectives Complete the demarcation of the Gateways as depicted on Figure 10.1 and prioritise pedestrian and cyclist movement within the Gateways. To re-examine options for pedestrian prioritisation in the city centre following implementation of the Central Access Scheme. Complete the improvements to the back lanes, including the lane from Fr. Murphy Square to Robertshill.	YES	IN	(i) (ii) (iii) (iv)

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Plan for the provision of the Greensbridge Way and the Ossory Bridge connection.			
10.2.2 Bus Facilitate the provision of approved bus stops and shelters within the City and Environs as the need arises.	NO	OUT	No Potential Impacts
To facilitate parking provision for tourist buses within the city.	YES	IN	(i) (ii) (iii) (iv)
To carry out a Traffic Management Scheme at Loughboy Shopping Centre to include a stop for the City bus service. To develop and agree an appropriately planned policy response for access to Leggetsrath roundabout on the N10 in conjunction with the National Roads Authority.	NO	OUT	No Potential Impacts
	YES	IN	(i) (ii) (iii) (iv) (v)
To preserve free from development proposed road realignment/improvement lines and associated corridors where such development would prejudice the implementation of National Roads Authority or Council plans (See Figure 10.2 Road hierarchy). Reserve the line of Phase 2 and Phase 3 of proposed Central Access Scheme free from development and to complete Phase 1 of the Central Access Scheme within the plan period. (See Figure 3.3). To widen the Castlecomer Road to provide for two lanes south bound and one lane north bound carriageway (See Figure 3.3). Reserve the proposed line of the western by-pass for the city from the Castlecomer Road to the Callan Road free from development, including for a river crossing (See Figure 3.3). Reserve the proposed line of a new road link from the Callan Road to the Waterford Road roundabout free from development (See Figure 3.3). Provide a second entrance to the Hebron Industrial Estate from the Hebron Road (See Figure 3.3). Complete the R697 Kells Road Improvement Scheme from Upper Patrick St. to the Kells Road			

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<p>Roundabout. Complete the N10 Road Improvement Scheme from the Dublin Road Roundabout to the Leggettsrath Roundabout. The development of the lands located on the Waterford Road (known as the Murphy Machinery lands, see Figure 3.3) to be dependent on an alternative access to the national route Prepare and implement traffic management and calming schemes for the City & Environs in line with the 3 year Roads Programmes. Complete the Bohernatounish Road Traffic Management Scheme</p> <p>Complete the Outrath Road Improvement Scheme</p> <p>Complete improvement works from the Parade Plaza to Dean Street under the Medieval Mile Project.</p>			
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Appendix 3 Finding of No Significant Effects Report for Natura 2000 sites outside of Kilkenny City & Environs

A 'Finding of No Significant Impacts' table has been completed for Natura 2000 sites not in the city but within 15km of the city.

Table A3: Finding of no significant effects report

Name of project or plan	Kilkenny City & Environs Draft Development Plan 2014-2020
Name and location of Natura 2000 site Sites located in adjacent counties and within 15km of the County Kilkenny border	Thomastown Quarry cSAC (002252)
Description of the project or plan:	The Kilkenny City & Environs Draft Development Plan sets out the vision and an overall spatial strategy for the proper planning and sustainable development of Kilkenny City & Environs for a period of 6 years from the date of its adoption. The draft plan provides for sustainable development of the city in terms of physical growth and renewal, economic, social and cultural activity and environmental protection and enhancement within the context of the National Development Plan, the National Spatial Strategy and the Regional Planning Guidelines for the South East.
Is the project or plan directly connected with or necessary to the management of the site (provide details)?	No
Are there other projects or plans that together with the project or plan being assessed could affect the site (provide details)?	The draft plan is set within the framework of higher level plans including the existing National Development Plan and the National Spatial Strategy and Regional Planning Guidelines. The draft plan will influence investment programmes of various sections of the Council such as water services and roads.
<i>The assessment of significance of effects</i>	
• Describe how the project or plan (alone or in combination) is likely to affect the Natura 2000 site.	The draft plan sets out strategy for the distribution of population, provides for economic development and zoning, sets out strategic locations for optimal location of economic concentration and development, and provides for spatial distribution of retail development within the city. It also contains objectives for development of riverside walks, infrastructure projects water supply and wastewater and objectives to facilitate bioenergy projects. The plan incorporates transport objectives for development which facilitates cycling, bus parking and road development and includes for zoning for a range of lands uses.
Explain why these effects are not considered significant.	Having assessed the likely direct, indirect or secondary impacts of the draft plan on the Natura 2000 sites listed above having regard to the elements of the draft plan likely to give rise to potential impacts on Natura 2000 sites, together with the sites' qualifying interests and threats to site integrity it is not considered likely that the effects will be significant as having regard to the

