Knockmealdown Protection Organisation CLG
c/o Ms Geraldine Lacey
Coolnacreena
Cappoquin
County Waterford
P51 C6F3

AN COIMISIÚN PLEANÁLA
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Time: 12:36 By: HAND

The Secretary
An Coimisiún Pleanála
64 Marlborough Str
Rotunda
Dublin 1
D01 V902

21 November 2025

An Coimisiún Pleanála Case Reference: VA93.323791

Proposed Development of a 110kV underground Grid Connection from the proposed Scart Mountain Wind Farm development (case ref: PA93.321522, currently awaiting decision) to Dungarvan substation in County Waterford.

Strategic Infrastructure Development Application
(SID Determination ref: ABP-317824-23)
By TOBIN Consulting Engineers on behalf of
FuturEnergy Scart Mountain Designated Activity Company

Dear Sir/Madam,

In response to the above-referenced Strategic Infrastructure Development (SID) Application, the Knockmealdown Protection Organisation CLG (also referred to as: Knockmealdown Protection Group) wishes to submit the attached Observation to An Coimisiún Pleanála, as permitted by Section 130 of the Planning and Development Act, 2000, as amended.

Description

This planning application is for construction of an underground 110kV Grid Connection (and all associated infrastructure) that will connect the proposed Scart Mountain Wind Farm (case ref. PA93.321522) development (approximately 4 km northeast of Cappoquin and approximately 13 km northwest of Dungarvan) to the existing 110kv Dungarvan substation in County Waterford. The cable route will be constructed primarily within public roads within the jurisdiction of Waterford City and County Council.

The site of the no. 15-turbine proposed Scart Mountain Wind Farm itself is located in an area designated as a 'Wind Energy Exclusion' area and 'Highly Sensitive' in the Landscape and Seascape Character Assessment by Waterford City and County Council (WCCC) under the Waterford City and County Council Development Plan 2022-2028. And while we understand it is no longer possible to make an Observation against the wind farm development itself, we wish the Commission to bear in mind that its unsuitability needs to be taken into consideration when making a decision on this Application for the proposed Grid Connection Application as both developments are interdependent on each other and one cannot function without the other – as the Applicant themselves states.

Waterford City and County Council Development Plan (WCCDP) 2022-2028

The land targeted by the Applicant is NOT SUITABLE for Wind Development. It is not just our community who understand this to be true, but also planners, ecologists, energy consultants and the elected officials in Waterford County Council (WCC).

The area for the proposed Scart Mountain Wind Farm is within an area designated as a WIND EXCLUSION ZONE. This designation was decided upon using the tools of Proper Planning, namely Strategic Environmental Assessment (SEA), AA Screening, NIS and other Water-, Habitat- and Species-related European and national legislation. The application of these accepted tools of land zoning and planning led to the informed decision that the area should be Excluded for Wind Development (WCCDP 2022-2028).

Much research and careful consideration was undertaken by WCC when deciding the areas of suitability for wind farm development, and there are many alternative location options within Waterford, where land is zoned as 'Preferred' and 'Open to Consideration' under the Wind Energy Strategy of the WCCDP. One of the aims of the Renewable Energy Strategy is to maximise the opportunities for renewable energy development, whilst safeguarding the environment and other amenities, subject to SEA and Habitats Directive Assessment requirements. And as the Commission will be aware, the Planning Authority of WCC does not recommend that planning permission be granted for the proposed wind farm development – this was unanimously agreed by all councillors present at the Dungarvan and Lismore District Meeting on 26 February 2025 (please refer to correspondence from WCC dated 10 March 2025).

We also refer the Commission to the fact that the Minister for Climate, Energy & the Environment Mr. Darragh O'Brien stated in the Oireachtas on 4th November 2025* that the government have no SEA on their onshore renewable energy targets because each County Development Plan had completed an SEA for its own strategies. Therefore, WCC's Renewable Energy Strategy must be considered in all seriousness and with respect as it is the only plan in this Scart Mountain situation that has actual legal and scientific justification.
*[https://www.oireachtas.ie/en/debates/question/2025-11-04/164]

Role of the WCCDP

Section 37G(2)(a)(ii) and (c) PDA 2000 require that the Commission considers the effect on the environment and the Development Plan but in contrast to the position in respect of all other development, by s37G(6), the Commission may grant permission for SID even if the proposed development contravenes materially the Development Plan relating to the area it which it is proposed to situate the development.

Notwithstanding the above, it is submitted that the WCCDP is a solemn binding contract between the people of County Waterford and the planning authority, in this case the Commission. It is submitted that its provisions should be departed from under s37G(6) PDA 2000 only where appropriate and in wholly exceptional circumstances. In this case, breach of the WCCDP would not be appropriate and the proposal to build a wind farm on the site and a connecting Grid Connection gives rise to no such exceptional circumstances. If the Commission does decide to depart from the provisions of the WCCDP, very clear and precise reasons should be given. (See *Attorney General (McGarry) v Sligo County Council* [1991] 1 IR 99, *Byrne v Fingal County Council* [2001] 4 R 565 and *Brophy v ABP* [2015] IEHC 433).

In particular, in *Brophy*, Baker J said that *'the consideration of a development permission in each case is specific to, and intended to be specific to, an individual location and in respect of which it is to be assumed that the individual local authority adopting a plan has a particular and specialist knowledge.'* (para 35)

Project Splitting

It is submitted that, as a separate development, the Scart Mountain GCR Application warrants an NIS and EIAR that is separate to the Scart Mountain Wind Farm one. And yet, the Applicant has submitted to An Coimisiún Pleanála the exact same documentation – EIAR, NIS etc – for the GCR as they did for the proposed Scart Mountain Wind Farm (December 2024), which focuses in the absolute majority on the wind farm site and merely mentions the GCR sporadically throughout. There is also no justification or reasoning provided for the time gap of ten months.

It is therefore submitted that the Scart Mountain GCR Application is fundamentally flawed due to unnecessary project splitting. This has undermined transparency, proper assessment and public participation. (The public was – and has been – deprived of the opportunity to comment on the full environmental effects of the project in a single, transparent process.)

Despite being submitted separately, the GCR Application must still meet full EIA and AA requirements, yet the accompanying EIAR and NIS fail to provide an adequate or up-to-date evaluation of the grid connection works; they are outdated, incomplete and lacking essential surveys, cumulative assessments and site-specific analysis. This leaves the Commission looking at an Application that contains insufficient environmental information, procedural issues and improper project fragmentation, and as a result puts the Commission in a position where it is unable to lawfully conclude that the propsoed GCR develoment will not have any adverse effects.

Climate change

The Applicant pitches energy above biodiversity, which shows a self-serving bias that is wholly regressive in the fight against climate change. Their assertion that the implementation of renewable energy trumps biodiversity is divisive and scientifically inaccurate. **Renewable energy tackles the cause of climate change.** But a zero-carbon world would still face ecological collapse if biodiversity is lost. **Biodiversity tackles the consequences and stabilises the planet.** Biodiversity is the planet's *life-support system*. Destroying it weakens Earth's ability to heal itself even if emissions fall. **Climate mitigation and biodiversity protection must work hand in hand**, not compete for policy or investment priority.

We ask the Commission to heed professionals who advocate the following:
"Biodiversity is not a 'nice to have' – it is a critical element of delivering action on climate change, health and wellbeing, and sustainable food production."
Prof. Rob Brooker, head of ecological sciences at the James Hutton Institute

"Addressing climate change and biodiversity loss requires integrated approaches that do not compromise one goal for the other."
Climate mitigation and biodiversity conservation Authors: Shah, M.A.R., et al. Year: 2024

Community

Beyond the ecological destruction offered, the proposed Scart Mountain development will destroy the quality of life of a rural community that lives appreciatively and respectfully in the surrounding area.

We have put this Observation together on behalf of the group's members and the residents, farmers, small business owners and other persons living in and around the area of the proposed Scart Mountain development who will be affected by the proposed wind farm and construction of the proposed Grid Connection Route.

The Applicant has had years in which to prepare this Application and access to a wide range of professional help in order to do so. We are a small group of local people who have had very limited

time in which to respond to this Application. We have invested all of our free time to read through, and try to understand, a mass of detail across a wide range of specialist subjects, and to present an Observation that is as comprehensive as time and expertise allows us. However, our strength in this situation is our local knowledge of the area, and that has helped us present the full facts of the situation, which are absent from the Applicant's EIAR and associated documents.

Expertise of the Commission

In respect of both EIA and Appropriate Assessment, it is submitted that the Commission will need to assemble a team of with expertise in multiple specialisms and legal knowledge/legislation in order to properly assess this Application. Please note that no disrespect is intended, but no one person could ever have expertise in all of the sub-disciplines and legal knowledge/legislation which arise in complex planning applications such as this.

We request that in giving its decision in this matter, the Commission gives an account of;

- the extent to which it examined and understood the legalities, science and the background in all of the relevant documentation
- how it addressed that task (assembly of a multi-disciplinary team, use of outside consultants etc)
- the qualifications and experience of the specialists involved.

Grounds for Refusal

The EIAR submitted with the Application is not fit for purpose. It is riddled with assumptions, conceptual designs, theories and unbridgeable lacuna and fails in its fundamental requirement to choose a correct location in the first place, never mind the requirement of the EIA Directive to provide complete, precise and definitive findings, and remove any reasonable scientific doubt that the integrity of a Natura 2000 site (of which there are two connected to the proposed GCR) will not be adversely affected. Our main concerns for this Grid Connection planning application are included in the attached Observation and include (but are not limited to):

- Biodiversity
- Ornithology
- Protected and vulnerable species
- Hydrology
- Impacts on EU-Designated Sites
- No satisfactory or comprehensive GCR-specific cumulative/in-combination assessment
- The Waterford City & County Council Development Plan 2022-2028
- The Planning Authority of Waterford County Council does not recommend that planning permission for the associated wind farm be granted
- The proposed Scart Mountain Wind Farm development, which this Grid Connection will serve, is a material contravention of the Renewable Energy Strategy, and the Biodiversity and Environment, Blue Green Infrastructure and Tourism provisions of the Waterford City & Council Development Plan (2022-2028)
- The proposed Scart Mountain development overall, which this Grid Connection is part of, is a material contravention of the Birds and Habitats Regulations, The Water Framework Directive, Ireland's River Basin Management Plan, and The Water Action Plan
- Project splitting
- Inadequate mitigation measures
- inadequate survey methodology that does not meet the requirement of the EIAR
- No reasonable alternatives have been addressed or provided
- The proposed development is contrary to Ireland's Climate & Biodiversity Emergency 2019 declaration, the 4th National Biodiversity Plan, Nature Restoration Laws and many other legislations.

- The proposed development is contrary to the 'Consideration of Alternatives' requirements of the EIA Directive.
- The EIAR is woefully lacking in any adequate assessment of the two Natura 2000 sites – Blackwater River SAC and Dungarvan Harbour SPA – and the potential GCR-specific impacts and risks to them and the protected species therein. We remind the Commission of the Courts of Justice of the European Union ruling in Case C-258/11 Peter Sweetman and Others v An Bord Pleanala, who found that the decision must comply with:

'So far as concerns the assessment carried out under Article 6(3) of the Habitats Directive, it should be pointed out that it 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 works proposed on the protected site concerned.'

Previous Refusals

This same group has invested years of our private lives challenging the proposed associated Scart Mountain Wind Farm that is currently awaiting a decision, and the proposed Dyrick Hill Wind Farm SID (case Ref: 317265 that was refused by the Commission in October 2024 but is now at Judicial Review). We thank you on ruling against Dyrick Hill Wind Farm – as well as the nearby Coumnagappul Wind Farm (case ref: 318446) – that would both share the same hydrological and GCR pathways as the proposed Scart Mountain Wind Farm, and that you chose to rule in favour of protecting habitats and species as well as supporting the Waterford City and County Council Development Plan. We urge the Commission to understand that the exact same risks, perhaps even greater, are presented by the developer of the Scart Mountain project, FuturEnergy Scart Mountain DAC.

Requests for further information

We are aware that the Commission may – as with the associated Scart Mountain Wind Farm proposal – refer back to the Applicant for extra information. While we do not believe that the Applicant deserves the opportunity to provide additional information due to the lack of due diligence in their Application when it comes to surveys, reports, missing and inaccurate information and errors, we ask the Commission to consider this: If the Applicant cannot provide correct information in their initial Application, how can the Commission be 100% certain – beyond any doubt whatsoever – that the additional information provided will in fact be correct itself, and not – as is seen throughout this Application – also inaccurate and incomplete.

In light of this, we fully trust that the Commission will carry out due diligence and proper, comprehensive assessment of the Application and its relevant matters (including, but not limited to, legislation regarding Ireland's legally-binding obligations in regard to protecting and restoring biodiversity, rather than merely rely on the Applicant's claims and statements made in their Planning Statement and Chapter 4 regarding the Commission's so-called 'legal duty' to give priority to renewable energy projects; up-to-date data on biodiversity in the area of the proposed Grid Connection route; and so on).

We also request that the Commission consider an Oral Hearing so that the Applicant can be questioned on the content of their Application before the Commission makes its final decision. We would also appreciate the opportunity to view and react to the responses the Applicant provides the Commission when you request further information from them.

We trust that your own adherence to matters of proper planning, compliance with national and European Law and protection of the environment will continue to take precedent. County Waterford has, and can continue to, assist in Ireland's transition to 'greener' energy. However, the area for the proposed Scart Mountain developments is not an area that anyone can afford to sacrifice.

A payment of €50 has been made, in payment of the statutory fee for making an Observation on a SID planning application, at the same time as this cover letter and the attached Observation has been delivered to the Commission's office by hand.

We thank you for your time and consideration and look forward to receiving your acknowledgement in due course.

Yours faithfully,

Richard Gorodecky
Director
Knockmealdown Protection Organisation CLG

NB:

1. Throughout this Observation, we use the term 'the Commission'. This refers to both the Inspector in charge of the case and the Board.
2. As the Commission has been asked by the Applicant to consider the two Applications (Scart Mountain Wind Farm and Scart Mountain Grid Application) as one overall project, and given the fact that, with the exception of the Planning Statement, all documentation submitted in this Application is exactly the same as documentation submitted for case ref. 321522, the Commission may find an overlap and/or reference to case 321522 throughout our Observation. We would like to take this opportunity to point out that any reference to case 321522 is merely used to support, highlight and emphasise points made in this Observation and not intended to be used for consideration for case ref 321522 as we know that Observations can no longer be submitted and considered for that. We do, however, refer to the project as a whole (Scart Mountain Wind Farm and Grid Connection) in many instances – as does the Applicant in their documentation and Applications – because in reality, that is what we are dealing with irrespective of the fact that two separate Applications have been submitted. As the Applicant themselves state on their Planning Notices, '*This application, and the wind farm application (ABP Ref. 321522) are functionally interdependent and constitute a single project.*' One development cannot function without the other, and so both must be argued against and considered when making a decision.

FOLDER 1 OF 2

OPENING LETTER

KNOCKMEALDOWN PROTECTION GROUP INTRODUCTION

CHAPTERS

1. BIODIVERSITY
2. ORNITHOLOGY
3. HYDROLOGY
4. COLLIGAN RIVER & FINISK RIVER CROSSINGS
5. SILT FENCING; HDD
6. MODELIGO PWS
7. TRAFFIC
8. HERITAGE
9. WATERFORD CITY & COUNTY COUNCIL DEVELOPMENT PLAN 2022-2028 WIND ENERGY STRATEGY ZONING
10. REBUTTAL OF LEGAL AND POLICY ARGUMENTS
11. CRITICAL CONSTRAINTS WITHIN IRELAND
12. COMMENTS ON APPLICANT'S EIAR SCHEDULE OF MITIGATIONS CHAPTE (Found in Folder 2)
13. FAILURE TO PROVIDE REQUIRED ZONING INFORMATION & DETAILS OF PLANNING APPEALS
14. NO EVIDENCE OF LEGAL CONSENT OR INTEREST IN LAND
15. CUMULATVE IMPACTS
16. PROJECT SPLITTING
17. [redacted] KDG KNOCKMEALDOWN PROTECTION GROUP.
18. SEA/WEDG

CHAPTER REMOVED FROM DOCUMENTS PRE-SUBMISSION. KDG.

APPENDICES: (Found in Folder 2)

The Knockmealdown Protection Group is a local and broadly-based community association, representing the interests of residents, farmers, small business owners and other persons living in and around the area where the proposed Scart Mountain Wind Farm and associated Grid Connection Route (GCR) would be located, if permitted.

In March 2023, in response to a planning application for the proposed nearby Dyrick Hill Wind Farm (case ref: PA93.317265), the Knockmealdown Protection Group was established as an unincorporated association of members. The Group is managed by a local committee, representing almost 300 members of the wider community; and the members include an elected chairperson, secretary and treasurer.

Members examined carefully the planning application and the supporting documentation for the proposed Dyrick Hill Wind Farm, from which they concluded that the proposed development, if permitted, would result in a number of adverse consequences, including damage to the health of residents living close to the wind farm site. Landscape quality, natural heritage, wildlife and property values would also be adversely affected; and the members of the Knockmealdown Protection Group also discovered a significant number of errors and inconsistencies in the applicant's documentation.

The Knockmealdown Protection Group members' detailed knowledge of the area in which the proposed wind farm site is located, together with consideration of the impacts mentioned above, led to the conclusion that the application site is inappropriate and unsuitable for the proposed development. The local community also concluded that if the Dyrick Hill Wind Farm were to be granted planning permission, other alternative and potentially more environmentally suitable and less damaging uses of the subject lands would be ruled out.

The Knockmealdown Protection Group submitted detailed observations to (then) An Bord Pleanála in August 2023, expressing concern about this proposed wind farm and its environmental and social effects; and, on 03 October 2024, the Board made a decision to refuse planning permission for the wind farm. As the Commission will be aware, that decision has been challenged in the High Court by Judicial Review proceedings initiated by the applicant for planning permission (Dyrick Hill Wind Farm Limited v An Bord Pleanála – H.JR.2024.0001470).

The Knockmealdown Protection Group were aware for some considerable time that another planning application would be made for a wind farm on a site adjoining the proposed Dyrick Hill Wind Farm – namely Scart Mountain Wind Farm. When the planning application for said wind farm was submitted by FuturEnergy Scart Mountain Designated Activity Company in December 2024, the Group decided to examine the application with an equivalent degree of thoroughness and attention to detail.

Following that examination, the Knockmealdown Protection Group concluded that the proposed Scart Mountain Wind Farm would result in a similar number of adverse consequences for the environment, for wildlife, biodiversity, and for the quality of life, health and residential amenity of people living in the area around the proposed development site,

and that the location was equally inappropriate and unsuitable for the proposed development. The Knockmealdown Protection Group decided to submit to (the then) An Bord Pleanála their combined observations on the above-referenced planning application by Futurenergy Scart Mountain DAC Ltd.

In response to the Scart Mountain Wind Farm application submitted by Futurenergy Scart Mountain DAC, the Knockmealdown Protection Group decided to establish a Company Limited by Guarantee, and this was done in February 2025, the name of the company being the Knockmealdown Protection Organisation CLG (Company registration number 781657). The Company also registered the name of Knockmealdown Protection Group as a business name on 17 February 2025.

By a resolution made at a meeting of the company in February 2025, it was further decided that the Observation against the proposed Scart Mountain Wind Farm submitted to An Bord Pleanála would be made in the name of the company, and that Environmental Management Services (EMS) would be asked to act as agent for the Group and the company. EMS submitted an Observation on the Scart Mountain Wind Farm SID planning application on behalf of the Knockmealdown Protection Group and the Knockmealdown Protection Organisation CLG.

When the planning application for the proposed Scart Mountain Grid Connection (case ref: VA93.323791), which is associated with the proposed (and as yet, undecided) Scart Mountain Wind Farm, was submitted by FuturEnergy Scart Mountain DAC on 2 October 2025, the Group once again decided to examine the application with an equivalent degree of thoroughness and attention to detail, and concluded that the proposed development would also result in a number of adverse consequences for the environment, the watercourses, wildlife and biodiversity. Therefore, the Knockmealdown Protection Group decided to submit another Observation on this Strategic Infrastructure Development (SID) Application.

The principal objectives of the Knockmealdown Protection Group and the Knockmealdown Protection Organisation CLG are:

1. To protect and preserve the natural environment and cultural heritage of the Knockmealdown Mountains and the adjacent regions in Counties Waterford, Tipperary and Cork;
2. To actively oppose the development of industrial or other projects which may cause damage to the environment, or which may alter the natural character of the Knockmealdown Mountains;
3. To communicate as widely as possible all relevant information about the natural beauty and uniqueness of the Knockmealdown mountain range, and the area's vulnerability to industrial-scale wind farming;
4. To examine and evaluate the SID planning applications by Futurenergy Scart Mountain DAC, and to identify the deficiencies and irregularities in the application and it's supporting documentation, a task undertaken by the committee members;
5. To identify and examine the environmental and social impacts, including potentially serious long-term impacts, of the proposed Scart Mountain wind farm on the communities and the environment in the townlands where the wind farm would be located, if permitted, and in the surrounding areas;
6. To engage in the planning process and to make submissions to An Coimisiún Pleanála in response to the SID planning applications associated with the Scart Mountain Wind Farm and Scart Mountain Grid Connection Route, including the appointment of specialist consultants to assist in this process; and,

7. To share and communicate (through the Knockmealdown Protection Group's website, Facebook page and other media) to the wider community in the surrounding areas all relevant information about the proposed Scart Mountain Wind Farm and Scart Mountain Grid Connection Route, which the members of the Group consider would be detrimental to the health and wellbeing of the community, including effects on the environment, on tourist amenities, residential property prices, other land uses, farming activities, noise, impact on the local amenities, and biodiversity.

The Chairperson of the Knockmealdown Protection Group is Mr Richard Gorodecky and the Honorary Secretary is Ms Geraldine Lacey. Ms Geraldine Lacey and Mr Richard Gorodecky are Directors of the Knockmealdown Protection Organisation CLG.

The address provided below may be used by An Coimisiún Pleanála to contact both the Knockmealdown Protection Organisation CLG, and the Knockmealdown Protection Group. The Commission should note however, that this Observation is being made in the name of the registered company, the Knockmealdown Protection Organisation CLG.

