

**MAYO COUNTY COUNCIL**

3 August, 2021

Breana Coyle  
Jennings O'Donovan & Partners Limited  
Finisklin Business Park  
Sligo  
F91 RHH9

**Re: P16/21/177 – EIA Scoping Document Firlough Wind Farm.**

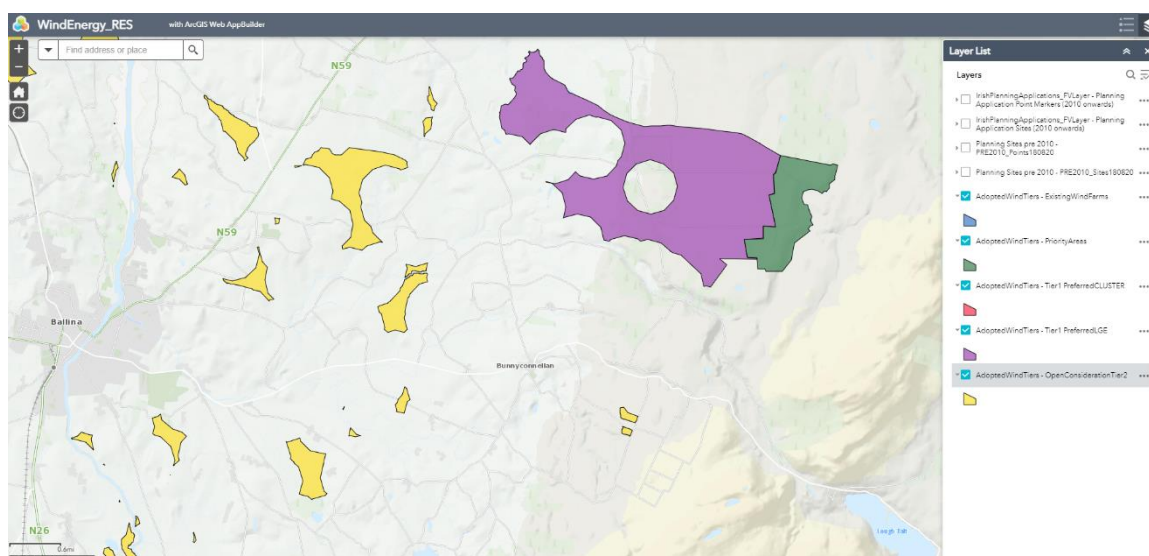
A Chara,

In relation to the proposal for 12 no. wind turbines the following is the consideration of Mayo County Council:

### Planning

Mayo County Council adopted a Renewable Energy Strategy for County Mayo on the 9<sup>th</sup> May 2011. The Strategy sets out a path to allow County Mayo to contribute to meeting the national legally-binding renewable energy targets and sets out opportunities for individuals, communities and businesses to harness renewable energy in a sustainable manner and to assist in combating climate change.

Map 1 Wind Energy details location in the County where wind farms will be considered. See extract from map below



The area proposed for the Firlough Wind Farm is located within Tier 1 preferred locations for wind turbines. Therefore, in principle the location is considered acceptable.

## **Landscape Appraisal**

Turbines should be located away from steep slopes, and higher ground and should harmonise visually with the existing and any proposed windfarm projects at this location.

## **Environment Section**

### **1. Terrain and Ground Conditions**

Show and discuss the location of terrain and ground conditions including information on slopes, soil type, bedrock, depth to bedrock, depth to groundwater, depth of peat. Forestry proposals in the area, with regard to clear felling plans and afforestation plans for the area.

### **2. Drainage Context**

Show and discuss the existing drainage on site relative to proposed development including roads, access tracks, turbines hard stand areas and grid connections. This shall include drainage associated with forestry and turf cutting.

### **3. Hydrological Context**

Details of overall site management relative to water courses in the area. This should have regard to the requirements of the Water Framework Directive, and any relevant River Basin Management Plan. This should include impact of downstream water body status. Any references to the Western RBD in the scoping document have been superseded by the 2<sup>nd</sup> Cycle RBMP and the EIAR should reflect this. The development should have regard to any Priority Areas for Action and High-Status Objective water bodies in the area.

The hydrological context of the overall site should be set out, together with a delineation of individual sub catchments within the proposed development associated with each turbine, including slope, drainage and proximity to same. This should include the location and flow direction of all drains and streams on site. Pathways to water courses and drains should be clearly identified, mapped.

Construction of the grid connection and proposed mitigation measures should be detailed due to its proximity of the Glenree River.

Access track and road any associated water crossings and details of how these will be designed and constructed to reduce impacts on the receiving environment.

Grid connection and any associated water crossings and details of how these will be designed and constructed to reduce impacts on the receiving environment.

Establish baseline water quality conditions prior to works commencing on site.

### **4. Noise impact assessment.**

Establish baseline noise conditions at noise sensitive receptors prior to works commencing on site.

Submit a noise impact assessment for the proposed development.

### 5. Cumulative Impacts

Discuss and show the location of projects and activities considered for cumulative impact assessment. This should include a map showing the location of the following (but not exclusive to):

- Other windfarms in the area,
  - Quarries,
  - Flood Relief work (if any),
  - Cutover bogs
  - Tubary Plots
  - Substations
  - Grid connections
6. A Construction Environmental Management Plan should form part of the EIAR.
  7. Provision should be made for the role of a Community Liaison Officer, to engage with communities before during and after construction of the proposed development.

### **Roads Department**

1. An assessment of the structural capacity of the local road network adjacent to the proposed windfarm site will need to be undertaken to determine its suitability / capacity to carry the construction traffic associated with the development. This will require Falling Weight Deflectometer (FWD) and Visual assessments,
2. Structural road pavement improvements identified in the FWD and Visual Surveys will be required in advance of any construction and again following completion, if required.
3. The proposal to construct the grid connection along the local road network is not acceptable as it has the potential to undermine the structural capacity of the roads concerned. A private wayleave should be secured.
4. Section 9.6 of the Scoping report suggests “There is unlikely to be a requirement for any significant additional strengthening and widening of the public road network along the haul route”. This may be the case for National and Regional Roads but would comprise of weak subgrades. The improvements identified must be undertaken in advance of any construction works commencing.
5. Any pavement damage caused by construction traffic / activities must be repaired to the satisfaction of Mayo County Council on and on-going basis

## Archaeology

The first part of an Archaeological Assessment should consist of a site visit and desk top study undertaken by a suitably qualified archaeologist. On foot of this any or all of the following may be required:

- Geophysical and/or other non-invasive surveys
- Licensed pre-development testing
- Licensed archaeological excavation
- Archaeological monitoring of ground works

Yours sincerely,

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Alan DiLucia S.E.P.,  
Planning Section.

**DEPARTMENT OF TOURISM, CULTURE, ARTS,**  
**GAELTACHT, SPORT AND MEDIA**



**An Roinn Turasóireachta, Cultúir,  
Ealaíon, Gaeltachta, Spóirt agus Meán**  
Department of Tourism, Culture,  
Arts, Gaeltacht, Sport and Media

Your Ref: Firlough Wind Farm

Our Ref: G Pre00005/2021 (Please quote in all related correspondence)

25<sup>th</sup> February 2021

Jennings O'Donovan  
Finisklin Business Park  
Sligo  
F91 RHH9

Via email: [bcoyle@jodireland.com](mailto:bcoyle@jodireland.com)

Re: Re: Notification to the Minister for Culture, Heritage and the Gaeltacht under the Planning and Development Act, 2000, as amended.

**Re: EIAR Scoping for Wind Farm**

A chara

I refer to your pre-planning correspondence to the Department of Culture, Heritage and the Gaeltacht received on 12<sup>th</sup> January in connection with the above proposed development for co-ordination across the heritage division by the Development Applications Unit of this Department.

Due in the main to the Covid 19 pandemic and the transition of the unit to working from home, the Development Applications Unit had to prioritise the workload and focus on statutory consultation planning cases. The Department have since had opportunity to consider your request and now outline below heritage-related observations/recommendations:

### **Nature Conservation**

The Department notes the detailed scoping document provided which sets out the key issues to be considered in the EIAR. Based on the information currently available about the location of the proposed development, a Natura Impact Statement (NIS) may also be required.

As an initial response to your consultation, you are advised to consult the 'Planning' section of the NPWS website - <https://www.npws.ie/development%20consultations> - as this contains text/advice on consulting NPWS in relation to 'development applications', data and information sources, and the basic elements of environmental assessments that may be required.

### **Aonad na nIarratas ar Fhorbairt**

*Development Applications Unit*

### **Oifigí an Rialtais**

*Government Offices*

**Bóthar an Bhaile Nua, Loch Garman, Contae Loch Garman, Y35 AP90**

Newtown Road, Wexford, County Wexford, Y35 AP90



The following scoping comments are made in the context of this Department's role in relation to nature conservation. The observations are intended to assist you in relation to identifying potential impacts on European sites, other nature conservation sites, and biodiversity and environmental protection in general, in the context of the current proposal. Data collected and surveys carried out in connection with this proposed development may raise other issues that have not been considered here. The observations are not exhaustive and are made without prejudice to any recommendation that may be made by this Department in the future.

## **1. Guidance on EIAR**

You are advised to consult the European Commission's (2017) 'Environmental Impact Assessment: Guidance on the preparation of the Environmental Impact Assessment Report (Directive 2011/92/EU as amended by 2014/52/EU)'. Any surveys and assessments should be based on a full details of the overall project, noting all lands that will be required. For a detailed list of potential considerations, see the 'Review checklist', and specifically 'Section 1 – Description of the project', in this guidance. Note also that if compensatory afforestation is required on other lands, the likely significant effects of that integral element of the development should be assessed in the main project EIAR.

In addition to guidance listed in Appendix 1, the following should be taken into account in planning and designing a windfarm and in completing the assessments. Please note the 2020 updates of the Guidance documents:

- *Guidance document on wind energy developments and EU nature legislation* (European Commission, **2020**)
- *Draft Revised Wind Energy Development Guidelines* (DoHLGH, **2020**), particularly the requirements in relation to assessing ground conditions/geology (section 5.3)
- *Landslides in Ireland* (GSI, 2006)<sup>1</sup>.

In considering a windfarm in this area, the Mayo Wind Energy Strategy and its associated appropriate assessment and SEA Environmental Report should be checked for any mitigation that applies in this type of situation, given the proximity and potential for negative effects of this proposal on protected sites of national and international importance for nature conservation.

### **1.1. Project planning and design**

It should be remembered that a key element of EIA is the avoidance or reduction of negative effects on the environment. EIA is an iterative process and the information gathered through assessments or surveys should be used to guide the planning and design of the windfarm so that sensitive ecological or hydrological areas are avoided, and negative impacts are

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<sup>1</sup> Creighton, R. (ed.). 2006. *Landslides in Ireland: A Report of the Irish Landslide Working Group*. Geological Survey of Ireland, Dublin.





minimised insofar as is possible. The size, layout and design of the proposed development should be informed by a constraints-type study and the compilation of an environmental constraints map that identifies and avoids, insofar as is possible and using appropriate separation distances, all nature conservation sites, other sensitive ecological and hydrological features, deep or intact peat deposits, and areas of wet and/or active bog, pool systems and flushes.

The National Biodiversity Action Plan 2017- 2021 aims to conserve and restore Ireland's biodiversity. A key objectives of the plan is to achieve; no net contribution to biodiversity loss arising from development projects occurring within the lifetime of the plan. Accordingly, the EIAR should outline how this project will avoid a net loss of biodiversity and include relevant mitigation and or compensatory measures where necessary.

### 1.2. Project components

In general, the EIAR should include sufficient project details so that the full nature and extent of the likely significant effects are clear and assessed fully in relation to, among other things, road design and construction methodology; site drainage details, including settlement ponds; temporary and permanent storage or disposal areas for peat and other materials or wastes arising; extraction sites/borrow pits; and any modifications to roads, bridges or culverts along the entire length of haul routes. Volumes of surplus material arising and of fill required should be calculated. Due consideration should also be given to the grid connection.

The Department notes that the location map provided is for an area of upland cutover bog. The EIAR should give specific consideration to the mobilisation of silt and changes to the stability of peat. The proposed windfarm has the potential for significant changes in patterns of surface water flow and may desiccate the peat allowing pathways to open up resulting in subsurface water losses. It should be noted that in 2020 a number of major upland peatland (blanket bog) landslides occurred across Ireland, most notably on Shass Mountain near Drumkeeran in County Leitrim<sup>2</sup> and Meenbog, near Ballybofey in County Donegal. The Peat Stability Risk Assessment must be considered in light of these occurrences with consideration of climate change predictions (e.g. rainfall level) in the hazard rating and should thoroughly assess risk with regard to change in weather patterns due to climate change such as more frequent and intense storms and rainfall events, increased likelihood and magnitude of river flooding, prolonged periods of dry conditions which may increase the likelihood of unstable peat.

