

Environmental Report Addendum 1

Strategic Environmental Assessment (SEA) and Strategic Flood Risk Assessment (SFRA) Supplementary Information

This Environmental Report Addendum 1 contains supplementary information in respect of the SEA and SFRA reports published in May 2016. This information is provided in response to items raised in submissions and observations raised in respect of the Draft Kildare County Development Plan 2017-2023.

Strategic Environmental Assessment (SEA) and Appropriate Assessment (AA)

SEA - No. 1		
Environmental Reports – Strategic Environmental Assessment (SEA)		
Page No.	Section	Title
47	4.11	Overlay of Environmental Sensitivity Mapping

Figure 4.13 Overlay Mapping of Environmental Sensitivities inserted into the Non-Technical Summary.

SEA - No. 2		
Environmental Reports – Strategic Environmental Assessment (SEA)		
Page No.	Section	Title
26	-	Non-Technical Summary

Update the SEA Environmental Report Non- Technical Summary to include information summarising the following:

- Flooding and flood risk within the County;
- SFRA and the requirements of the Flood Risk Management Guidelines;
- Information used in the SFRA;
- Designated AREAS FOR Further Assessment (AFAs) in the County; and
- Conclusions from the SFRA undertaken for the Plan.

SEA - No. 3		
Environmental Reports – Strategic Environmental Assessment (SEA)		
Page No.	Section	Title
175	Table 10.1	Selected Indicators, Targets and Monitoring Sources

Following text is inserted before Table 10.1:

This shows the indicators and targets which have been selected for monitoring the likely significant environmental effects of implementing the Plan, if unmitigated.

A stand-alone Monitoring Report on the significant environmental effects of implementing the Plan will be prepared by Kildare County Council in advance of the beginning of the review of the Plan.

SEA - No. 4 Environmental Reports – Strategic Environmental Assessment (SEA)		
Page No.	Section	Title
180	Appendix I	Relationship with Legislation and Other Plans and Programmes

Following references inserted in Appendix I

Relationship with Legislation and Other Plans and Programmes” to the SEA Environmental Report as plans/policies that have not yet been adopted:

- Draft National Bioenergy Plan (DCENR, currently under preparation).
- Renewable Electricity Policy and Development Framework (DCENR) recently commenced
- National Mitigation Plan (DECLG) currently being prepared
- National Alternative Fuels Infrastructure for the Transport Sector (DTTAS)
- Food Wise 2025 (DAFM)

SEA - No. 5 Environmental Reports – Strategic Environmental Assessment (SEA) and Appropriate Assessment (AA)		
Page No.	Section	Title
30 (AA report)	3.2.4 (AA report)	Changes in Key Indicators of Conservation Value
102 (SEA report)	8.6.6 (SEA report)	

The following text from the AA NIR (Section 3.2.4 Changes in Key Indicators of Conservation) is added to Section 8 of the SEA Environmental Report (Section 8.6.6 Chapter 7: Infrastructure Development):

Existing and new development within the County will need to continue to be supplied by adequate and appropriate levels of water services infrastructure.

Much of the water supplied to County Kildare is supplied from outside of County Kildare – primarily from regional plants at Ballymore, Eustace (Dublin City Council) and Leixlip (Fingal County Council). Intensification of existing water abstractions or the development of new water abstractions has the potential, if unmitigated, to impact upon the environment including European sites.

Various towns within County Kildare utilise the same waste water treatment plants; Leixlip, serves Kilcock, Maynooth, Celbridge, Leixlip and Straffan and Osberstown serves Naas, Newbridge,

Kilcullen, Athgarvan, Prosperous, Sallins, Clane and Kill, for example. As is the case with other applications within the County, applications within such settlements are required to be assessed against the provisions within the County Development Plan providing for the protection of European Sites and associated assessments.

Irish Water, being the Water Services body for the State and County Kildare, is responsible for the delivery, integration and implementation of water and wastewater projects and infrastructural improvements. Various provisions in the County Development Plan commit the Council to work in conjunction with Irish Water in order to facilitate their provision of necessary water services infrastructure.

Irish Water is required to fulfil its responsibilities in compliance with relevant legislation including the Habitats Directive and transposing Regulations and to comply with the provisions of the County Development Plan as relevant and appropriate. Irish Water has prepared a “Water Services Strategic Plan” and associated “Capital Investment Plan 2014-2016”, which have been subjected to their own environmental assessment processes as relevant and appropriate. In combination with the provisions of these higher-level documents, the County Development Plan will contribute towards sustainable development and the appropriate protection and management of the environment, including Natura 2000 sites.

The key indicators of conservation value for the majority of European sites in County Kildare are surface water quality and quantity. Impacts on European sites may occur where there are hydrological connections between the sites and development areas. Implementation of the Draft Plan may result in alterations to the hydrological regime or physical environment of sites through water abstraction, drainage, and discharges to watercourses, coastal waters or groundwater resources. Of particular importance will be the provision of water supplies and the disposal of wastewater.

