

SCREENING STATEMENT

IN SUPPORT OF THE

APPROPRIATE ASSESSMENT

Proposed Variation No. 2 to Westmeath County
Development Plan, 2014-2020.

DECEMBER 2016

Table of Contents

| | | |
|----------|---|-----------|
| 1 | INTRODUCTION | 2 |
| 1.1 | BACKGROUND..... | 2 |
| 1.2 | LEGISLATIVE CONTEXT | 2 |
| 1.3 | STAGES OF APPROPRIATE ASSESSMENT | 3 |
| 2 | ASSESSMENT CRITERIA..... | 5 |
| 2.1 | DESCRIPTION OF THE PLAN..... | 5 |
| 2.2 | THE PROPOSED VARIATION | 7 |
| 2.3 | DESCRIPTION OF THE NATURA 2000 SITES..... | 8 |
| 2.4 | QUALIFYING FEATURES AND THEIR VULNERABILITY TO DEVELOPMENT | 8 |
| 2.5 | OTHER PLANS WHICH MAY LEAD TO CUMULATIVE IMPACTS ON NATURA SITES..... | 8 |
| 2.6 | DIRECT, INDIRECT OR SECONDARY IMPACTS | 10 |
| 2.7 | ELEMENTS OF THE PLAN WHERE THE IMPACTS ARE LIKELY TO BE SIGNIFICANT | 12 |
| 2.8 | CONCLUSIONS OF STAGE 1 | 12 |
| 3 | REFERENCES | 13 |

1 INTRODUCTION

1.1 BACKGROUND

This report has been prepared by Dr. Marian Coll, Ecologist and Environmental Consultant, at the request of Westmeath County Council to inform their Appropriate Assessment of a proposed variation to the County Development Plan 2014-2020 (Variation no. 2). Appropriate Assessment is required under the Habitats Directive to assess the impact of plans or policies on Natura sites.

1.2 LEGISLATIVE CONTEXT

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, better known as "The Habitats Directive", provides legal protection for habitats and species of European importance. Articles 3 to 9 provide the legislative means to protect habitats and species of Community interest through the establishment and conservation of an EU-wide network of sites known as Natura 2000. These are Special Areas of Conservation (cSACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79/409/ECC).

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect Natura 2000 sites (Annex 1.1). Article 6(3) establishes the requirement for Appropriate Assessment (AA):

"Any plan or project not directly connected with or necessary to the management of the [Natura 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subjected appropriate assessment of its implications for the site in view of the site's conservation objectives. In 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."

If, in spite of a negative assessment of the implications for the [Natura 2000] 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 a social or economic nature, Member States 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."

This legislation is implemented in the Republic of Ireland by the European Communities (Birds and Natural Habitats) Regulations 2011. These new regulations consolidate the European Communities (Natural Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats)(Control of Recreational Activities) Regulations 2010, as well as addressing transposition failures identified in the CJEU judgements.

1.3 STAGES OF APPROPRIATE ASSESSMENT

This Natura Impact Statement has been prepared in accordance with the following guidance:

- *Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities.* Department of the Environment, Heritage and Local Government, 2009.
- *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,* European Commission Environment DG, 2000.
- *Managing Natura 2000 sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC:* European Commission, 2000

As set out in these guidance documents, AA comprises up to four stages:

Stage One: Screening

The process which identifies the likely impacts upon a Natura 2000 site of a project or 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 project or 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

The process which examines alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 site.

Stage Four: Assessment where no alternative solutions exist and where adverse impacts remain

An assessment of compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed.

The Habitats Directive promotes a hierarchy of avoidance, mitigation and compensatory measures. Firstly, the plan should aim to avoid any impacts on Natura 2000 sites by identifying possible effects early in the plan-making process and altering the plan or project in order to avoid such impacts. Secondly, mitigation measures should be applied, if necessary, during the AA process to the point where no adverse impacts on the site(s) remain. If significant effects on the site(s) are likely, and no further practicable mitigation is possible, the Plan or project may not proceed unless for imperative reasons of overriding public interest (IROPI test) under Article 6(4) of the Habitats Directive, in which case compensation measures are required for any remaining adverse effect(s).

This report documents the first of these stages. It's conclusion that significant impacts on Natura 2000 sites are unlikely means that further AA stages are not required.

2 ASSESSMENT CRITERIA

2.1 DESCRIPTION OF THE PLAN

The Westmeath County Development Plan, 2014-2020, sets out Core Strategy and policies in key areas such as Economy, Housing, Natural Heritage, Landscape Characterisation and Lake Management. The plan also sets out current policy for the County for Energy and Communications (Chapter 10) and this includes policy for renewable energy and wind energy. The CDP includes development management objectives for energy and communications and these include objectives for wind energy developments (Chapter 14).

In relation to wind energy (S.10.5, p.145) the County Development Plan seeks to achieve a balance between the positive effects of wind energy on reduction of carbon emissions, and local environmental concerns, which '...include visual impact, landscape protection, impacts on residential amenity, impact on wildlife and habitats, connections to the national grid and impact of construction and ancillary infrastructure. The policies related to wind energy development include:

P-WIN3 To ensure the siting and development of wind turbines is carried out in accordance with the requirements of the DoEHLG Wind Energy Development Guidelines 2006, and as otherwise amended. [New guidelines are currently being drafted (DECLG, 2013)].