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	distance of the site from the draft plan area and zone of contribution and influence that may reasonably be expected from developments arising under the framework of the draft plan there are was very little or no potential for impacts on the Natura 2000 site from development facilitated by the draft plan.
List of agencies consulted: provide contact name and telephone or e-mail address.	National Parks and Wildlife Service, Dr. Linda Patton, Regional Ecologist (01-6678256).
Response to consultation	Responses received highlighted: The importance that the appropriate assessment procedure should take place in consultation with the teams working on the draft Plan and SEA as each process can help inform the other to ensure that the objectives and policies in the draft Plan will have no significant effects on any Natura 2000 site. The appropriate assessment should examine the effects of policies, objectives and any indicative maps or zonings, as well as cumulative impacts with other plans and projects both within and outside of the Plan area. In order to carry out the appropriate assessment you will need to collect information about the relevant Natura 2000 sites including their conservation objectives. This report will be forwarded to the Development Applications Unit of the Department of the Environment, Community and Local Government.
<i>Data collected to carry out the assessment</i>	
Who carried out the survey	Kilkenny County Council, Forward Planning Section, with specialist Ecologist input from CAAS.
Sources of Data	Existing data from National Parks and Wildlife Service, Department of the Environment, Community and Local Government; European Commission; Kilkenny County Council, Bird Watch Ireland.
Level of assessment completed	Desktop studies
Where can the full results of the assessment be accessed and viewed	Council Offices: Planning Counter, Kilkenny County Council, County Hall, John's Street, Kilkenny and Planning Counter, Kilkenny Borough Council, Town Hall, High Street, Kilkenny. Website: www.kilkennycoco.ie
Overall Conclusion	Stage 1 Screening indicated that the draft plan will not have a significant negative impact on the Natura 2000 site listed above, therefore a Stage 2 Appropriate Assessment under Article 6(3) of the Habitats Directive 92/43/EEC is not required in relation to Thomastown Quarry (002252).

Appendix 4 – Water Schemes and Wastewater Treatment Plants in County Kilkenny

Table A4 (a) : Waste Water Treatment plants in Co. Kilkenny

Name of plant	WWTP Type	Design P.E. (Population Equivalent)	Current load P.E. (Population Equivalent) as at 9/2/2012	Comment on upgrade
Ballyhale/Knocktopher	Secondary	400	505	Overloaded. Upgrade planned.
Ballyragget	Secondary	1,920	983	Capacity available
Bennettsbridge	Primary	500	1,425	Overloaded. Upgrade planned.
Callan	Secondary	4,000	5,280	Overloaded
Castlecomer	Secondary	2,540	1,311	Upgrade planned.
Clogh-Mooneenroe	Secondary	1,740	755	Upgrade planned.
Coan	Primary	75	30	Capacity available
Deerpark, Moneenroe	Primary	65	54	Capacity available
Dunamaggin	Secondary	150	100	Capacity available
Dungarvan	Primary	65	150	Overloaded. No immediate plans for upgrade.
Fiddown	Primary	300	608	Overloaded. Upgrade planned.
Freshford	Primary	400	1,000	Overloaded. Upgrade planned – funding dependant
Glenmore	Primary	250	220	Capacity available
Goresbridge	Primary	400	1,837	Overloaded. Upgrade funding dependant.
Gowran	Secondary	1,600	701	Capacity available
Graiguenamanagh	Secondary	3,000	1,270	Capacity available
Inistioge	Primary	400	330	Overloaded. Upgrade funding dependant.
Johnstown	Primary	900	990	Overloaded. Upgrade funding dependant.
Kells	Secondary	300	320	Overloaded. No immediate plans for upgrade.
Kilkenny City Purcellsinch	Secondary	107,650	54,504	Purcellsinch. EIS application for major upgrade given approval by An Bord Pleanála.
Kilkenny Sion Road	Primary	21	21	
Kilmacow	Secondary	2,500		New plant. Capacity available.
Kilmaganny	Primary	245	275	
Kilmanagh	Primary	50	30	
Ballyhale/Knocktopher	Secondary	400	505	Overloaded. Upgrade planned.
Mooncoin	Secondary	2,800	612	Capacity available