Development located in proximity to groundwater dependent habitats may interfere with the hydro geological regime that supports groundwater-dependent qualifying interests. Developments that may be carried out as part of the Draft Plan could potentially interfere with the hydrogeological regime of those sites listed in Table 3.4, therefore potentially reducing the habitat quality of those sites.

~~Meeting additional potable water demands and wastewater treatment demands arising from the proposed increase in population has the potential to adversely affect, in the case of abstractions from and effluent discharges to surface waters, the ecological status of surface waters and, in the case of groundwater abstractions, the quantitative status of groundwaters. Such demands would occur in combination with those in adjoining counties. Irish Water’s plan and programme making is subject to SEA and AA at national, regional, county and local levels. Adverse effects on the ecological status of surface waters and on the quantitative status of groundwaters would have the potential to impact upon protected species and habitats.~~

The provision of potable water supplies has the potential to result in adverse effects on environmental components including European Sites. Potential adverse effects on European sites could occur as a result construction works (transportation or treatment) and new or intensified

abstractions of water that could reduce the flow of waters that support surface or ground water dependent habitats and species. Where there are multiple abstractions, these have the potential to cumulatively contribute towards such adverse effects. Such potential effects include direct habitat loss (including loss of wetlands), habitat damage (e.g. damage to wetlands), reductions in water quality, disturbance to species including sensitive aquatic species.

The provision of wastewater treatment has the potential to result in adverse effects on environmental components including European Sites. Potential adverse effects on European sites could occur as a result construction works (transportation or treatment) and new or increased effluent discharges that could reduce deteriorate the quality of waters that support surface or ground water dependent habitats and species. Where there are multiple effluent discharges, these have the potential to cumulatively contribute towards such adverse effects. Such potential effects include direct habitat loss, reductions in water quality, disturbance to species including sensitive aquatic species.

Potential adverse effects will be mitigated by the various provisions that have been integrated into Plan, including those detailed at Section 4 of this report. Projects will be subjected their own consent procedures with associated Appropriate Assessment requirements as relevant and appropriate.

SEA - No. 6		
Environmental Reports – Strategic Environmental Assessment (SEA)		
Page No.	Section	Title
14	4.3.4	Candidate Special Areas of Conservation

The following text is inserted in Section 4.3.4 Candidate Special Areas of Conservation

Figure 4.2 maps SACs (and SPAs) both within the County, and within 15km of the County. The distance of 15km is currently recommended in the DoE document Appropriate Assessment of Plans and Projects - Guidance for Planning Authorities, however, sites beyond this distance should also be considered where there are hydrological linkages or other pathways that extend beyond 15 km thereby ensuring that all potentially affected European sites are considered. Potential effects identified by this assessment relate to those that could occur both within and beyond this distance as a result of, for example, water pollution. More detail on the potential impacts on European Sites is provided in the Stage 2 Appropriate Assessment that accompanies the Plan and this SEA Environmental Report.

SEA - No. 7		
Environmental Reports – Strategic Environmental Assessment (SEA)		
Page No.	Section	Title
49 & 175	Section 5 (SEA Objectives) Section 10 (Monitoring)	Strategic Environmental Objectives, Indicators and Targets

	Measures)	
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SEO B3 (included on Tables 5.1 and 10.1) is updated as follows:

B3: To avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites¹ and to ensure compliance with the Wildlife Acts 1976-2010 with regard to the protection of ~~listed~~ species **listed within these Acts.**

SEA - No. 8		
Environmental Reports – Strategic Environmental Assessment (SEA)		
Page No.	Section	Title
73 - 116	8.6	Detailed Evaluation

Amend/Update evaluations included in the SEA Environmental Report activities as follows:

The development of new and existing walking, cycling and driving routes/trails and the development of linkages between trails in Kildare and adjoining counties – including those identified by Objectives EO37 – have the potential to contribute towards a better management of tourism in sensitive areas and thereby benefitting various environmental components including habitats at certain locations (SEOs B1 B2 B3). The reference to protecting environmental quality and landscapes and to sustainable development would contribute towards beneficial effects upon the protection/management of all environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1). As with other developments and uses, those related to tourism and recreation would present the potential for significant adverse environmental effects to arise with regard to all environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1).

The development of walkways, cycleways, trails and routes (e.g. Arthur’s Way, Dublin- Galway Greenway, Barrow Blueway, Shackleton Trail, the Gordon Bennett Route) presents a variety of potentially adverse effects (upon environmental components including soil, water, landscape, cultural heritage and emissions to air and waste) that would be likely to arise from both the construction and operation of such developments and/or their ancillary infrastructure. These types of infrastructure are often constructed in ecologically and visually sensitive areas adjacent to the banks of rivers and streams.