Detailed consideration should be given to the amount of peat to be excavated, stored, and disposed/recovered. A detailed plan for the safe storage, disposal and rehabilitation of excavated or disturbed peat should form part of the EIAR. The spreading or recovery of excavated peat on areas of intact bog, wet and revegetated areas of cutover bog or other habitats or vegetation of ecological value is unlikely to be acceptable. Excavated or exposed peat should not pose any threat to surface waters and water quality. Any proposals to combine peat disposal with habitat restoration or rehabilitation measures will require a

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<sup>2</sup> <https://www.npws.ie/news/shass-mountain-peat-landslide-report-published>



detailed plan to show the location, nature and area of lands in question, and provide details of how such areas will be reinstated, managed and improved for habitats and/or species, together with proposals for monitoring and reporting. This plan should be prepared by a suitably qualified ecologist in consultation with hydrologists and other experts as appropriate.

A detailed site drainage map will be required and should show all existing watercourses, drainage ditches, flushes, lakes or ponds; new drainage ditches; all outfall points to watercourses or lakes; and all settlement ponds. The EIAR must demonstrate that the proposed development will not pose any threat to surface waters and associated species (particularly Freshwater Pearl Mussel). Any impact on water table levels or groundwater flows may impact on wetland sites some distance away. The EIAR should assess cumulative impacts with other plans or projects, if applicable. Where negative impacts are identified suitable mitigation measures should be detailed as appropriate.

The associated impacts of quarrying or extraction should be included among the considerations at the earliest stages of project planning and design, and should be assessed fully in the EIAR. Reinstatement or restoration plans will be required for any quarries or borrow pits on-site and should be included in the EIAR. As with any other part of the development, all borrow pits (existing or proposed) to be used in construction should be included within the application area for the proposed development.

Any tree felling of forested sites should be included as an intrinsic element of the overall development, the impacts and implications of which should be assessed fully in the EIAR. The extent of tree felling should be mapped, and the future use and management of all cleared areas should be specified. The impacts of tree felling on wildlife, habitats and surface waters (e.g. water quality) should be assessed fully, including the risk of Phosphate mobilisation from peat soils as a result of tree clearance and ground disturbance.

Tree felling is licensed and regulated by the Forest Service; any additional requirements in respect of this element of the proposed development, including any obligations to replant on other lands, should be made known at the planning application stage, and assessed as part of the EIAR as appropriate. If restoration of planted areas is proposed as mitigation or compensation for negative ecological effects, the EIAR should include a detailed plan to show the location, nature and area of habitat to be reinstated, and provide details of how such areas will be reinstated, managed and improved for habitats and/or species, together with proposals for monitoring and reporting. This plan should be prepared by a suitably qualified ecologist in consultation with other experts as appropriate.

The likely impacts of grid connection, particularly for birds, sensitive habitats and surface waters, should be given due consideration at the EIA stage.

Any improvement or reinforcement works required for access and transport anywhere along the proposed haul route(s) should be included in the EIAR and subjected to ecological impact assessment with the inclusion of mitigation measures, as appropriate.

Any losses of biodiversity habitat associated with this proposed development (including access roads and cabling etc.) such as woodland, scrub, hedgerows and other habitats should be mitigated for. In addition, Annex 1 habitats which occur outside the Natura 2000



network are important in terms of biodiversity conservation. The presence of any Annex I habitats outside the network should be given due consideration as part of the consideration of biodiversity matters generally for the proposed development. The loss of Annex 1 habitats outside SACs should be avoided wherever possible.

You are advised that no disturbing or damaging site or ground investigations, or testing, should take place in an ecological site, including national (NHA) and European sites (SAC and SPA), in advance of the main project consent without due consideration of the need for planning permission (for exempted development where there are restrictions on exemptions), or another consent.

### 1.3. Ecological Data and Surveys

Along with the standard NPWS data requests which is recommended, other sources of habitat and species information beyond those already identified include (but are not be limited to): the National Biodiversity Data Centre ([www.biodiversityireland.ie](http://www.biodiversityireland.ie)), Inland Fisheries Ireland ([www.fisheriesireland.ie](http://www.fisheriesireland.ie)), BirdWatch Ireland ([www.birdwatchireland.ie](http://www.birdwatchireland.ie)), Irish Raptor Study Group, Golden Eagle Trust and Bat Conservation Ireland ([www.batconservationireland.org](http://www.batconservationireland.org)). Some guidance and reference documents are provided in the Appendix to this letter.

It is expected by this Department that best practice will be adhered to with regard to survey methodology and if necessary non Irish methodology adapted for the Irish situation, noting specific gaps in relation to species and age of the data outlined in some guidance documents. The EIAR should cover the whole project, including construction, operation and, if applicable, restoration or decommissioning phases. Alternatives examined should also be included in the EIAR. Inland Fisheries Ireland should be consulted with regard to fish species, if applicable. For information on Geological and Geomorphological sites, the Geological Survey of Ireland, should be consulted.

Where ex-situ impacts are possible, survey work may be required, outside of the development sites. Such surveys should be carried out by suitably qualified persons at an appropriate time of the year, depending on the species being surveyed for. The EIAR should include the results of the surveys and detail the survey methodology and timing of such surveys including consistency in terms of timed vantage point surveys.

#### 1.3.1. Ornithology

Surveys for all species should cover bird usage and facilitate assessment of potential collision risk, habitat loss, barrier effect and displacement for these species and should be based around the daily and seasonal activity patterns of the species being surveyed. Survey work should cover year-round site use and should cover a minimum of two years to allow for an accurate determination of site usage. Target species for this site include

Annex I (Birds Directive) species and Birds of Conservation Concern (BoCCI) such as Hen Harrier, Merlin, Greenland White-fronted Goose and Red Grouse. Other species of note



include Buzzard. Hinterland surveys therefore should include breeding raptor surveys, including roost watches, surveys for nocturnal species and other species-specific surveys as appropriate.

Vantage point surveys should be done in a manner that ensures sufficient data is collected to allow an assessment of the importance of all the flight paths into, out of and between sites and assess migratory movements. Consequently, the Department recommends that a visibility analysis of topography and vegetation is used in the selection of vantage points for ornithological surveys. Technological solutions should also be considered in conjunction with VPs surveys to ensure sufficient data is compiled for assessment.

Results for species need to be referenced back to the overall populations and their dynamics as, in some cases even a small risk to a population of a species could be considered significant.

When completing impact assessment for birds, assessment and monitoring results from nearby windfarms must be considered. Cumulative impact on birds from all windfarms in the area needs to be assessed and the data from surrounding sites needs to be considered in the assessment.

### 1.3.2. Bats

Bat roosts may be present in trees, buildings and bridges. Bat species are protected under the Wildlife Act, 1976 to 2018, and are subject to a regime of strict protection pursuant to the requirements of the Habitats Directive (92/43/EEC) as transposed in Irish law in Regulation 51 of the European Communities (Birds and Natural Habitats) Regulations, 2011 (as amended). Therefore, damage/disturbance to any such roosts must be avoided in the first instance. While the Minister may grant a derogation licence under Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations 2011-2015, a licence can only be granted once a number of strict criteria have been met (see Regulation 54). An assessment of the impact of the proposed wind farm on bat species should be carried out noting recent guidance available, “*Bat and Onshore Wind Turbines: Survey, Assessment and Mitigation, 2019*” published jointly by Scottish Natural Heritage and Bat Conservation Trust and other stakeholders.

The Department would like to highlight new research on patterns of bat activity in upland wind farms<sup>3</sup> which indicates it is more appropriate to use 30 day survey periods with static automated detectors, in each season, and in different weather conditions to reduce sampling bias and to accurately determine when the curtailment mitigation is required during the operational phase. This survey should include use of detectors at different heights. Any proposed bat friendly lighting should be proven to be effective and follow up to date guidance.

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<sup>3</sup> <https://cieem.net/resource/cieem-webinar-patterns-of-bat-activity-at-upland-windfarms-implications-for-sampling-and-mitigation/>



### 1.3.3. Flora Protection Order Species

*Meesia triquetra* is located in Fiddandry Bog within the Ox Mountains SAC in close proximity to the application site. *Meesia triquetra* is a moss protected under Section 21 of the Wildlife Act, 1976 as amended, and listed in the Flora (Protection) Order, 2015 (S.I. No. 356 of 2015). Fiddandry Bog is the last known site for this bryophyte species in Ireland.

The information pack on the Bryophytes Map Viewer<sup>4</sup> for this species states “*Although Rare and Threatened Bryophytes of Ireland (2012) lists this plant as Regionally Extinct, this recent record means that, if reassessed, its status in Ireland would be Critically Endangered. This is the only known extant site for this plant in Ireland*”.

Due to its conservation status, high ecological importance, sensitivity and close proximity to the application site, it is important that a survey for this species is conducted. Surveys must be carried out within the developable area and areas of suitable habitat within the application site.

### 1.3.4. Watercourses and wetlands

Wetlands are important areas for biodiversity and ground and surface water quality should be protected during construction and operation of the proposed development. The EIAR should include a detailed assessment of the hydrological impacts on wetlands from the proposed development. Any watercourse or wetland which may be impacted on should be surveyed for the presence of protected species and species listed on Annexes II and IV of the Habitats Directive. For example, these species could include Otter (*Lutra lutra*) which are protected under the Wildlife Acts and listed on Annex II and IV of the Habitats Directive, Salmon (*Salmo salar*), Lamprey (three species in Ireland) listed on Annex II of the Habitats Directive, Freshwater Pearl Mussel (*Margaritifera* species) and White-clawed Crayfish (*Austropotamobius pallipes*) which are both protected under the Wildlife Act and listed on Annex II of the Habitats Directive, Frogs (*Rana temporaria*) and Newts (*Trituris vulgaris*) protected under the Wildlife Acts and Kingfishers (*Alcedo atthis*) protected under the Wildlife Acts and listed on Annex I of the Birds Directive (Council Directive 79/409 EEC).

Further to potential impacts on the species listed above, for example, one of the main threats identified in the threat response plan for otter is habitat destruction (see [https://www.npws.ie/sites/default/files/publications/pdf/2009\\_Otter\\_TRP.pdf](https://www.npws.ie/sites/default/files/publications/pdf/2009_Otter_TRP.pdf)). A 10m riparian buffer on both banks of a waterway is considered to comprise part of the otter habitat. Therefore any proposed development should be located at least 10m away from a waterway and should consider movements between waterways and waterbodies by otters.

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<sup>4</sup> <https://dahg.maps.arcgis.com/apps/webappviewer>



#### 1.3.5. *Freshwater Pearl Mussel*

The proposed development site is within the Easkey *Margaritifera* Sensitive Area. The species is an Annex II species of the EU Habitats Directive and is critically endangered in Ireland. Alteration of the hydrological regime / watercourses within the catchment can have significant effects on this species through eutrophication and siltation pressures on the water courses. Detailed Freshwater Pearl Mussel surveys will be required. Detailed information on the species and assessment requirements are available at <https://www.npws.ie/research-projects/animal-species/invertebrates/freshwater-pearl-mussel>.

#### 1.3.6. *Flood plains*

Flood plains, if present, should be identified in the EIAR and left undeveloped to allow for the protection of these valuable habitats and provide areas for flood water retention (green infrastructure). If applicable, the EIAR should take account of the guidelines for Planning Authorities entitled "*The Planning System and Flood Risk Management*" published by the Department of the Environment, Heritage and Local Government In November 2009.

#### 1.3.7. *Hedgerows, Scrub and related habitats*

Hedgerows and scrub should be maintained where possible, as they form wildlife corridors and provide areas for birds to nest in; hedgerows provide a habitat for woodland flora, roosting places for bats and Badger setts may also be present. The EIAR should provide an estimate of the length/area of any hedgerow/scrub that will be removed. Where it is proposed that trees or hedgerows will be removed there should be suitable planting of native species in mitigation incorporated into the EIAR. Hedgerows, trees, scrub and uncultivated vegetation (including peatland habitats) should not be removed during the nesting season (i.e. March 1st to August 31st), noting the protection afforded under the Wildlife Act 1976-2018.

#### 1.3.8 *Marsh Fritillary*

Marsh fritillary surveys should be carried out as per standard Marsh Fritillary Larval Web Survey methodology.

#### 1.3.9 *Alien invasive species*

The EIAR should also address the issue of invasive alien plant and animal species such as *Rhododendron ponticum* and Japanese Knotweed, and detail the methods required to ensure they are not accidentally introduced or spread during survey and or construction. Information on alien Invasive species In Ireland can be found at <http://invasives.biodiversityireland.ie/> and at <http://invasivespeciesireland.com/>.