Development management objectives and criteria used in the assessment of wind energy development (S.14.11.1) relate to environmental quality issues including landscape values, access and transportation, natural heritage, shadow flicker and noise.

Policies in relation to noise aim to ensure it does not interfere with the quality of life of the population. Noise impacts are mentioned in the context of quarrying activities, (S. 3.43.3), promotion of non-motorised forms of transport (S.8.9) general environmental management (S.9.14) and management of wind energy facilities (S. 10.5.3). While legislation and policies on noise focus on impacts to humans, the current review of wind energy guidelines (DECLG, 2013) allows for the definition of areas of high amenity as noise sensitive properties. Objectives relating to management of noise impacts are:

O-NAL1 To prepare Noise Maps in accordance with the EU directive on Assessment and Management of Environmental Noise and implement action plans, where necessary, to seek to reduce noise levels.

O-NAL2 To implement the Westmeath Noise Action Plan 2013-2018.

A policy recognises the significance of the equine sector:

P-EQ3 To protect the equine industry from inappropriate development which would adversely affect its continued operation.

A zoning map (Map Reference C4), which has been amended following the adoption of Variation 1 of the CDP, specifies areas of low and no capacity for wind energy.

Policies and objectives in relation to biodiversity provide for Appropriate Assessment in relation to Natura sites and for consideration of local biodiversity interests and features outside these sites. These include:

P-NAT1 To protect and conserve wild bird species and their habitats, especially rare or vulnerable species and regularly occurring migratory species.

P-NAT2 To protect and conserve Special Areas of Conservation, candidate Special Areas of Conservation, Special Protection Areas and candidate Special Protection Areas, designated by the National Parks and Wildlife Service of the Department of the Arts Heritage and the Gaeltacht under the EU Birds and Habitats Directives respectively.

P-NAT3 To protect plant, animal, species and habitats which have been identified by the Habitats Directive, Birds Directive, Wildlife Act (1976) and (Amendment Act) 2000, and the Flora Protection Order S.I No. 94 of 1999.

P-NAT4 To assess any plan or project in accordance with Article 6 of the Habitats Directive, and assess whether the Plan or project is likely to have a significant effect on the site either individually or cumulatively upon the integrity, conservation objectives and qualifying interest of any Natura 2000 site.

P-NAT5 To require environmental assessment such as EIA (Environmental Impact Assessment) and/or ecological appraisal for development not directly connected with or necessary to the management of a European site, or a proposed European Site and which are likely to have significant effects on the European site either individually or cumulatively.

P-NAT6 To consult with the Prescribed Bodies when assessing development proposals affecting sites of biodiversity value, with particular emphasis on the Natura 2000 network of sites.

P-NAT 7 To ensure that the Local Authority in fulfilling its responsibility in the supply of services and infrastructure, zoning of lands and undertaking and authorizing development, addresses the potential effects on biodiversity and the needs of priority habitats and species within or adjoining sites as identified in the NPWS Report 'The status of EU Protected Habitats and Species in Ireland' NPWS 2008.

P-NAT8 To identify and provide appropriate buffer zones between designated ecological sites and local biodiversity features and areas zoned for development.

P-NAT9 To prepare Strategic Habitat Management Plans for Natura Sites in consultation with the National Parks and Wildlife Service and relevant stakeholders.

P-SPB1 To conserve the existing wide range of flora, fauna and wildlife habitats in the county, through the preservation of ecological corridors and ecological networks. These are the habitats that link the areas of high nature conservation value.

P-SPB2 To apply the precautionary principle in relation to development proposals in areas identified as being of local nature conservation interest, by requiring a Scientific / Ecological Risk Assessment, to ensure that the development will not impact upon the integrity and habitat value of the site.

P-SBV3 To require developments likely to have an adverse effect on recognised sites of local nature conservation importance, and to demonstrate the impacts on the ecological value of the site. Such applications will not be approved, unless it can be clearly demonstrated that there are reasons for the development that outweigh the need to safeguard the intrinsic nature conservation value of the site.

Objectives include

O-NAT1 To promote the maintenance and as appropriate, achievement of favourable conservation status of habitats and species and to improve the ecological coherence of the Natura 2000 network, by maintaining and where appropriate, developing features in the landscape which are of major importance for wild fauna and flora.

O-SBV1 To continue to map the habitat of the county to enable planning for future development in a sensitive manner and inform the Development Management process.

O-SBV2 To prepare in consultation with the National Parks and Wildlife Service, a Heritage Management Plan for Council owned lands within designated Habitat Sites.

O-SBV3 To encourage the inclusion of wildlife friendly building methods that support birds, bats and hibernating insects, in furtherance of the creation of heritage awareness.