Knockmealdown Protection Group CLG,
c/o Honorary Secretary Ms Geraldine Lacey,
Coolnacreena,
Cappoquin,
County Waterford,
P51 C6F3

BIODIVERSITY

'Without careful planning and management, renewable power infrastructure's expanding footprint could, itself, drive declines in biodiversity. This, in turn, could undermine ecosystems' resilience to climate change, their capacity to sequester carbon and their contribution to societal adaptation.
Source: The Organisation for Economic Co-operation and Development (OECD)

The following chapter is in relation to the potentially severe impacts on biodiversity that the Applicant's proposed Grid Connection Route (GCR) could have. The Applicant's overarching assertion that the implementation of renewable energy trumps biodiversity is both divisive and scientifically inaccurate. This assertion seems to have informed the attitude in which it has carried out the EIAR. We ask the Commission to remain mindful that climate mitigation and biodiversity protection must work hand in hand, not compete for policy or investment priority.

KEY SUMMARY POINTS

- **Survey methodology is inadequate**: The Applicant did not carry out sufficient, up-to-date, or site-specific field surveys for the Grid Connection Route (GCR).
- **Overreliance on desktop studies**: Biodiversity assessments rely heavily on outdated desk-based data rather than current, targeted ecological surveys.
- **Lack of field surveys along critical areas**: No meaningful field surveys were completed on the GCR, including Colligan Woods, Inchindrislawood, or along the Finisk River (which falls under the Blackwater River SAC) and Colligan River (which feeds directly into the Dungarvan Harbour SPA).
- **Outdated and incomplete data**: Much of the ecological data used is 1–2 years old, excluding all of 2025, making the EIAR obsolete and incomplete.
- **Insufficient aquatic surveys**: eDNA and kick-sampling locations were mostly upstream or far from the GCR; the only Colligan River aquatic site surveyed was upstream of the HDD crossing.
- **Inaccurate assumptions about species presence**: The Applicant repeatedly assumes species absence without evidence, contradicting best ecological practice.
- **Otter assessment is incomplete**: No clear evidence of otter field surveys on the Finisk or Colligan Rivers; potential impacts downplayed; derogation licence requirements not addressed.
- **Badger surveys missing**: No GCR-specific surveys for badger despite known active setts in the area and legal requirements for derogation licences.
- **Protected species poorly assessed**: Common Frog, Smooth Newt, Common Lizard, Marsh Fritillary and White-clawed Crayfish all lack adequate field study or are evaluated using questionable or incorrect assumptions.
- **WD2 woodland habitat omitted**: Mixed broadleaved–conifer woodland habitat (WD2) along the route is unassessed, despite its ecological importance.
- **EU site impacts**: Applicant admits potential adverse impacts to the Blackwater River SAC and Dungarvan Harbour SPA through possible water quality degradation.
- **Mitigation measures overstated**: Claims that mitigation will 'ensure protection' are not scientifically supported.
- **Failure to assess cumulative impacts**: The Applicant did not address grid connection overlaps or combined impacts with Dyrick Hill and Coumnagappul wind farm GCRs.
- **Overall conclusion**: EIAR and NIS are incomplete, outdated and legally insufficient; they fail to remove scientific doubt about risks to protected habitats and species, undermining compliance with EU and national environmental law.

THE APPLICANT HAS NOT EMPLOYED SATISFACTORY SURVEY METHODOLOGY OR SURVEY METHODOLOGY THAT MEETS THE REQUIREMENT OF THE EIAR

1. LACK OF FIELD SURVEYS ALONG THE GCR

In the EIAR Chapter 6: Biodiversity, Section 6.1.3 Purpose of the Chapter, the Applicant states:

The purpose of this Biodiversity Impact Assessment is to describe the baseline ecology of the proposed project (i.e. the proposed wind farm site, the proposed GCR and the proposed works along the TDR), through desktop review and ecological field surveys…

It is submitted that this statement is misleading and incorrect. There is a distinct lack of any evidence of field surveys having been carried out on the GCR, and from what can be seen when reading the EIAR, the Applicant relies (for the majority) on desktop review studies. This is of particular concern when the route includes the forestry of Colligan Woods and Inchindrislawood and the environs of the HDD watercourses – where the Colligan River and the Finisk River are of significant importance due to their important hydrological connection to the Dungarvan Harbour SPA and Blackwater SAC respectively. As part of these two EU-Designated Sites, and as homes for EU Directive (92/43/EEC) Annexed Species and Habitats, these rivers and their environs deserve – and require – an extensive baseline environmental assessment.

2. LACK OF INVESTIGATIONS AT COLLIGAN RIVER AND FINISK RIVER CROSSINGS & INADEQUATE, INSUFFICIENT AND INCOMPLETE AQUATIC STUDIES

To avoid full repetition, we refer the Commission to our chapter **4. Colligan River & Finisk River Crossings** for full detailed information regarding the waterways, which we ask the Commission to read and bear in mind while reading this chapter.

3. UNSUITABLE AQUATIC SURVEY METHODS

The Applicant has not employed survey methodology that meet the requirement of the EIAR. We refer the Commission to the section, 'Unsuitable Locations and Methodology for Aquatic Surveys' and 'Unsuitable Survey Methods for Fish' below.

4. UNACCEPTABLE RELIANCE ON DESKTOP REVIEW STUDIES

As already mentioned, the Applicant does not provide any detailed information or content on field surveys carried out along the GCR. In fact, when it comes to the GCR, it appears that the Applicant relies mainly on desktop review studies. The only exception is the eDNA sampling and Kick Sampling that took place between the 15th and 18th August 2022 and the 19th and 20th July 2023, but in locations far away from the GCR (bar two places on the Finisk), and upstream of the Colligan HDD crossing.

Best practice in ecological assessment, as set out in the EPA's *Guidelines on the Information to be Contained in Environmental Impact Assessment Reports* (2022) and in CIEEM guidance, clearly indicates that desk-based data sources are to be supported by appropriate and up-to-date field surveys. Such surveys are necessary to accurately characterise the ecological baseline, verify the presence or possible absence of protected species and habitats, and provide site-specific ecological information relevant to the proposed development and its surroundings.

Reliance on desk-based records alone (including NBDC datasets) does not establish the current ecological conditions of the site. These datasets may be incomplete, dated or spatially limited (see details of NBDC's disclaimer below), and therefore must be supplemented by targeted, site-specific field surveys undertaken at appropriate times of year and to recognised survey standards.

In the absence of robust, site-specific ecological survey data, it is not possible for the Applicant to demonstrate that the ecological baseline has been adequately described, nor that potential impacts on protected species, habitats and sensitive ecological receptors have been fully assessed and mitigated for in the case of any negative impacts. Consequently, the Application fails to meet the standards of best practice required under the EPA and CIEEM guidance, and does not provide sufficient information to enable the Commission to conduct a complete, accurate and legally robust assessment of ecological effects.

Reliance on National Biodiversity Data Centre

In the Applicant's EIAR Chapter 6: Biodiversity, section 6.5.1.5.2 National Biodiversity Data Centre, it states:

A search of the NBDC database was carried out in August 2023 and November 2024 for records of protected flora and fauna recorded (excluding avifauna) and invasive nonnative species (INNS) listed under the Third Schedule of the Birds and Natural Habitats Regulations (2011) within hectads S10, X19 and X29, which encompass the proposed project.

It is noted that the Applicant carried out their NBDC searches, which they rely heavily on, in August 2023 and November 2024 – two years and one year prior to this Application. While August 2023 is questionable, November 2024 may be considered an acceptable date for the Scart Mountain Wind Farm Application (case ref. 321522) of which this GCR Application is connected as an overall project. However, neither date can realistically be deemed acceptable for this GCR Application when considering the reliability of data in terms of timing. Data that is one-to-two years old is a considerable lacuna in terms of an Application and the proposed development's possible effects on biodiversity.

Furthermore, while the NBDC is a valuable and credible resource for biodiversity information at national level, it is important to recognise the limitations of this dataset when applied to site-level decision-making in the planning process. The NBDC collects, manages and provides biodiversity data on Ireland's species, habitats and ecosystems that has been compiled from a wide range of sources, from professionals to members of the public. As such, it represents a credible and authoritative secondary data source, suitable for use in the desk study phase of ecological assessments, but is only indicative, not definitive information.

The NBDC itself states on the Excel sheets that can be downloaded from its online platform:
Quality of information: The National Biodiversity Data Centre makes every effort to ensure the quality of the information available on this website and updates the information regularly. ***Before relying on the information on this site, however, users should carefully evaluate its accuracy, currency, completeness and relevance for their purposes.*** *The National Biodiversity Data Centre* ***cannot guarantee*** *and assumes no legal liability or responsibility for* ***the accuracy, currency or completeness of the information.***
[highlighted for emphasis]

NBDC records do not represent a complete or up-to-date inventory of biodiversity for any given site. The presence of a record confirms that a species has been sighted and recorded at or near a location, but it is crucial to bear in mind that the **absence of records does not imply absence of species.** Many species and habitat datasets are incomplete, spatially

coarse, and may not reflect recent changes in site condition or species distribution. Therefore, the NBDC database should **not be relied upon as sole evidence** for determining the biodiversity status of a site. And yet, it appears that the Applicant does so when it comes to the GCR.

In this context, reliance on NBDC data alone, without adequate supporting field survey evidence, does **not provide a robust or reliable assessment** of the ecological baseline or potential impacts of the proposed GCR. Any conclusions drawn solely from NBDC data are therefore **insufficient to meet the standards of evidence required under the Planning and Development Acts and the Habitats Directive**.

Reliance on other Applications for proposed wind farm developments in the area

In addition to failing to carry out its own field surveys and relying on databases, the Applicant also places reliance on assessments carried out by other wind farm developers. There is no guarantee that the information contained in these other EIARs is accurate, correct or up to date, and it can also be heavily biased towards the positive perspective for a developer (with lacuna, misleading information and clever / strategic wording). A perfect case in point is the Applicant's dependence on the proposed Dyrick Hill Wind Farm, the location of which is proposed to be directly adjacent/neighbouring the proposed Scart Mountain Wind Farm.

EIAR Chapter 6: Biodiversity, Section 6.5.1.7 Review of Previous Ecological Assessments states:
A review of previous ecological assessments which were carried out in proximity to the proposed project was undertaken and are summarised below. The closest development to the proposed project is Dyrick Hill Wind Farm, the main findings in relation to ecology are outlined hereunder.

It is submitted that the Dyrick Hill Wind Farm (Doherty Environmental Consultants (DEC), 2023) ecological assessment cannot be relied upon as a trustworthy source due to the vast number of errors, inconsistencies and cut-and-paste mistakes within the EIAR (even the names of roads, areas, SACs etc were incorrect and referenced places in other counties of Ireland). Therefore, the Commission cannot place any confidence in the information provided within that EIAR upon which this Application relies here.

Given the above, it is submitted that the Commission should ensure that any biodiversity assessments supporting this Application are based on **comprehensive, up-to-date field data**, and not solely on secondary sources and desktop review studies. Where such field data is absent or insufficiently detailed, the Application should be deemed **deficient in its assessment of biodiversity and impacts**.

5. OUTDATED SENSITIVE DATA USED

In the Applicant's EIAR Chapter 6: Biodiversity, section 6.5.1.5.1 National Parks Wildlife Services, it states:
*Sensitive Data Request: A sensitive data request for hectads S10, X19 and X29 (which encompass the proposed project) was issued to NPWS on **3 August 2023** and a NPWS data package was received on **21st August 2023**.* [highlighted for emphasis]

Once again, we draw the Commission's attention to the timeframe. August 2023 is **two years prior** to when this GCR Application was submitted – 2 October 2025. Even for an EIAR submitted in December 2024 (for the Scart Mountain Wind Farm; case ref: 321522), this is inexcusably outdated data to be using. The Applicant should have provided something much more current and relevant to the GCR Application. If they are submitting an

Application for the GCR that is separate to the wind farm project (i.e. not all under one Application, or even submitted at the same time, but 10 months apart), the Applicant should have provided a new NIS and EIAR that has information focused specifically and solely on the GCR and contains information that is current to the timeframe, as opposed to being a 'second thought', as is the case in most of this Application's EIAR. A gap of two years in data – specifically sensitive data on protected species etc – CANNOT be deemed acceptable and is a substantial lacuna in the Application, which – as a result – **fails to remove all scientific doubt** regarding potential adverse impacts on sensitive and protected species.

Case in point: On 3 September 2025, it was reported in the news that **the first White-tailed Eagle (once extinct in Ireland, red-listed on the BOCCI and a strictly protected species listed under Annex I of the EU Birds Directive, requiring special conservation measures and the protection of its habitats) was born in Waterford in since the 1800s**:
'The breakthrough comes as part of Ireland's national reintroduction programme, which has been working since 2007 to restore the once-extinct bird of prey to Irish skies. Since 2007, 245 young eagles sourced from Norway have been released in Ireland by the National Parks and Wildlife Service. Breeding pairs have since established themselves in Clare, Cork, Tipperary and Galway, and now, finally, in Waterford. The two adult eagles, identifiable by their wing tags—K (male) and L (female)—were released in Waterford in 2021. For the past four years, volunteers from WFN have been monitoring their movements ***along the Blackwater estuary, the Knockmealdowns,*** *and even into East Cork. Last week, a local wildlife photographer spotted the pair with a juvenile eagle showing the telltale dark tail feathers of a fledgling. Experts confirmed that this young bird is indeed their chick.*
[highlighted for emphasis]

This information would not have been available when compiling the EIAR for the Scart Mountain project. And yet imagine if the process was the other way around and the GCR Application was submitted first (December 2024) with the existing EIAR and NIS, and the wind farm Application – with exact same documentation and no updated or site-specific data/survey findings etc – followed in October 2025. The Commission would be looking at an EIAR and NIS for a development with turbines that did not contain this vital, current data. That is unacceptable and unthinkable.

5. INFORMATION IS OUTDATED OR MISSING

In addition to the point highlighted above regarding data from August 2023 and November 2024 having been provided for an Application submitted in October 2025, we also draw the Commission's attention to the following regarding outdated and missing information:

- As stated in the EIAR, all data was accessed in November 2024. This means that **all of 2025** is completely omitted, rendering the information in the Application for the GCR incomplete.
- EIAR Chapter 6, Table 6-2: Date of Ecological Field Surveys Undertaken for the Proposed Project lists the search results dated 2022 and 2023, thus <u>completely omitting all of Q4 2023, all of 2024 and all of 2025.</u>

This leaves an incomplete EIAR that does not provide an up-to-date, accurate or complete overview of the area. The Applicant has provided information that is outdated (and, as a result, at times lacking) for this specific Application development due to the EIAR having been completed and initially submitted at the end of 2024, more than ten months prior to submission of this Application.

6. SURVEY LIMITATION

In EIAR Chapter 6: Biodiversity, Section 6.3.2.3 Survey Limitation, it states:
Access was granted in all areas of the proposed project which were subsequently surveyed by TOBIN Ecologists and a team of third-party specialists. However, some small areas of the proposed project could not be fully surveyed on foot due to dense vegetation and/or steep terrain. Following best practice guidelines (CIEEM, 2018), ***these areas were instead surveyed and visually assessed from adjacent lands and/or from public roads using binoculars****, where possible, and were supported by information obtained from a review of aerial photography and desk study data. Notwithstanding the limited access to a small number of areas, a comprehensive description of the baseline biodiversity of the study area, likely to be affected by the proposed project, was captured and sufficient data was gathered to inform the impact assessment.* [highlighted for emphasis]

It is submitted that surveying dense vegetation and/or steep terrain from adjacent lands and/or from public roads for frogs, newts, lizards and Devil's-bit Scabious etc is a completely unreliable and unacceptable survey method. Furthermore, the Applicant fails to state the location, amount and size of these 'small areas', which leaves incomplete results that **fail to remove all scientific doubt** regarding potential adverse impacts, and leaves the Commission in a position where they cannot make a fully informed decision.

7. UNRELIABLE MITIGATION MEASURES

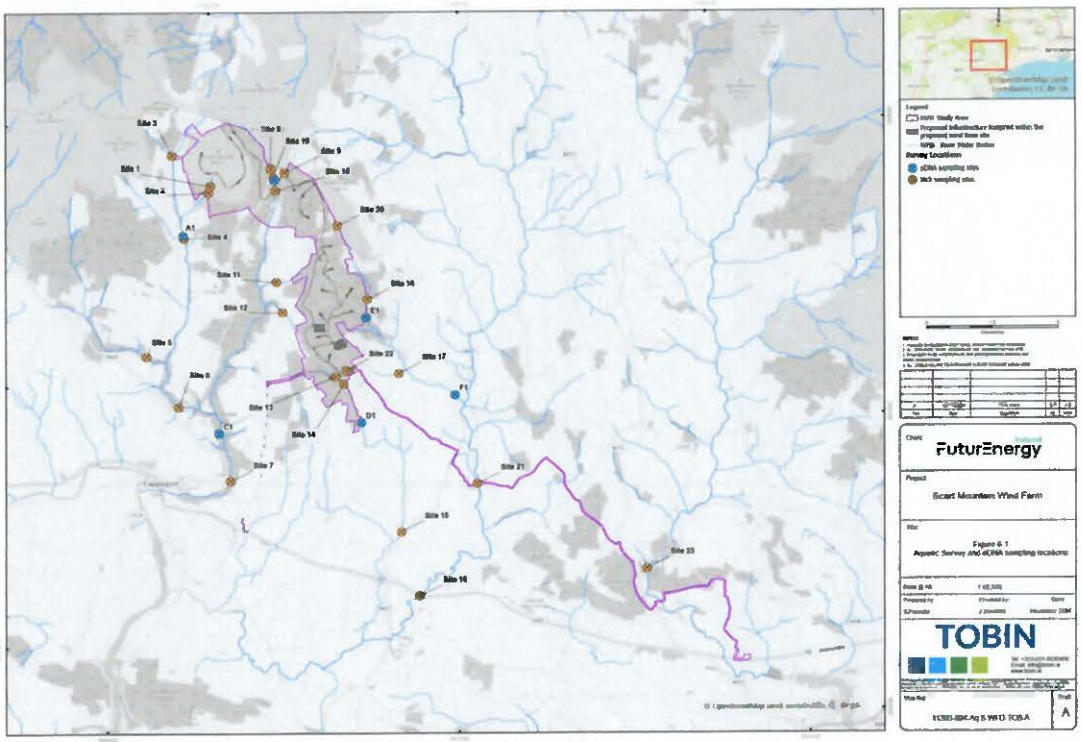
As a result of all of the above, any mitigation measures put forward by the Applicant pertaining to the GCR, Colligan River and Finisk Rivers (among other factors) cannot be considered as reliable or robust as one cannot mitigate for an unknown or poor environmental baseline survey.

Combined, this means that the incomplete and outdated information provided **does not satisfy the *EPA's Guidelines on the Information to be Contained in Environmental Impact* Assessment Reports (2022), is not in line with CIEEM guidance**, and fails to remove all scientific doubt regarding potential adverse impacts on the EU-protected waterways and the species therein.

UNSUITABLE LOCATIONS AND METHODOLOGY FOR AQUATIC SURVEYS

In EIAR Chapter 6: Biodiversity, Section 6.3.2.2.2.4 eDNA Water Sampling, it states:
Environmental (e)DNA water sampling was carried out at six locations in all hydrologically connected waterbodies within and downstream of the proposed project (refer to Figure 6-1). The six survey locations were placed strategically at ***downstream*** *locations which were informed by the presence of suitable habitat and ecological expertise. […]* ***It is important to note that eDNA does not provide definitive confirmation of species presence or absence****, but rather offers an indication of their likely occurrence. The eDNA surveys results were therefore considered in conjunction with all other aquatic survey results.*
[highlighted for emphasis]

1. eDNA is an imprecise survey method, as admitted by the Applicant (*'eDNA does not provide definitive confirmation of species presence or absence.'*) However, the EIAR has an almost total reliance on the eDNA survey. And out of the six sites, **only two** are linked (at a great distance) to the proposed GCR (E1 and F1 on the map below). From this admission, we know that the Applicant's EIAR Chapter 6: Biodiversity has lacunae and DOES NOT contain complete, precise and definitive findings and conclusions, and is therefore **not capable of removing all scientific doubt** (as is required by law) as to the effects of the proposed development. With this in mind, the Commission cannot be expected to grant permission to the Application.
2. If the Commission takes a look at the map below, they will see that with regards to the GCR, ALL of the eDNA locations were in fact **upstream** of the proposed works. DNA is transported downstream to the sample site. Therefore, eDNA cannot give any information of anything below the sample site. Therefore, the eDNA sampling does not provide any information at all pertaining to the proposed GCR works.



Source: EIAR Figure 6-1 Aquatic Survey and eDNA Sampling Locations

Furthermore, with the exception of one – Site 21 – all the Kick Sampling sites are either extremely far away or upstream (Site 23) of the GCR. In fact, Site 23 is the ONLY aquatic field survey to have been carried out for the Colligan River.

The Applicant has not met even the basic requirements of an accurate Aquatic Survey. There are no reliable results with which to understand how the proposed works could affect the species therein and or how effects could or should be mitigated.

UNSUITABLE SURVEY METHODS FOR FISH

In their EIAR Appendix 6-3 Aquatic Survey Report / 3.1.2 Fish, the Applicant shares the impressive findings of an Inland Fisheries Ireland (IFI) survey on the Finisk River that reveal a habitat for brown trout, salmon, stone loach, eel, lamprey and three-spined stickleback. The method the IFI used was electrofishing.

IFI uses electrofishing and many forms of netting (gill netting, fyke netting, seine netting and beam trawl) as the principal survey methods to monitor fish for the Water Framework Directive (WFD). These are seen as the established methods for accurate assessment. [Source: http://wfdfish.ie/index.php/fish-stock-assessment/]

However, the Applicant chose to rely on eDNA sampling as their fish survey method. A method the Applicant themselves defines in Chapter 6: Biodiversity 6.3.2.2.2.4 eDNA Water Sampling as *'eDNA does not provide definitive confirmation of species presence or absence.')*
By this admission, we must assume that an unsuitable survey method has been employed as the results do not contain complete, precise and definitive findings.

The Applicant undertook the following aquatic survey methods:
SIX eDNA SAMPLING SITES
eDNA is an imprecise survey method, as admitted by the Applicant (*'eDNA does not provide definitive confirmation of species presence or absence.')* However, the EIAR has an almost total reliance on the eDNA survey.