#### 1.4. Impact assessment

The impact of the proposed development on the flora/ fauna and habitats present should be assessed with particular regard to:

Natura 2000 sites, i.e.:

- Special Areas of Conservation (SAC) designated under the EC Habitats Directive (Council Directive 92/43/EEC)
- and Special Protection Areas (SPA) designated under the EC Birds Directive (Council Directive 2009/147 EC),

other designated sites, or sites proposed for designation such as,

- Natural Heritage Areas;
- proposed Natural Heritage Areas;
- Nature Reserves;
- Refuges for Fauna or Flora designated under the Wildlife Acts 1976 to 2018;
- species protected under the Wildlife Acts including protected flora;

'Protected species and natural habitats', as defined in the Environmental Liability Directive (2004/35/EC) and European Communities (Environmental Liability) Regulations, 2008 including

- Birds Directive - Annex I species and other regularly occurring migratory species, and their habitats (wherever they occur);
- Habitats Directive - Annex I habitats, Annex II species and their habitats;
- Annex IV species and their breeding sites and resting places (wherever they occur);
- important bird areas such as those identified by Birdlife International, features of the landscape which are of major importance for wild flora and fauna, such as those with a "stepping stone" and ecological corridors function, as referenced in Article 10 of the Habitats Directive;
- other habitats of ecological value in a national to local context (such as those identified as locally important biodiversity areas within Local Biodiversity Action Plans and County Development Plans);
- Red data book species;
- and biodiversity in general.



### 1.5. Construction Management Plans and Mitigation

Complete project details including Construction Management Plans (CMPs) need to be provided in order to allow an adequate EIAR and appropriate assessment to be undertaken. CMPS should contain sufficient detail to avoid any post construction doubt with regard to the implementation of mitigation measures, timings and roles and responsibilities for same. Any mitigation needs to be included in detail and if being relied upon to reach conclusions must be proved to be achievable and likely to be effective in any given scenario it is needed. Proof of effectiveness will be required with examples of where similar techniques have been employed previously.

Applicants need to be able to demonstrate that CMPs and other such plans are adequate, all mitigation is included and effective and supported by scientific information and analysis and that they are feasible within the physical constraints of the site. The positions, locations and sizes of construction infrastructure and mitigation such as settlement ponds, disposal sites and construction compounds may significantly affect European and other designated sites, habitats and species in their own right and could have an effect for example on, drainage, water quality, habitat loss, and disturbance. If these are undetermined at time of the assessment all potential effects of the development on the site are not being considered.

Construction work should not be allowed to impact on water quality and measures should be detailed in the EIAR to prevent sediment and/or fuel runoff from getting into watercourses which could adversely impact on aquatic species.

Inland Fisheries Ireland (IFI) should be consulted with regard to impacts on fish species and the applicant may find it useful to consult their publication entitled "Planning for watercourses in the urban environment" (2020) which can be downloaded from their web site.

If applicants are not in a position to state the exact location and details of cable routes at the time of application, then they need to consider the range of options (overhead and underground) that may be used within their assessment. Should the exact height and rotor diameter of the turbines not be known at EIAR stage then the assessment of impacts must be applicable to a variety of turbine heights and rotor diameters which could be used. This should be made clear in the EIAR.

## **2. Guidance on the Appropriate Assessment (AA):**

In order to carry out the Appropriate Assessment screening, and/or prepare a Natura Impact Statement (NIS), information about the relevant European sites including their conservation objectives will need to be collected.

Screening for appropriate assessment should focus on the likely significant effects of the proposed development and related activities on European sites noting that impacts to sites via air and water may occur over large distances using the source-pathway-receptor model. Details of designated sites and species and conservation objectives can be found on <http://www.npws.ie/>.





Site-specific, as opposed to generic, conservation objectives are now available for many sites. Each conservation objective for a qualifying interest (QI) habitat or species is defined by a list of attributes and targets and is often supported by further documentation. Where these are not available for a site, an examination of the attributes that are used to define site-specific conservation objectives for the same QIs in other sites can be usefully used to ensure the full ecological implications of a proposal for a site's conservation objective and its integrity are assessed. It is advised, as per the notes and guidelines in the site-specific conservation objectives that any reports quoting conservation objectives should give the version number and date, so that it can be ensured and established that the most up-to-date versions including map boundaries<sup>5</sup> are used in the preparation of Natura Impact Statements and in undertaking appropriate assessments.

In addition, the Article 12 and 17 reports under the Birds and Habitats Directives should be referenced <https://www.npws.ie/publications>. The Departmental guidance document on Appropriate Assessment is available on the NPWS website at <https://www.npws.ie/development-consultations> and in EU Commission guidance entitled:

- “*Wind energy developments and Natura 2000*”<sup>6</sup>
- “*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*”<sup>7</sup>;
- 2018 Commission notice “*Managing Natura 2000 sites The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC*”<sup>8</sup> (updated June 2020)

More recent CJEU and Irish case law has clarified some issues and should also be consulted.

The NIS should present a robust and reasoned scientific assessment and analysis of the implications of the proposals for the relevant conservation objectives of relevant European sites. Best scientific knowledge in the field should be applied to the understanding of the likely effects, and to the assessment and analysis of the implications of the proposals for the conservation objectives and integrity of the sites. When carried out by the competent authority, the appropriate assessment cannot have lacunae and must contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the project on European sites. General advice on the preparation, content and scope of an NIS is included in Appendix 2.

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<sup>5</sup> <https://www.npws.ie/maps-and-data/designated-site-data>

<sup>6</sup> [https://ec.europa.eu/environment/nature/natura2000/management/docs/Wind\\_farms.pdf](https://ec.europa.eu/environment/nature/natura2000/management/docs/Wind_farms.pdf)

<sup>7</sup>

[http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/natura\\_2000\\_asses\\_s\\_en.pdf](http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/natura_2000_asses_s_en.pdf)

<sup>8</sup>

[https://ec.europa.eu/environment/nature/natura2000/management/docs/art6/EN\\_art\\_6\\_guide\\_jun\\_2019.pdf](https://ec.europa.eu/environment/nature/natura2000/management/docs/art6/EN_art_6_guide_jun_2019.pdf)



### **3. Cumulative and ex situ impacts**

A rule of thumb often used is to include all European sites within a distance of 15km. It should be noted however that this will not always be appropriate. In some instances where there are hydrological connections a whole river catchment or a groundwater aquifer may need to be included. Similarly where bird flight paths are involved the impact may be on an SPA more than 15 kilometres away.

Other relevant Local Authorities should be consulted to determine if there are any projects or plans which, in combination with this proposed development, could impact on any European sites.

As noted already assessment and monitoring results from nearby windfarms should be considered. Cumulative impact from all windfarms in the area needs to be assessed and the data from surrounding sites needs to be considered in the assessment of impacts.

### **4. Post construction monitoring**

This Department recognises the importance of pre and post construction monitoring, such as recommended in Drewitt et al. (2006), and Bat Conservation Ireland (2012). The applicant should not use any proposed post construction monitoring as mitigation to supplement inadequate information in the assessment. Please refer to Circular Letter PD 2/07 and NPWS 1/07 on this issue. This can be downloaded from the Department's website <https://www.npws.ie/development-consultations> .

The EIAR process should identify any pre and post construction monitoring which should be carried out. The post construction monitoring should include bird and bat strikes/fatalities including the impact on any such results of the removal of carcasses by scavengers. Monitoring results should be made available to the competent authority and copied to this Department. An appropriate plan of action needs to be agreed at planning stage with the Planning Authority if the results in future show a significant mortality of birds and/or bat species. It is important to note that unless post decision consultation with NPWS is specifically stated as a condition of planning, NPWS has no post consent role. However, regional staff are available for liaison regarding any associated licencing requirements and or new information arising for specific species of concern.

**Note:** any significant change to mitigation may require amendment and where a licence has expired; there will be a need for new licence applications for protected species.

### **5. Licenses**

Where there are impacts on protected species and their habitats, resting or breeding places, licenses may be required under the Wildlife Act 1976-2018 or derogations under the EC (Birds and Natural Habitats) Regulations 2011, as amended.

In particular, bats as outlined earlier and otters, are subject to a regime of strict protection pursuant to the requirements of the Habitats Directive (92/43/EEC) as transposed in Irish law



in Regulation 51 of the European Communities (Birds and Natural Habitats) Regulations, 2011 (as amended). A copy of Circular Letter NPWS 2/07 entitled “*Guidance on Compliance with Regulation 23 of the Habitats Regulations 1997 – strict protection of certain species/applications for derogation licences*” can be found on the Departmental web site at [www.npws.ie/sites/default/files/general/circular-npws-02-07.pdf](http://www.npws.ie/sites/default/files/general/circular-npws-02-07.pdf). It should be noted that the Regulations of 1997 have since been superseded by the European Communities (Birds and Natural Habitats) Regulations 2011, as amended. Part 6 of those Regulations is now the relevant section dealing with the protection of flora and fauna. Reference to Regulation 23 in the circular letter should be taken to mean Regulation 51 in the current Regulations.

In addition, the EIAR should take account of species protected under sections 21, 22 and 23 of the Wildlife Acts if there are any impacts on other protected species or their resting or breeding places, such as on protected plants, badger setts or birds’ nests. And will also need to be cognisant of article 5 (d) of the Birds Directive. For that reason uncultivated vegetation, including hedges and trees, should not be removed during the nesting season (i.e. March 1<sup>st</sup> to August 31<sup>st</sup>).

In order to apply for any such licenses or derogations as mentioned above the results of a survey should be submitted to the National Parks and Wildlife Service of this Department. Such surveys are to be carried out by appropriately qualified person/s at an appropriate time of the year. Details of survey methodology should be provided. Should this survey work take place well before construction commences, it is recommended that an additional ecological survey of the development site should take place immediately prior to construction to ensure no significant change in the findings of the baseline ecological survey has occurred. As outlined already, if there has been any significant change mitigation, this may require amendment and where a licence has expired, there will be a need for new licence applications for the protected species.



## Appendix 1

### Additional Guidance and References

1. The Departmental Wind Energy Planning Guidelines
2. Windfarms on Peatland (2008-2010) Mires and Peat volume 4.
3. Best Practice guidance for Habitat Survey and Mapping by George F Smith, Paul O'Donoghue, Katie O'Hora and Eamon Delaney, 2011. The Heritage Council.
4. Pearce-Higgins, James W., Stephen, Leigh, Langston, Rowena H. W., Bainbridge, Ian P. and Bullman. Rhys (2009). "The distribution of breeding birds around upland wind farms". *Journal of Applied Ecology*, 46, p1323-1331.
5. Johnson, Gregory D. and Arnett Edward 8. "A Bibliography of Bat Fatality Activity and Interactions with Wind Turbines" (June 2004 updated February 2010) Bat Conservation International.
6. Pearce-Higgins, James W., Stephen, Leigh, Douse, Andy, and Langston, Rowena H. W. (2012). "Greater impacts of wind farms on bird populations during construction than subsequent operation: results of a multisite and multi-species analysis". *Journal of Applied Ecology*. 49. p386-394.
7. Rodrigues, Let ai, (2014). "Guidelines for consideration of bats in wind farm projects". Eurobats Publication Series NO.6 UNEP and Eurobats.
8. The Departmental guidance document on Appropriate Assessment which is available on the NPWS web site at <https://www.npws.ie/protected-sites/guidance-appropriate-assessment-planning-authorities>
9. 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/guidance\\_en.htm](http://ec.europa.eu/environment/nature/natura2000/management/guidance_en.htm)
10. Bat Conservation Ireland (2012) Wind Turbine/Wind Farm Development Bat Survey Guidelines. Version 2.8, December 2012.
11. Drewitt, Allan Land Longston Rowena H. W. (2006) "Assessing the impacts of wind farms on birds". *Ibis* 148. p29-42.
12. <https://cieem.net/resource/cieem-webinar-patterns-of-bat-activity-at-upland-windfarms-implications-for-sampling-and-mitigation/>
13. May R, Nygård T, Falkdalen U, Åström J, Hamre Ø, Stokke BG. Paint it black: Efficacy of increased wind turbine rotor blade visibility to reduce avian fatalities. *Ecol Evol*. 2020;00:1–9. <https://doi.org/10.1002/ece3.6592>
14. Hardey J, Crick H, Wernham C, Riley H, Etheridge B and Thompson D. (2009). *Raptors: A Field Guide to Survey and Monitoring*, 2nd Edition. TSO, Edinburgh.



15. Hötker, H., Krone, O. & Nehls, G. (2013): *Greifvögel und Windkraftanlagen: Problemanalyse und Lösungsvorschläge*. Schlussbericht für das Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit. Michael-Otto-Institut im NABU, Leibniz-Institut für Zoo- und Wildtierforschung, BioConsult SH, Bergenhusen, Berlin, Husum.