2.2 THE PROPOSED VARIATION

The motion to vary the Development Plan as adopted by the elected members of the Westmeath County Council is as follows:-

That Westmeath County Council amend the Westmeath County Development Plan 2014-2020 to provide for the following separation distances between wind turbines and homes:

- 500 metres, where height of the wind turbine generator is greater than 25 metres but does not exceed 50 metres.
- 1000 metres, where the height of the wind turbine generator is greater than 50 metres but does not exceed 100 metres.
- 1500 metres, where the height of the wind turbine generator is greater than 100 metres but does not exceed 150 metres.
- More than 2000 metres, where the height of the wind turbine generator is greater than 150 metres.

2.3 DESCRIPTION OF THE NATURA 2000 SITES

The Natura Impact Report for the Development Plan provides a list of Natura sites (SAC's and SPA's) in Westmeath and within 15km. Information on qualifying interests was obtained from the NIR and updated through an examination of National Parks and Wildlife Service web site (NPWS.ie). Table 1 contains a list of Natura sites. Further information on the important habitats and species (qualifying interests) of these sites is in Appendix 1.

2.4 QUALIFYING FEATURES AND THEIR VULNERABILITY TO DEVELOPMENT

The qualifying features in the Natura sites listed in Appendix 1 confirm that they are principally important for wetland habitats and species, in bogs, turloughs, rivers and lakes. The wider landscape is also important to many of those species, as well as bats a group of species which are principally associated with the large lakes, Owel, Ennell and Ree. Commonly occurring bat species are the Pipistrelle's (Common, Soprano, Nathusius), Leisler's, Daubenton and Natterer's bat. The lesser Horseshoe and Whiskered bat are uncommon.

Principal threats to the SAC's are damaging direct and indirect impacts to their hydrology, direct removal of habitats and disturbance to species, particularly wetland birds. Noise and disturbance impacts are of potential significance to nocturnal species, including bats. As bats hunt their insect prey using ultrasonic calls and part of this acoustic information can fall within the spectrum of anthropogenic noise, there is potential for noise to cause a significant adverse impact to bats. Based on studies elsewhere there is indirect evidence that the feeding activity of gleaning species such as brown long-eared bat (*Plecotus auritus*), Natterer's bat (*Myotis nattereri*) and whiskered bat (*Myotis mystacinus*) could be reduced by noise as low as 15db (Schaub et al., 2008). In Ireland it is known that bats roost in areas where there is constant noise (Kelleher, 2007) but that the introduction of a new noise source could lead to bats abandoning roosts.

2.5 OTHER PLANS WHICH MAY LEAD TO CUMULATIVE IMPACTS ON NATURA SITES

The following plans or projects have potential to impact on Natura sites:

- Midland Regional Planning Guidelines 2010 – 2022;
- Shannon International River Basin Management Plan (ShIRBD); and
- Eastern River Basin Management Plan (ERBD).

The impacts of these three plans on Natura sites have already been assessed as all have been subject to AA. Therefore they are unlikely to have an adverse impact on Natura sites.

Table 1 Natura sites (SAC's and SPA's) in Westmeath and within 15km

| NATURA (SAC) Sites in Westmeath and within 15km | | NATURA (SPA's) Sites in Westmeath and within 15km |
|---|---|--|
| In Westmeath | Within 15km | |
| Site Code: 00069 Scragh Bog | Site Code: 000006 Killyconny Bog (Cloghbally) Meath/Cavan | 004065 Lough Sheelin SPA |
| Site Code: 000688 Lough Owel | Site Code: 000572 Clara Bog, Offaly | 004061 Lough Kinale and Derragh Lough SPA |
| Site Code: 000440 Lough Ree | Site Code: 000448 Fortwilliam Turlough, Longford | 004043 Lough Derravaragh SPA |
| Site Code: 000685 Lough Ennell | Site Code: 002341 Ardagullion Bog, Longford | 004102 Garriskill Bog SPA |
| Site Code: 002313 Ballymore Fen | Site Code: 000571 Charleville Wood, Offaly | 004045 Glen Lough SPA |
| Site Code 002342 Mount Hevey Bog | Site Code: 000575 Ferbane Bog, Offaly | 004046 Lough Iron SPA |
| Site Code: 002336 Carn Park Bog | Site Code: 000576 Fin Lough (Offaly), Offaly | 004232 River Boyne and River Blackwater SPA |
| Site Code: 000216 River Shannon Callows | Site Code: 000580 Mongan Bog, Offaly | 004047 Lough Owel SPA |
| Site Code: 002337 Crosswood Bog | Site Code: 000581 Moyclare Bog, Offaly | 004064 Lough Ree SPA |
| Site Code: 001831 Split Hills and Long Hill Esker | Site Code: 000582 Raheenmore Bog, Offaly | |
| Site Code: 002340 Moneybeg and Clareisland Bogs | Site Code: 001776 Pilgrim's Road Esker, Offaly | |
| Site Code: 001810 White Lough, Ben Loughs and Lough Doo | Site Code: 002339 Ballynamona Bog and Corkip Lough, Roscommon | |
| Site Code: 002120 Lough Bane and Lough Glass | Site Code: 000610 Lough Croan Turlough, Roscommon | |
| Site Code: 002299 River Boyne and River Blackwater | Site Code: 000611 Lough Funshinagh Roscommon | |
| Site Code: 002121 Lough Lene | Site Code: 001625 Castlesampson Esker, Roscommon | |
| Site Code: 000679 Garriskil Bog | | |