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Ballygriffin, Mooncoin	Primary	30	30	
Mullinavat	Primary	280	520	Overloaded. Upgrade post 2013 & funding dependant.
New Ross (Environs)	Secondary	1,900	200	New plant in Co. Wexford. Design PE represents capacity reserved for Kilkenny County Council. Capacity available. Total Design PE 16,000, PE used 10,013)
Paulstown	Secondary	1,000	665	Upgrade planned.
Piltown	Secondary	1,500	2,096	Overloaded. Upgrade funding dependant.
Skeaghvosteen	Primary	27	27	
Slieverue	Secondary	19,500	5,100	New Waterford City plant at Belview. Design PE represents capacity reserved for Kilkenny County Council for Waterford City Environs and Slieverue. Capacity available. (Total PE 190,600, used 122,588)
Stoneyford	Secondary	500	614	Overloaded. Upgrade funding dependant.
Thomastown	Secondary	7,500	2,049	Capacity available
Tullaroan	Primary	150		
Urlingford	Secondary	1,500	2,015	Overloaded. Upgrade planned.
Windgap	Primary	27	27	

Table 4A (b): Water Supply Schemes

Water Supply Name	Comment on capacity	
		Upgrade
Ballyragget Ws 1001	Capacity Available	
Bennettsbridge Regional Ws 1002	Capacity Limited	
Callan Ws 1003	Capacity Available	
Castlecomer (Old) Ws 1004	Capacity Limited	
Clogh-Castlecomer Ws 1005	Capacity Limited	Prioritised for upgrade
Glenmore Ws 1006	Capacity Limited	
Gorteen Ws 1016	Capacity Limited	
Gowran-Goresbridge-Paulstown Ws 1007	Capacity Limited	Prioritised for upgrade
Graigenamanagh Ws 1008	Capacity Limited	
Inistioge Ws 1009	Capacity Limited	
Kilkenny City (Radestown) Ws 1010	Capacity Available	Prioritised for upgrade
Kilkenny City (Troyswood) Ws 1011	Capacity Available	
Kilmaganny Ws 1019	Capacity Limited	
Lois Na Si Ws 1018	Closed	
Mooncoin Regional Ws 1012	Capacity Available	Prioritised for upgrade
Piltown Ws 1013	Capacity Limited	
Silversprings Ws 1017	Closure proposed	
South Kilkenny Environs Ws 1020	Capacity Available	
Thomastown Ws 1014	Capacity Limited	Prioritised for upgrade
Urlingford-Johnstown Ws 1015	Capacity Limited	

Appendix 5 Habitats Directive Assessment Determination

Comhairle Chontae Chill Chainnigh
Halla an Chontae Sraid Eoin Cill Chainnigh

Kilkenny County Council
County Hall John Street Kilkenny



Serving People - Preserving Heritage

Kilkenny City & Environs Development Plan 2014-2020

Habitats Directive Assessment Determination

The Habitats Directive Assessment carried out under Article 6(3) of the Habitats Directive determined that the Kilkenny City & Environs Development Plan 2014-2020 will not adversely affect the integrity of a Natura 2000 site. While a number of objectives in the Plan were identified as having the potential to adversely affect the integrity of a Natura 2000 site, mitigation measures have been identified which it is envisaged will negate any such adverse effects on the integrity of the Natura 2000 sites in view of their conservation objectives.

Denis Malone
Senior Planner
Planning Department

June 2014