Out of the six sites, **only two** are linked (at a great distance) to the proposed GCR (E1 and F1 on the Applicant's Figure 6-1 Aquatic Survey and eDNA sampling locations in EIAR Chapter 6) and both of these are on the Finisk River – the Applicant carried out no eDNA sampling on the Colligan River. In lotic systems (flowing water), DNA is transported downstream to the sample site. Therefore, eDNA cannot give any information of anything below the sample site. The nearest sample site is approximately 2 km above the proposed GCR. Therefore, the eDNA sampling does not provide any information at all about the proposed GCR.

From this admission, we know that the Applicant's EIAR Chapter 6: Biodiversity has lacunae and DOES NOT contain complete, precise and definitive findings and conclusions, and is therefore **not capable of removing all scientific doubt** (as is required by law) as to the effects of the proposed development. Therefore, with this in mind, the Commission cannot be expected to grant permission to the Application.

HABITAT SUITABILITY SURVEY
This is a method of **prediction** based on perceived flow and gradient. And the surveyor's ability to see fish. It is NOT QUANTITATIVE and CERTAINLY NOT A SCIENTIFIC MEASUREMENT; it is an 'educated guess' and subject to observer bias.

The surveys were carried out between the 15th and 18th August 2022 and the 19th and 20th July 2023. This July and August 'snapshot' of waterways does not factor in the seasonally dynamic nature of waterways and is also more than two years old when considering this specific Application, and therefore very outdated.

'Only recently have fisheries scientists begun to understand the importance of temporal stream channel dynamics and flow variability on habitat and fish populations (Poff and Ward 1989; Palmer and Poff 1997).'
Source: *Habitat Evaluation*. Tammy J. Newcomb, Donald J. Orth, and Dean F. Stauffer; https://fisheries.org/docs/books/55049C/17.pdf

TWENTY-FIVE KICK SAMPLING SITES
The other method of survey was Kick Sampling (sites 16, 17, 18 and 21 on Figure 6-1. the Aquatic Survey and eDNA sampling locations map. Chapter 6 Biodiversity).
kick sampling is not a method used to survey for fish and check for their presence or quantities.

'Kick-sampling is widely used as a standard method in qualitative studies of benthic macroinvertebrates.'
Source: *Evaluating the Precision of Kick-Sampling in Upland Streams for Assessments of Long-Term Change: The Effects of Sampling Effort, Habitat and Rarity*. Bradley, David C.; Ormerod, S. J.

'Scientists can examine the macroinvertebrates that live in the bed of a river and the health of a river through a sampling process called kick sampling.'
Source: Teagasc: https://www.teagasc.ie/news--events/daily/environment/using-kick-sampling-to-determine-the-quality-of-water-in-a-river.php#:~:text=Scientists%20can%20examine%20the%20macroinvertebrates,is%20disturbed%20in%20a%20net.

Furthermore, if Kick Sampling was a method used for fish counting or a reliable way to gather information, it is important to note that only two of the sites (21 and 23) are located in proximity to the proposed GCR under this Application, and Site 23 is UPSTREAM of the proposed works.

Finally: The Colligan River was subject to JUST ONE Sample site overall – a single Kick Sampling location positioned some distance upstream of the proposed GCR, and nothing below.

Based on the above, we must conclude that the APPLICANT HAS NOT CARRIED OUT ANY EFFECTIVE SURVEY METHOD IN AREAS THAT HAVE A DIRECT VIABLE SOURCE-PATHWAY-RECEPTOR LINK VIA HYDROLOGICAL CONNECTION TO THE GCR AND – FOR EXAMPLE – THE EU-DESIGNATED DUNGARVAN HARBOUR SPA.

This lack of information means the application is **not capable of removing all scientific doubt** (as is required by law) as to the effects of the proposed development. Therefore, with this in mind, the Commission cannot be expected to grant permission to the Application. works.

POLLUTING IMPACTS ON FISH, EU-PROTECTED SPECIES AND EU-DESIGNATED SITES

In the EIAR Chapter 6, Section 6.7.3 Habitats, 6.7.3.1 Construction phase, 6.7.3.1.1 FW1 – Eroding/Upland rivers, the Applicant states:

Water Quality Impacts
Directional drilling will be carried out under four rivers, the Colligan River, the Ballykerin Middle Stream, the Finisk River and the Scart_18 Stream as part of the proposed GCR infrastructure. At each location a launch and reception pit will be excavated. During these works there is potential for impacts to occur from sediment runoff and drill lubricant (e.g. bentonite) pollution.

Infrastructure site works
[…] Site clearance, excavation activities and the stockpiling of material have the potential to result in the runoff of sediment and nutrients which could result in an increase of suspended solids and nutrients depositing within nearby watercourses. […] Increased silt loading in watercourses can stunt macrophyte growth, enhance filamentous algae growth, limit dissolved oxygen capacity and reduce the ecological quality of watercourses ultimately causing increased mortality of fish and other aquatic organisms. There is also the potential for spills and leaks of hydrocarbons, oils, and chemicals from storage areas or plant and equipment to impact on aquatic habitats.

Hydrocarbons are a pollutant risk due to their toxicity to all flora and fauna organisms. The majority of hydrocarbons are light non-aqueous phase liquids (L-NAPL's) which means that they are less dense than water and therefore float on the water's surface. They chemically repel water, sparingly dissolve in water, and adsorb ('stick') onto the majority of natural solid objects they encounter, such as vegetation, animals, and earth materials such as soil. They burn most living organic tissue, such as vegetation, due to their volatile chemistry. They are also a nutrient supply for adapted microorganisms, which can then deplete dissolved oxygen at a rapid rate and thus kill off water-based vertebrates such as Atlantic salmon and lamprey species. Similar to suspended solids arising from excavation activities, hydrocarbons accidentally introduced to the Colligan River during works associated with the proposed GCR crossing will be conveyed downstream to the Dungarvan Harbour SPA. The potential impacts of hydrocarbons to receptors such as EU Directive-listed species (e.g. Annex II fish and Otter), and the wetland habitats and special conservation interest bird species of the SPA can be long-lasting or permanent.

Therefore, with this in mind, the Commission cannot be expected to grant permission to a development that potentially threatens and risks EU-protected species and an EU-Designated SPA. This is also of even more critical importance at present given the devastating ecological catastrophe that occurred in the Blackwater SAC in August 2025 in which approximately 50,000 fish were killed over a period of about 10 days, an impact on fish stocks that is reported will take at least 10 years to recover.

INSUFFICIENT INFORMATION ABOUT, AND AMBIGUOUS NAMING REGARDING, LOCATIONS OF ANY FIELD SURVEYS POSSIBLY CARRIED OUT

With the exception of the EIAR Figure 6-1 Aquatic Survey and eDNA Sampling Locations, the Applicant fails to provide or show any detailed information regarding locations of field surveys that *may* have been carried out. There are only vague mentions of locations, such as 'the site', the 'proposed project' and so on. The Applicant also states 'in suitable locations'

but doesn't show or detail exactly where. With such lack of information, we have no evidence of any field surveys having been carried out in areas such as the Colligan River, Colligan Woods and Inchindrislawood.

INADEQUATE AND UNSATISFACTORY SURVEY OF OTTER

In its descriptions about studies carried out for Otter, the EIAR Chapter 6: Biodiversity is very unclear about whether the GCR waterways were included in field surveys or whether they were solely the subject of desktop review studies. And without clear evidence and specific wording to prove otherwise, it cannot be assumed that field surveys – as opposed to just desktop review studies – were definitely carried out. Furthermore, if field surveys were carried out, the Applicant has failed to detail the times and methodology of these surveys.

Examples of this ambiguity include:
All streams and drainage ditches within all parts of the proposed project were surveyed for Otter. No holts, spraints, slides, couches or other evidence of Otter activity was recorded during surveys within the proposed project. Optimal foraging habitat however was recorded along the lower reaches of the Glennafallia, Glenshelane and Farnane rivers (located within and downstream of the proposed project). In addition, the larger Finisk River and the Colligan River contain suitable salmonid populations for foraging (O'Reilly, 2009).
(EIAR Chapter 6: Biodiversity, section 6.5.2.24 Mammals, 6.5.2.24.1 Otter)

- *'within all parts of the proposed project'*: does *'proposed project'* pertain to the wind farm site itself or the entire development? As the Applicant states *'the Glennafallia, Glenshelane and Farnane rivers (located within and downstream of the proposed project)'*, and these rivers are only connected to the wind farm site, not the GCR. With *'proposed project'* being used alternately throughout the EIAR to describe either the wind farm site itself or the wind farm and GCR, this is unclear here.
- The addition of *'(O'Reilly, 2009)'* after the mentions of Finisk and Colligan rivers demonstrates that only desktop review studies were carried out for these waterways.

As outlined in Section 6.5.1.5.2, Otter have previously been recorded on the upper reaches of the Glenshelane River, upstream of the proposed Glenshelane clear span bridge river crossing, and also on the River Finisk, approximately 3km downstream of the proposed project. There is potential that Otter use streams and rivers that are hydrologically connected to the proposed project for foraging and commuting, due to the suitable habitat present and availability of prey (refer to Section 6.5.2.27). All NPWS records of Otter are within the boundaries of the Blackwater River (Cork/Waterford) SAC of which it is a qualifying interest. The local population of Otter was therefore assessed as being of International Importance.

- All refer to 'previously recorded' sightings on **databases**. And no mention of the Colligan River at all.

Otter surveys were carried out following the NRA (2006) guidelines. The Otter surveys were conducted along the Glenshelane_010, which forms part of the Blackwater River (Cork/Waterford) SAC, and its tributaries which intersect the proposed project. The surveyors covered the length of the watercourses within the proposed project, plus an additional 150m buffer, to account for potential disturbance impacts. Any evidence of Otter presence or activity, such as holts (breeding and temporary), slides and territorial marking points (spraints), was recorded. (EIAR Chapter 6: Biodiversity, Section 6.3.2.2.1.1 Otter)

- No field surveys have been carried out on the Finisk River or Colligan River, the latter of which has records of Otter activity, as shown by the Applicant in Table 6-3: Protected

Flora and Fauna under the Habitats Directive (HD) and Wildlife Acts (section 6.5.1.5.2 National Biodiversity Data Centre (WA) extract b)

European Otter	12/06/2015	EU HD Annex II, IV and WA	There are three records of otter within the north-west of the site along the Glenshelane_010 river. Otter is also recorded along the Colligan_040 (IE_SE_17CO10300) which is crossed by the proposed GCR (grid square X29)

Otter is also recorded along the Colligan_040 (IE_SE_17CO10300) which is crossed by the proposed GCR (grid square X29) [highlighted for emphasis]

The fact that this was recorded in 2015 does not mean that there is no possibility of Otter activity in the area now – as previously stated: the **absence of records does not imply absence of species**. It is also important to bear in mind that Otters are not that easy to spot as they are shy creatures, move rapidly, spend much of their time underwater, blend into their surroundings, and are most active at dawn or dusk. So it is not so highly likely they would be regularly spotted unless being specifically looked for.

Furthermore, 2015 is a date attributed to both the Glenshelane and the Colligan, which is ambiguous in its own right, and not having carried out a field survey at the Colligan (or Finisk) River – as was done for the Glenshelane – is a gross and inexcusable failure. (NB: Sighting of Otter was also recorded in 2012 in grid X2297. See our **Appendix: NBDC Excels**.)

POTENTIAL NEGATIVE IMPACTS ON OTTER DOWNPLAYED OR IGNORED BY APPLICANT

While listing the many potential impacts on the Otter, its habitat, commuting corridor and foraging resources, the Applicant attempts to downplay their negative effects.

In EIAR Chapter 6: Biodiversity, Section 6.7.4 Species, 6.7.4.1 Construction Phase, 6.7.4.1.1 Otter, it states:

Habitat Loss
Construction works have the potential to result in effects on Otter. No instream works are proposed as part of the proposed project, however ***there is potential for the loss of suitable habitat which supports the species (NIEA, 2011) particularly at the HDD reception pit sites [...] where habitat on the banks of river will temporarily be lost.***
[...]
Directional drilling
Directional drilling will use the road corridor for reception pit and launch pit placement. ***Where directional drilling is proposed under the Colligan River in a rural setting, scrub and woodland vegetation removal is proposed to accommodate the proposed GCR, possibly impacting on habitat occasionally used by Otter****. Considering the minimal removal of scrub and woodland required for these works, the temporary loss of habitat at these locations will not result in any significant effects to Otter at any geographical scale.*

Disturbance/displacement
There is potential that the proposed construction works, associated with the clear span bridges and directional drilling works, which are located directly adjacent to watercourses, may result in the disturbance of Otter when foraging or commuting nearby. The construction of the proposed GCR which crosses a number of streams and rivers using directional drilling has the potential to result in disturbance to Otter. *However, the majority of construction activities will take place during daylight hours, thereby avoiding disturbance to Otter which are mostly crepuscular. Considering that the construction works will not be undertaken when Otter are most active and that no holts were recorded within the ZoI of the proposed project, the temporary disturbance associated with construction works will result in temporary, negative, imperceptible effects (effect is not significant) on the local Otter population at an international geographic scale.*
[highlighted for emphasis]
Note:

1. With regards to '*no holts were recorded within the ZoI of the proposed project*': as mentioned above, it is ambiguous as to whether the Finisk and Colligan Rivers are included in this.
2. Just because holts were not recorded at that time of possible field surveys does not mean there won't be any presence of Otter in the future.

Water Quality Impacts
Considering the proximity of the construction works to a number of watercourses, ***there is potential for elements of the proposed project, such as [...] the HDD works along the proposed GCR, to result in the runoff of sediment laden water and hydrocarbons to deposit within the Glennafallia River, Glenshelane River, Farnane River, Boherawillin River which all flow into the Finisk River and the Blackwater River*** *if not appropriately managed.* ***This will result in indirect impacts on Otter due to a degradation of water quality resulting in impacts on their foraging resources****. Chanin (2003) notes that 'Otters are not directly affected by water quality and will forage in conditions that seem extremely unpleasant to humans, however, where deterioration in water quality leads to a deterioration in food supply there will clearly be an indirect effect'. A degradation of Otter foraging resources would therefore cause a short-term, negative, slight effect on the conservation status of the local Otter population, at an international geographical scale*
[highlighted for emphasis]

We wish to highlight something that the Applicant has failed to mention in this text (as well the Colligan River, which is also an HDD water crossing). The Applicant places focus on how the runoff of hydrocarbons will result in '*indirect impacts on the Otter due to a degradation of water quality resulting in impacts on their foraging sources*'. Yet what the Applicant completely fails to mention here is that hydrocarbons are a pollutant risk due to their toxicity to all flora and fauna organisms. We refer the Commission to the aforementioned details in the section: Polluting Impacts on Fish, EU-Protected Species and EU-Designated Sites.

The Commission should also bear this in mind when considering the cumulative effects with the proposed Dyrick Hill Wind Farm (case ref: 317265, refused by the Commission in October 2024 but currently at Judicial Review). In their NIS, the Applicant for that proposed wind farm states:
5.2.1.2 Release of hydrocarbons
Similar to suspended solids arising from excavation activities, hydrocarbons accidentally introduced to the Colligan River during works associated with the grid connection route crossing will be conveyed downstream to the wetland habitats of the Dungarvan Harbour

SPA. Hydrocarbons are a pollutant risk due to their toxicity to all flora and fauna organisms, including the special conservation interest bird species of this SPA. Potential incidents or accidental release of contaminants will likely be short lived or temporary, however the potential impacts to downstream receptors such as wetland habitats and special conservation interest bird species can be long lasting. (page 171)

LACK OF DEROGATION LICENCE FOR OTTER

As is shown throughout EIAR Chapter 6: Biodiversity, the proposed GCR has potential to impact Otters, which are strictly protected under Annex II and Annex IV of the Habitats Directive and the European Communities (Birds and Natural Habitats) Regulations 2011. Otters and their holts, resting and breeding places cannot be disturbed without assessment and, where necessary, a derogation licence.

The Application's EIAR and NIS do not confirm that Otter field surveys were undertaken along the relevant sections of the GCR, nor do they provide baseline data. Instead, they rely on pre-construction survey commitments (see EIAR Chapter 6: Biodiversity, Section 6.9.3 – Pre-construction Biodiversity Surveys, 6.9.3.1 Otter). While that section acknowledges that Otter holts may require a derogation licence, it **does not confirm that Otter field surveys were conducted along the GCR.**

Without this baseline data, the Commission cannot determine the extent of impacts, whether the legal protections for this species have been adequately addressed or whether a derogation licence is required under the Wildlife Act 1976 (as amended) and the European Communities (Birds and Natural Habitats) Regulations 2011. As also addressed in the Badger section of this chapter, we draw the Commission's attention to the fact that the Court of Justice of the European Union (CJEU) confirmed that where a derogation licence may be necessary, it must be obtained ***before*** development consent is granted (Case C-166/22; 6 July 2023)). The Court stated that giving permission without first resolving the derogation issue would result in consent being '*given on an incomplete basis and would not, therefore, meet the applicable requirements.*' Given the absence of clearly documented Otter surveys and assessments, and the failure to establish whether a derogation is required, the GCR Application remains fundamentally incomplete. Granting permission would be inconsistent with EU law, procedurally flawed, and open to legal challenge.

'It follows from that case-law that, in the specific case where, first, the execution of a project that is subject to the dual requirement for assessment and development consent laid down in Article 2(1) of Directive 2011/92 involves the developer applying for and obtaining a derogation … and where, second, a Member State confers power to grant such a derogation on an authority other than the one on which it confers power to give development consent for the project, that potential derogation must necessarily be adopted before development consent is given. ***If it were otherwise, that development consent would be given on an incomplete basis and would not, therefore, meet the applicable requirements.***'
[highlighted for emphasis]
Source: paragraph 36; Case C-166/22; CJEU; https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:62022CJ0166 and https://www.algoodbody.com/insights-publications/derogation-licences-required-before-planning-permission-is-granted?utm.com

We also draw the Commission's attention the following text, which is included in the report compiled by Ecologist Dr Patrick Moran about the Scart Mountain Applicant's NIS*, and is submitted together with this Observation (see our **Appendix: Ecology Report, Dr Patrick Moran):**

*Also of note, with regard to QIs of the River Blackwater (Cork and Waterford) SAC, in relation to the presence of Otter (an Annex IV species) the NIS states "…In the event that otter holts are identified within 150 m of the footprint of the works, an appropriate wildlife (derogation) license will be sought from the NPWS…". **The granting of planning permission without a derogation licence being in place is contrary to legislation – as such, planning permission cannot be granted for the proposed development without a derogation being in place prior to granting of permission. Otter (in addition to all other Annex IV species occurring in Ireland) must be afforded strict protection, wherever they occur.*** [highlighted for emphasis]

* [Note: the report was originally compiled for our Observation against the Scart Mountain Wind Farm Application (case ref: 321522), however it is being submitted once again with our Observation against this Application and being used to support specific points we are making due to the fact that it addresses inadequacies in the NIS, which is the same documentation and pertaining to the same overall project.]

NON-EXISTENT FIELD SURVEYS FOR COMMON FROG

While it has been acknowledged that the NPWS Sensitive Data package showed '*There is Common Frog located close to the directional drilling site for the proposed GCR under the Colligan River*', the Applicant has completely failed to carry out any specific field surveys, as was done on the wind farm site itself. This leaves a lacuna in the EIAR and **fails to remove all scientific doubt** regarding potential adverse impacts on this protected species.

QUESTIONABLE SURVEY METHODOLOGY FOR SMOOTH NEWT

In EIAR Chapter 6: Biodiversity, Section 6.3.2.2.3.1 Smooth Newt, it states:

*A Smooth Newt survey, which included visual daytime searches for adults and juveniles (efts) and egg inspection, was carried out within suitable habitat within all parts of the proposed project, following methodologies outlined in the Meehan (2013) guidelines. The suitable survey sites (small pools and drainage ditches) were surveyed during the day by walking around the perimeter of the water body, stopping every 2m to examine the water for newts of all life cycle stages (Meehan, 2013). **No trapping or net dipping, which requires a licence, was carried out.*** highlighted for emphasis]

1. The Applicant's wording here misleads in context as it fails to explain clearly WHY no trapping or net dipping was carried out – is this <u>because</u> it requires a licence and they did not bother to apply for one, or because it was not deemed necessary to carry out those methods? And if so, why / by whom was it deemed unnecessary?
2. As questioned in other sections above, '*within all parts of the proposed project*': Where in the GCR was this carried out? This description is too vague and ambiguous, and it therefore cannot be assumed any field surveys / searches were carried out along the GCR.

EIAR Chapter 6: Biodiversity, 6.5.2.25.2 Smooth Newt states:
Smooth Newt is known to use a variety of water body types, such as garden ponds, natural pools, drainage ditches and quarry ponds (Meehan, 2013). A Smooth Newt survey was undertaken along the drainage ditches and small ponds present within the proposed project. No Smooth Newts were recorded during the field surveys and habitat was found to only be sub-optimal for newts. The pools of standing water and drainage ditches were deemed too shallow to support Smooth Newts, as the species generally utilises ponds with a depth of 0.5-1m (O'Neil et al., 2004). Although Smooth Newt has previously been recorded within the wider surrounding area (outside the proposed project - refer to the desk study, Section 6.5.1.5.2 and Table 6-3) Smooth Newt are not likely to use the proposed project due to the absence of suitable habitat. ***Smooth Newt were therefore considered to be absent from the study area and are not considered further within the assessment.***

Such an assumption cannot be made based on a desktop review from the NBDC (as explained already re its suitability for sole research). Just because the species has not been recorded, it does not mean the species is not there.

Furthermore, stating that '*pools of standing water and drainage ditches were deemed too shallow to support Smooth Newts*' is misleading. Water depth in pools and drainage ditches fluctuates with precipitation. Plus, newts' use of these habitats fluctuates as they migrate between land and water at different times of the year.

'While commonly encountered near water bodies, adult newts are actually terrestrial, only returning to water bodies to breed.'
Source: The Herpetological Society of Ireland

QUESTIONABLE DETAILS REGARDING COMMON LIZARD

In EIAR Chapter 6: Biodiversity, section 6.3.2.2.3.3 Common Lizard, it states:
The Common Lizard is widespread in Ireland and occurs in suitable habitats such as stone walls, dry banks, heathland and bog habitats (King et al., 2011). Suitable habitat was searched for the presence of ***frogs*** *during the walkover surveys.*

Let's hope the Applicant actually searched for lizard too.