2.6 DIRECT, INDIRECT OR SECONDARY IMPACTS

As part of this screening those features of the proposed variation that have the potential to impact on features and conservation objectives of the Natura sites were assessed. European Commission Environment DG 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"* outlines the types of impacts that may affect Natura 2000 sites. These include impacts from the following activities:

- Land take
- Resource Requirements (Drinking Water Abstraction Etc.)
- Emissions (Disposal to Land, Water or Air)
- Excavation Requirements
- Transportation Requirements
- Duration of Construction, Operation, Decommissioning

In addition, the Guidance document outlines the following likely changes that may occur at a designated site, which may result in impacts on the integrity and function of that site:

- 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

It should be noted that the Westmeath County Development Plan, 2014-2020 has already been subject to Appropriate Assessment and the resulting Natura Impact Report contains mitigation measures to ensure that no significant impacts will arise from the implementation of the Plan.

(<http://www.westmeathcoco.ie/en/media/Volume%204%20Natura%20Impact%20Report2.pdf>).

In addition, the plan itself has integrated policy and objectives which serve to protect the integrity of the Natura 2000 network of sites. As such, this screening relates only to the Variation and does not revisit other aspects of current County Development Plan (CDP) policy or the current NIR for the CDP.

The proposed Variation allows for the setting of separation distances between wind turbines and homes and will further restrict the allowable areas for wind farm development. Overall, this is likely to have a net neutral to positive impact on the Natura 2000 network and will not result in any further negative impacts over and above those previously identified in the NIR of the CPD.

2.6.1 Land take

The proposed variation will not lead to any further landtake or loss of habitat over and above that which has previously been assessed. The proposed variation will not have a significant impact on the Natura 2000 network in this respect.

2.6.2 Resource Requirements (Drinking Water Abstraction Etc.)

The proposed variation will not lead to any increased resource requirements over and above those which have previously been assessed. The proposed variation will not have a significant impact on the Natura 2000 network in this respect.

2.6.3 Emissions (Disposal to Land, Water or Air)

No direct or indirect emissions to water will occur in relation to any future implementation of this variation.

2.6.4 Excavation Requirements

No increased excavation requirements will occur in relation to any future implementation of this variation, over and above those previously assessed. The proposed variation will not have a significant impact on the Natura 2000 network in this respect.

2.6.5 Transportation Requirements

There will be no increased transportation requirements as a result of this variation. The proposed variation will not have a significant impact on the Natura 2000 network in this respect.

2.6.6 Duration of Construction, Operation, Decommissioning

Implementation of the proposed variation will not result in any additional construction works over and above those previously assessed. It is not likely that the duration of construction or operation phases will impact significantly on the Natura 2000 network.

2.6.7 Reduction of Habitat Area

Implementation of the proposed variation will not result in the loss or reduction of any habitats for which any site is designated. The proposed variation will not have a significant impact on the Natura 2000 network in this respect.

2.6.8 Disturbance to Key Species

Implementation of the proposed variation will not result in the disturbance of any species for which the identified Natura 2000 sites have been designated. The proposed variation will not have a significant impact on the Natura 2000 network in this respect.

2.6.9 Habitat or Species Fragmentation

Habitat and species fragmentation can occur through the breaking up of habitats resulting in interference with existing ecological units or when construction introduces a barrier to the free movement of species from one habitat to another. Implementation of the proposed

variation will not result in fragmentation of habitats or populations of species for which any Natura site is designated.

2.6.10 Reduction in Species Density

As outlined in Sections 2.6.7 and 2.6.9, there will be no loss of habitat or fragmentation of populations of species that would result in the reduction in species density of any protected species. The proposed variation will not have a significant impact on the Natura 2000 network in this respect.

2.6.11 Changes in Key Indicators of Conservation Value (Water Quality Etc.)

The proposed variation will not have a significant impact on the Natura 2000 network through changes to ground and surface water quality.

2.6.12 Climate Change

The proposed variation will not significantly impact Climate Change.

2.7 ELEMENTS OF THE PLAN WHERE THE IMPACTS ARE LIKELY TO BE SIGNIFICANT

As outlined in **Section 2.6**, no direct or indirect impacts on the Natura 2000 network of sites will arise from the proposed variation. Therefore, no element of the proposed variation will have a significant impact on the Natura 2000 network of sites.

2.8 CONCLUSIONS OF STAGE 1

The likely impacts that may arise from the implementation of the proposed Variation have been examined in the context of a number of factors that could potentially affect the integrity of the Natura 2000 network. On the basis of the findings of this Screening for Appropriate Assessment, it is concluded that the proposed Variation will not have any significant impacts on the Natura 2000 network of sites due its restricted nature and the protective policies incorporated in the Westmeath County Development Plan 2014-2020. No further assessment is required.

3 REFERENCES

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

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, European Commission Environment DG, 2000.

Managing Natura 2000 sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC: European Commission, 2000.