NPWS Circular Letters (available from [www.npws.ie](http://www.npws.ie))

16. Circular Letter NPWS 2/07: *Guidance on Compliance with Regulation 23 of the Habitats Regulations 1997 – Strict Protection of Certain Species/Derogation Licences*.
17. Circular Letter PD 2/07 and NPWS 1/07: *Compliance Conditions in respect of Developments requiring (1) Environmental Impact Assessment (EIA); or (2) having potential impacts on Natura 2000 sites*
18. Circular NPWS 1/10 & PSSP 2/10: *Appropriate Assessment under Article 6 of the Habitats Directive: guidance for Planning Authorities*



## Appendix 2

### Notes on the preparation and content of an NIS

The term 'NIS' is defined in legislation<sup>9</sup>. In general, an NIS, if required, should present the data, information and analysis necessary to reach a definitive determination as to 1) the implications of the plan or project, alone or in combination with other plans and projects, for a European site in view of its conservation objectives, and 2) whether there will be adverse effects on the integrity of a European site. The NIS should be underpinned by best scientific knowledge and objective information, as required in the case of screening for appropriate assessment, and by the precautionary principle.

Based on the Department's experience of reviewing such reports, the following advice is offered in relation to the preparation and content of an NIS:

1. An NIS is a scientific assessment that presents relevant evidence, data and analysis, and focuses on the implications of the plan or project, on its own and in combination with other plans and projects, for the conservation objectives of the relevant European site(s), taking the full scope of these objectives, whether generic or site specific, into account;
2. Examination of the potential effects of the plan or project must be undertaken to identify what European sites, and which of their qualifying interests (SAC), special conservation interests (SPA) or conservation objectives, are potentially at risk. In combination effects must also be taken into account. This is required to determine a 'zone of influence' or 'zone of impact' for the project, if such a concept is used. The 15km distance in existing guidance is an indicative figure only and its application and validity should be examined and justified in each specific case on an ecological or other basis;
3. The scientific basis on which sites and their conservation objectives are included or excluded from assessment and analysis should be presented and justified;
4. The full area or extent of the likely effects of the plan or project should be determined and quantified. Where temporary damage and disturbance will occur, predicted timelines for recovery should be presented;
5. The relevant environmental baseline and trends in European sites should be taken into account, bearing in mind changes and in combination effects which have occurred since site designation;
6. An NIS should be informed by any necessary surveys of habitats and species at the appropriate time(s) of year to identify, describe, evaluate and map their presence within the receiving environment. In all relevant cases, the scientific basis and justifications for categorising or not categorising habitats as Annex I habitats, or priority types, should be presented;

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<sup>9</sup> The term, 'NIS', is defined in the European Communities (Birds and Natural Habitats) Regulations, 2011, and Part XAB, Section 177T of the Planning and Development Act, 2000 as amended



7. An NIS should be informed by any necessary hydrological, hydrogeological or geotechnical investigations to assess impacts on habitat structure and function;
8. Where mitigation measures are required, full details should be included in the project description and drawings, with method statements provided, where necessary. It must be demonstrated that mitigation measures will be delivered in full, and at the appropriate time, at all post-consent stages, and that they will be effective in any specific location or set of conditions. The necessary analysis should be presented to demonstrate how the mitigation measures will avoid or remove the risks of adverse effects on the integrity of European sites that have been identified in an NIS so that the final analysis is undertaken in the context of the predicted residual effects;

You are requested to send further communications to the Development Applications Unit (DAU) at [manager.dau@chq.gov.ie](mailto:manager.dau@chq.gov.ie), or to the following address:

The Manager  
Development Applications Unit (DAU)  
Government Offices  
Newtown Road  
Wexford  
Y35 AP90

Is mise, le meas

**Diarmuid Buttimer**  
**Development Applications Unit**

**TRANSPORT INFRASTRUCTURE IRELAND**



## Caroline McGarry

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**From:** INFO <Information@tii.ie>  
**Sent:** Tuesday, January 5, 2021 9:50 AM  
**To:** 'bcoyle@jodireland.com'  
**Subject:** EIAR Scoping in relation to the proposed development of a wind farm development at Firlough, Corrowleagh, Bonniconlon, Co. Mayo.

Dear Ms. Coyle,

Thank you for your email and attachments of 9 December 2020 regarding an EIAR Scoping in relation to the proposed development of a wind farm development at Firlough, Corrowleagh, Bonniconlon, Co. Mayo. The position in relation to your enquiry is as follows.

Transport Infrastructure Ireland (TII) wishes to advise that it is not in a position to engage directly with planning applicants with respect to proposed developments. TII will endeavour to consider and respond to planning applications referred to it, given its status and duties as a statutory consultee under the Planning Acts. The approach to be adopted by TII in making such submissions or comments will seek to uphold official policy and guidelines, as outlined in 'Spatial Planning and National Roads. Guidelines for Planning Authorities' (DoECLG, 2012). Regard should also be had to other relevant guidance available at [www.TII.ie](http://www.TII.ie).

The issuing of this correspondence is provided as best practice guidance only and does not prejudice TII's statutory right to make any observations, requests for further information, objections or appeals, following the examination of any valid planning application referred.

With respect to EIAR scoping issues, the recommendations indicated below provide only general guidance for the preparation of an EIAR, which may affect the National Roads Network.

The developer/scheme promoter should have regard, *inter alia*, to the following:

- Consultations should be had with the relevant Local Authority/National Roads Design Office, with regard to the locations of existing and future national road schemes.
- TII would be specifically concerned as to potential significant impacts the development would have on the national road network (and junctions with national roads), in the proximity of the proposed development.
- The developer should assess visual impacts from existing national roads.
- The developer should have regard to any Environmental Impact Statement and all conditions and/or modifications imposed by An Bord Pleanála regarding road schemes in the area. The developer should, in particular, have regard to any potential cumulative impacts.
- The developer, in conducting Environmental Impact Assessment, should have regard to TII Publications (formerly DMRB and the Manual of Contract Documents for Road Works).
- The developer, in conducting Environmental Impact Assessment, should have regard to TII's Environmental Assessment and Construction Guidelines, including the 'Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes' (National Roads Authority (NRA), 2006).
- The EIAR should consider the 'Environmental Noise Regulations 2006' (SI 140 of 2006) and, in particular, how the development will affect future action plans by the relevant competent authority. The developer may need to consider the incorporation of noise barriers to reduce noise impacts (see 'Guidelines for the Treatment of Noise and Vibration in National Road Schemes' (1<sup>st</sup> Rev., NRA, 2004)).
- It would be important that, where appropriate, subject to meeting the appropriate thresholds and criteria and having regard to best practice, a Traffic and Transport Assessment (TTA) be carried out in accordance with relevant guidelines, noting traffic volumes attending the site and traffic routes to/from the site, with reference to impacts on the national road network and junctions of lower category roads with national roads. TII's 'Traffic and Transport Assessment Guidelines' (2014) should be referred to in relation to proposed development, with potential impacts on the national road network. The scheme promoter is also advised to have regard to Section 2.2 of TII's TTA Guidelines, which addresses requirements for sub-threshold TTA.

- The designers are asked to consult TII Publication, to determine whether a Road Safety Audit is required.
- In the interests of maintaining the safety and standard of the national road network, the EIAR should identify the methods/techniques proposed for any works traversing/in proximity to the national road network.
- In relation to haul route identification, the applicant/developer should clearly identify haul routes proposed and fully assess the network to be traversed. Separate structure approvals/permits and other licences may be required in connection with the proposed haul route, including where temporary modification to the road network may be required. Consultation with relevant PPP Companies and Motorway Maintenance and Renewal Contract (MMaRC) Contractors may also be required. All structures on the haul route should be checked by the applicant/developer to confirm their capacity to accommodate any abnormal load proposed, including abnormal weight load.
- In relation to cabling and potential connection routing, the scheme promoter should note the locations of existing and future national road schemes and develop proposals to safeguard proposed road schemes. In the context of existing national roads, alternatives to the provision of cabling along the national road network, such as alternative routing or the laying of cabling in private lands, should be considered, in the interests of safeguarding the investment in and the potential for future upgrade works to the national road network. The cable routing should avoid all impacts to existing TII infrastructure, such as traffic counters, weather stations, etc. and works required to such infrastructure shall only be undertaken in consultation with and subject to the agreement of TII. Any costs attributable shall be borne by the applicant/developer. The developer should also be aware that separate approvals may be required for works traversing the national road network and motorway network.

Notwithstanding, any of the above, the developer should be aware that this list is non-exhaustive, thus site and development specific issues should be addressed in accordance with best practise.

I trust that the above comments are of use in your EIAR preparation.

**Yours sincerely,**

**Aisling Dineen**  
Land Use Planner



Transport Infrastructure Ireland  
Parkgate Business Centre  
Parkgate Street  
Dublin D08 DK10

**IRISH WATER**

Jenning and O'Donovan,  
Finisklin Business Park,  
Sligo,

F91 RHH9

15<sup>th</sup> February 2021

**Uisce Éireann**  
Bosca OP 6000  
Baile Átha Cliath 1  
D01 WA07  
Éire

**Irish Water**  
PO Box 6000  
Dublin 1  
D01 WA07  
Ireland

T: +353 01 89 25000  
T: +353 01 89 25001  
[www.water.ie](http://www.water.ie)

**Re: EIAR Scoping Request – Firlough Wind Farm, Bonniconlon, Co. Mayo.**

Dear Ms. McGarry,

Irish Water (IW) acknowledges receipt of your request in respect of the Environmental Impact Assessment Report (EIAR) scoping for the proposed Windfarm located in Bonniconlon, Co. Mayo.

Please see attached our suggested scope in relation to Water Services. On receipt of the planning referral, Irish Water will review the EIAR as part of the planning process

Queries relating to the terms and observations above should be directed to [planning@water.ie](mailto:planning@water.ie)

Yours sincerely,

Signed on behalf of Irish Water:

PP: Ali Robinson

**Yvonne Harris**  
Connections and Development Services

## Response to EIAR Scoping Report Requests

IW currently does not have the capacity to advise on scoping of individual projects. However, in general we would like the following aspects of Water Services to be considered in the scope of an EIAR where relevant;

- a) Impacts of the development on the capacity of water services (do existing water services have the capacity to cater for the new development if required). This is confirmed by IW in the form of a Confirmation of Feasibility (COF). If a development will require a connection to either a public water supply or sewage collection system the developer is advised to submit a Pre Connection Enquiry (PCE) enquiry to IW to determine the feasibility of connection to the Irish Water network. All pre-connection enquiry forms are available from <https://www.water.ie/connections/get-connected/>
- b) Any up-grading of water services infrastructure that would be required to accommodate the development.
- c) In relation to a development that would discharge trade effluent – any upstream treatment or attenuation of discharges required prior to discharging to an IW collection network
- d) In relation to the management of surface water; the potential impact of surface water discharges to combined sewer networks & potential measures to minimise/stop surface waters from combined sewers
- e) Any physical impact on IW assets – reservoir, drinking water source, treatment works, pipes, pumping stations, discharges outfalls etc. including any relocation of assets
- f) If you are considering a development proposal, it is best practice to contact us in advance of designing your proposal to determine the location of public water services assets. Details, where known, can be obtained by emailing an Ordinance Survey map identifying the proposed location of your intended development to [datarequests@water.ie](mailto:datarequests@water.ie). Other indicators or methodologies for identifying infrastructure located within your lands are the presence of registered wayleave agreements, visible manholes, vent stacks, valve chambers, marker posts etc. within the proposed site.
- g) Any potential impacts on the assimilative capacity of receiving waters in relation to IW discharge outfalls including changes in dispersion /circulation characterises
- h) Any potential impact on the contributing catchment of water sources either in terms of water abstraction for the development (and resultant potential impact on the capacity of the source) or the potential of the development to influence/present a risk to the quality of the water abstracted by IW for public supply.
- i) Where a development proposes to connect to an IW network and that network either abstracts water from or discharges waste water to a “protected”/sensitive area, consideration as to whether the integrity of the site/conservation objectives of the site would be compromised.

j) Mitigation measures in relation to any of the above

*This is not an exhaustive list.*

Please note

- The Confirmation of Feasibility from IW, to the applicant, should be issued prior to applying for planning permission.
- Irish Water will not accept new surface water discharges to combined sewer networks

**HEALTH SERVICE EXECUTIVE**



Feidhmeannacht na Seirbhíse Sláinte  
Health Service Executive

Environmental Health Service  
Primary, Community & Continuing Care  
HSE West  
St. Mary's Headquarters  
Castlebar  
Co. Mayo

(094) 90 42260 / 90 42105  
 (094) 90 27312

**Date:** 7<sup>th</sup> January 2021  
**Developer:** Mercury Renewables (Carrowleagh) Limited (MRCL)  
**Consultant's reference:** 6129/503/SL/001/BC  
**Re:** EIA Scoping Report  
**Proposed development:** Proposed Firlough Wind Farm, Bonniclon, Co. Mayo  
**Applicant:** Emerging Markets Power (EMPower)  
**EHIS Reference:** 1483

Dear Ms. Coyle,

Please find enclosed the HSE Consultation Report in relation to the above proposal.