INCORRECT DETAILS REGARDING MARSH FRITILLARY

EIAR Chapter 6: Biodiversity, section 6.5.2.25.4 Marsh Fritillary states:
The species is widespread in Ireland and ***can be reasonably common if suitable habitat is present****. Although widespread, it is also listed as vulnerable on the red list of Irish butterflies (Regan et al. 2010) due to habitat loss and degradation. Although Marsh Fritillary was recorded during the desk study to the west and east of the proposed wind farm site as recent as 2021 (refer to Table 6-3),* ***no suitable habitats, nor its food plant Devil's-Bit Scabious were recorded within the proposed wind farm site****, during the habitat surveys. Marsh Fritillary is therefore considered to be absent from the study area and is not considered further within the assessment.*

The assumption of the Marsh Fritillary to be absent is flawed as:

1. No habitat surveys are recorded to have been carried out along the GCR.
2. The species' food plant Devil's-Bit Scabious has been recorded in the NBDC in 2023 in grid X2196 along the GCR (see our **Appendix: NBDC Excels**).

NO EVIDENCE OF BADGER SURVEYS OR STUDIES CARRIED OUT FOR GCR & A LACK OF DEROGATION LICENCE

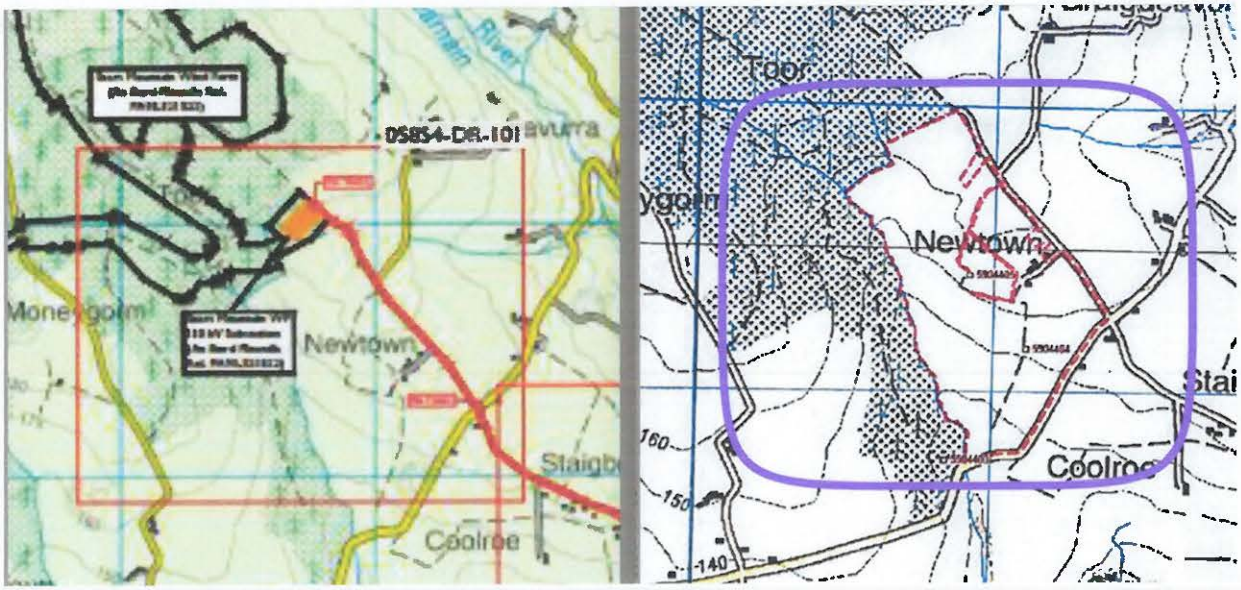
In EIAR Chapter 6: Biodiversity, section *6.5.2.24.2 Badger*, it states:
Little evidence of Badger activity was recorded within the proposed project during surveys. A single disused Badger sett was recorded near the western boundary of the proposed wind farm site along the Knocknasheega Stream, located 160m west of the proposed site road. The sett was confirmed to be disused using a camera trap (under license No. 16/2022) which was installed at the sett for a period of five days. The desk study indicates that Badger was previously recorded within the proposed wind farm boundary to the south of Knocknanask, no other records are available within the wind farm site boundary. Despite the lack of evidence of Badger recorded during the field surveys, it is expected that Badger may use the proposed wind farm site for foraging and commuting, at least on occasion, considering the large areas of suitable habitat present within the study area. The local badger population was assessed as being of Local Importance (Higher Value).

And Table 6-9: Summary of Key Ecological Receptors for Species confirms, *'Signs of Badger activity were recorded within the study area during the surveys and desktop study. There is potential to impact on this species.'*

However, there is no evidence in the Application that any field surveys or desktop review studies were carried out for Badger along the GCR. Yet there are records of badgers in the area. We draw the Commission's attention to an Observation made against the Scart Mountain Wind Farm Application (case ref: 321522) (see our **Appendix: Maps – Badger Maps**). In it, it states:

(b) Tuberculosis (TB) Threat
It is a widely accepted fact that there is a direct link between large-scale infrastructure projects and increased levels of TB infection in the cattle population. I have enclosed Department of Agriculture maps which show a large number of active badger setts in the hinterland of the proposed wind farm site. It is undeniable that the development of a windfarm at Scart Mountain will cause massive upheaval in the surrounding badger population. This is causing a huge amount of fear and anxiety amongst farmers in the community, including ourselves, and we see it as a direct threat to our livelihoods. In their planning submission for Scart Mountain Wind Farm, and in particular in the E.I.A.R., Tobin Consultants make no reference whatsoever to this devastating impact.

As the Commission will see from the map that is mentioned (screenshot below right), the red dotted boundary area lies WITHIN the GCR.



Source: Extracts from Applicant's 05854-DR-100B Overall Site Location Map Sheet 2 of 2 (1_15000).pdf (left) and Department of Agriculture map depicting area of active badger setts (as submitted in one of the Observations against Scart Mountain Wind Farm (ref: 321522)), with a purple circle added by us highlighting the GCR)

This clearly shows that the proposed GCR passes in the direct vicinity of known active badger setts, yet the EIAR and NIS submitted with the GCR Applications do not present GCR-specific baseline badger survey results, and rely instead on pre-construction survey commitments. Without GCR-specific baseline data, the Commission cannot determine the extent of impacts or whether a derogation is required now. Under the Wildlife Act 1976 (as amended) it is an offence to wilfully interfere with badger setts, and furthermore the European Communities (Birds and Natural Habitats) Regulations 2011 transpose the Habitats Directive 92/43/EEC and the Birds Directive 2009/147/EC and establish that a derogation licence may be required where protected species are disturbed.

It is also submitted that the Court of Justice of the European Union (CJEU) confirmed that where a derogation licence may be necessary, it must be obtained ***before*** development consent is granted (Case C-166/22; 6 July 2023)). The Court held that giving permission without first resolving the derogation issue would result in consent being *'given on an incomplete basis and would not, therefore, meet the applicable requirements.'* In this case, the absence of surveys and the failure to establish whether a derogation is required render the application fundamentally incomplete. Granting permission in such circumstances would be inconsistent with EU law, procedurally flawed, and open to legal challenge.

'It follows from that case-law that, in the specific case where, first, the execution of a project that is subject to the dual requirement for assessment and development consent laid down in Article 2(1) of Directive 2011/92 involves the developer applying for and obtaining a derogation … and where, second, a Member State confers power to grant such a derogation on an authority other than the one on which it confers power to give development consent for the project, that potential derogation must necessarily be adopted before development consent is given. ***If it were otherwise, that development consent would be given on an incomplete basis and would not, therefore, meet the applicable requirements.'***
[highlighted for emphasis]
Source: paragraph 36; Case C-166/22; CJEU; https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:62022CJ0166 and https://www.algoodbody.com/insights-publications/derogation-licences-required-before-planning-permission-is-granted

Without ecological survey data to identify impacts or to determine whether such a licence is required, the Commission cannot lawfully or reliably assess the GCR Application's compliance with protected species legislation. Granting permission under these circumstances would be premature, procedurally unsound and open to legal challenge.

OUTDATED AND INADEQUATE INPUT FROM CONSULTATIONS

In EIAR Chapter 6: Biodiversity, Section 6.2.2 Consultation, it states:
Consultations held with various state agencies and environmental Non-Governmental Organisations (NGOs) were undertaken in January 2023 to inform this EIAR. […] At the time of writing this Chapter, no response was received from Bat Conservation Ireland (BCI) or the Irish Wildlife Trust (IWT).

We draw the Commission's attention once again to the timeframe. All the input provided is from consultations held more than two-and-a-half years prior to submission of this Application – January 2023. The Application is distinctly lacking in any up-to-date research or considerations that incorporate new information or findings or the NPWS Observation for the Scart Mountain Wind Farm (see our **Appendix: Scart Mountain Wind Farm Observations**), and there have been no further attempts to get responses from IWT or BCI (which is highly odd in itself given the fact that the EIAR bat survey and baseline bat report was done by John Curtin who is also the Co-Chair of BCI).

NON-EXISTENT BAT SURVEY FOR GCR

We draw to the Commission's attention that the Applicant has failed to carry out a bat survey for the GCR, most notably at Modeligo Bridge (Finisk River HDD crossing), Colligan Wood and Inchindrislawood.

The bat ecology report appendix states there are no suitable roosts in Colligan Woods, yet records, the NBDC database (see our **Appendix: NBDC Excels**) and citizen science field surveys show otherwise.

Bankside Bat Walk at Colligan Wood, 19 August 2025: Join WCCC Biodiversity and Science team for an evening stroll to discover the species that inhabit the banks and waters of the Colligan River. We will delve into water sampling to take a closer look at freshwater invertebrates and as dusk arrives, switch on the bat detectors to identify the bats that call this woodland home. ***At least 6 species of Irish bats have been recorded in this area.***
[highlighted for emphasis]
Source: https://www.heritageweek.ie/event-listings/bankside-bat-walk-at-colligan-woods

In relation to the [above-mentioned] *walk we did not take any official recordings of invertebrate species on the night but* ***we had three species of bat (Soprano pipistrelle, Common Pipistrelle and Leisler's). The Waterford Bat Group before it disbanded noted that 6 of the 9 species of bat in Ireland occur in Colligan woods.***
[highlighted for emphasis]
Source: Email from Marina Mulligan, Biodiversity Officer, Waterford City & County Council, dated 4 November 2025. (See our **Appendix: Mail From Waterford City & County Council Biodiversity Department**.)

THE INADEQUATE AQUATIC SURVEY OF THE COLLIGAN RIVER

In their EIAR Appendix 6-3: Aquatic Survey Report, the Applicant states:
'There is potential for crayfish in the 3rd and 4th order rivers downstream of the site, such as Finisk River at Site 21 and the Colligan River at Site 23 where the river is of gentle gradient and there is suitable habitat present.' (page 17)

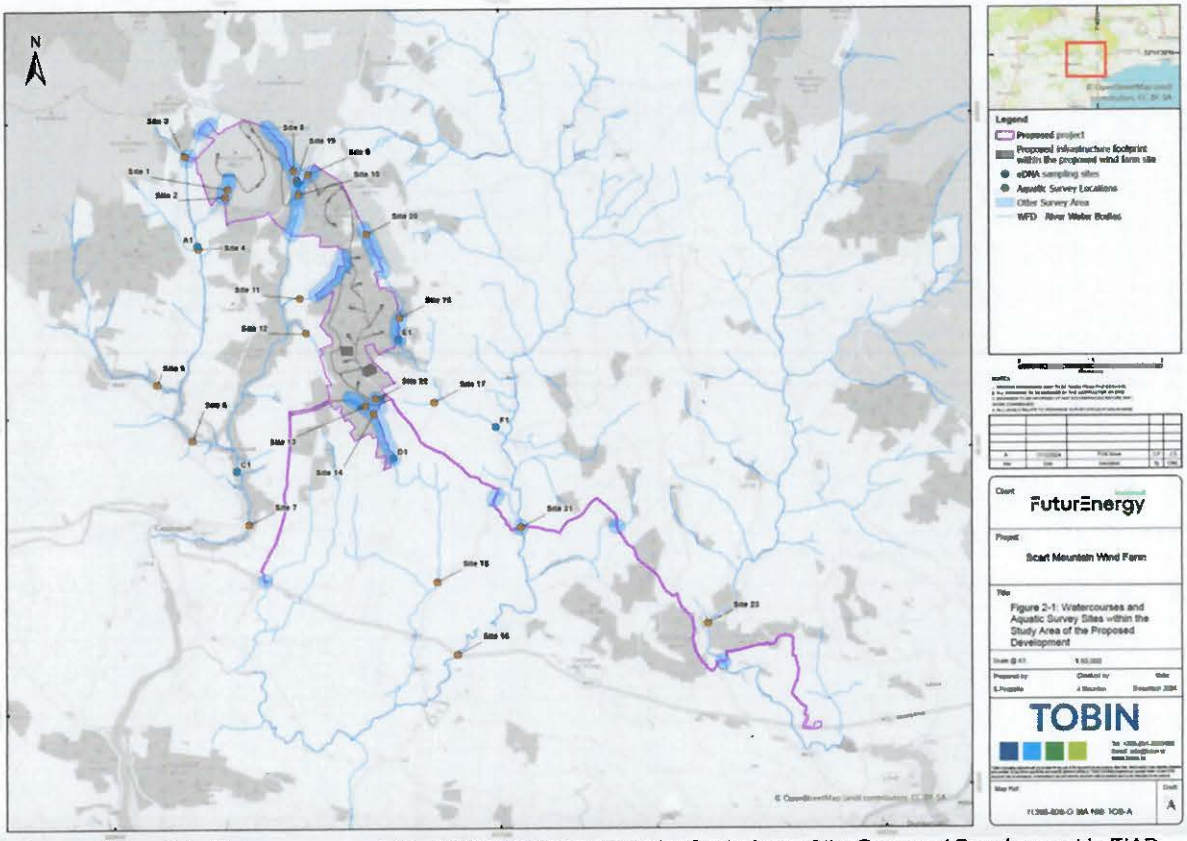
For the Commission's attention:
'The White-clawed Crayfish was listed on Annex II and Annex V of the Habitats Directive and the species is protected in Ireland under the Wildlife Acts. Ireland has international responsibility for the White-clawed Crayfish as it remains the only part of the EU with no introduced species of crayfish and no proven incidence of crayfish plague. The animal remains common in many lakes, rivers and streams in limestone districts. It is an important species ecologically both as a grazer of plants and as a favoured food item of the Otter.'
Source: https://www.npws.ie/research-projects/animal-species/invertebrates/white-clawed-crayfish-austropotamobius-pallipes

'The White-clawed Crayfish is considered a globally threatened species and Ireland holds one of the largest surviving populations.'
Source: *New regulations to protect native freshwater crayfish*;
https://biodiversityireland.ie/crayfish-regulations

And in their NIS, the Applicant states:
'White-clawed crayfish have not been recorded in any of the watercourses within or downstream of the proposed project. This species is not expected to occur in the other watercourses draining the proposed project... therefore, it can be assumed that there is no potential impact on this species.' (page 26)

The choice of the word 'assumed' is highly concerning here. When it comes to a globally threatened species, of which Ireland holds one of the largest surviving populations and is internationally responsible for it, the Applicant cannot have such disregard to the species and make such a sweeping, dismissive assumption when the Applicant has carried out a wholly inadequate and incomplete aquatic survey of the Colligan River.

We draw the Commission's attention to the fact that – as can be seen in the map below, Survey Site 23 on the Colligan River, which is not hydrologically connected to the main Scart Mountain Wind Farm site, is actually **upstream** of the proposed HDD crossing of the Colligan River. So, if we factor in the law of physics here, being upstream of an HDD crossing, one can believe that a species will not suffer any polluting event. But that is not the case for anything downstream of the site. Site 23 is the **only** aquatic site surveyed on the Colligan River – which in itself is a totally inadequate and incomplete assessment of this ecologically important waterway. The Applicant has completely failed to include, address and assess what aquatic life lies **below** the HDD crossing and in the direct hydrological path of an HDD pollution event.



Source: Figure 2-1: Watercourses and Aquatic Survey Sites within the Study Area of the Proposed Development in EIAR Appendix 6-3: Aquatic Survey Report

Furthermore, EIAR Chapter 6: Biodiversity, section 6.5.2.27.2 White-clawed Crayfish states:
During surveys, no live White-clawed Crayfish were recorded. There was also no evidence recorded of White-clawed Crayfish carapace or claw remains on the riverbanks or bridge ledges, in the form of Otter scat or remains from predation. The watercourses located within the boundary of the proposed project do not have suitable habitat for White-clawed Crayfish due to unsuitable geology, peatland afforested catchments, high energy channels and unsuitable substrate. Suitable instream vegetation and burrowing habitat required for crayfish was rare to absent resulting in a low availability of refuges. ***eDNA sampling was carried out at strategically chosen locations on the Glennafallia_020, Finisk_030 and the Farnane_010 rivers to determine their possible presence/absence in waterbodies located downstream of the proposed project****. The results indicated did not suggest presence of White-clawed Crayfish in any of the sampled waterbodies which corresponded with the desktop and aquatic habitat survey results. For further information see Appendix 6-3. Due to the lack of evidence of White-clawed Crayfish recorded in any waterbody hydrologically connected to the proposed project and as the waterbodies within the study area lie outside the range of this species, effects are unlikely to occur. Therefore, White-clawed Crayfish is not considered a KER and will not be further assessed.*
[highlighted for emphasis]

Yet in Appendix 6-3: Aquatic Survey report, 3.2.2 Riverine habitat, the Applicant seems to contradict their claim above by stating:
There is potential for crayfish in the 3rd and 4th order rivers downstream of the site, such as Finisk River at Site 21 and the Colligan River at Site 23 where the river is of gentle gradient and there is suitable habitat present.

We once again remind the Commission: just because a species is not recorded, it does not automatically mean the species is not there. And we draw to the Commission's attention that NO eDNA sampling was carried out on the Colligan River. And with suitable habitat present and the Applicant's own admission that '*There is potential for crayfish in the 3rd and 4th order rivers downstream of the site, such as Finisk River and the Colligan River*', the Applicant's decision that '*White-clawed Crayfish is not considered a KER and will not be further assessed*' is a substantial lacuna in the EIAR.

The Applicant has once again failed to provide the Commission with a truly informed environmental base line study **that would remove all scientific doubt** regarding potential adverse impacts on the EU-protected waterways and the species therein. And also, as a result, any mitigation measures proposed are of an incorrect and false origin. **The Applicant has not employed survey methodology that meet the requirement of the EIAR.**

THE FINISK RIVER:
THE CONTRADICTIONS AND MISLEADING ASSESSMENTS IN THE EIAR AND NIS

White-clawed Crayfish

'*The White-clawed Crayfish, Austropotamobius pallipes, is the only indigenous species of freshwater crayfish in Ireland (Holdich, 2002)*
[…]
Austropotambius pallipes is assessed as Endangered on the IUCN Red List (Füreder et al., 2010) and the Irish population is considered to be of substantial conservation importance within Europe (Reynolds, 1998). It is a protected species under Irish and European legislation; it is listed on Annex II and Annex V of the EU Habitats Directive. Ireland is required to designate Special Areas of Conservation (SAC) for the species and to monitor its conservation status (Reynolds et al., 2010). The White-clawed Crayfish is listed as a qualifying interest for 15 SACs in Ireland.'
https://www.npws.ie/sites/default/files/publications/pdf/IWM131.pdf (page 1)

Please note that the Blackwater River (Cork/Waterford) SAC is one of the above-mentioned 15 SACs, and the Finisk River is a large tributary and part of the Blackwater River SAC.

In their EIAR Appendix 6-3: Aquatic Survey Report, the Applicant states:
'*There are currently no records of white clawed crayfish present within watercourses of the study area.*' (page 14)
And
'*White-clawed crayfish have not been recorded in any of the watercourses within or downstream of the proposed project.*' (page 26)

We draw to the Commission's attention the following publicly available information, that is in the Inspector's Report relating to the proposed Dyrick Hill Wind Farm (case ref: 317265; refused permission by the Commission in October 2024, but currently at Judicial Review).