Appendix 1 Qualifying interests and management issues for Natura sites

Table 1 Natura sites in Westmeath

| Name and Site Code | Objectives | Habitat code | Annexed species and habitat | Development issues of concern |
|-------------------------------------|---------------------------------|--------------|--|--|
| Site Code: 00069 Scragh Bog | Generic Conservation Objectives | 1065 | <i>Euphydryas aurinia</i> | Interference with water quality |
| | | 1393 | <i>Drepanocladus vernicosus</i> | |
| | | 7230 | Alkaline fens | |
| | | 7140 | Transition mires and quaking bogs | |
| Site Code: 000688 Lough Owel | Generic Conservation Objectives | 3140 | Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp. | Changes to water quality, damage to habitats |
| | | 7140 | Transition mires and quaking bogs | |
| | | 7230 | Alkaline fens | |
| Site Code: 000440 Lough Ree | Generic Conservation Objectives | 1355 | <i>Lutra lutra</i> | Decline in water quality, habitat removal, drainage. |
| | | 3150 | Natural eutrophic lakes with Magnopotamion or Hydrocharition-type vegetation | |
| | | 7230 | Alkaline fens | |
| | | 91A0 | Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in British Isles | |
| | | 6210 | Semi-natural dry grasslands and scrubland facies on | |

| Name and Site Code | Objectives | Habitat code | Annexed species and habitat | Development issues of concern |
|--|---------------------------------|--------------|---|--|
| | | | calcareous substrates (<i>Festuco Brometalia</i>)(*important orchid sites). | |
| | | 91D0 | Bog woodland | |
| | | 8240 | Limestone pavements | |
| | | 7120 | Degraded raised bogs still capable of natural regeneration | |
| Site Code: 000685 Lough Ennell | Generic Conservation Objectives | 1096 | Lampetra planeri | Pollution, drainage; overgrazing, fertilization, alien species |
| | | 1355 | Lutra lutra | |
| | | 7230 | Alkaline fens | |
| | | 3140 | Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. | |
| Site Code: 002313 Ballymore Fen | Generic Conservation Objectives | 7140 | Transition mires and quaking bogs | Interference with local hydrology and groundwater quality. |
| | | 7230 | Alkaline fens | |
| | | 7120 | Degraded raised bogs still capable of natural regeneration | |
| Site Code: 002342 Mount Hevey Bog | Generic Conservation Objectives | 7110 | Active raised bog | Interference with bog habitats, changes to local hydrology |
| | | 7120 | Degraded raised bog capable of natural regeneration | |

| Name and Site Code | Objectives | Habitat code | Annexed species and habitat | Development issues of concern |
|--|---------------------------------|--------------|---|---|
| | | 7150 | Depressions on peat substrates of the Rhynchosporion | |
| Site Code: 002336 Carn Park Bog | Generic Conservation Objectives | 7110 | Active raised bogs | Interference with bog habitats, changes to local hydrology. |
| | | 7120 | Degraded raised bogs still capable of natural regeneration | |
| Site Code: 000216 River Shannon Callows | Generic Conservation Objectives | 6510 | Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>) | Changes to farming practises, drainage; modifying structures of inland water courses. |
| | | 6410 | Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinia caerulea</i>) | |
| | | 8240 | Limestone pavements | |
| | | 91E0 | Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) | |
| | | 1355 | <i>Lutra lutra</i> | |
| Site Code: 002337 Crosswood Bog | Generic Conservation Objectives | 7110 | Active raised bog | Changes to local hydrology and removal of bog habitats. |
| | | 7120 | Degraded raised bogs still capable of natural regeneration | |
| Site Code: 001831 Split Hills and Long Hill Esker | Generic Conservation Objectives | 6210 | Semi-natural dry grasslands and scrubland facies on | Quarrying |

| Name and Site Code | Objectives | Habitat code | Annexed species and habitat | Development issues of concern |
|--|---------------------------------|--------------|---|---|
| | | | calcareous substrates (Festuco Brometalia)(*important orchid sites) | |
| Site Code: 002340 Moneybeg and Clareisland Bogs | Generic Conservation Objectives | 7120 | Degraded raised bogs still capable of natural regeneration | Removal of bog habitats, changes to local hydrology. |
| | | 7110 | Active raised bogs | |
| | | 7150 | Depressions on peat substrates of the Rhynchosporion | |
| Site Code: 001810 White Lough, Ben Loughs and Lough Doo | Generic Conservation Objectives | 1092 | White-clawed crayfish (Austropotamobius pallipes) | Changes in farming practises. |
| | | 3140 | Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. | |
| Site Code: 002120 Lough Bane and Lough Glass | Generic Conservation Objectives | 1092 | White-clawed crayfish (Austropotamobius pallipes) | Changes to water quality |
| | | 3140 | Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. | |
| Site Code: 002299 River Boyne and River Blackwater | Generic Conservation Objectives | 1099 | River lamprey (Lampetra fluviatilis) | Bad drainage practises, increased inputs of pollutants. |
| | | 1106 | Salmon (Salmo salar) | |
| | | 1355 | Otter (Lutra lutra) | |
| | | 7230 | Alkaline fens | |
| | | 91E0 | Alluvial forests with Alnus glutinosa and Fraxinus | |

| Name and Site Code | Objectives | Habitat code | Annexed species and habitat | Development issues of concern |
|--|---------------------------------|--------------|---|---|
| | | | excelsior (Alno-Padion, Alnion incanae, Salicion albae) | |
| Site Code: 002121 Lough Lene | Generic Conservation Objectives | 1092 | White-clawed crayfish (Austropotamobius pallipes) | Increased abstraction and eutrophication caused by agricultural run-off from surrounding areas. |
| | | 3140 | Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. | |
| Site Code: 000679 Garriskil Bog | Generic Conservation Objectives | 7120 | Degraded raised bogs still capable of natural regeneration | Changes to local hydrology |