¹ The Planning and Development Act 2010 defines a ‘wildlife site’ as: (a) an area proposed as a natural heritage area and the subject of a notice made under section 16(1) of the Wildlife (Amendment) Act 2000, (b) an area designated as or proposed to be designated as a natural heritage area by a natural heritage area order made under section 18 of the Wildlife (Amendment) Act 2000, (c) a nature reserve established or proposed to be established under an establishment order made under section 15 (amended by section 26 of the Wildlife (Amendment) Act 2000) of the Wildlife Act 1976, (d) a nature reserve recognised or proposed to be recognised under a recognition order made under section 16 (amended by section 27 of the Wildlife (Amendment) Act 2000) of the Wildlife Act 1976, or (e) a refuge for fauna or flora designated or proposed to be designated under a designation order made under section 17 (amended by section 28 of the Wildlife (Amendment) Act 2000) of the Wildlife Act 1976.

Lower tier project consideration is likely to find that the highest concentrations of ecological constraints to both the construction and operation of development are located within water bodies or close to the edge water bodies and that more ecologically appropriate locations for new development are located away from the water's edge. The mitigation measures that have been integrated into the Plan support the location of new development away from the water's edge (including for example GI 18: *"To maintain buffer of undisturbed vegetation of not less than 10 metres from the top of the bank of all watercourses in the county"*) and necessitate the undertaking of lower tier studies. Lower tier studies would be required to undertake new ecological survey work (where necessary, to be determined on a project by project basis) as well as consider information on the various designations to which the baseline data provided in this SEA Environmental Report relates.

Potential adverse effects would be mitigated both by measures which have been integrated into the Draft Plan which provide for and contribute towards environmental protection, environmental management and sustainable development (see Section 9) and by measures arising from lower tier assessments (including those for the preparation of lower tier strategies, plans or programmes).

Hydroelectric projects on rivers and geothermal energy developments Hydro-Energy Policies

Positive Effects: Contribution towards renewable energy and minimisation of greenhouse gases targets

Potential Negative Effects, if unmitigated:

- Depending on the scale and location of the development there is potential for impacts to occur on biodiversity, in particular aquatic biodiversity.

Lower tier project consideration is likely to find that the highest concentrations of ecological constraints to both the construction and operation of development are located within water bodies or close to the edge water bodies and that more ecologically appropriate locations for new development are located away from the water's edge. Providing for hydro-energy developments presents a particular challenge in this context.

The mitigation measures that have been integrated into the Plan support the location of new development away from the water's edge (including for example GI 18: *"To maintain buffer of undisturbed vegetation of not less than 10 metres from the top of the bank of all watercourses in the county..."*) and necessitate the undertaking of lower tier studies. Lower tier studies would be required to undertake new ecological survey work (where necessary, to be determined on a project by project basis) as well as consider information on the various designations to which the baseline data provided in this SEA Environmental Report relates.

- Potential to impact upon the morphological, biological and chemical status of waters - this could interact with drinking water sources (in freshwater) and biodiversity
- Potential interactions leading to change in structure of soil and geology
- Operation could impact upon flood risk elsewhere

- Potential impacts upon archaeological heritage or nearby architectural heritage, including context
- Changes to the character of locations may occur however visual impacts would depend upon, inter alia, the size of the installation, ancillary facilities and the perception and visibility of the relevant area

Geo Thermal Policies

These provisions cumulatively contribute towards the effects referred to under 'Aim' above; see commentary under 'Aim' above.

Positive Effects: Contribution towards renewable energy targets

Potential Negative Effects, if unmitigated:

- Potential impacts upon the status of waters and ecology contained within, especially arising from changes in the temperature of groundwater which can impact upon the structure and ecology of the aquifer and any dependent surface waters - this could interact with drinking water sources

Warm springs that occur along the Meath to Kildare border, which are of geological and ecological interest and are subject to designations in places would present constraints to geo-thermal projects in these locations.

The mitigation measures that have been integrated into the Plan contribute towards the protection of the environment (including Geo Thermal Energy Project GT 1: "To facilitate large and smaller scale geothermal energy generating developments subject to the proper planning and sustainable development of the area and consideration of environmental and ecological sensitivities") and necessitate the undertaking of lower tier studies. Lower tier studies would be required to undertake new ecological survey work (where necessary, to be determined on a project by project basis) as well as consider information on the various designations to which the baseline data provided in this SEA Environmental Report relates.

- Potential interactions leading to change in structure of soil and geology
- Potential impacts upon archaeology, including unknown underground archaeology
- Potential impacts upon on site water services
- Potential impacts upon context of archaeological and architectural heritage arising from surface installation

Strategic Flood Risk Assessment (SFRA)

SFRA – No. 1

The Strategic Flood Risk Assessment (SFRA) has been amended to take account of issues raised in the submissions received during the Draft Plan public consultation period from the Department of Housing, Planning, Community and Local Government and the Office of Public Works.

The amended SFRA Report includes a Stage 2 Flood Risk Assessment for all Towns, Villages and Rural Settlements contained in Volume 2 (Land Use Plans) of the Draft Kildare County Development Plan 2017-2023. The amended Strategic Flood Assessment Report September 2016, forms part of this Addendum.

The amended SFRA has been carried out in accordance with the requirements set out in 'The Planning System and Flood Risk Management Guidelines, 2009'.