13.3.11.
Section 5.4 of the submitted AA examines each of the qualifying interests of the Blackwater River SAC to determine whether pathways are within the ZoI of the specific qualifying interests. […] The features of interest within the zone of influence identified are as follows:
- *Floating River Vegetation [3260] - known to occur along the Finisk River at and downstream of the project site.*

- *Austropotamobius pallipes (White-clawed Crayfish) [1092] - known to occur along the Finisk River at and downstream of the project site.'* (page 174)

Source: https://www.pleanala.ie/anbordpleanala/media/abp/cases/reports/317/r317265.pdf

The following information is contained within the (Dyrick Hill Wind Farm) Applicant's Screening Report for Appropriate Assessment and NIS, compiled by Doherty Environmental. The site of the proposed Dyrick Hill Wind Farm is directly adjacent to the site of the proposed Scart Mountain Wind Farm, and therefore both projects share the same known hydrologically connected pathways of the Finisk. **Therefore, it is clearly evident that the reported records of *'White-clawed Crayfish) [1092] - known to occur along the Finisk River at and downstream of the project site'* that is referenced to in the Dyrick Hill Wind Farm NIS and AA also applies to the Scart Mountain project.**

[It is also worthy of note that, when bearing the information above provided in the Dyrick Hill Wind Farm NIS in mind, the Scart Mountain GCR Applicant also fails to assess the in-river vegetation of flowing waters flora of any of the rivers that are hydrologically connected to the project. Including the Finisk and Colligan Rivers. The vegetation of flowing waters is a designated Annex I EU Habitats Directive (92/43/EEC) and is protected. The National Parks and Wildlife Service report *The Status of EU Protected Habitats and Species in Ireland (Article 17 2019, Volume 1 – Overview)* for the habitat code **3260 Vegetation of flowing waters**: *'The Overall Status of the habitat is Inadequate and deteriorating, unchanged since the 2013 assessment. 3260 VEGETATION OF FLOWING WATERS.'* (page 26)
[Source:
https://www.npws.ie/sites/default/files/publications/pdf/NPWS_2019_Vol1_Summary_Article17.pdf]

In the NIS for Dyrick Hill Wind Farm, it is stated in Table 5.3: Examination of Potential Impacts to the Conservation Objectives of Qualifying Features of Interest/Special Conservation Interests:
White-clawed crayfish of the Blackwater River SAC
Juveniles and/or females with eggs in all occupied tributaries: In the event that the construction phase of the proposed development causes or contributes to pollution in the Finisk River and Blackwater River downstream it will have the potential to undermine the population structure of crayfish occurring within these waterbodies downstream. (page 27)

And

Habitat quality – heterogeneity: In the event that the construction phase of the proposed development causes or contributes to pollution in the Finisk River and Blackwater River downstream, it will have the potential to undermine crayfish habitat heterogeneity. (page 28)

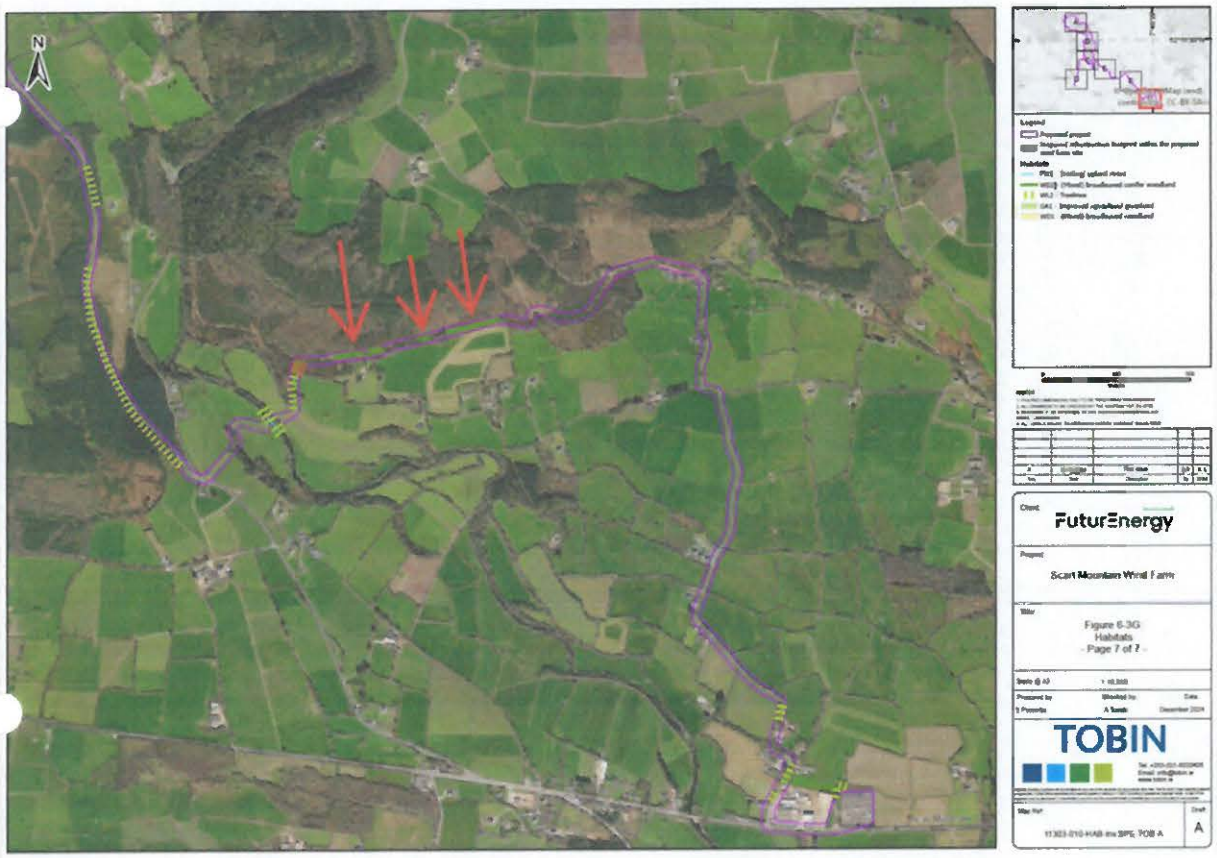
We remind the Commission: the Finisk River is a known tributary and a part of the Blackwater River SAC.

As such, the (Scart Mountain Wind Farm) Applicant's EIAR/NIS is misleading, incomplete and inadequate which, in turn, prevents the Commission in being able to make a truly informed decision on the Application as it **fails to remove all scientific doubt** regarding potential adverse impacts on the EU-protected waterways and the species therein. And therefore, a decision to deny permission should be enacted.

OMISSION OF HABITAT IN THE EIAR

After having crossed the Colligan River, the proposed GCR will cut through Inchindrislawood. As can be seen in the Applicant's Figure 6-3G: Habitats - Page 7 of 7 (EIAR Chapter 6: Biodiversity) shown below, the dark green highlights of the GCR in Inchindrislawood are labelled as **WD2 - (Mixed) broadleaved conifer woodland**, and there is a substantial amount marked.

Yet the EIAR entirely fails to address the presence, extent and ecological importance of WD2 woodland habitat, as well as how it will be directly affected by the proposed GCR construction phase. No field surveys or desktop review studies have been carried out for wildlife, flora, fauna or birds in and/or surrounding the area, and there is no mention of the works that are proposed to be carried out through/in it.



Source: Figure 6-3G: Habitats - Page 7 of 7 (EIAR Chapter 6: Biodiversity) with arrows added by us for clarity. Full-size version available in our **Appendix: Maps – Missing Habitat**.

WD2 (Mixed Broadleaved–Conifer Woodland) is recognised under the NPWS-adopted Fossitt (2000) classification as follows:

This general category includes woodland areas with mixed stands of broadleaved trees and conifers, where both types have a minimum cover of 25%, and a maximum of 75%. Trees may be either native or non-native species. Mixed broadleaved/conifer plantations are included if the canopy height is greater than 5 m, or 4 m in the case of wetland areas. Stands of immature or sapling trees are excluded (see immature woodland - WS2).

Mixed woodland of this type is well-documented as supporting a significant range of wildlife by providing essential structural diversity, understorey habitat and sheltered commuting and foraging corridors. NPWS, BirdWatch Ireland, the NBDC and Bat Conservation Ireland all confirm that woodland habitats such as mixed broadleaf-conifer stands are used extensively by woodland mammals (including pine marten and red squirrel, both of which have been recorded on the NBDC platform for the area – see our **Appendix: NBDC Excels**), woodland birds, and all Irish bat species for commuting, foraging and roost-associated behaviours. These species are protected under the Wildlife Act and, in the case of bats, pine marten and certain woodland birds, under the EU Habitats Directive (92/43/EEC) or Birds Directive (2009/147/EC). Fragmentation, removal or disturbance of WD2 woodland habitat can therefore have significant negative ecological effects such as loss of flight corridors (bats), reduced breeding habitat (birds), reduced cover and connectivity (mammals) and reduced resilience (woodland ecosystems).

The omission of mentioning and assessment of the WD2 woodland habitat within the EIAR represents a considerable lacuna in baseline habitat evaluation, likely impacts, mitigation needs, alternatives, and appropriate ecological protection measures. And, as a result, the EIAR fails to meet its basic legal obligations – without a full survey and impact assessment of this habitat, it is submitted that the Application cannot be considered compliant with EU or national environmental legislation.

LOSS OF HABITAT USED BY PROTECTED SPECIES

EIAR Chapter 6: Biodiversity, Section 6.7.3.1.5 states:

WD3 - (Mixed) Conifer Woodland Habitat loss
[…] The proposed GCR route crosses this habitat to the north of the Colligan River. Trees and understory vegetation located within the area of proposed infrastructure will likely need to be felled/cleared to facilitate the works (over a width of approximately 10m). ***The loss of […] (Mixed) conifer woodland will result in a short term, negative, not significant effects on the habitat at a local geographical scale.*** [highlighted for emphasis]

Yet this is contradicted in the Applicant's Table 6-11: Residual effects of the proposed project, where it states '*permanent, not significant, negative effect*'

WD3 - (Mixed) conifer woodland	Loss of habitat	Permanent, not significant, negative effect during the construction phase at a local scale.	Refer to 6.8.1.3.5	No significant residual effects.	NA

We draw to the Commission's attention that WD3 Mixed Conifer Woodland provides important habitat for species such as the red squirrel (Wildlife Act) and pine marten (EU Habitats Directive, Annex V and Wildlife Act), both of which use conifer woodland for feeding and shelter. The removal of trees to facilitate the GCR will reduce available important wildlife corridors, cover, and quality of and connectivity between local habitats. This has the potential to cause disruption to these species.

EFFECTS ON EUROPEAN SITES

Throughout the EIAR, the Applicant admits that there will be negative impacts on EU-Designated Sites. Examples include:

EIAR Chapter 6: Biodiversity, Section 6.7 Assessment of Effects, 6.7.2 Designated Sites, 6.7.2.1 Construction Phase, 6.7.2.1.1 European Sites

The screening assessment concluded, in light of best available scientific data, that there is potential for likely significant effects on the Qualifying Interests and conservation objectives of the:

- *Blackwater River (Cork/Waterford) SAC [002170]*
- *Dungarvan Harbour SPA [004032]*
- *Blackwater Estuary SPA [004028]*

The NIS identified the potential for adverse effects on the integrity of the Blackwater River (Cork/Waterford) SAC, Dungarvan Harbour SPA and Blackwater Estuary SPA due to a potential degradation of water quality within the site during the construction and decommissioning phases, in the absence of mitigation. The degradation of water quality would result in a change in the community distribution and structure within habitats, a decrease in habitat area, and would reduce the carrying capacity of the SAC and SPAs to support the qualifying interests. Therefore, a degradation in water quality within the European sites would result in likely adverse effects on the qualifying interests/special conservation interests in view of their conservation objectives.

6.7.2.1.2 Other Designated Sites

Two pNHAs were identified as having source-pathway-receptor links to the proposed project, therefore significant effects are anticipated. The pNHAs are listed below:

- *Blackwater River and Estuary pNHA [000072] (situated within Blackwater River (Cork/Waterford) SAC and Blackwater Estuary SPA)*
- *Dungarvan Harbour pNHA [000663] (situated within Dungarvan Harbour SPA)*

6-56

Both pNHAs are located entirely within the above-mentioned European sites and therefore potential impacts discussed in relation to the European sites may also negatively affect the two pNHAs

6.7.3 Habitats, 6.7.3.1 Construction phase, 6.7.3.1.1 FW1 – Eroding/ upland rivers
Water Quality Impacts

Directional drilling will be carried out under four rivers, the Colligan River, the Ballykerin_Middle Stream, the Finisk River and the Scart_18 Stream as part of the proposed GCR infrastructure. At each location a launch and reception pit will be excavated. During these works there is potential for impacts to occur from sediment runoff and drill lubricant (e.g. bentonite) pollution.

These are just a few of the negative impacts that could affect EU-Designated – and thus EU-protected – waters, species and so on. We ask the Commission to just take a moment and reflect on the gravity of this.

And now we draw the Commission's attention to the wording used throughout the Applicant's Table 19-1 Table of EIAR Mitigation Measures Biodiversity / Ecology (EIAR Chapter 19: Schedule of Mitigation Measures):

Mitigation measures protecting [...] will ensure the protection of...

1. A mitigation measure will NOT ENSURE anything. 'To ensure' means to guarantee, and no one can make such a guarantee. Measures will be put in place to **attempt** to mitigate any negative impacts, NOT **guarantee** that they won't happen.
2. What's more, these mitigation measures state they ensure '*the protection of*' and NOT that they ensure a hazardous event will not happen. For illustrative purposes: locking a car will ensure the protection of the car, but it does not ensure that the car will not be stolen or vandalised.

We ask the Commission not to be fooled by such flippant use of terminology.

The only way to **ensure** that EU-Designated sites and species are not negatively impacted is to prevent the potential risks from arising in the first place. In other words, the only effective option is to implement the 'refuse permission' scenario.

Helping Ireland meet its renewable energy targets does not override the safety and integrity of biodiversity – especially those protected under EU and national law. And this is certainly the case with the proposed Scart Mountain development. There are plenty of other areas within the county, within Ireland and offshore that are suitable for wind farm development where there is no risk to biodiversity. Biodiversity is a key and crucial component of the climate challenge – one that is on a par with renewable energy.

FAILURE TO ACKNOWLEDGE AND/OR ADEQUATELY ADDRESS CUMULATIVE EFFECTS

In the EIAR Chapter 6: Biodiversity, Section 6.10 Cumulative Effects, it mentions the projects of the proposed Dyrick Hill Wind Farm (case ref: 317265; refused permission in October 2024, prior to the Scart Mountain EIAR originally being submitted in December) and Coumnagappul Wind Farm (case ref: 318446; refused permission in April 2025). As both are now at Judicial Review, they must still be considered.

While discussing both of these developments (and placing great reliance on their EIARs in desktop review studies), the entire section (page 6-78 to 6-79) fails to make any mention whatsoever to the GCRs – which is of particular concern when two parts of the proposed Scart Mountain GCR overlap with the Dyrick Hill and Coumnagappul GCRs, most notably along the R672 through Colligan Woods (we refer the Commission to the maps below).

Furthermore, as already mentioned previously, the EIAR of the Dyrick Hill Wind Farm cannot be treated as a reliable source – and subsequently cannot be relied upon for comments made based on it in this Application – due to the numerous errors throughout it (we refer the Commission to the Observation submitted by Julia Gorodecky et al against it, which includes a full comprehensive list of errors).



Source: Scart Mountain Grid Connection Route Map with purple sections highlighting the exact overlap of the GCR with the GCRs of the proposed Dyrick Hill Wind Farm (case ref: 317265) and Coumnagappul Wind Farm (ref. 318446). Full-size version available in our **Appendix: Maps – GCR Overlaps**.



Source: Extracts of maps showing last part of GCR for both Coumnagappul Wind Farm (left) and Dyrick Hill Wind Farm (right), which overlap the proposed Scart Mountain GCR at two points.

FAILURE TO ADDRESS BIODIVERSITY-RELATED RECOMMENDATIONS FROM DAU

We refer the Commission to the response provided by the Department of Housing, Local Government & Heritage (dated 13 March 2023) in Appendix 1-4: EIAR Scoping Consultee Responses:

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.* [highlighted for emphasis]

- *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.* This has not been done.
- *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.* They have not.

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), White-clawed Crayfish (Austropotamobius pallipes) 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).***

- No detailed assessment of the hydrological impacts on wetlands from the proposed development has been carried out/provided.
- *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.* No surveys were carried out. Inadequate desktop review studiess, yes. But surveys: no.

CONCLUSION

It is submitted that the biodiversity assessment supporting the proposed GCR Application is inadequate, incomplete and outdated. The Applicant has failed to provide the comprehensive, current and site-specific ecological surveys required under the EPA Guidelines and CIEEM best practice, relying instead on obsolete data, desktop studies and unsupported assumptions. Critical areas – including the Finisk River (that falls under the Blackwater SAC), Colligan River (that feeds into the Dungarvan Harbour SPA), Colligan Woods, Inchindrislawood and other ecologically sensitive habitats – have not been properly or adequately surveyed or assessed. As a consequence, the EIAR and NIS do not establish a reliable ecological baseline, fail to remove scientific doubt regarding potential adverse impacts on protected species and habitats, and do not demonstrate compliance with national or EU environmental legislation.

The omissions and inconsistencies identified throughout the assessment render it impossible for the Commission to carry out a complete, accurate and legally robust evaluation of the proposed GCR's ecological effects during construction. Significant gaps remain – particularly in relation to qualifying interests of the Blackwater River SAC and Dungarvan Harbour SPA, Annex II and Annex IV species, and habitats directly affected by the proposed works. Mitigation measures presented are based on incomplete information and are therefore unreliable.

Given these substantial deficiencies, the Application cannot be considered compliant with the requirements of the Habitats Directive, the Birds Directive, or the Planning and Development Acts. In the absence of robust, current, site-specific data and in light of potential risks to protected areas and species, it is submitted that the only responsible course of action is for the Commission to refuse permission.

ORNITHOLOGY

The Applicant has failed to carry out an adequate and comprehensive ornithology survey for the GCR and the HHD crossing areas. As a result, as with other bird species surrounding the main wind farm site, birds of significance – most notably the Kingfisher and the Grey Wagtail – have been omitted from the Application.

KEY POINT SUMMARY

- No ornithological field surveys were carried out along the 15.5 km GCR or HDD river crossings.
- Kingfisher and Grey Wagtail – both protected species – are not addressed.
- The EIAR relies solely on outdated, incomplete desktop data.
- Significant habitats and Natura 2000 linkages (Finisk → Blackwater SAC, Colligan → Dungarvan SPA) were not assessed.
- Cumulative effects with other proposed GCRs has not been addressed.
- Proposed mitigation is unreliable as it is based on absent field data and contradictory statements.
- The EIAR/NIS is incomplete, legally non-compliant, and cannot remove scientific doubt.
- Given the complete lack of ornithological surveys (as well as ground investigations), the Commission cannot lawfully conclude that the proposed GCR will not harm relevant bird species or their supporting habitats. Approval in such circumstances would therefore contravene Article 6(3) of Directive 92/43/EEC and the precautionary requirements established by the CJEU.

AN INCOMPLETE AND INADEQUATE ORNITHOLOGY SURVEY

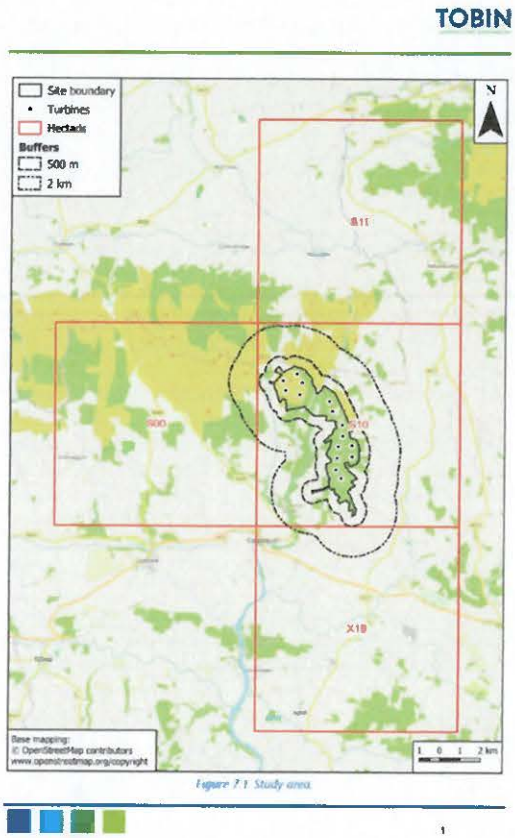
In EIAR Chapter 7: Ornithology, section 7.2, the Applicant provides details of their ornithological survey methodology:

7.2.1 Study area
The study area for the ornithological assessment comprised the proposed wind farm site and various buffers around this site. […] Some survey work was also carried out outside these buffers. […] The study area also included the proposed grid connection route (GCR) and proposed turbine delivery route (TDR).
This statement is incorrect and misleading as no evidence or results have been provided of any studies having been carried out along the GCR.

The study area for the final desk review was defined as a 2 km buffer around the proposed wind farm site (Figure 7.1).
The 'wind farm site' is not the GCR. The GCR travels 15.5km from the wind farm site. The study area does not include the 15.5km of the GCR.

*All bird records held by the National Biodiversity Data Centre for the four hectads (10 km squares) overlapping the study area (**S00, S10, S11 and X19**; Figure 7.1) were reviewed. These included records from the four national bird atlas surveys (Sharrock et al., 1976; Lack, 1980; Gibbons et al., 1993; Balmer et al., 2013)*

As the Commission will see in Figure 7.1 (below), the four hectads mentioned (S00, S10, S11 and X19) only cover the wind farm site and surrounding area. No records have been accessed and checked for the full length of the proposed GCR.



Source: EIAR Chapter 7: Ornithology, Figure 7.1 showing the ornithological study area from National Biodiversity Data Centre database

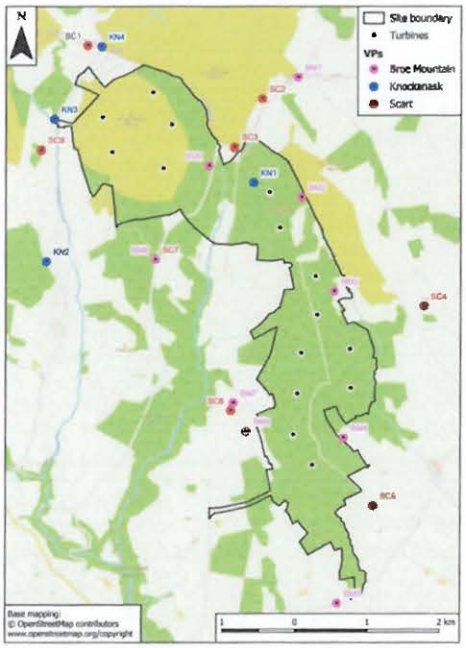
Other data sources used included: information from rare and protected species records supplied by the National Parks and Wildlife Service; information on site coverage from the Irish Wetland Bird Survey; information contained in Environmental Impact Assessment Reports for other wind farm projects in this area; and other relevant papers and technical reports.

1. The '*information from rare and protected species records supplied by the National Parks and Wildlife Service*' was from August 2023, and therefore should be considered outdated and irrelevant: *A sensitive data request for hectads S10, X19 and X29 (which encompass the proposed project) was issued to NPWS on 3 August 2023 and a NPWS data package was received on 21st August 2023.* (EIAR Chapter 6: Biodiversity)
2. The '*information contained in Environmental Impact Assessment Reports for other wind farm projects in this area*' is an incorrect and misleading statement. While the Applicant does indeed refer to the EIARs of the proposed Dyrick Hill Wind Farm (case ref: 317265) and proposed Coumnagappul Wind Farm (case ref: 318446) when discussing the wind farm site, it fails entirely to mention either one with regards to the GCR. This is of particular concern considering the fact that the GCR routes of all three physically overlap in two places – most notably along Colligan Wood – and also share the same hydrological connections of the Finisk River and Colligan River. Please see our section later in this chapter that addresses this issue on more detail.

3. The Applicant holds up the EIAR for the proposed Dyrick Hill Wind Farm (case ref: 317265) as a source of information on Ornithology, yet the Applicant made an Observation against the proposed Dyrick Hill Wind Farm with one of the key points in their observation being the risk to Hen Harriers (see our **Appendix: FuturEnergy / Dyrick Hill Wind Farm Observation**).
It is beyond belief that the Applicant is willing to quote ornithology findings of a wind farm development that they 'observed' did not meet the requirements of ornithology.