Table 2 Natura sites (SAC's) within 15km of Westmeath

| SAC Name and Site Code | Objectives | Habitat Code | Annexed species habitat and | Development Issue of concern |
|--|---------------------------------|--------------|--|------------------------------|
| Site Code: 000006 Killyconny Bog (Cloghbally) Meath/Cavan | Generic Conservation Objectives | 7110 | Active raised bogs | Peat cutting and drainage. |
| | | 7120 | Degraded raised bogs still capable of natural regeneration | |
| Site Code: 000448 Fortwilliam Turlough Longford | Generic Conservation Objectives | 3180 | Turloughs | Changes to farming practises |

| SAC Name and Site Code | Objectives | Habitat Code | Annexed habitat and species | Development Issue of concern |
|---|---------------------------------|--------------|---|---|
| Site Code: 002341 Ardagullion Bog Longford | Generic Objectives Conservation | 7120 | Degraded raised bogs still capable of natural regeneration | Damage to bog habitats. Interference with hydrology. |
| | | 7110 | Active raised bogs | |
| | | 7150 | Depressions on peat substrates of the Rhynchosporion | |
| Site Code: 000571 Charleville Wood Offaly | Generic Objectives Conservation | 1016 | <i>Vertigo moulinsiana</i> | Poor management woodland |
| | | 91A0 | Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in British Isles | |
| Site Code: 000572 Clara Bog Offaly | Generic Objectives Conservation | 1065 | Euphydryas aurinia | Damage to bog habitats and changes to land use in surrounding esker. through the bog drains the areas adjacent to it. |
| | | 91D0 | Bog woodland | |
| | | 7110 | Active raised bogs | |
| | | 6210 | Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco Brometalia)(*important orchid sites) | |
| | | 7120 | Degraded raised bogs still capable of natural regeneration | |
| | | 7150 | Depressions on peat substrates of the | |

| SAC Name and Site Code | Objectives | Habitat Code | Annexed habitat and species | Development Issue of concern |
|---|--|--------------|-----------------------------|------------------------------|
| | | | Rhynchosporion | |
| Site 000575 Ferbane Bog Offaly | Code: <p>Objective 1: To maintain the Annex I habitats for which the cSAC has been selected at favourable conservation status; *active raised bog (26% area of the site), degraded peat still capable of natural regeneration (50%) and depressions on peat substrates of the Rhynchosporion (1% in mosaic with *active raised bog). Objective 2: To maintain other habitats at favourable conservation status, including deciduous woodland (9%), cutover bog (9%) and lowland wet grassland (5%). Objective 3: To maintain the populations of notable species on the site at favourable conservation status, including Merlin and important raised bog species such as Oblong-leaved Sundew and Crowberry. Objective 4: To establish effective liaison</p> | 7110 | Active raised bogs | Damage to bog habitats |

| SAC Name and Site Code | Objectives | Habitat Code | Annexed habitat and species | Development Issue of concern |
|---|---|--------------|---|------------------------------|
| | with landowners, legal users and relevant authorities | | | |
| | | 7120 | Degraded raised bogs still capable of natural regeneration | |
| | | 7150 | Depressions on peat substrates of the Rhynchosporion | |
| Site Code: 000576 Finn Lough (Offaly) Offaly | Generic conservation objectives | 1013 | Vertigo geyeri | Local hydrology |
| | | 7230 | Alkaline fens | |
| | | 3140 | Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. | |
| | | 7120 | Degraded raised bogs still capable of natural regeneration | |
| Site Code: 000580 Mongan Bog Offaly | Generic conservation Objectives | 7110 | Active raised bogs | Changes to local hydrology |
| | | 7120 | Degraded raised bogs still capable of natural regeneration | |
| | | 7150 | Depressions on peat substrates of the Rhynchosporion | |
| Site Code: 000581 Moyclare Bog Offaly | Generic Conservation Objectives | 7150 | Depressions on peat substrates of the Rhynchosporion | Damage to bog habitats |
| | | 7110 | Active raised bogs | |