The following HSE departments were made aware of the consultation request for the proposed development:

- Emergency Planning – Kay Kennington
- Estates – Jim Murphy
- Assistant National Director for Health Protection – Kevin Kellegher/Laura Murphy
- CHO – Tony Canavan

If you have any queries regarding this report the initial point of contact is Ms Maria Horkan, Principal Environmental Health Officer who will refer your query to the appropriate person.

Yours sincerely

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**Maria Horkan**  
Principal Environmental Health Officer

MH/EK/MG



## HSE EIA Scoping

### Environmental Health Service Submission Report

**Date:** 7.1.21

**Our reference:** EHIS 1483

**Report to:** Ms Breena Coyle, Jennings O'Donovan & Partners Limited, Finisklin  
Business Park, Sligo

**Type of Consultation:** EIA Scoping

**Proposed development:** Proposed Firlough Wind Farm, Bonniconlon, Co. Mayo

**Applicant:** Mercury Renewables (Carrowleagh) Limited (MRCL)

**Proposed Development:** MRCL intends to apply as Strategic Infrastructure Development SID approval for the construction of up to 12 no. wind turbines each typically of approximately 5 megawatts (MW) with a combined output of approximately 75 MW at Carrowleagh (Kilbride), Bonniconlon, Co. Mayo. The proposals will also include planning permission for the construction of an underground grid connection via a looped connection to the existing 110kV overhead powerline north of Bonniconlon village and the construction of a 110kV Loop Substation on the proposed Wind Farm Site. It is also proposed to include an energy storage facility as part of the application.

#### General Introduction

The following documents should be taken into consideration when preparing the Environmental Impact Assessment Report:

- Guidelines on the information to be contained in EIS (2002), 187kb
- Advice Notes on Current Practice in the preparation of EIS (2003), 435kb
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment

[https://www.housing.gov.ie/sites/default/files/publications/files/guidelines\\_for\\_planning\\_authorities\\_and\\_an\\_bord\\_pleanála\\_on\\_carrying\\_out\\_eia\\_-\\_august\\_2018.pdf](https://www.housing.gov.ie/sites/default/files/publications/files/guidelines_for_planning_authorities_and_an_bord_pleanála_on_carrying_out_eia_-_august_2018.pdf)

EU publication: Environmental Impact Assessment of Projects Guidance on the preparation of the Environmental Impact Assessment Report, EU, 2017

[http://ec.europa.eu/environment/eia/pdf/EIA\\_guidance\\_EIA\\_report\\_final.pdf](http://ec.europa.eu/environment/eia/pdf/EIA_guidance_EIA_report_final.pdf)

Adoption of the Directive (2014/52/EU) in April 2014 initiated a review of the above guidelines. The draft new guidelines can be seen at:

<http://www.epa.ie/pubs/consultation/reviewofdraftteisguidelinesadvicenotes>

Generally the Environmental Impact Assessment should examine all likely significant impacts and provide the following information for each:

- a) Description of the receiving environment;
- b) The nature and scale of the impact;
- c) An assessment of the significance of the impact;
- d) Proposed mitigation measures;
- e) Residual impacts.

Directive 2014/52/EU has an enhanced requirement to assess likely significant impacts on Population and Human Health. It is the experience of the Environmental Health Service (EHS) that impacts on human health are often inadequately assessed in EIAs in Ireland. It is recommended that the wider determinants of health and wellbeing are considered in a proportionate manner when considering the EIA. Guidance on wider determinants of health can be found at [www.publichealth.ie](http://www.publichealth.ie)

In addition to any likely significant negative impacts from the proposed development, any positive likely significant impacts should also be assessed.

The HSE will consider the final EIAR accompanying the SID/ planning application and will make comments to the relevant planning authority on the methodology used for assessing the likely significant impacts and the evaluation criteria used in assessing the significance of the impact.

This report only comments on Environmental Health Impacts of the proposed development. It is based on an assessment of the correspondence submitted to this office dated 27<sup>th</sup> November 2020.

The Environmental Health Service (EHS) recommends that the following matters are included and assessed in the EIAR

- Public Consultation
- Decommissioning phase
- Siting and location of turbines
- Opportunity for Health Gain

- Noise & Vibration
- Shadow Flicker
- Air Quality
- Surface and Groundwater Quality
- Geological Impacts
- Ancillary facilities
- Cumulative impacts

### **Public Consultation**

It is strongly recommended that early and meaningful public consultation with the local community should be carried out to ensure all potentially significant impacts have been adequately addressed.

All parties affected by the proposed development, **including those who may benefit financially from the project**, must be fully informed of what the proposal entails especially with regard to potential impacts on surrounding areas.

Sensitive receptors and other stakeholders should be identified to ensure all necessary and appropriate mitigation measures are put in place to avoid any complaints about the proposed wind farm development in the future.

Consideration should be given to any submissions made for Planning Application reference An Bord Pleanála PL16.241592 and evidence should be provided as to how any issues of concern raised in respect of that application have been addressed.

It is acknowledged that current restrictions around public gatherings as a result of Covid 19 prevention measures will impact on opportunities for public consultation events. However it is expected that meaningful public consultation, where the local community is fully informed of the proposed development, will be undertaken. Members of the public should be given sufficient opportunities to express their views on the proposal wind farm.

The Environmental Impact Assessment Report (EIAR) should clearly demonstrate the link between public consultations and how those consultations have influenced the decision-making process in the EIA.

To assist with the consultation and planning process it is recommended that the applicant develops a dedicated website for the proposed wind energy project. All correspondence, maps, project updates and documentation including the EIAR should be uploaded to the website.

### **Decommissioning Phase**

The EIAR should detail what the eventual fate of the turbines and associated material will be, i.e. will the material be recycled or how will it be disposed of.

Information should also be provided regarding the proposed methodology to be used for the disposal of the materials forming the foundations of the wind turbines.

The EIAR should indicate the proposed future use of the wind farm site at the end of the planning permission period.

### **Siting, Location and details of Turbines**

The EIAR should include a map and a description of the proposed location of each of the proposed wind turbines.

The Environmental Health Service expects that details (height and model) of the turbines to be installed will be available at the time planning permission is sought and will be included in the EIAR.

Details of turbine foundation structures, including depth, quantity and material to be used should be included in the EIAR.

### **Opportunity for Health Gain**

The EPA has issued guidance with regard to meeting the requirements of Directive 2014/52/EU which assesses the impact of certain public and private projects on the environment. The proposed development should be assessed with a view to the potential to include opportunities for health gain within the site of the proposed wind farm by including greenways, cycle-paths or walking trails within the development site.

### **Assessment of Consideration of Alternatives**

The EIAR should consider an assessment of alternatives. The EHS recommends that alternative renewable energy options to on shore wind farms should be assessed as part of the EIAR.

### **Noise & Vibration**

The potential impacts for noise and vibration from the proposed development on all noise sensitive locations must be clearly identified in the EIAR. The EIAR must also consider the appropriateness and effectiveness of all proposed mitigation measures to minimise noise and vibration.

A baseline noise monitoring survey should be undertaken to establish the existing background noise levels. Noise from any existing turbines in the area should not be included as part of the background levels.

In addition, an assessment of the predicted noise impacts during the construction phase and the operational phase of the proposed wind farm development must be undertaken which details the change in the noise environment resulting from the proposed wind farm development.

The Draft Revised Wind Energy Development Guidelines were published in December 2019. Whilst these have yet to be adopted, any proposed wind farm development should have consideration of the draft Guidelines.

[https://www.housing.gov.ie/sites/default/files/public-consultation/files/draft\\_revised\\_wind\\_energy\\_development\\_guidelines\\_december\\_2019.pdf](https://www.housing.gov.ie/sites/default/files/public-consultation/files/draft_revised_wind_energy_development_guidelines_december_2019.pdf)

It is recommended that the transformer proposed as part of the development is manufactured with a specified and guaranteed noise emission level in order to minimise the impact on sensitive receptors and that the minimising of noise is a criterion used for the selection and installation of substation equipment.

### **Shadow Flicker**

It is recommended that a shadow flicker assessment is undertaken to identify any dwellings and sensitive receptors which may be impacted by shadow flicker. The assessment must include all proposed mitigation measures. Dwellings should include all occupied properties and any existing or proposed properties for which planning consent has been granted for construction or refurbishment.

It is recommended that turbine selection will be based on the most advanced available technology that permits shut down during times when residents are exposed to shadow flicker. As a result no dwelling should be exposed to shadow flicker.

### **Air Quality**

Due to the nature of the proposed construction works generation of airborne dust has the potential to have significant impacts on sensitive receptors. A Construction Environmental Management Plan (CEMP) should be included in the EIAR which details dust control and mitigation measures. Measures should include:

- Sweeping of hard road surfaces
- Provision of a water bowser on site, regular spraying of haul roads
- Wheel washing facilities at site exit
- Restrict speed on site
- Provide covers to all delivery trucks to minimise dust generation
- Inspect and clean public roads in the vicinity if necessary
- Material stockpiling provided with adequate protection from the wind
- Dust monitoring at the site boundary
- Truck inspection and maintenance plan
- Details of a road maintenance agreement between the wind farm operator and the Local Roads Authority to clarify responsibility for the upkeep and repair of access roads during the

construction phase of the project.

### **Surface and Ground Water Quality**

The proposed development has the potential to have a significant impact on the quality of both surface and ground water. All drinking water sources, both surface and ground water, must be identified. Public and Group Water Scheme sources and supplies should be identified. Measures to ensure that all sources and supplies are protected should be described. The Environmental Health Service recommends that a walk over survey of the site is undertaken in addition to a desktop analysis of Geological Survey of Ireland data in order to identify the location of private wells used for drinking water purposes.

Any potential significant impacts to drinking water sources should be assessed. Details of bedrock, overburden, vulnerability, groundwater flows, aquifers and catchment areas should be considered when assessing potential impacts and any proposed mitigation measures.

### **Geological impacts**

A detailed assessment of the current ground stability of the site for the proposed wind farm and all proposed mitigation measures should be detailed in the EIAR. The assessment should include the impact construction work may have on the future stability of ground conditions, taking into consideration extreme weather events, site drainage and the potential for soil erosion.

It is expected that an updated EIA will be undertaken to assess the likely significant impacts arising from the proposed increase in size of the turbines (from the turbines granted Planning Permission in 2013)

Information should be provided on the make and model of the turbines and on construction details for the turbine foundations, including the depth and volume of concrete required. An accurate assessment of the potential impacts of the foundations on water quality and peat stability cannot be undertaken without this information.

Reference is made to a peat slide which occurred near Ballybofey in Co. Donegal on November 13th 2020 which may have been linked to construction activity at Meenbog Wind Farm. Potential impacts on water supply associated with contamination following a peat slide include sedimentation and alteration of pH levels.

The Environmental Health Service recommends that a detailed Peat Stability Assessment should be undertaken to assess the suitability of the soil for the proposed development. The EIAR should include provision for a peat stability monitoring programme to identify early signs of potential bog slides ('pre-failure indicators' see the Scottish Government's 'Peat Landslide Hazard and Risk Assessments: Best Practice Guide for Proposed Electricity Developments 2017)

<https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2017/04/peat-landslide-hazard-risk-assessments-best-practice-guide-proposed-electricity/documents/00517176-pdf/00517176-pdf/govscot%3Adocument/00517176.pdf>

### **Ancillary Facilities**

The EIAR should include details of the location of all site office, construction compound, fuel storage depot, sanitary accommodation and canteen, First Aid facilities, disposal of wastewater and the provision of a potable water supply to the site canteen.

### **Cumulative Impacts**

All existing or proposed wind farm developments in the vicinity should be clearly identified in the EIAR.

The impact on sensitive receptors of the proposed development combined with any other wind farm developments in the vicinity should be considered. The EIAR should include a detailed assessment of any likely significant cumulative impacts of the proposed renewable energy development.

The EIAR should state clearly if there is any future proposal to extend the proposed Firlough Wind Farm.



Evelyn Keane  
Environmental Health Officer  
Primary care Centre  
Claremorris  
Co. Mayo



Caroline Hueston  
Environmental Health Officer  
Environment Operational Unit  
HSE West  
Ennistymon Health Centre  
Ennistymon  
Co. Clare

**ÚDARÁS NA GAELTACHTA**



## Caroline McGarry

---

**From:** Údarás na Gaeltachta <eolas@udaras.ie> on behalf of Údarás na Gaeltachta  
**Sent:** Wednesday 9 December 2020 12:41  
**To:** Caroline McGarry  
**Subject:** RE: Proposed Wind Farm, Bonniconlon, Co. Mayo.

Caroline, a chara,

Go raibh maith agat as ucht do theachtaireacht.

Thank you for your correspondence which is acknowledged herein.  
I have forwarded your correspondence to our Engineering and Property Division for their attention and direct reply.

Mise, le meas  
An Rannóg Cumarsáide

---

**From:** Caroline McGarry <cmcgarry@jodireland.com>  
**Sent:** Wednesday 9 December 2020 12:35  
**To:** Dnag Suiomh Idirlion <DnagSuiomhIdirlion@udaras.ie>  
**Cc:** Breena Coyle <bcoyle@jodireland.com>  
**Subject:** Proposed Wind Farm, Bonniconlon, Co. Mayo.