LACK OF ORNITHOLOGY FIELD SURVEYS ALONG THE GCR

To highlight the lack of adequate surveys discussed above, EIAR Chapter 7: Ornithology, Figure 7.3. Vantage point locations (added below) clearly shows that no bird field surveys took place anywhere along the GCR or at/near any of the HDD river crossings. All bird survey overviews shown are of the wind farm site itself.



The lack of ornithological field surveys and associated environmental investigations along the proposed GCR is of particular concern with regards to the Colligan River, Finisk River, Colligan Wood and Inchindrislawood as none have been adequately assessed or addressed for presence, habitat suitability, nesting suitability, and feeding/foraging suitability.
It is also of particular concern as various records confirm the presence of Kingfisher and Grey Wagtail along the Finisk River and Colligan River areas as well as the suitability for breeding and nesting habitat sites therein.

This omission would be unacceptable under any circumstances. And what makes it even more unacceptable and concerning is the fact that the Colligan River is hydrologically connected to the Dungarvan Harbour SPA, and that the Finisk River is hydrologically connected to the Blackwater River SAC.

It is submitted that, under Article 6(3) of Directive 92/43/EEC, any plan or project likely to have a significant effect on a designated site must undergo an Appropriate Assessment. In order to complete this assessment, adequate baseline ecological information is required.

'Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives.' (Article 6(3) of Habitats Directive 92/43/EEC)

Appropriate Assessment of plans and projects
Article 7 of the Habitats Directive extends the scope of its Article 6(2), 6(3) and 6(4) to the Birds Directive. Therefore, any plan or project that is likely to have a significant effect on a special protection area must be subject to appropriate assessment under Article 6(3) of the Habitats Directive. Competent authorities [the Commission in this instance - ed.] *may only agree to a plan or project after having ascertained that it will not have a significant impact on the integrity of a Natura 2000 site.*
https://www.npws.ie/legislation/eu-directives/birds-directive

Finally: Any mitigation measures put forward by the Applicant are unreliable as one cannot mitigate for an unknown or poor environmental baseline survey and missing details regarding the presence of birds along the GCR.

By failing to provide a baseline environmental assessment – extensive or otherwise – the Applicant is denying the Commission a full and complete assessment of the ornithological status of the GCR and in particular the Colligan River, Finisk River, Colligan Wood and Inchindrisiawood, and therefore **fails to remove all scientific doubt** regarding potential adverse impacts. As a result, the Commission is unable to make a truly informed decision on the Application, and therefore cannot be expected to grant permission.

FAILURE TO ADDRESS BIODIVERSITY-RELATED RECOMMENDATIONS FROM DAU

We refer the Commission to the response provided by the Department of Housing, Local Government & Heritage (dated 13 March 2023) in Appendix 1-4: EIAR Scoping Consultee Responses:

Nature Conservation
When completing Impact Assessments for birds, assessment and monitoring results from nearby wind farms must be considered. Cumulative impact on birds from all wind farms in the area needs to be assessed and the data from surrounding sites needs to be considered in the assessment. The assessment should also consider any currently proposed wind farm application adjoining the site and how that may interact with the proposed development.
The Applicant has failed to assess – or even address/mention – the GCRs of the proposed Dyrick Hill Wind Farm (case ref: 317265; refused but at Judicial Review) and Coumnagappul Wind Farm (case ref: 318446; refused but at Judicial Review). While this does not concern cumulative impacts of turbines, it does concern disruption to habitat as the GCRs overlap/run alongside the proposed Scart Mountain GCR at two points, and are hydrologically connected with it at various points.

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.*
[highlighted for emphasis]

- *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.* This has not been done.
- *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.* They have not.

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 [...] Kingfishers (Alcedo atthis) protected under the Wildlife Acts and listed on Annex I of the Birds Directive (Council Directive 79/409 EEC).***

- No detailed assessment of the hydrological impacts on wetlands from the proposed development has been carried out/provided.
- *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.* No surveys were carried out. Inadequate (and unreliable) desktop review studies, yes. But ornithological field surveys: no.

We remind the Commission: Just because a species is not recorded somewhere on a database, that does not mean it is not present in that location.

We refer the Commission to our **Chapter 1. Biodiversity** for more and full details on the lack of adequate assessments – no field surveys, sole reliance on desktop reviews studies and so on – and the fact that this leaves the Commission unable to say beyond any scientific doubt that the proposed GCR will not have adverse effects on species listed on Annex I of the EU Birds Directive and Red-Listed bird on the BOCCI.

SOLE RELIANCE ON DESKTOP REVIEW STUDIES

EIAR Chapter 7: Ornithology starts with:
'*The chapter [...] is primarily based on bird surveys carried out between the winter of 2022/23 and the summer of 2024. Reference is also made to previous relevant bird survey data dating back to the winter of 2017/18.*' (page 7-1)

Which means that the Applicant had two breeding seasons to carry out live ornithology field surveys along the proposed GCR as well as the nesting and breeding habitats of the

Kingfisher and Grey Wagtail at the Finisk River and Colligan River (or, as they also make reference to *previous bird survey data dating back to the winter of 2017/18*, possibly three seasons), but instead they chose to rely solely on desktop review studies.

Having read through the Applicant's EIAR, we find that the only mentions of any studies carried out regarding ornithology and the GCR are as follows:

EIAR Chapter 7: Ornithology:
7.2.2 Desk review: 'Categorisation of species as red-listed, or amber-listed, in Birds of Conservation Concern in Ireland 2020 – 2026 (Gilbert et al., 2021), and/or inclusion of species on Annex I of the Birds Directive, was used to help highlight species of potential interest. (page 7-4)
Desktop review study only

Therefore, the **Annex I** Kingfisher and **Red-listed** Grey Wagtail – both of which are also Natura 2000-protected – only warranted a desktop review study. As we are sure the Commission will agree, this is woefully inadequate and far from a complete assessment.

7.2.5 Grid connection route and turbine delivery route: 'The potential ornithological value of habitats along the proposed GCR and proposed TDR were assessed.' (page 7.6)
There is no other text accompanying this one sentence. Assessed how?

7.2.3 Habitat data: 'The habitat data used for the assessments in this chapter come from two sources. The habitats within the wind farm site were surveyed for the proposed project (see Chapter 6). The CORINE2018 dataset1 was used for habitats outside the wind farm site'.
(page 7-4)
Desktop review study only, and nothing more.

7.4.11.3 Grid Connection Route (Proposed GCR): 'The section of the Colligan River crossed by the proposed GCR may contain potential breeding habitat for Kingfisher and Grey Wagtail. Probable breeding by Grey Wagtail was recorded in the tetrad (2 x 2 km grid square) covering this area during the Bird atlas 2007-11 surveys (Balmer et al., 2013).'
(page 61)
Desktop review study only. But we do finally have mention of the two significant species that could be impacted by the proposed HDD works. Unfortunately, it only refers to the Colligan River HDD and fails to include the Finisk River HDD crossing.

Additionally, ambiguous wording such as '*may*' and '*probable*' does not instil much confidence in the Applicant's Kingfisher and Grey Wagtail desktop review studies and their proposed associated mitigation measures.

And yet, with this admission and knowledge, and records confirming the species presence, the Applicant has completely failed to carry out any live field surveys and thus provide a complete and adequate EIAR. If there is potential breeding habitat and if probable breeding was recorded, then the Applicant should have taken this as sufficient grounds to carry out full and detailed surveys and studies. The Applicant's true baseline ecological conditions are absent and as a result they fail to provide a complete informed assessment of the impacts and as a result their mitigation measures are lacking.

As explained in our Biodiversity chapter, best practice in ecological assessment, as set out in the EPA's *Guidelines on the Information to be Contained in Environmental Impact Assessment Reports* (2022) and in CIEEM guidance, clearly indicates that **desk-based data sources are to be supported by appropriate and up-to-date field surveys**. Such surveys are necessary to accurately characterise the ecological baseline, verify the presence or

possible absence of protected species and habitats, and provide site-specific ecological information relevant to the proposed development and its surroundings.

Reliance on desk-based records alone is not sufficient to establish the current ecological conditions of the site. These datasets may be incomplete, dated or spatially limited, and therefore must be supplemented by targeted, site-specific field surveys undertaken at appropriate times of year and to recognised survey standards.

In the absence of robust, site-specific ecological survey data, it is not possible for the Applicant to demonstrate that the ecological baseline has been adequately described, nor that potential impacts on protected species, habitats and sensitive ecological receptors have been fully assessed and mitigated for in the case of any negative impacts. Consequently, the Application fails to meet the standards of best practice required under the EPA and CIEEM guidance, and does not provide sufficient information to enable the Commission to conduct a complete, accurate and legally robust assessment of ecological effects.

FAILURE TO ASSESS ORNITHOLOGICAL IMPACTS OF THE GCR

The EIAR submitted for the Scart Mountain project does **not** include an assessment of the ornithological impacts associated with the GCR, despite the GCR being an integral element of the project. Although the GCR Application has been submitted separately, its construction and operation will inevitably contribute to the overall ecological footprint of the development. Submission of the GCR as a separate Application does not remove the Applicant's obligation to assess all significant ecological impacts arising from the complete project.

No ornithological field surveys were undertaken for the GCR, even though it crosses habitats that are **highly relevant for birds**, including:

- Four waterways in total via Horizontal Directional Drilling (HDD). Two of which are **hydrologically connected** to EU-designated conservation sites – Finisk River (**Blackwater River SAC)** and Colligan River (**Dungarvan Harbour SPA).** These features represent key ecological pathways and are therefore directly relevant to the sensitivity of the Important Avian Features (IAFs) potentially affected by the development.
- Modeligo Bridge, which is **suitable for grey wagtail nesting**.
- Areas of **woodland**, which may support breeding, foraging, and roosting species.

Percival (2003) and subsequent best-practice guidance make clear that the evaluation of ornithological impacts depends on a thorough assessment of the sensitivity of Important Avian Features (IAFs) to all elements of the project that may cause disturbance, displacement, habitat loss or increased mortality risk. The GCR, which involves ground-disturbing works, construction traffic and habitat fragmentation, has clear potential to affect sensitive bird species in its own right.

By excluding the GCR from the EIAR and treating it as a 'second thought' with regards to assessments and studies, the Applicant has effectively segmented the project in a way that prevents a full and meaningful evaluation of cumulative and project-wide impacts. This contravenes the principle that relevant associated infrastructure should be assessed together, ensuring the totality of impacts on avian populations is understood.

Without an integrated appraisal of both the wind farm and the GCR, the ornithological assessment is incomplete and inadequate. Given the potential for significant impacts on EU-designated sites and protected bird species – combined with the absence of essential field survey data – the Commission cannot be confident that significant effects on IAFs have been properly identified, mitigated or evaluated. The Application should therefore be considered deficient and should not be approved.

GREY WAGTAIL (*MOTACILLA CINEREA*)

EIAR Chapter 7: Ornithology, section 7.4.11 Other Impacts, states:
7.4.11.3 Grid connection route (Proposed GCR)
The section of the Colligan River crossed by the proposed GCR may contain potential breeding habitat for Kingfisher and Grey Wagtail. Probable breeding by Grey Wagtail was recorded in the tetrad (2 x 2 km grid square) covering this area during the Bird atlas 2007-11 surveys (Balmer et al., 2013).

The Grey Wagtail is:

- RED-LISTED in the Birds of Conservation Concern Ireland 2020-2026 and, as a result, is of high conservation value.
  Source: https://maps.biodiversityireland.ie/Species/11457

- Part of the Natura 2000 network, with the assigned species code **A261**.

All species of the *Motacillidae* family, to which the Grey Wagtail belongs, are listed under Appendix II of the Bern Convention (1979, as amended) as strictly protected fauna species. This prohibits the deliberate capture, killing or disturbance of the species, and protects its breeding and resting sites. Furthermore, the Grey Wagtail is protected under the EU Birds Directive (2009/147/EC), which provides for the conservation of all wild bird species naturally occurring in the EU. Under Articles 1 and 5 of the Directive, all wild birds, their eggs, nests and habitats are safeguarded from deliberate destruction or disturbance. The Directive also requires Member States to maintain populations of wild birds at favourable conservation status and to designate Special Protection Areas (SPAs) under Article 4 for species and habitats of particular importance. Collectively, these ensure that the Grey Wagtail is afforded strict legal protection, reflecting its ecological significance and conservation priority.

RECORDS CONFIRMING PRESENCE OF GREY WAGTAIL

There is no mention in the EIAR of any investigation – field surveys or desktop review studies – having been carried out specifically for Grey Wagtail along the GCR or otherwise. Therefore, the Applicant has failed to provide any evidence as to 1. whether the species was addressed, and 2. evidenced confirmation of its presence or lack thereof.

In light of this serious omission, it is submitted that records do show that the Grey Wagtail is present in the Colligan River and Finisk River systems. Examples include (but are not limited to):

- National Biodiversity Data Centre: confirmed sightings during breeding and winter seasons (for example 20/03/2021 in grid X2197 and 03/04/2020 in grid X2297; 20/02/2023 – please see our **Appendix: NBDC Excels**).
- Dyrick Hill Wind Farm (case ref: 317265) EIAR Appendix 7.1: Dyrick Hill Ornithology Report: *3.3.1 Summer 2020: Two Hinterland sites were visited in Summer 2020, River Finisk (Mountain Castle) and Boolahalla. No target species were recorded but* ***Red-listed grey wagtail was observed at River Finisk on 11th of August 2020.***

For the Commission's reference, the proposed HDD for the Scart Mountain GCR lies approximately 1.89km downstream (as the crow flies, see map below) from the recorded sighting mentioned in the Dyrick Hill Ornithology Report, along the same continuous river corridor. irrespective of the fact that the Finisk meanders, the hydrological and ecological connectivity between these two points (Mountain Castle and Modeligo Bridge) remains intact, with suitable environments throughout. As the Grey Wagtail typically occupies and forages along extended, winding stretches of river rather than isolated sites, it is very reasonable to conclude that the species would also be present within the Modeligo section of the Finisk.



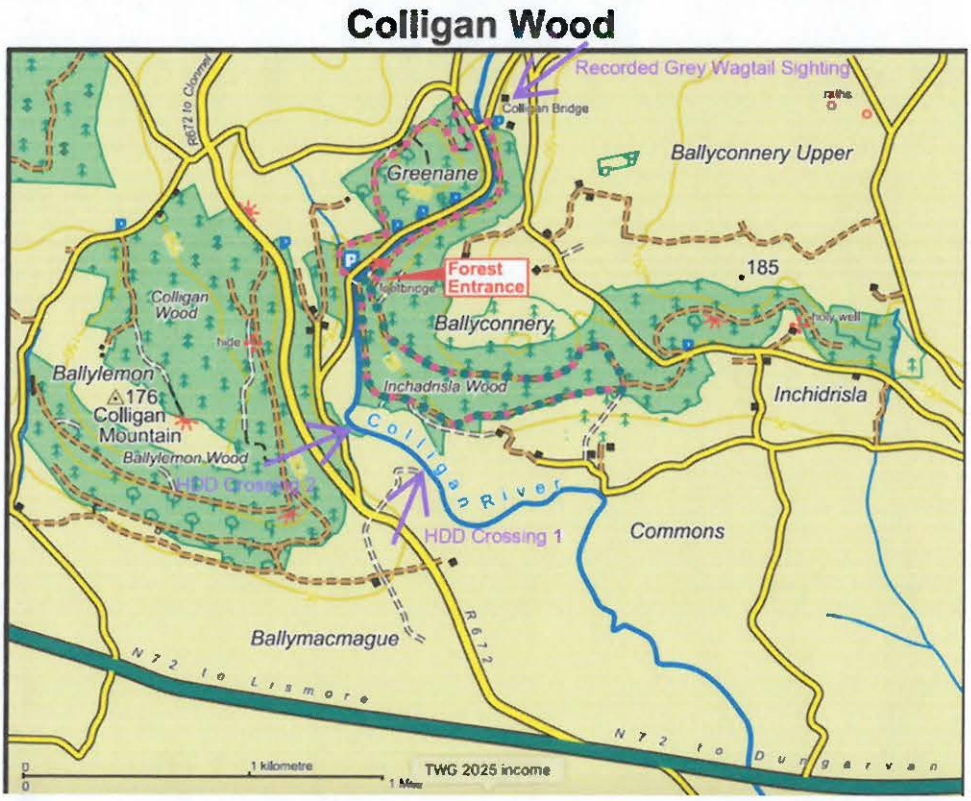
Map showing location of Mountain Castle (top) and Modeligo Bridge – location of proposed Scart Mountain GCR HDD crossing (bottom) on the River Finisk

- Dyrick Hill Wind Farm (case ref: 317265) EIAR Appendix 7.1: Dyrick Hill Ornithology Report: *Summer 2021: A total of six specific hinterland sites were visited in Summer 2021 […] (****River Finisk*** *(Ballynagleragh),* ***River Finisk*** *(Ballynamult) and* ***River Finisk*** *(Mountain Castle) […]* ***the following birds of conservation concern were observed during the hinterland surveys of Summer 2021: […] grey wagtail (Red-listed)…***

- Coumnagappul Wind Farm (case ref: 318446) EIAR Appendix 9.3: Aquatic Survey Reports 1.3: *Grey wagtails (Motacilla cinerea) were observed at Scart Br. (ITM 62289 60500) and at Colligan Br. (ITM 62195 59806)* (page 11)

For the Commission's reference, the map below shows the location of Colligan Bridge and the two HDD crossing locations proposed in the Scart Mountain GCR Application (please see our **Chapter 4: Colligan River & Finisk River Crossings** for further details regarding two locations). Again, irrespective of distance, it is along the same continuous

river corridor. The hydrological and ecological connectivity between these points remains intact, with suitable environments throughout. As the Grey Wagtail typically occupies and forages along extended, winding stretches of river rather than isolated sites, it is reasonable to conclude that the species would also be present within the stretch of the Colligan River where the HDD works are proposed to be carried out.



Source: Coillte Map of Colligan Wood, with purple arrows added by us showing location of Grey Wagtail sighting at Colligan Bridge (as recorded in Coumnagappul Wind Farm Appendix 9.3: Aquatic Survey Reports 1.3) and both proposed locations of HDD crossing of Scart Mountain GCR; https://www.coillte.ie/wp-content/uploads/2017/01/Waterford-ColliganMapFinal.pdf.com

- Coumnagappul Wind Farm (case ref: 318446) EIAR Appendix 9.3: Aquatic Survey Reports 1.3, Conclusion: *Protected riparian animal species, including otter, kingfisher and grey wagtail, have been recorded at downstream locations...* (page 19)

- Coumnagappul Wind Farm Appendix 10.1 Ornithology Report

- Waterford Birds website: We also refer the Commission to the Waterford Birds website – waterfordbirds.com – for further investigation on sightings per month, year. Unfortunately, due to time constraints of having to compile an Observation on the entire EIAR within seven weeks and with a small team, we have not had the opportunity to be able to delve further into this, but we trust the Commission to carry out a full detailed search.

Due to this lacuna, we ask the Commission to carry out a full investigation / to ensure a full investigation – assessment - is carried out of this species along the GCR.

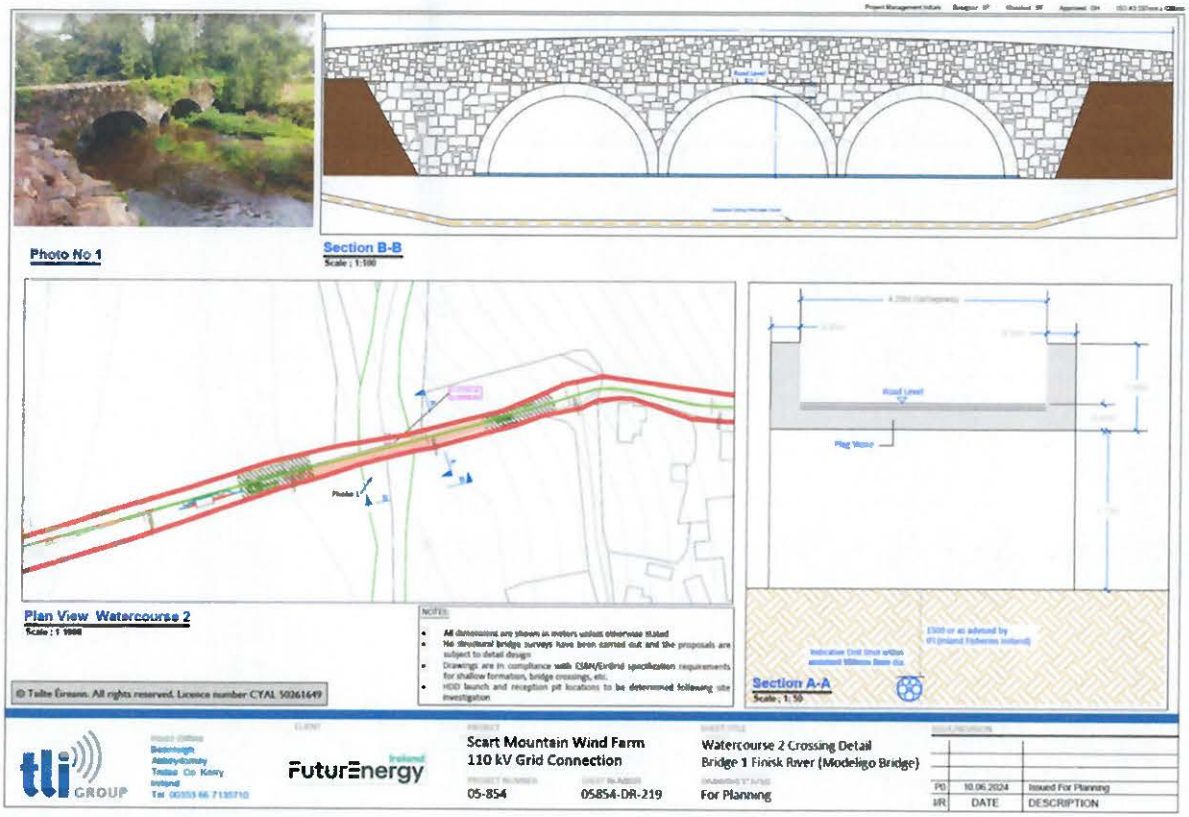
MISLEADING STATEMENTS MADE REGARDING SUITABLE NESTING SITE OF GREY WAGTAIL

In the EIAR Chapter 7: Ornithology, Section *7.4.11 Other Impacts*, the Applicant states:
7.4.11.3 Grid connection route (Proposed GCR)
'Construction of the proposed GCR could cause disturbance to breeding Kingfishers or Grey Wagtails if there are nest sites close to the crossing point, and if construction work takes place during the breeding season. ***However, most Grey Wagtail nest sites in Ireland are associated with bridges or other artificial structures*** *(Smiddy and O'Halloran, 1998),* ***so there are unlikely to be any Grey Wagtail nest sites close to the proposed GCR.'*** (page 61) [highlighted for emphasis]

The Applicant's claim that there are unlikely to be any Grey Wagtail nest sites close to the proposed GCR as most Grey Wagtail nest sites are associated with bridges is misleading and an untrue statement when considering both HDD crossings at the Finisk River and the Colligan River.