| SAC Name and Site Code | Objectives | Habitat Code | Annexed habitat and species | Development Issue of concern |
|--|---------------------------------|--------------|---|---|
| | | 7120 | Degraded raised bogs still capable of natural regeneration | |
| Site Code: 000582 Raheenmore Bog Offaly | Generic Objectives Conservation | 7150 | Depressions on peat substrates of the Rhynchosporion | Damage to bog habitats |
| | | 7110 | Active raised bogs | |
| | | 7120 | Degraded raised bogs still capable of natural regeneration | |
| Site Code: 001776 Pilgrim's Esker Offaly | Generic Objectives Conservation | 6210 | Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco Brometalia)(*important orchid sites) | Quarrying and changes to land use |
| Site Code: 002339 Ballynamona Bog and Lough Roscommon | Generic Objectives Conservation | 7110 | Active raised bogs | Damage to bog habitats |
| | | 7120 | Degraded raised bogs still capable of natural regeneration | |
| | | 7150 | Depressions on peat substrates of the Rhynchosporion | |
| | | 91D0 | Bog woodland | |
| | | 3180 | Turloughs | |
| Site Code: 000610 Lough Croan Turlough Roscommon | Generic Objectives Conservation | 3180 | Turloughs | Changes to local hydrology and quality of groundwater |

| SAC Name and Site Code | Objectives | Habitat Code | Annexed habitat and species | Development Issue of concern |
|--|---------------------------------|--------------|-----------------------------|---|
| Site Code: 000611 Lough Funshinagh Roscommon | Generic Objectives Conservation | 3180 | Turloughs | Changes in local hydrology and quality of groundwater |
| Site Code: 001625 Castlesampson Esker Roscommon | Generic Objectives Conservation | 3180 | Turloughs | Quarrying, changes to land use |

Table 3 Natura sites (SPA's) in Westmeath and within 15km

| Site name and code | Objectives | Habitat code | Annexed species and habitats | Development Issues of concern |
|--|---------------------------------|--------------|------------------------------|-------------------------------|
| 004065 Lough Sheelin SPA | Generic objectives Conservation | A005 | <i>Podiceps cristatus</i> | Changes to water quality. |
| | | A059 | <i>Aythya ferina</i> | |
| | | A061 | <i>Aythya fuligula</i> | |
| | | A067 | <i>Bucephala clangula</i> | |
| | | A999 | Wetlands & Waterbirds | |
| 004061 Lough Kinale and Derragh Lough SPA | Generic objectives Conservation | A059 | <i>Aythya ferina</i> | Changes to water quality |
| | | A061 | <i>Aythya fuligula</i> | |

| Site name and code | Objectives | Habitat code | Annexed species and habitats | Development Issues of concern |
|-------------------------------------|---------------------------------|--------------|-------------------------------------|---|
| | | A999 | Wetlands & Waterbirds | |
| 004043 Lough Derravaragh SPA | Generic objectives Conservation | A038 | <i>Cygnus Cygnus</i> | Changes to lake water quality |
| | | A059 | <i>Aythya ferina</i> | |
| | | A061 | <i>Aythya fuligula</i> | |
| | | A125 | <i>Fulica atra</i> | |
| | | A395 | <i>Anser albifrons Flavirostris</i> | |
| | | A140 | <i>Pluvialis apricaria</i> | |
| | | A999 | Wetlands & Waterbirds | |
| 004102 Garriskill Bog SPA | Generic objectives Conservation | A395 | <i>Anser albifrons flavirostris</i> | Damage to bog habitats? |
| 004045 Glen Lough SPA | Generic objectives Conservation | A395 | <i>Anser albifrons flavirostris</i> | Changes to land use affecting habitats and water quality. |
| | | A038 | <i>Cygnus cygnus</i> | |

| Site name and code | Objectives | Habitat code | Annexed species and habitats | Development Issues of concern |
|---|---------------------------------|--------------|-------------------------------------|--|
| 004046 Lough Iron SPA | Generic objectives Conservation | A038 | <i>Cygnus cygnus</i> | <i>Changes to water quality.</i> |
| | | A050 | <i>Anas penelope</i> | |
| | | A052 | <i>Anas crecca</i> | |
| | | A056 | <i>Anas clypeata</i> | |
| | | A125 | <i>Fulica atra</i> | |
| | | A140 | <i>Pluvialis apricaria</i> | |
| | | A395 | <i>Anser albifrons flavirostris</i> | |
| | | A999 | <i>Wetlands & Waterbirds</i> | |
| 004232 River Boyne and River Blackwater SPA | Generic objectives Conservation | A229 | <i>Alcedo atthis</i> | <i>Drainage</i> |
| 004047 Lough Owel SPA | Generic objectives Conservation | A056 | <i>Anas clypeata</i> | <i>Changes in water quality, disturbance</i> |
| | | A125 | <i>Fulica atra</i> | |

| Site name and code | Objectives | Habitat code | Annexed species and habitats | Development Issues of concern |
|----------------------|---------------------------------|--------------|-------------------------------------|--------------------------------------|
| | | A395 | <i>Anser albifrons flavirostris</i> | |
| | | A999 | <i>Wetlands & Waterbirds</i> | |
| 004064 Lough Ree SPA | Generic Conservation objectives | A038 | <i>Cygnus cygnus</i> | <i>Invasive species, disturbance</i> |
| | | A050 | <i>Anas penelope</i> | |
| | | A052 | <i>Anas crecca</i> | |
| | | A053 | <i>Anas platyrhynchos</i> | |
| | | A056 | <i>Anas clypeata</i> | |
| | | A061 | <i>Aythya fuligula</i> | |
| | | A065 | <i>Melanitta nigra</i> | |
| | | A067 | <i>Bucephala clangula</i> | |
| | | A004 | <i>Tachybaptus ruficollis</i> | |
| | | A125 | <i>Fulica atra</i> | |