Dear Sir / Madam,

Please find attached letter and drawings in relation to the above development.

Kind regards,

Caroline McGarry



### Head Office

Finisklin Business Park, Sligo, Ireland, F91 RHH9. [MAP](#)  
Tel: [+353719161416](tel:+353719161416) Email: [cmcgarry@jodireland.com](mailto:cmcgarry@jodireland.com) Web: [www.jodireland.com](http://www.jodireland.com)



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Fógra faoi Rúndacht agus Síniú Leictreonach: Tá an ríomhphost seo agus aon iatán a ghabhann leis rúnda agus tharlódh go mbeadh ábhar íogarach tráchtála san áireamh ann. Is leis an duine / nó daoine sin amháin a bhfuil siad seolta chucu a bhaineann siad agus ní ceart iad a léamh ná a scaoileadh chuig aon tríú páirtí gan cead roimh ré ó Údarás na Gaeltachta. Tabhair faoi deara freisin nach nglacann Údarás na Gaeltachta le sínithe leictreonacha d'aon

**OFFICE OF PUBLIC WORKS**

## Caroline McGarry

---

**From:** Info Opw <info@opw.ie> on behalf of Info Opw  
**Sent:** Wednesday 9 December 2020 12:52  
**To:** Caroline McGarry  
**Subject:** Automatic reply: Proposed Wind Farm, Bonniconlon, Co. Mayo.

Thank you for your email to the Office of Public Works.  
Your query has been forwarded to the relevant section within the OPW for direct reply.  
If you do not receive a response within 20 working days, please email this address again for further assistance.

All Media queries should be emailed to [opwcsc@opw.ie](mailto:opwcsc@opw.ie)

This is an automated response. Please do not respond to this email.

Go raibh maith agat as an ríomhphost uait chuig Oifig na nOibreacha Poiblí.  
Seoladh do cheist chuig an rannóg chúí taobh istigh den OPW a thabharfaidh freagra díreach duit.  
Sa chás nach bhgaigheann tú freagra taobh istigh de 20 lá oibre, seol ríomhphost chuig an seoladh seo arís le do thoil, chun cúnamh breise a fháil.

Ba chóir ceisteanna meáin a sheoladh trí ríomhphost chuig [opwcsc@opw.ie](mailto:opwcsc@opw.ie)

Is freagra uathobrithe é seo. Ná seol freagra ar an ríomhphost seo le do thoil.

Email Disclaimer: <https://www.opw.ie/en/disclaimer/>

**DEPARTMENT OF ENVIRONMENT, CLIMATE AND COMMUNITIES**

## Caroline McGarry

---

**From:** CorporateSupport.Unit <CorporateSupport.Unit@decc.gov.ie> on behalf of CorporateSupport.Unit  
**Sent:** Tuesday 9 February 2021 14:54  
**To:** 'Caroline McGarry'  
**Cc:** CorporateSupport.Unit  
**Subject:** Nil reply from DECC re Proposed Wind Farm, Bonniconlon, Co. Mayo.

Good afternoon Caroline,

Please be advised that Corporate Support Unit have received no observations from the Divisions following circulation of correspondence regarding the proposed Wind Farm, Bonniconlon, Co. Mayo.

Regards,  
Enda Brady,  
Corporate Support Unit,  
Department of Environment, Climate and Communications.  
01 678 2308

---

**From:** Caroline McGarry [mailto:cmcgarry@jodireland.com]  
**Sent:** 09 February 2021 11:27  
**To:** CorporateSupport.Unit  
**Cc:** Breena Coyle  
**Subject:** RE: Proposed Wind Farm, Bonniconlon, Co. Mayo.

**CAUTION:** This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Hi Enda,

I'm following up on the below email.

Has your team any comments on the proposed Development?

Thank you

Kind regards,

Caroline

---

**From:** Caroline McGarry <[cmcgarry@jodireland.com](mailto:cmcgarry@jodireland.com)>  
**Sent:** Thursday 10 December 2020 09:35  
**To:** CorporateSupport.Unit <[CorporateSupport.Unit@decc.gov.ie](mailto:CorporateSupport.Unit@decc.gov.ie)>  
**Subject:** RE: Proposed Wind Farm, Bonniconlon, Co. Mayo.

Hi Enda,

I have created a dropbox link below where the drawing can be viewed or downloaded.

If you have any issues, please let me know.

[https://www.dropbox.com/s/kc4oiz7r9wcbc0k/6129-PP-001%20Location\\_.pdf?dl=0](https://www.dropbox.com/s/kc4oiz7r9wcbc0k/6129-PP-001%20Location_.pdf?dl=0)

thank you.

Kind regards,

Caroline McGarry



**Head Office**

Finisklin Business Park, Sligo, Ireland, F91 RHH9. [MAP](#)  
Tel: [+353719161416](tel:+353719161416) Email: [cmcgarry@jodireland.com](mailto:cmcgarry@jodireland.com) Web: [www.jodireland.com](http://www.jodireland.com)

---

**From:** CorporateSupport.Unit <[CorporateSupport.Unit@decc.gov.ie](mailto:CorporateSupport.Unit@decc.gov.ie)>  
**Sent:** Wednesday, December 9, 2020 6:33 PM  
**To:** 'Caroline McGarry' <[cmcgarry@jodireland.com](mailto:cmcgarry@jodireland.com)>  
**Cc:** CorporateSupport.Unit <[CorporateSupport.Unit@decc.gov.ie](mailto:CorporateSupport.Unit@decc.gov.ie)>  
**Subject:** RE: Proposed Wind Farm, Bonniclon, Co. Mayo.

Good afternoon Caroline,

Please be advised that I have circulated the correspondence below and three attachments to the planning contacts in the Department of Environment, Climate and Communications. However one of our contacts has a mailbox limit of 5Mb. Could you resend the attached document (8Mb) as a compressed file <5Mb or add the document to an online droplink that the map can be downloaded from?

Perhaps the map is already available online so an email with the link would also suffice. I have attached the 8Mb document for reference.

Thank you for your assistance.

Regards,  
Enda Brady,  
Corporate Support Unit,  
Department of Environment, Climate and Communications.  
01 678 2308

---

**From:** Caroline McGarry [<mailto:cmcgarry@jodireland.com>]  
**Sent:** 09 December 2020 12:48  
**To:** CorporateSupport.Unit  
**Cc:** Breena Coyle  
**Subject:** Proposed Wind Farm, Bonniclon, Co. Mayo.

**CAUTION:** This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Dear Sir / Madam,

Please find attached letter and drawings in relation to the above development.

Kind regards,

**FÁILTE IRELAND**



**Fáilte Ireland**  
National Tourism Development Authority

## **EIAR Guidelines for the Consideration of Tourism and Tourism Related Projects**



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Éire

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## 1. Introduction

Tourism is a growing sector and substantial part of the Irish Economy. It contributes to both urban and rural economies in every part of the country. The impact and interaction of tourism with the environment is complex and the assessment of environmental impacts is of utmost importance to creating a sustainable tourism economy and protecting the natural resources that are so often a tourism attraction.

The purpose of this report is to provide guidance for those conducting Environmental Impact Assessment and compiling an Environmental Impact Assessment Reports (EIAR), or those assessing EIARs, where the project involves tourism or may have an impact upon tourism. These guidelines are non-statutory and act as supplementary advice to the EPA EIAR Guidelines outlined in section 2.

This guidance document has been prepared by Cunnane Stratton Reynolds on behalf of Fáilte Ireland to update their EIA guidelines in line with changes in legislative requirements.

## 2. Background to this Document

Tourism is one of the largest and most important sectors of the economy, providing employment for approximately **260,000 people**, an economic contribution of **€8.4 billion**, and exchequer revenue of **€1.78 billion** in 2018, which helps fund other key public services.

In 2018 Ireland welcomed **10.6 million overseas visitors**.

Fáilte Ireland is the National Tourism Development Authority. Fáilte Irelands role is to support the tourism industry and work to sustain Ireland as a high-quality and competitive tourism destination. They provide a range of practical business supports to help tourism businesses better manage and market their products and services.

Fáilte Ireland also work with other state agencies and representative bodies, at local and national levels, to implement and champion positive and practical strategies that will benefit Irish tourism and the Irish economy.

Fáilte Ireland promotes Ireland as a holiday destination through a domestic marketing campaign (DiscoverIreland.ie) and manage a network of nationwide tourist information centres that provide help and advice for visitors to Ireland.

Tourism related projects cover a broad range of plans, programmes and developments, from the Wild Atlantic Way to a single hotel conversion. These guidelines apply to projects involving or impacting upon tourism. A tourism plan, strategy or programme where it is part of the statutory plan making process under the Planning and Development Acts (as amended), may be more appropriately assessed by a Strategic Environmental Assessment (SEA) as discussed in the next section.

It should be borne in mind that EIA is required where there is anticipated to be a significant impact on the environment, where tourism projects are of a prescribed type or meet thresholds identified below.

Where Natura 2000 Designated Sites are potentially affected by tourism development Appropriate Assessment must be carried out by the appropriate authority in accordance with Article 6(3) of the EU Habitats Directive.

### **3. Legislation and Statutory Guidance**

Environmental Impact Assessment is a procedure that ensures that the environmental implications of decisions are taken into account before planning based decisions are made. The assessment results in a report, called an Environmental Impact Assessment Report (EIAR).

#### ***Legislation***

These guidelines are produced under current EIAR legislative requirements, having regard to Directive 2011/92/EU (known as 'Environmental Impact Assessment' – EIA Directive), as amended by Directive EU 2014/52 which came into effect in May of 2017. These requirements were transposed into Irish Law on 1 September 2018 as most of the provisions of the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018) came into effect. The principle of both Directives is to ensure that plans, programmes and projects likely to have significant effects on the environment are made subject to an environmental assessment, prior to their approval or authorisation.

#### ***Statutory Guidance***

In response to the changes to the EIAR requirements under Directive EU 2014/52, the Environmental Protection Agency (EPA) developed Draft guidelines on the information to be contained in Environmental Impact Assessment Reports in August 2017. At the time of this document the guidelines have not been adopted from draft.

In addition to the EPA statutory guidance, the Department of Housing has produced Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment in August 2018.

The process of EIA is set out in the EPA EIAR Guidelines, which this document should be read in conjunction with and used as supplementary guidance to. The process for ascertaining whether an EIAR is required is known as 'screening' and the process to determine the breadth and scope of an EIAR is known as 'scoping'. Guidance on this can be found in Section 3.2 of the EPA Guidelines.

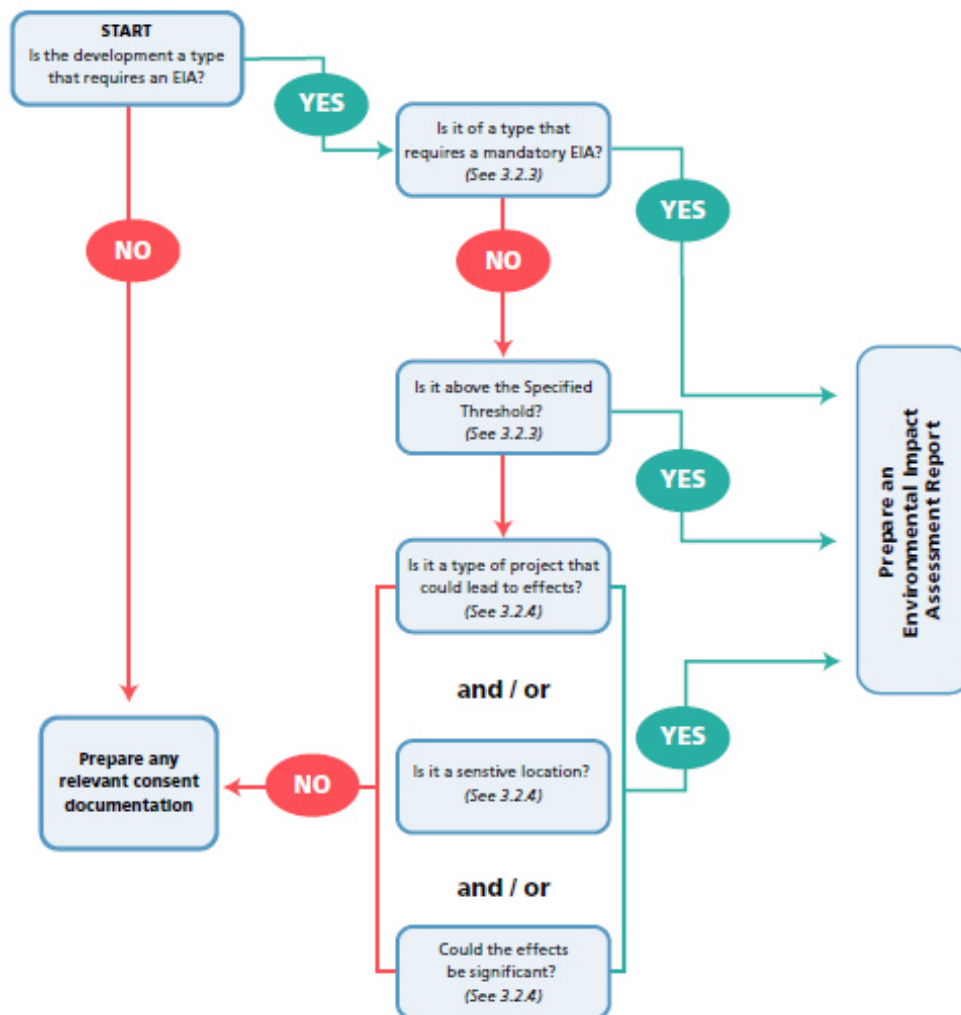
#### ***Screening***

Through EIAR Screening, developments are either considered as requiring an EIAR due to the project type or because they exceed a threshold level. The screening process begins by establishing whether the proposal is a 'project' as understood by the Directive (as amended).