Colligan River: The Applicant states *'Probable breeding by Grey Wagtail was recorded in the tetrad (2 x 2 km grid square) covering this area during the Bird atlas 2007-11 surveys (Balmer et al., 2013).'* (page 61, EIAR Chapter 7: Ornithology).
For the Commission's attention, there is a bridge not far upstream of the proposed HDD Colligan River crossing that lies well within the 2 x 2 km grid square – and we ask: Is this the breeding site that Balmer et al. 2013 refers to?

Finisk River: the Applicant seems to be somewhat confused (which is of concern) of the fact that they have proposed the HDD crossing of the Finisk River to take place at Modeligo Bridge (see below).



Source: Applicant's 05854-DR-219Watercourse-2-Crossing-Detail-Finisk-River

As the Commission will see from the photograph included above, Modeligo Bridge is a three-arched stone bridge crossing the flowing River Finisk, and it provides features typical of suitable bridge-nesting habitat for the Grey Wagtail. Grey Wagtails commonly nest under stone bridges along fast-flowing rivers, using sheltered crevices and ledges above normal water level for protection. The Finisk River offers suitable foraging conditions with riffles and aquatic insects, and – as already mentioned above – Grey Wagtails have been recorded along it.

Yet there is a distinct lack of any physical/live field surveys of this suitable bridge-nesting-habitat for the Grey Wagtail in the Application.

Sources: Bern Convention, Appendix II: https://rm.coe.int/1680304355 and
EU Birds Directive (Directive 2009/147/EC): https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0147

With absolutely no live field surveys carried out, **the Application is seriously lacking and does not contain complete, precise and definitive findings and conclusions**. This means that the Application is **not capable of removing all scientific doubt** (as is required by law) as to the effects of the proposed development. Therefore, with this in mind, the Commission cannot be expected to grant permission. Especially in light of the fact that this relates to a BOCCI Red-Listed species, Bern Convention Annex II-protected fauna species and EU Bird Directive-protected species, in addition to its habitat – which is within the environs of the project's HDD sites - being protected too.

KINGFISHER (*ALCEDO ATTHIS*)

EIAR Chapter 7: Ornithology, section 7.4.11 Other Impacts, states:
7.4.11.3 Grid connection route (Proposed GCR)
The section of the Colligan River crossed by the proposed GCR may contain potential breeding habitat for Kingfisher and Grey Wagtail.

The Kingfisher is:

- An **Annex I-protected species under the EU Birds Directive**
- **Amber-listed** in the Birds of Conservation Concern Ireland 2020-2026 (BOCCI) and, as a result, is of high conservation value.
  Source: https://maps.biodiversityireland.ie/Dataset/21/Species/11112 and
  https://eunis.eea.europa.eu/references/2441/species
- Part of the Natura 2000 network, with the assigned species code **A053.**

Although not classified as 'globally threatened' in Ireland, the Kingfisher remains locally scarce and vulnerable due to habitat loss, water pollution and disturbance along riverbanks. As a specialist of clean, slow-flowing rivers, lakes and wetlands with abundant small fish, its presence serves as an indicator of good water quality. Kingfishers nest by excavating deep burrows in vertical, sandy or earthen riverbanks, where they lay their eggs. Protecting riparian habitats, maintaining unpolluted waterways and preserving natural banks suitable for nesting are essential for sustaining this ecologically important species.

Sources: https://birdwatchireland.ie/birds/kingfisher; https://www.npws.ie/sites/default/files/publications/pdf/Cummins_et_al_2010_Kingfisher_survey.pdf; and https://birdwatchireland.ie/a-guide-to-identifying-riverbirds-the-dublin-city-riverbird-survey/

'The kingfishers are cavity nesters with holes usually in earth banks on the sides of rivers and lakes. ***The Blackwater SAC is one of two rivers in Ireland that are designated for the conservation of the Kingfisher****. Main threats to Kingfishers include: predation; low food supply due to pollution and loss of habitat due to flooding and bank erosion. Bank erosion is having a devastating effect on wildlife […], including the Kingfisher which requires steep river banks to build nests.'* [highlighted for emphasis]

Source:
https://www.duhallowlife.com/sites/default/files/ANNEX%20SPECIES%20BROCHURE.pdf

RECORDS CONFIRMING PRESENCE OF KINGFISHER

There is no mention in the EIAR of any investigation – field surveys or desktop review studies – having been carried out specifically for Kingfisher along the GCR or otherwise. Therefore, the Applicant has failed to provide any evidence as to 1. whether the species was addressed, and 2. evidenced confirmation of its presence or lack thereof.

In light of this serious omission, it is submitted that records do show the Kingfisher's presence in the Colligan River and Finisk River systems. Examples include (but are not limited to):

- *'Fri 29 Sept (2023): DUNGARVAN: Adult* ***WHITE-WINGED BLACK TERN*** *at Colligan River; a* ***DOTTEREL*** *flew over Ballyneety Bridge, further upriver; also a* ***Kingfisher*** *at Ballyneety.'* http://www.waterfordbirds.com/jandec2023.html
  For the Commission's reference: Ballyneety sits just east of the Colligan River and at the northern edge of the Dungarvan Harbour SPA.

- *'The Colligan River plays a major role in this wood which sits on either side of the river valley as it flows through on its way to meet the sea at Dungarvan Bay. Spoilt for choice, the visitor has the option to picnic [….] Explore nature: The River plays a big role in Colligan. Take some time to sit quietly on one of the seats close to the river and watch the dippers bobbing up and down. You may be lucky enough to see a kingfisher. Enjoy.'* https://www.coillte.ie/site/colligan-wood/ (we note the irony that this is from the Coillte website, a co-owner of FuturEnergy, the Developer behind this Application)

- Coumnagappul Wind Farm (case ref: 318446) EIAR Appendix 9.3: Aquatic Survey Reports 1.3: *While no evidence of European kingfisher (Alcedo atthis) was recorded at any of the stretches of watercourse surveyed in the Colligan catchment, the NBDC website shows records of the presence of this species.* (page 11)

- Coumnagappul Wind Farm (case ref: 318446) EIAR Appendix 9.3: Aquatic Survey Reports 1.3, Conclusion: *Protected riparian animal species, including otter, kingfisher and grey wagtail, have been recorded at downstream locations...* (page 19)

As previously stated: the **absence of records does not imply absence of species**. It is also important to bear in mind that, despite their bright blue and orange plumage, Kingfishers are not so easy to spot. They perch motionless beside water patiently hunting for their prey, travel extremely fast when they strike, and use low-flying, brief flight paths over water surfaces. Consequently, unless someone is specifically surveying for Kingfishers, travelling along the water (for example by canoe) or (for example) fishing, the likelihood of spotting a kingfisher is substantially reduced; the birds are not so likely to be spotted by people taking casual walks past a stream or river. This is substantiated by survey evidence from six Irish river catchments (both bank- and boat-based surveys), which indicated that reliable detection of kingfishers is strongly aided by systematic methods (e.g. multiple visits, boat access) rather than incidental sightings from the banks alone.

As with the Grey Wagtail above, absolutely no live field surveys were carried out regarding the Kingfisher species and their habitat/nesting sites at or near the HDD sites of the Finisk River and Colligan River even though records show their past presence in the areas as well as there being suitable habitats for them. **The Application has serious lacunae and does not contain complete, precise and definitive findings and conclusions**. This means that the Application is **not capable of removing all scientific doubt** (as is required by law) as to the effects of the proposed development. Therefore the Commission cannot be expected to grant permission to the Application and has ample legal reasoning to refuse the project. Especially in light of the fact that this relates to an **Annex I-protected species under the EU Birds Directive**.

RECOMMENDED BEST PRACTICE PROTECTION OF THE KINGFISHER

In the Assessment of the distribution and abundance of Kingfisher and other riparian birds on six SAC river systems in Ireland report commissioned by the National Parks and Wildlife Service and prepared by BirdWatch Ireland, it states:

Recommendations for future monitoring, and protection of the Kingfisher
'Future monitoring of waterways birds should adopt the methodology used in 2010. Three visits between mid-March and end of May are of considerable benefit, especially for Kingfisher, which is reportedly an early nester (Boag 1982). The majority of nests are laid at the end of March and into early April, which means that the first brood of chicks can be fledged by the end of April.' (page 33)
Source:https://www.npws.ie/sites/default/files/publications/pdf/CumminsetaI2010Kingfishersurvey.pdf

If the Applicant had followed the above best-practice, they would have provided the appropriate survey information that would have allowed the Commission to make a fully informed decision, either way. And it would be a decision that the Commission can be confident has **removed all scientific doubt** regarding potential adverse impacts on the EU-protected waterways and the species therein.

IMPACTS ON KINGFISHER

In the same report, it states:
Pressures and threats
'Disturbance factors could also impact on numbers of breeding pairs, as Kingfishers will often not nest in an area if there is ongoing disturbance nearby (Boag 1982)' (page 32)
Source:https://www.npws.ie/sites/default/files/publications/pdf/Cumminsetal2010Kingfishersurvey.pdf

We draw to the Commission's attention that in EIAR Chapter 7: Ornithology, Section 7.4 Potential Effects, 7.4.11 Other Impacts, 7.4.11.3 Grid connection route (Proposed GCR), the Applicant states:

'The Irish population of Kingfisher is estimated to be a maximum of around 1000 pairs. Therefore, the Co. Waterford population is clearly less than 100 pairs, so one breeding pair will be more than 1% of the county population. ***Therefore, disturbance to breeding Kingfishers that causes avoidance of a nest site or failure of a breeding attempt would be a temporary significant negative impact at the county scale.*** (page 61)
[highlighted for emphasis]

The highlighted sentence implies that the Applicant could consider carrying out construction during breeding season, as they have chosen to include such a caveat in their 'potential effects of the Grid Connection Route' section. This is completely contradictory to what Cummins et al recommends.

Furthermore, the above statements are the Applicant's unsupported assertion that disturbance to the breeding Kingfisher and Grey Wagtail* would have a *'temporary significant negative impact'*. For the Commission's information, the Applicant is using the *Guidelines for Ecological Impact Assessment in the UK and Ireland* (CIEEM, 2019) when it comes to assessment of significance. In those guidelines, it states:
Duration
5.14 Duration should be defined in relation to ecological characteristics (such as the lifecycle of a species) as well as human timeframes. For example, five years, which might seem short-term in the human context or that of other long-lived species, would span at least five generations of some invertebrate species.
5.15 ***The duration of an activity may differ from the duration of the resulting effect caused by the activity. For example, if short-term construction activities cause disturbance to birds during their breeding period, there may be long-term implications from failure to reproduce that season.*** *Impacts and effects may be described as short, medium or long-term and permanent or temporary. These will need to be defined in months/years.* (page 38) [highlighted for emphasis]
Source: https://cieem.net/wp-content/uploads/2018/08/EclA-Guidelines-v1.3-Sept-2024.pdf

The highlighted section shows that a 'temporary' disturbance to a nest or breeding attempt during construction works, could actually in fact have long-term implications.

This is yet another example of the use of misleading assertions that paint the Application in a favourable light and attempt to 'lighten' the potential impacts and effects. Particularly when read in combination with the way the Applicant presents the figures of *'clearly less than 100 pairs, so one breeding pair will be more than 1% of the county population'* and *'a lot less than 100 pairs, so one breeding pair will be more than 1% of the local population'* – so as to attempt to 'minimise' their importance. With an Annex-I species, ALL percentages – no matter how small – are of great importance.

Yet we once again draw to the Commission's attention another lacuna: the Applicant has chosen to ignore the '*need to define in months and years*' of the impacts and effects – and thus fail to provide the relevant information – as per the CIEEM-recommended best practice guidelines for impact assessment.

*'[Based on the availability of habitat in the local area (i.e., within around 5 km of the grid connection crossing), the local population of Grey Wagtails will be a lot less than 100 pairs, so one breeding pair will be more than 1% of the local population. **Therefore, disturbance to breeding Grey Wagtails that causes avoidance of a nest site or failure of a breeding attempt would be a temporary significant negative impact at the local scale.**'* (page 61, EIAR Chapter 7: Ornithology, Section 7.4 Potential Effects, 7.4.11 Other Impacts, 7.4.11.3 Grid connection route (Proposed GCR))
[highlighted for emphasis]

FAILURE TO FULLY ADDRESS THE EU-DESIGNATED SITES AND WATERFORD CITY & COUNCIL DEVELOPMENT PLAN (2022-2026)

The proposed HDD works at the Finisk River (part of the Blackwater River SAC, Site Code 002170) and the Colligan River (hydrologically connected to the Dungarvan Harbour SPA, Site Code 004032) raise significant concerns under the EU Birds and Habitats Directives and their transposition into Irish law. Both rivers form integral parts of, or are directly connected to, Natura 2000 sites supporting the Annex I-listed Kingfisher and other qualifying bird species.

However, the Applicant has carried out no environmental, ground, or ornithological field investigations for either site. In the absence of such baseline data, it is not possible – on the basis of the best scientific knowledge – to establish that the project will not adversely affect the integrity of these European sites. As the Commission is aware, under Article 6(3) of the Habitats Directive, any project likely to have a significant effect on a SAC or SPA must undergo Appropriate Assessment (AA), informed by adequate scientific evidence. As confirmed by the CJEU in *Waddenzee* (C-127/02) and reaffirmed in *Sweetman* (C-258/11), *People Over Wind* (C-323/17) and *Holohan* (C-461/17), authorisation may be granted only where no reasonable scientific doubt remains as to the absence of adverse effects on site integrity. Given the complete lack of ornithological surveys (as well as ground investigations), the competent authority cannot lawfully conclude that the proposed Scart Mountain GCR will not harm relevant bird species or their supporting habitats. Approval in such circumstances would therefore contravene Article 6(3) and the precautionary requirements established by the CJEU.

Furthermore, as the Kingfisher is Amber-listed in Ireland's BOCCI and remains vulnerable to threats such as water pollution, habitat degradation, flooding and bank erosion, the lack of adequate ecological assessment is inconsistent with both EU and national obligations to ensure the species' protection and the conservation of the habitats upon which it depends.

Finisk River:
The Finisk River is a large tributary of the Blackwater River SAC (as recognised by the NPWS). The Blackwater River is a designated Natura 2000 site under the Habitats Directive, encompassing qualifying Annex I habitats and Annex II species. Bird interests, including the Annex I-listed Kingfisher, are protected within the overlapping or nearby SPAs, such as the Blackwater Estuary SPA (004028) and the Blackwater Callows SPA (004094) (the latter of

which has been omitted by the Applicant in their assessment – as is highlighted by Ecologist Dr Patrick Moran in his Section 3.1 Identification of Key Ecological Receptors informing the NIS (see our **Appendix: Ecology Report, Dr Patrick Moran**)

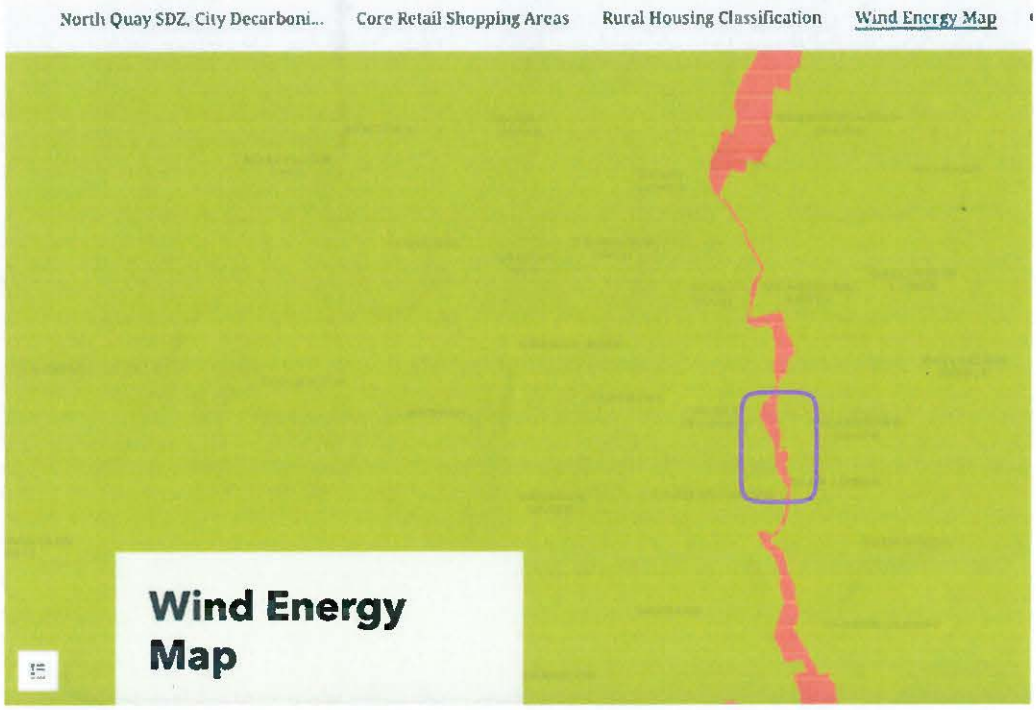
'With regard to any EIAR and NIS, a fundamental step in the process of identifying the potential impacts associated with any development is the identification of Key Ecological Receptors in the form of internationally important Natura 2000 sites within the Zone if Influence. The authors of the NIS have identified the following Natura 2000 sites as being within the Zone of Influence.

***Blackwater River (Cork/Waterford) SAC – site code 002170**. Please note that although The Blackwater River (Cork/Waterford) SAC was considered a Key Ecological Receptor, the Blackwater Callows SPA (site code 004094) was not. The detailed Conservation Objectives Document for this site1 clearly state that*

"…Please note that this SPA overlaps with Blackwater River (Cork/Waterford) SAC (002170). See map 2. The conservation objectives for this site should be used in conjunction with those for the overlapping site as appropriate…". […]

As such, the NIS is fundamentally flawed and cannot be deemed of sufficient scientific robustness to inform adequately the Competent Authority as to potential impacts of the proposed development on the Natura 2000 network.'

The Finisk River is also located within the Wind Exclusion Zone of the Waterford City & Council Development Plan (2022-2026) as is shown in the map below. The Applicant has failed to include this important piece of information within their Application (we refer the Commission to our **Chapter 13: Failure to Provide Required Zoning Information** for more details):



Source: Extract from WCCDP Wind Energy Map, with purple circle added by us to show location of proposed GCR HDD crossing over Finisk River. (Full-size version available in **Appendix: Maps**)

And while this specific GCR Application does not include any turbines, it is still a wind energy development and part of the overall wind farm development/application (as the Applicant themselves clearly state). Therefore, when assessing all of the points mentioned in this Observation, to even consider that the proposed Scart Mountain Wind Farm and GCR will be

without risk is impossible to conceive, especially when one takes into account the WCCDP wind farm suitability site assessments, which have been informed by all the relevant governmental bodies and environmental experts.

The Applicant may suggest that their project, although shown by their own admission to have the potential to cause significant negative impacts on the Blackwater SAC and the Dungarvan Harbour SPA habitats and species, may still be permitted for imperative reasons of overriding public interest. Yet this line of argument is only permitted to proceed **if there is an absence of other alternatives.** We take this opportunity to remind/inform the Commission that there are many areas in County Waterford that have been designated as 'Preferred' and 'Open for Consideration' for wind farm development and as such this clearly shows the existence of an alternative for the Applicant to pursue. We refer the Commission to our **Chapter 9: Waterford County Development Plan Wind Energy Strategy Zoning** for more detailed information about this.

Colligan River:
The Colligan River is the main tributary feeding into the Dungarvan Harbour SPA (Site Code 004032), thereby establishing a clear hydrological connection to this EU-Designated Special Protection Area under the EU Birds Directive. It is also a proposed Natural Heritage Area (00663), 'for biodiversity reasons and the geodiversity of an active sedimentation system should be highlighted as part of that designation'.
Sources: https://www.npws.ie/protected-sites/spa/004032 and *The Geological Heritage of Waterford – An Audit of County Waterford's Geological Sites* (page 56)

With the proposed HDD of the Colligan River lying 4km upriver or possibly closer (as the Applicant has proposed two different sites for the Colligan HDD crossing), this puts the HDD crossing within the Zone of Influence of the Dungarvan Harbour SPA.

Therefore, any potential release of a sedimentary hydrocarbon or bentonite / clear bore mud slurry will have an adverse effect on the EU-Designated Dungarvan Harbour SPA habitats and, in turn, the EU-protected and Special Conservation species that it supports.

With the EU Birds Directive paying special attention to wetland areas, the possibility now arises whereby not only is there a risk of devastating impacts on wildlife, but a negative financial implication for Ireland is not beyond the realms of reality. And it shall be the State (and therefore taxpayers) who is liable for any fines due (as was the case with Derrybrien Wind Farm in Co Galway), NOT the Developer.

The Applicant's assertion that the implementation of renewable energy trumps biodiversity and the EU Habitats and Birds Directives (among others) is inaccurate, environmentally misguided and will be found wanting if it needs to be tested by the European Court of Justice. (We refer the Commission to our **Chapter 10: Rebuttal of Legal and Policy Arguments** and **Chapter 4: Colligan River & Finisk River Crossings** for more on this).