| Site name and code | Objectives | Habitat code | Annexed species and habitats | Development Issues of concern |
|--------------------------------|---------------------------------|--------------|-------------------------------------|-------------------------------|
| | | A140 | <i>Pluvialis apricaria</i> | |
| | | A395 | <i>Anser albifrons Flavirostris</i> | |
| | | A142 | <i>Vanellus vanellus</i> | |
| | | A193 | <i>Sterna hirundo</i> | |
| 004044 Lough Ennell SPA | Generic Conservation objectives | A059 | <i>Aythya ferina</i> | Disturbance |
| | | A061 | <i>Aythya fuligula</i> | |
| | | A125 | <i>Fulica atra</i> | |
| | | A140 | <i>Pluvialis apricaria</i> | |
| | | A395 | <i>Anser albifrons Flavirostris</i> | |
| | | A005 | <i>Podiceps cristatus</i> | |
| | | A053 | <i>Anas platyrhynchos</i> | |
| | | A067 | <i>Bucephala clangula</i> | |

| Site name and code | Objectives | Habitat code | Annexed species and habitats | Development Issues of concern |
|--|---------------------------------|--------------|-------------------------------------|-------------------------------|
| | | A142 | <i>Vanellus vanellus</i> | |
| | | A999 | Wetlands & Waterbirds | |
| 004096 Middle Shannon Callows SPA | Generic Conservation objectives | A038 | <i>Cygnus Cygnus</i> | Changes to land use. |
| | | A050 | <i>Anas Penelope</i> | |
| | | A122 | <i>Crex crex</i> | |
| | | A140 | <i>Pluvialis apricaria</i> | |
| | | A142 | <i>Vanellus vanellus</i> | |
| | | A156 | <i>Limosa limosa</i> | |
| | | A179 | <i>Chroicocephalus ridibundus</i> | |
| | | A395 | <i>Anser albifrons Flavirostris</i> | |
| | | A082 | <i>Circus cyaneus</i> | |
| | | A052 | <i>Anas crecca</i> | |

| Site name and code | Objectives | Habitat code | Annexed species and habitats | Development Issues of concern |
|--|--|--------------|------------------------------|-------------------------------|
| | | A061 | <i>Aythya fuligula</i> | |
| | | A149 | <i>Calidris alpina</i> | |
| | | A160 | <i>Numenius arquata</i> | |
| | | A162 | <i>Tringa totanus</i> | |
| | | A179 | <i>Larus ridibundus</i> | |
| | | A153 | <i>Gallinago gallinago</i> | |
| | | A290 | <i>Locustella naevia</i> | |
| | | A113 | <i>Coturnix coturnix</i> | |
| | | A056 | <i>Anas clypeata</i> | |
| | | A999 | Wetlands & Waterbirds | |
| 004139 Lough Turlough Roscommon | Croan SPA Generic objectives Conservation | A056 | <i>Anas clypeate</i> | Changes to local hydrology |
| | | A140 | <i>Pluvialis apricaria</i> | |

| Site name and code | Objectives | Habitat code | Annexed species and habitats | Development Issues of concern |
|---------------------------------------|---|--------------|-------------------------------------|-------------------------------|
| | | A395 | <i>Anser albifrons flavirostris</i> | |
| | | A038 | <i>Cygnus Cygnus</i> | |
| | | A050 | <i>Anas penelope</i> | |
| | | A051 | <i>Anas strepera</i> | |
| | | A052 | <i>Anas crecca</i> | |
| | | A054 | <i>Anas acuta</i> | |
| | | A142 | <i>Vanellus vanellus</i> | |
| | | A160 | <i>Numenius arquata</i> | |
| | | A059 | <i>Aythya ferina</i> | |
| | | A999 | Wetlands & Waterbirds | |
| 004097 River Callows Roscommon | Suck SPA Generic objectives Conservation | A038 | <i>Cygnus cygnus</i> | Changes to land use |
| | | A140 | <i>Pluvialis apricaria</i> | |

| Site name and code | Objectives | Habitat code | Annexed species and habitats | Development Issues of concern |
|---|--------------------|----------------------|-------------------------------------|-------------------------------|
| | | A142 | <i>Vanellus vanellus</i> | |
| | | A395 | <i>Anser albifrons flavirostris</i> | |
| | | A050 | <i>Anas penelope</i> | |
| | | A052 | <i>Anas crecca</i> | |
| | | A054 | <i>Anas acuta</i> | |
| | | A179 | <i>Larus ridibundus</i> | |
| | | A160 | <i>Numenius arquata</i> | |
| | | A999 | Wetlands & Waterbirds | |
| 004017 Mongan Bog SPA Offaly | Generic objectives | Conservation A395 | <i>Anser albifrons Flavirostris</i> | Access to the site |
| | | A160 | <i>Numenius arquata</i> | |
| | | A153 | <i>Gallinago gallinago</i> | |