The prescribed development types and thresholds are set out in Annex I and II of the EIA Directive as transposed into Schedule 5 of the Planning and Development Regulations 2010-2018 (as amended). Development which do not exceed these thresholds but may require an EIAR are called sub threshold. Sub-Threshold considerations are outlined in Schedule 7 of European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018) as transposed from Annex III of the Directive. The Guidelines on Environmental Impact Assessment Reports note that projects at first glance may not appear to come under the Schedule

but on closer examination when the process is further examined, they may do so because of the sensitivity or significance of the receiving environment etc. Sub threshold developments require an EIAR if they are likely to have significant environmental impacts and must undergo assessment for likely significant impacts through an EIAR screening report. The contents of a screening report for subthreshold development are contained in Annex III of the EIA Directive.

Figure 1: EIAR Screening Process



(Taken from Fig 3.2 of the EPA Guidelines)

Tourism locations should be identified as sensitive receptors in screening assessments for particular impacts, depending on scale and sensitivity, as they would in a full EIAR. Section 6 below can act as guidance for Screening Reports as well as for full EIAR.

The screening process for considering where an EIAR is necessary, is summarised below in Figure 1 (excerpted from Figure 3.2 of the EPA Guidelines).

Strategic Environmental Assessment (SEA) is a more strategic level of environmental assessment that examines plans, policies, objectives and programmes specifically rather than projects. For some tourism developments it may be more appropriate that they be examined through SEA, while individual projects or specific proposals are likely to be more assessed through EIAR. If a project is part of a plan, programme or policy/objective assessed by SEA there will still be a requirement for an EIAR for that development.

## *EIAR Scoping*

Scoping an EIAR is an opportunity to look at the breadth of issues and ensure that any areas of possible significant impact are assessed. Identifying sensitivities and stakeholders should take account of tourism facilities and consider Fáilte Ireland in scoping requests where necessary.

### **4. Assessing Tourism**

There is no legal definition of 'tourism' in Irish legislation. The UNWTO definition of sustainable tourism is *"Tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities"*. This is widely accepted as a key definition of tourism as we move to a more sustainable future.

Tourism assessments are frequently carried out by economic consultants and by specific tourism consultants. It is always advisable, particular for tourism projects, that suitably qualified and experienced personnel are used to determine the impact of tourism related projects or to assess the impact of more general proposals on a tourism asset identified in a particular location. There is a requirement for EIAR under current legislation to contain a statement of competency within all EIAR documents, including screening and scoping reports.

#### ***Projects which involve a tourism element***

Tourism projects are wide ranging and diverse. While there are some projects which cater to tourism and are easily identified as such - Hotels, Museums, etc. there are other projects where tourism is a key service or element, but which may not be immediately obvious - forest trails, community facilities and others. EIAR conducted for developments containing tourist elements should be completed in accordance with the current guidance from the EPA.

Projects which include a tourism element have potential particular environmental effects which differ from a non-tourism development. These impacts can be intermittent, event related, inconsistent, dependent on weather, temporal, temporary or seasonal. This is considered within the prescribed environmental topics for EIAR outlined in Section 7 below.

#### ***Projects which may have an impact upon tourism***

While tourism projects may be diverse, the projects which can impact tourism are considerably more wide ranging, from large infrastructural developments to local energy developments. Disruption to or suppression of a tourist resource or amenity can have very local or more strategic impacts, directly or indirectly- for example energy projects in a rural area can have both a negative and positive impact in different regards. There can be temporary, periodic or even seasonal impacts occurring during construction or operational periods.

According to the Fáilte Ireland Tourism Facts 2018 Report, the most important factors in determining the attractiveness of tourism destinations for visitors to Ireland are;

- Beautiful Scenery and Unspoiled Environment
- Hospitality
- Safety
- Nature, Wildlife and Natural Attractions
- History and Culture
- Pace of Life

These factors used for the promotion of tourism in Ireland are also barometers of sensitivity to change in tourism sensitive or dominant locations where development may have an impact upon the tourism asset. The potential for development to impact these sensitivities, and the environmental criteria under which they can be considered, are identified in section 7 of the guidelines.

## **5. Guiding Principles of EIAR**

As outlined in the EPA Draft EIAR Guidelines, the fundamental principles to be followed when preparing an EIAR, including screening and scoping, are:

- Anticipating, avoiding and reducing significant effects
- Assessing and mitigating effects
- Maintaining objectivity
- Ensuring clarity and quality
- Providing relevant information to decision makers
- Facilitating better consultation.

Environmental assessment should be undertaken in accordance with the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018.

## **6. Consideration of Competency and Qualifications**

As per Section 2.5 of the EPA Guidelines, EIAR is required to be completed by 'competent experts'.

Contributors to the preparation of environmental impact assessment reports, including screening and scoping assessments, should be qualified and competent. Sufficient expertise, in the relevant field of the project concerned, is required for the purpose of its examination by the competent authorities in order to ensure that the information provided by the developer is complete and of a high level of quality so that a full and proper assessment can be undertaken.

For tourism related projects, or projects likely to affect tourism assets, competent experts in the area of tourism should be utilised in the environmental assessment.

The competency of all involved in the production of an EIAR or any related report (eg. Screening and scoping) is required to be stated at the beginning of the EIAR report with further details as necessary in each following chapter.

Where tourism projects involve for example heritage or cultural components, input from heritage consultants, conservation architects, or historians may be required.

## **7. EIAR Requirements**

The following are the key requirements for an EIAR under the current guidance. This is not a definitive list and should be read in conjunction with regulations.

- project description;
- assessment of alternatives considered;

- baseline assessment;
- impact assessment;
- cumulative impact
- interaction of impacts
- mitigation.

### ***Project Description***

Project descriptions are required to describe the whole project including site, scale, design and key factors. It is important that the EIAR and design team have a consistent understanding of the development description in full. The key requirements are outlined in section 3.5 of the EPA Guidelines however they identify the following;

- the location of the project
- the physical characteristics of the whole project
- the main characteristics of the operational phase of the project
- an estimate, by type and quantity, of the expected residues and emissions

The location of the project should include identifying key sensitive receptors (including tourism receptors). In the operational phase of the project any tourism based, or potentially tourism related activity, should be identified.

### ***Assessment of Alternatives***

The assessment of alternatives is a requirement of EIAR

Where tourism projects are location dependent the assessment of alternatives should consider alternative methods and technologies, detail the key considerations culminating in the selection of the design, the reasoning for these and the environmental effect of these decisions. This is particularly important for tourism projects which are often location tied. The developer is expected to consider reasonable alternatives. What is considered reasonable may vary from case to case.

### ***Baseline Assessment***

Baseline descriptions are evidence based, current descriptions of environmental characteristics with consideration of likely changes to the baseline environment evidenced in planning histories, unimplemented permissions, and applications pending determination. Baseline assessments should identify any tourism sensitivities in the zone of influence of a development. This zone of influence of a development is highly dependant on its **Context, Character, Significance, and Sensitivity**, as outlined in the Draft Guidelines. These characteristics apply to both the development and the environment.

For example, in a tourism context;

The location of sensitive tourism resources that are likely to be directly affected should be highlighted, and other premises which although located elsewhere, may be the subject of in combination impacts such as alteration of traffic flows or increased urban development.

The character of an area from a tourism perspective should be described and the principal types of tourism in the area. Where relevant, the specific environmental resources or attributes in the existing environment which each group uses or values should be stated and where relevant, indicate the time, duration or seasonality of any of those activities.

The significance of the tourism assets or activities likely to be affected should be highlighted. Reference to any existing formal or published designation or

recognition of such significance should be. Where possible the value of the contribution of such tourism assets and activities to the local economy should be provided.

If there are any significant concerns or opposition to the development known to exist among tourism stakeholders and interest groups, this should be highlighted. Identify, where possible, the particular aspect of the development which is of concern, together with the part of the existing tourism resource which may be threatened or impacted.

In addition, the baseline should include any methodologies employed in the study to obtain information, if particular databases are used to locate sensitive receptors they should be acknowledged. In relation to tourism information, the suggested information sources at the end of this document are a non-exhaustive list which may be of assistance in identifying tourism receptors.

### ***Impact Assessment***

The topics for consideration of impact are prescribed in the EIA Directive and transcribed into Irish law by the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018). Impact assessment should contain the likely significant effects of a development arising from both construction and operation of a development. Advice on describing the effects is contained within the Draft Guidelines and includes the **quality, significance, extent, probability, type** and **duration** of the effect, with particular descriptors for each. In describing effects upon tourism receptors these descriptors should take account of the particular aspects and sensitivities of tourism, for example a temporary annual effect from a development may have different impacts upon tourism if it falls at peak season rather than off-peak.

Impact assessment should be carried out as per EPA guidelines and the best practice for that prescribed topic. It may be considered appropriate to consider impact on tourism assets under the 'material assets' topic below.

#### Population and Human Health

The consideration of tourism projects within the Population and Human Health is extensive, with impacts ranging from rural employment population impacts of seasonal tourism, to the health impact of air pollution from increased traffic in urban areas.

The impact upon tourism can be considered within this section through the sensitivities of Hospitality, Safety and Pace of Life. Changes in population can impact the perception of pace of life or safety in a particular location. Impacts upon these issues in areas which rely heavily on tourism or have a particular sensitive tourism generator should be considered in this section.

#### Biodiversity

Particular tourist activities can have a significant impact upon biodiversity. Landscapes which are 'unspoiled' can be attractors of tourism. However, the disturbance to ecology must be managed to minimise impact. Biodiversity is also a tourism asset and should be protected as such from other development and should be provided for in proposals where possible.

#### Land, Soils and Geology

A link between tourism and this prescribed environmental factor, beyond the normal development impacts, is rare, however particular activities or facilities which use geological features may have an impact upon soils and geology, such as mountain biking trails, recreational uses of old quarries etc. Indirect impacts such as material use for extensive landscaping and public realm should also be considered.



## Water

Tourism uses can be water intense, depending on development type. Recreational use of a surface water feature, water-based leisure centres etc have different impacts to standard development.

## Air Quality and Climate

Tourism impact upon air quality is dependent on activity proposed and sensitivity of the location.

## Noise and Vibration

A link between tourism and this prescribed environmental factor, beyond the normal development impacts, is rare, however the impact upon tourism of issues of noise and vibration can be significant. Construction adjoining hotels for example should consider the sensitivity of the development and ensure mitigation is in place.

## Material Assets; Traffic and Transport

The different transport patterns associated with tourism activities is a key impact of tourism and should be considered especially for tourism projects. These produce temporal and seasonal changes on the norm and specialist consideration and interpretation should be given. Tourism proposals should, where possible, be well served by public transport and should be accessible by modes other than the car. The impact of traffic on tourism assets can be substantial and can vary in severity according to season, the weather, etc. The impact of construction traffic can be a particular concern in tourism sensitive areas in terms of noise pollution and visual impact. The construction programme of developments should work to avoid peak tourism periods in tourism areas and should consider planned or anticipated tourism events and festivals.

## Cultural Heritage

Cultural heritage can be a key component of tourism projects and the impact of tourism on the maintenance of cultural heritage should be given the utmost consideration, whether positive or negative. As a tourism attraction, cultural heritage should be strongly considered in non-tourism developments and the impact upon tourism considered as a potential impact.

## Archaeology

Archaeology can be of tourism interest and can be an attractive or key component of tourism projects. Archaeology can be a tourism attractor but is generally not kept in situ except in key cases which could also be considered under cultural heritage.

## Material Assets; Waste Management

Tourism is a resource heavy activity and can impact waste streams and waste segregation. Impacts here should be considered strongly and with knowledge of the variation that arises from the particular tourist activity. Waste and Waste disposal issues can also impact the perception of an unspoiled environment, effecting tourism, which should be considered.

## Material Assets

Material assets are utilities and infrastructure. Tourism itself could be considered a material asset as its impact upon the economy and the infrastructure in place to support it is a material consideration in assessing economic impact.

## Landscape

The visual impact of a tourism development, especially in locations which are visually sensitive or renowned for their scenic or landscape beauty, should be considered carefully. A

development intended to utilise or enjoy a particular vista or environment should minimise impact upon that environment.

### ***Major Accident and Natural Disaster***

There is a requirement for tourist developments to describe expected significant effects on the environment of the proposed development's vulnerability to major accidents and/or natural disasters relevant to it. Where appropriate measures should be identified to prevent or mitigate the significant adverse effects of such accidents or disasters, including resulting from climate change, on the environment and detail the preparedness for the proposed response.

### ***Interaction of Effects***

Where two or more environmental impacts combine or interact they should be considered under the prescribed topics. It is best practice to provide a table of interactions within an EIAR or EIAR Screening Report.

### ***Mitigation***

Mitigation should follow the hierarchy of minimisation in descending order of preference- Avoid, Reduce, Remedy

*Avoid* sensitive tourism resources- such as views, access and amenity areas including habitats as well as historical or cultural sites and structures.

*Reduce* the exposure of sensitive resources to excessive environmental impact

*Reduce* the adverse effects to tourism land uses and patterns of activities, especially through interactions arising from significant changes in the intensity of use or contrasts of character or appearance.

*Remedy* any unavoidable significant residual adverse effects on tourism resources or activities.

Mitigation measures must be measurable and achievable within the bounds of the project.

### ***Cumulative Impact***

The cumulative impact is that of the project combined with any known likely project which will interact or compound an environmental impact.

### ***Transboundary Impact***

Transboundary impacts should be included in EIAR. In the case of tourism, especially international travel, the transboundary impacts may not be proximate to the EIAR site.

## **8. Sources of information on Tourism**

### ***Information available online***

#### ***Fáilte Ireland***

Fáilte Ireland offers detailed research analysis and insights into the Irish Tourism Industry. The National Tourism Development Authority has a portfolio of research across a number of areas including facts and figures, briefing papers and reports and visitor feedback. The Fáilte Ireland website has a dedicated research library which can be accessed [here](#)

### *Tourism Ireland*

Tourism Ireland is responsible for marketing the island of Ireland overseas as a holiday and business tourism destination. Tourism Ireland publishes a range of research documents including; visitor facts and figures, seasonal updates and industry insights which are accessible [here](#)

### *Local Authorities*

Local Authorities are an invaluable source of information. They produce tourism strategies and audits of tourism assets within their jurisdiction. Local authorities will also produce landscape and seascape studies. Protected views and prospects as well as the record of protected structures and other designated protected buildings are contained within the Statutory Development Plans.

### *Regional Authorities*

Regional Authorities can also be consulted on high level strategic tourism and potential Regional Spatial and Economic Strategies (RSEs) should be consulted.

### Central Statistics Office

The Central Statistics Office (CSO) is Ireland's national statistical office and their purpose is to impartially collect, analyse and make available statistics about Ireland's people, society and economy. The Tourism and Travel Section of the Central Statistics Office is the major source for tourism statistics in Ireland and is updated regularly.

**DEPARTMENT OF TRANSPORT**

## Caroline McGarry

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**From:** Dept of Transport <zMail\_Dept\_Transport@transport.gov.ie> on behalf of Dept of Transport  
**Sent:** Wednesday 9 December 2020 14:14  
**To:** Caroline McGarry  
**Subject:** Automatic reply: Proposed Wind Farm, Bonniconlon, Co. Mayo.

THIS IS AN AUTOMATIC ACKNOWLEDGEMENT OF RECEIPT OF YOUR EMAIL. PLEASE *DO NOT REPLY TO THIS EMAIL AS REPLIES TO AUTO ACKNOWLEDGEMENTS WILL REMAIN UNANSWERED.*

Dear Customer,

Thank you for contacting The Department of Transport.

We have received your message and the division or staff member that is dealing with your query will provide a full reply within 12 working days in the majority of cases.

In the meantime if you need an answer sooner, you can find answers to most queries on our website, [www.gov.ie/transport](http://www.gov.ie/transport)

Regards,

Customer Services  
Department of Transport

Is seo uath-admháil go bhfuarthas do ríomhphoist. Ná freagraíonn leis an roimhphoist seo más é do thoil é mar fainfidh freagraí leis na uath-admhálacha gan freagairt.

Chustaiméir, a chara,

Go raibh maith agat as teagmháil a dhéanamh leis an t-aonad um Sheirbhísí do Chustaiméirí sa Roinn Iompair.

Tá do theachtaireacht faighte againn agus beidh an rannán nó don bhall foirne a bheidh ag déileáil le do cheist ag cur freagra iomlán ar fáil laistigh de 12 lá oibre i bhformhór na gcásanna.

Idir an dá linn más gá duit freagra a fháil níos túisce, is féidir leat freagraí den chuid is mó de na ceisteanna a fháil ar ár suíomh gréasáin, [www.gov.ie/transport](http://www.gov.ie/transport)

Le meas,  
Seirbhísí Custaiméirí  
An Roinn Iompair

\*\*\*\*\*

Tá eolas sa teachtaireacht leictreonach seo a d'fhéadfadh bheith príobháideach nó faoi rún agus b'fhéidir go mbeadh ábhar rúnda nó pribhléideach ann. Is le h-aghaidh an duine/na ndaoine nó le h-aghaidh an aonáin atá ainmnithe thuas agus le haghaidh an duine/na ndaoine sin amháin atá an t-eolas. Tá cosc ar rochtain don teachtaireacht leictreonach seo do aon duine eile. Murab ionann tusa agus an té a bhfuil an teachtaireacht ceaptha dó bíodh a fhios agat nach gceadaítear nochtadh, cóipeáil, scaipeadh nó úsáid an eolais agus/nó an chomhaid seo





Breena Coyle  
Jennings O'Donovan & Partners Limited  
Finisklin Business Park  
Sligo  
F91 RHH9

17 December 2020

**Re: Request for Scoping Opinion on information to be included in the preparation of an EIA for Firlough Wind Farm, Bonniclon, Co. Mayo**

**Your Ref: 6129/503/SL/012/BC**

**Our Ref: 20/316**

Geological Survey Ireland is the national earth science agency and has datasets including Bedrock Geology, Quaternary Geology, Geological Heritage Sites, Mineral deposits, Groundwater Resources, Geohazards and the Irish Seabed. These comprise maps, reports and extensive databases that include mineral occurrences, bedrock/mineral exploration groundwater/site investigation boreholes, karst features, wells and springs. Please see our [website](#) for data availability and we recommend using these various data sets, when undergoing the EIAR, planning and scoping processes. Geological Survey Ireland should be referenced to as such and should any data or geological maps be used, they should be attributed correctly to Geological Survey Ireland.

Dear Breena,

With reference to your letter dated 27 November 2020, concerning the preparation of an EIA for the proposed Firlough Wind Farm, Bonniclon, Co. Mayo, Geological Survey Ireland (a division of the Department of Environment, Climate and Communications) would like to make the following comments.

### **Geoheritage**

Geological Survey Ireland is in partnership with the National Parks and Wildlife Service (NPWS, Department of Culture, Heritage and Gaeltacht), to identify and select important geological and geomorphological sites throughout the country for designation as geological NHAs (Natural Heritage Areas). This is addressed by the Geoheritage Programme of Geological Survey Ireland, under 16 different geological themes, in which the minimum number of scientifically significant sites that best represent the theme are rigorously selected by a panel of theme experts.

County Geological Sites (CGS), as adopted under the National Heritage Plan, include additional sites that may also be of national importance, but which were not selected as the very best examples for NHA designation. All geological heritage sites identified by GSI are categorised as CGS pending any further NHA designation by NPWS. CGS are now routinely included in County Development Plans and in the GIS of planning departments, to ensure the recognition and appropriate protection of geological heritage within the planning system. CGSs can be viewed online under the Geological Heritage tab on the online [Map Viewer](#).

The audit of County Geological Sites of County Mayo was completed in 2014, revised in 2019 and published in November 2020. The full report details can be found [here](#). **Our records show that there are no CGSs in the vicinity of the proposed wind farm development.**



## **Groundwater**

Groundwater is important as a source of drinking water, and it supports river flows, lake levels and ecosystems. It contains natural substances dissolved from the soils and rocks that it flows through, and can also be contaminated by human actions on the land surface. As a clean, but vulnerable, resource, groundwater needs to be understood, managed and protected.

Through our [Groundwater Programme](#), Geological Survey Ireland provides advice and maps to members of the public, consultancies and public bodies about groundwater quality, quantity and distribution. Geological Survey Ireland monitors groundwater nationwide by characterising aquifers, investigating karst landscapes and landforms and by helping to protect public and group scheme water supplies. **We recommend using our National Aquifer, Vulnerability and Recharge maps on our [Map viewer](#) to this end.**

**The [GW Flood](#) project was a groundwater flood monitoring and mapping programme aimed at addressing the knowledge gaps surrounding groundwater flooding in Ireland and ran from 2016 to 2019.** The project is providing the data and analysis tools required by local and national authorities to make scientifically-informed decisions regarding groundwater flooding. **Although primarily focused on karst areas, this may provide information to benefit the proposed wind farm development. We recommend using our [GW Flood](#) tools found under our programme activities (in conjunction with OPW data), to this end.**

With regards to Climate Change, there is a need to improve the monitoring capacity of groundwater levels in Ireland so that the potential impacts of climate change can be monitored and assessed. In this context the GSI has established the [GW Climate](#) project in January 2020. [GW Climate](#) will 1) establish a long-term strategic groundwater level monitoring network and 2) develop modelling and analytical approaches for evaluating the impacts of Climate Change to Irish groundwater systems. **Further information can be found on the [Groundwater flooding page](#) of the Groundwater Programme.**

## **Geological Mapping**

Geological Survey Ireland (GSI) maintains online datasets of bedrock and subsoils geological mapping that is reliable, accessible and meets the requirements of all users including depth to bedrock and physiographic maps. These datasets include depth to bedrock data and subsoil classifications. **We would encourage you to use these data which can be found [here](#), in your future assessments.**

## **Geohazards**

Geohazards can cause widespread damage to landscapes, wildlife, human property and human life. In Ireland, landslides are the most prevalent of these hazards. **Landslides are common in areas of peat, areas which are found within the proposed windfarm development area.** Geological Survey Ireland has information available on past landslides for viewing as a layer on our [Map Viewer](#). Geological Survey Ireland also engages in national projects such as Landslide Susceptibility Mapping and GW Flood Groundwater Flooding. **We recommend that geohazards and particularly landslides be taken into consideration, especially when developing areas where these risks are prevalent, and we encourage the use of our data when doing so.**

## **Natural Resources (Minerals/Aggregates)**

Geological Survey Ireland is of the view that the sustainable development of our natural resources should be an integral part of all development plans from a national to regional to local level to ensure that the materials required for our society are available when required. Geological Survey Ireland highlights the consideration of mineral resources and potential resources as a material asset which should be explicitly recognised within the environmental assessment process.





Geological Survey Ireland provides data, maps, interpretations and advice on matters related to minerals, their use and their development in our [Minerals section](#) of the website. The Active Quarries, Mineral Localities and the Aggregate Potential maps are available on our [Map Viewer](#).

**In keeping with a sustainable approach, we would recommend use of our data and mapping viewers to identify and ensure that natural resources used in the proposed wind farm development are sustainably sourced from properly recognised and licensed facilities.**

#### **Other Comments**

Should development go ahead, all other factors considered, Geological Survey Ireland would much appreciate a copy of reports detailing any site investigations carried out. Should any significant bedrock cuttings be created, we would ask that they will be designed to remain visible as rock exposure rather than covered with soil and vegetated, in accordance with safety guidelines and engineering constraints. In areas where natural exposures are few, or deeply weathered, this measure would permit on-going improvement of geological knowledge of the subsurface and could be included as additional sites of the geoheritage dataset, if appropriate.

Alternatively, we ask that a digital photographic record of significant new excavations could be provided. Potential visits from Geological Survey Ireland to personally document exposures could also be arranged.

The data would be added to Geological Survey Ireland's national database of site investigation boreholes, implemented to provide a better service to the civil engineering sector. Data can be sent to Beatriz Mozo, Land Mapping Unit, at [Beatriz.Mozo@gsi.ie](mailto:Beatriz.Mozo@gsi.ie), 01-678 2795.

I hope that these comments are of assistance, and if we can be of any further help, please do not hesitate to contact me ([Trish.Smullen@gsi.ie](mailto:Trish.Smullen@gsi.ie)), or my colleague Clare Glanville ([Clare.Glanville@gsi.ie](mailto:Clare.Glanville@gsi.ie)).

Yours sincerely,

Trish Smullen  
**Geoheritage Programme**  
**Geological Survey Ireland**