OMISSION TO INCLUDE THE POTENTIAL POLLUTING IMPACTS CAUSED BY HDD WORKS

With the lack of adequate ornithology studies carried and the omission of any mention as to the potential impacts on the above species when it comes to the HDD works in the Applicant's EIAR, we draw the Commission's attention to the following:

Suspended Solids/Silt

The following statement comes from the Application for the proposed Dyrick Hill Wind Farm development (case ref: 317265; refused but at Judicial Review), which is proposed to be situated directly adjacent to the proposed Scart Mountain Wind Farm and whose GCR overlaps the Scart Mountain GCR at two points (something the Scart Mountain Applicant has completely failed to mention in their Application). As such, this has relevance to the proposed Scart Mountain development in regard to Cumulative Effects due to both Developers proposing to use HDD at the Finisk and Colligan Rivers. In their NIS, the Dyrick Hill Wind Farm Applicant states the following possibility:

5.2.1.2 Release of hydrocarbons
Similar to suspended solids arising from excavation activities, ***hydrocarbons accidentally introduced to the Colligan River during works associated with the grid connection route crossing will be conveyed downstream to the wetland habitats of the Dungarvan Harbour SPA.***
Hydrocarbons are a pollutant risk due to their toxicity to all flora and fauna organisms, including the special conservation interest bird species of this SPA.
Potential incidents or accidental release of contaminants will likely be short lived or temporary, however ***the potential impacts to downstream receptors such as wetland habitats and special conservation interest bird species can be long lasting.*** (page 171)
[highlighted for emphasis]

In addition to the polluting effects of hydrocarbons described here, we wish to draw the Commission's attention to the intended meaning behind the above-used terms *'short-lived'* and *'temporary'* by referring to the framework set out by the Chartered Institute of Ecology and Environmental Management (CIEEM) in its Guidelines for Ecological Impact Assessment. CIEEM provides a structured approach for describing the duration of impacts, giving indicative examples of what each category typically represents. Within this framework, *temporary* impacts are generally those lasting up to around a year; *short-term* impacts may last from roughly one to seven years; *medium-term* impacts can extend from about seven to fifteen years; and *long-term* impacts may persist for periods exceeding twenty-five years. This categorisation helps clarify the likely duration of effects and provides a consistent basis for interpreting impact timescales.
Source: https://cieem.net/wp-content/uploads/2018/08/EcIA-Guidelines-v1.3-Sept-2024.pdf

We ask the Commission to seriously consider the environmental impact on an Irish SAC and SPA lasting up to seven years (*'short-lived'*) and the devastation this will cause to the legally EU-protected physical and biological receptors involved. (We draw to the Commission's attention as an example the devastating environmental disaster in the Blackwater River SAC in Cork in August 2025 in which tens of thousands of fish were killed due to a pollutant being released into the water.)

DISTINCT CONTRADICTION IN APPLICATION REGARDING WORKS DURING BREEDING SEASON

In the EIAR Chapter 7: Ornithology, Section, Section 7.5.4 Mitigation of disturbance impacts to Kingfisher and Grey Wagtail, the Applicant states:

Construction work on the proposed GCR crossing of the Colligan River will only take place during the Kingfisher and Grey Wagtail breeding seasons if appropriate surveys have shown that there are no Kingfishers or Grey Wagtails breeding in the vicinity of the crossing.

And 7.6 Residual Effects, section 7.6.3 Kingfisher and Grey Wagtail states:
'Successful implementation of the mitigation measures will prevent disturbance to active Kingfisher or Grey Wagtail nests. Therefore, the potential for residual impacts (after mitigation) will be eliminated'.

Yet in section 7.4.11 Other Impacts, the Applicant states:

7.4.11.3 Grid connection route (Proposed GCR)
'Construction of the proposed GCR could cause disturbance to breeding Kingfishers or Grey Wagtails if there are nest sites close to the crossing point, and if construction work takes place during the breeding season.

This is in contradiction to the Applicant's claimed mitigation measures as, by connecting 'nest sites close to the crossing point' with 'construction work takes place during breeding season' to equal causing 'disturbance to breeding Kingfishers or Grey Wagtails', the Applicant is clearly stating the possibility of construction taking place during the breeding season.

Another complete contradiction appears in the following statements:

We are also confused why the Applicant would state that, during their GCR construction phase, the following effect will occur:
'*Therefore, disturbance to breeding Kingfishers that causes avoidance of a nest site or failure of a breeding attempt would be a temporary significant negative impact at the county scale.'* (7.4.11.3 Grid connection route (Proposed GCR))

When they also state in Section 7.5.4 Mitigation of disturbance impacts to Kingfisher and Grey Wagtail:
'Construction work on the proposed GCR crossing of the Colligan River will only take place during the Kingfisher and Grey Wagtail breeding seasons if appropriate surveys have shown that there are no Kingfishers or Grey Wagtails breeding in the vicinity of the crossing.'

Additionally, in section 6.8.1.3.5 WD3 - (Mixed) conifer woodland, the Applicant's 'mitigation measures' to minimise impacts are as follows:
'If trees are to be felled within the bird nesting season, it is recommended that trees are first surveyed for the presence of bird nests. Where a nest is found, and if feasible, the tree will be cornered off until the chicks have fledged or until nesting has failed.'

Yet another admission by the Applicant that they will indeed be considering carrying out construction works during breeding season.

1. *If trees are to be felled within the bird nesting season.* The Applicant seems to think they are above the law and will be permitted to fell trees during nesting season. Under Section 40 of the Wildlife Act 1976, as amended by the Wildlife (Amendment) Act 2000, *it is an offence to destroy (by any means) vegetation growing on any land not then cultivated, or to destroy hedgerows or ditches, during the period from 1 March to 31 August, inclusive. This is to protect wild birds, their nests and eggs during the breeding and rearing season. Tree felling during this period would therefore constitute an offence if it results in the destruction of active nests or the disturbance of breeding birds, even where a felling licence has been granted under the Forestry Act 2014. Limited exemptions exist - Work carried out for public health and safety (e.g. removing*

dangerous trees) or activities by public authorities for road safety or similar essential works. Neither of which apply to this proposed project.

2. It is ludicrous to assume that the Applicant will check every tree for a nest or even be able to see a nest high up in the thick vegetation/leaves. In fact, it can safely be said that they will not.
3. *'it is recommended'* – this statement is meaningless. IF for whatever reason the Applicant does start felling trees, then a 'recommendation' to check trees for nests is a ridiculous statement. It should be demanded / a definitive requirement NOT a suggestion.
4. *'if feasible, the tree will be cornered off'* – we ask the Commission to take a moment to think of the actual realistic scenario here. One tree will be 'cornered off' in a large area where they are felling numerous trees. These trees will be felled by machinery that will disturb nests in other ways and chicks would most likely be abandoned by the parents due to disturbance.

UNRELIABLE MITIGATION MEASURES

IN EIAR Chapter 7: Ornithology, 7.5 Mitigation Measures, 7.5.2 Construction disturbance mitigation, it states:
'Breeding bird surveys will be carried out in the breeding season preceding the start of Construction, and in every subsequent breeding season across the duration of the construction period. These surveys will include Hen Harrier surveys and Snipe surveys.'
(page 63)
Yet there is no mention made of the Kingfisher or Grey Wagtail.

The Applicant then goes on to say:
'If other sensitive breeding species are found, appropriate mitigation will be implemented based on evidence about their disturbance distances'. (page 63)

This implies that the Applicant will only carry out a breeding survey IF the project is granted permission, and implement 'appropriate mitigation based on evidence about their disturbance distances'. This lacuna in the Application leaves the Commission uninformed of what the Applicant plans to do and is therefore an incomplete assessment on which the Commission can base an informed decision as it **fails to remove all scientific doubt** regarding potential adverse impacts on a protected species.

Mitigation after planning has been awarded is not best practice and excludes the Commission's and general public's involvement at the appropriate pre-permission Observation stage.

All the mitigations that the Applicant proposes to carry out can be deemed invalid as the Applicant has failed to present a fully complete baseline assessment at this, the Application stage. The mitigation measures they claim they will apply to the impacts the proposed project could have on the physical and biological environment are based merely on (out of date) desktop review studies and will also have no input or scrutiny from the Commission or public. This is not with keeping with the proper and correct legal planning application procedures. The Applicant cannot claim mitigation measures will offset impacts without having carried out comprehensive, up to date and appropriate environmental assessments.

We refer the Commission to the ruling of the Court of European Justice on case C-323/17 People Over Wind and Peter Sweetman v. Coillte Teoranta and ask you to consider whether the Applicant has adhered to this ruling.
https://curia.europa.eu/juris/liste.jsf?language=en&num=C-323/17

FAILURE TO COMPLY WITH GUIDELINES

We refer the Commission to in the report compiled by the Ecologist Dr Patrick Moran about the Scart Mountain Applicant's NIS*, and is submitted together with this Observation (see our **Appendix: Ecology Report, Dr Patrick Moran**):

Section 3.3. Failure to comply with guidelines
According to EU Guidelines one of the primary steps in the AA screening process is identification of negative pressures and/or threats with impacts on designated sites and '…The information provided in the Natura 2000 standard data form is the starting point for identifying the habitat types and species that are significantly present on the site and that could be affected by the plan or project, as well as any existing pressures and impacts on the site…'

Although this information is readily available online7, the AA process fails to consult Natura 2000 data forms to consider these threats, pressures and activities (internal and external) with impacts on the sites as comprehensively detailed in the relevant Natura 2000 data-forms. This must be seen as a fatal flaw in the AA process.
[…]
The SPAs within the zone of influence of the proposed development are primarily coastal ecosystems, designated for over-wintering bird populations utilising the intertidal zone for roosting/foraging. Increases in sea level will impact on the availability of this habitat, displacing foraging populations of bird species comprising qualifying interests into habitats further inland. According to EU Guidance,
'…Deterioration is any form of degradation affecting a habitat. The Member State has to take into consideration all the influences on the environment hosting the habitats…'. Caselaw has identified that
'…it may be necessary to adopt both measures intended to avoid external man-caused impairment and disturbance and measures to prevent natural developments that may cause the conservation status of species and habitats in SACs to deteriorate…'.

Furthermore, guidance indicates that potential modifications of Natura 2000 sites linked to climate change should be assessed case-by-case. The AA of the proposed development (which pertains to renewable energy as a means to combat climate change) has given no cognisance to the potential impact of climate change on the Conservation Objectives of Qualifying Interests of the relevant Natura 2000 sites (both SACs and SPAs), nor on the potential impacts on, for example, changes in species distribution or flight paths.

4 Concluding Statement
Having reviewed the NIS as presented, it is my professional opinion that there are significant lacunae within the NIS as presented, including a failure to identify all potentially impacted Natura 2000 sites. There is a plethora of lacunae, errors and weaknesses the NIS and almost certainly within the EIAR upon which the NIS is dependent. This lacunae include weakness in the ornithological findings

* [Note: the report was originally compiled for our Observation against the Scart Mountain Wind Farm Application (case ref: 321522), however it is being submitted once again with our Observation against this Application and being used to support specific points we are making due to the fact that it addresses inadequacies in the NIS, which is the same documentation and pertaining to the same overall project.]

FAILURE TO ADDRESS CUMULATIVE EFFECTS

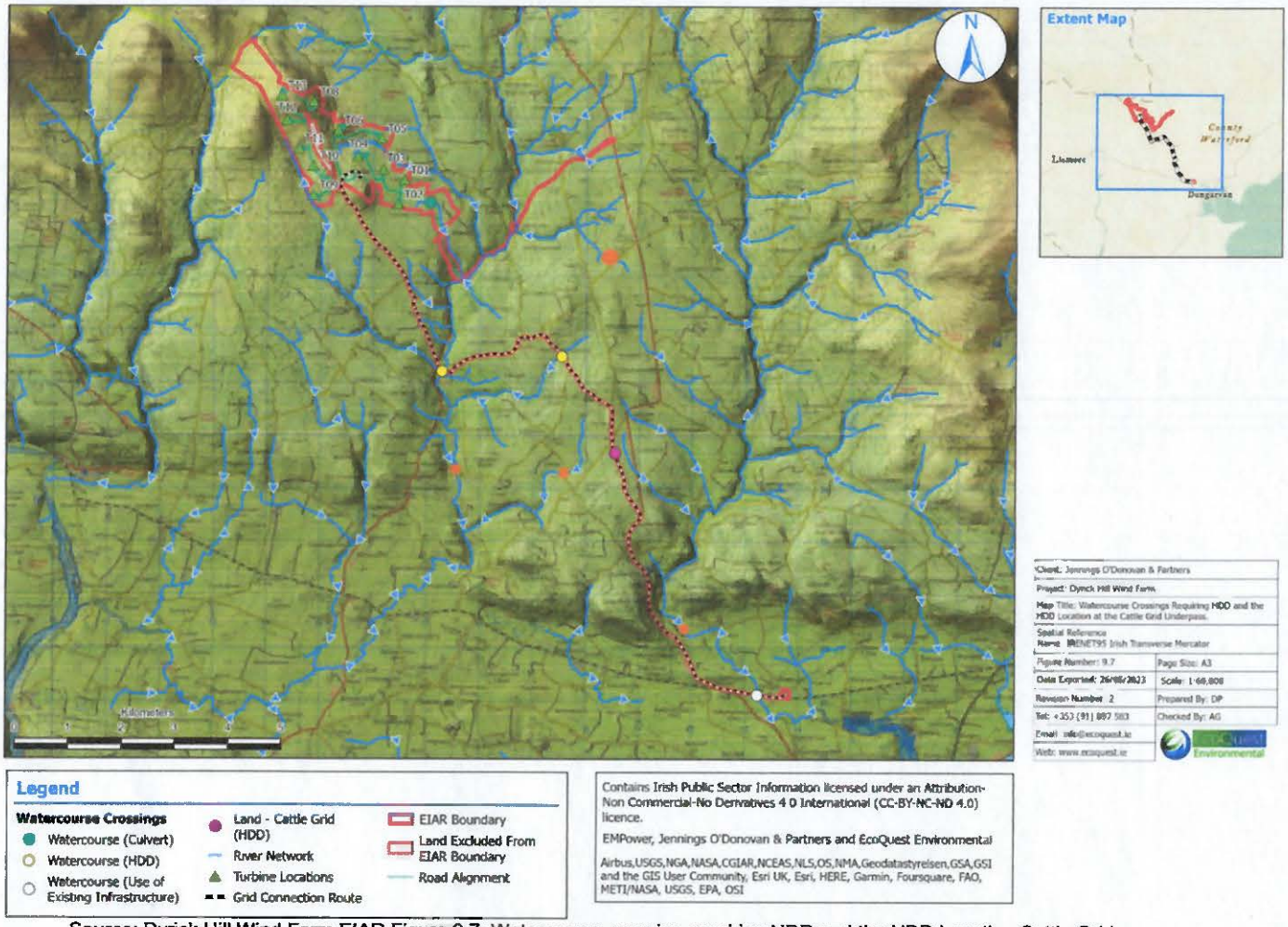
EIAR Chapter 7: Ornithology, Section 7.4.2.5 Cumulative impacts states:

'The only potential impact that requires cumulative assessment is the collision risk.'

In regard to the Applicant's above assertion, we draw to the Commission's attention that the Applicant fails to assess, and is woefully misjudging and ignoring, the cumulative impacts associated with the multiple HDD river crossings also proposed to be carried out under the Colligan River and Finisk River systems that are associated with the proposed Dyrick Hill Wind Farm (case ref: 317265) and the Coumnagappul Wind Farm (case ref: 318446).

While these Applications (both of which had the GCR included within the actual application, and not submitted as a separate one) have been refused permission by the Commission, as they are currently at Judicial Review, they MUST still be considered.

Interestingly, the Applicant has failed entirely to mention the GCRs for both of the above in its own Application, and therefore this absence of cumulative effect is a serious omission. We refer the Commission to our separate **Chapter 15: Cumulative Impacts** for full details and maps on this. But for the purposes of this chapter, we include one of the maps for the Commission's reference:



Source: Dyrick Hill Wind Farm EIAR Figure 9.7: Watercourse crossing requiring HDD and the HDD Location Cattle Grid Underpass, with amendments (inclusion of orange dots) by us. (Full-size version available in our **Appendix: Maps**)

As the Commission will see from the above map:

- The yellow dots mark watercourse HDD crossings of the proposed Dyrick Hill GCR (no. 2)
- The white dot marks the watercourse HDD crossing of the proposed Dyrick Hill and Coumnagappul GCRs (no. 1)
- The orange dots along the lower half of the map mark the watercourse HDD crossings of the proposed Scart Mountain GCR (no. 3)
  (added by us using the Scart Mountain: EIAR Figure 2.7: Watercourse Crossings map)
- The orange dot in the upper half of the map marks the watercourse HDD crossing of the proposed Coumnagappul GCR (no.1)
  (added by us using the Coumnagappul EIAR: Map of Hydrological Features within GCR & TDR)

This totals **seven HDD crossings** across **two rivers of ecological importance** that are hydrologically connected to **two EU-Designated Sites**:

- Five = Finisk River that is a major tributary of the Blackwater SAC
- Two = Colligan River that feeds into the Dungarvan Harbour SPA (and at locations that are just a few kms away).

We refer the Commission to the following for full details on the protected habitats and species and the conservation objectives of these two EU-Designated sites:

Blackwater SAC: https://www.npws.ie/protected-sites/sac/002170
Dungarvan Harbour SPA: https://www.npws.ie/protected-sites/spa/004032

And to our **Chapter 3: Hydrology**.

We remind the Commission that the Applicant's assertion that the implementation of renewable energy trumps biodiversity is divisive and scientifically inaccurate. **Renewable energy tackles the cause of climate change.** But a zero-carbon world would still face ecological collapse if biodiversity is lost. **Biodiversity tackles the consequences and stabilises the planet.** Biodiversity is the planet's *life-support system*. Destroying it weakens Earth's ability to heal itself even if emissions fall. **Climate mitigation and biodiversity protection must work hand in hand**, not compete for policy or investment priority.

With the Applicant's failure to mention and assess the cumulative impacts associated with the other proposed wind farm developments and collective HDD river crossings, the Applicant's assessment of their baseline studies is misinformed and lacking. And, as a result, the species on the Blackwater SAC and Dungarvan SPA have not been addressed and the mitigations for the impacts on Kingfisher and Grey Wagtail (among others) are also misinformed and fail to fully show the real impacts.

CUMULATIVE AFFECTS OF THE PROPOSED DEVELOPMENTS AS A WHOLE

We ask the Commission to consider the following:

All of these aforementioned and highlighted doubts, concerns and risks are included in just ONE aspect of the proposed development – the Grid Connection / HDD water crossings. It does not even take on board the actual entire GCR construction phase or the main industrialised wind farm site construction, which has huge potential to further increase the hazardous impacts on the surrounding unique and vulnerable environment, the Dungarvan Harbour SPA, the Blackwater River SAC and all the protected species therein.

The accumulative effects of the grid route, haul route and site construction phase having disastrous long-lasting environmental impact on the Dungarvan Harbour SPA, the Blackwater River SAC and all the protected species therein are way beyond the capabilities of the Applicant when it comes to preventing such outcomes. To expect the Applicant's mitigation measures to function at 100% success rate is beyond believable and the probable environmental and legal repercussions will cost the State of Ireland (NOT the Applicant) dearly.

On a final note of importance and relevance, we ask the Commission to consider the ability of the Applicant to comply fully in all aspects of the following statement and taking due regard of all our aforementioned doubts, concerns and risks posed by the overall proposed Scart Mountain Wind Farm development into account:

The overall aim of the EU Habitat Directive is to maintain or restore the favourable conservation status of habitats and species and with the favourable conservation of species being achieved when:

- *Population dynamics data on species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitat and*
- *The natural range of species is neither being reduced nor is likely to be reduced for the foreseeable future.*

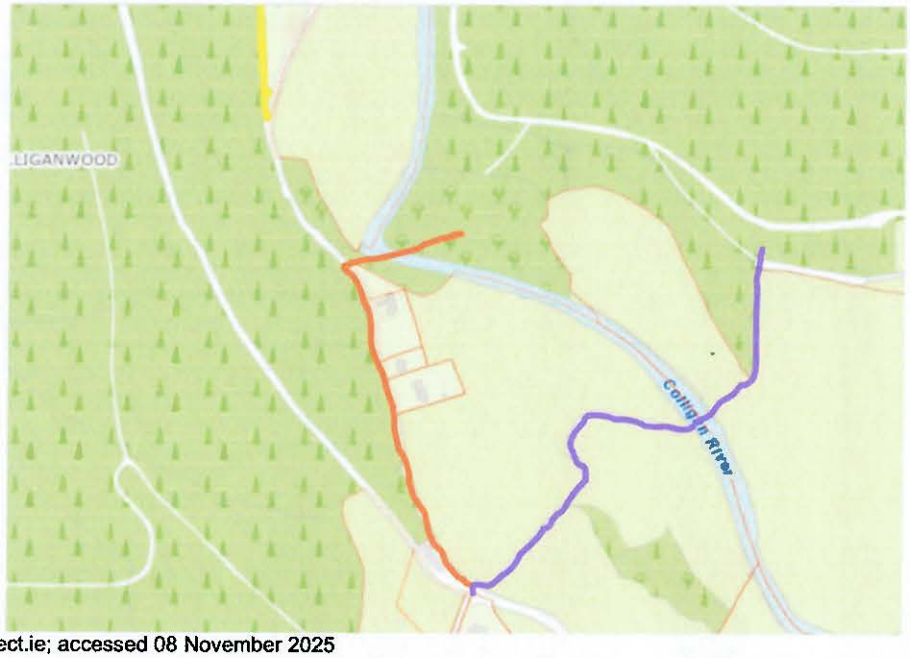
It is therefore essential that any decision regarding this proposed development demonstrates clear and credible evidence that these legal and ecological obligations can and will be met in full.

TWO PROPOSED HDD CROSSING LOCATIONS AT THE COLLIGAN RIVER

We bring to the Commission's attention the incomplete and misleading assessment of the HDD crossing at the Colligan River, with the Applicant proposing two different HDD crossing sites. Full details of this are included in our **Chapter 4: Colligan River & Finisk River Crossings.**

What we do draw to the Commission's attention in respect of an ornithology issue is that the ambiguity of the HDD crossing and the habitats it crosses either side of the Colligan River have not been assessed on an ecological level – habitats lost, nesting sites, disturbance to foraging corridors, etc.

The map below shows the two suspected proposed locations (although it's possible there are three) and the different habitats they would intersect.



Source: landdirect.ie; accessed 08 November 2025

[Disclaimer: The orange line depicting Description 1 is not meant to be an exact accurate depiction as it has been drafted to the closest point of Coiiite land from the L-5103/R-672 junction and it is not stated in the text above exactly how far within Coillte land option 1 travels before crossing into private lands, but it gives an overview of the difference in habitat and location.]

Either way, what is clear and evident is that there are two (perhaps three?) HDD crossing locations presented – each of which is very different in habitat to the other. But both have something in common, however: the complete lack of a clear, complete and appropriate assessment of the habitat.

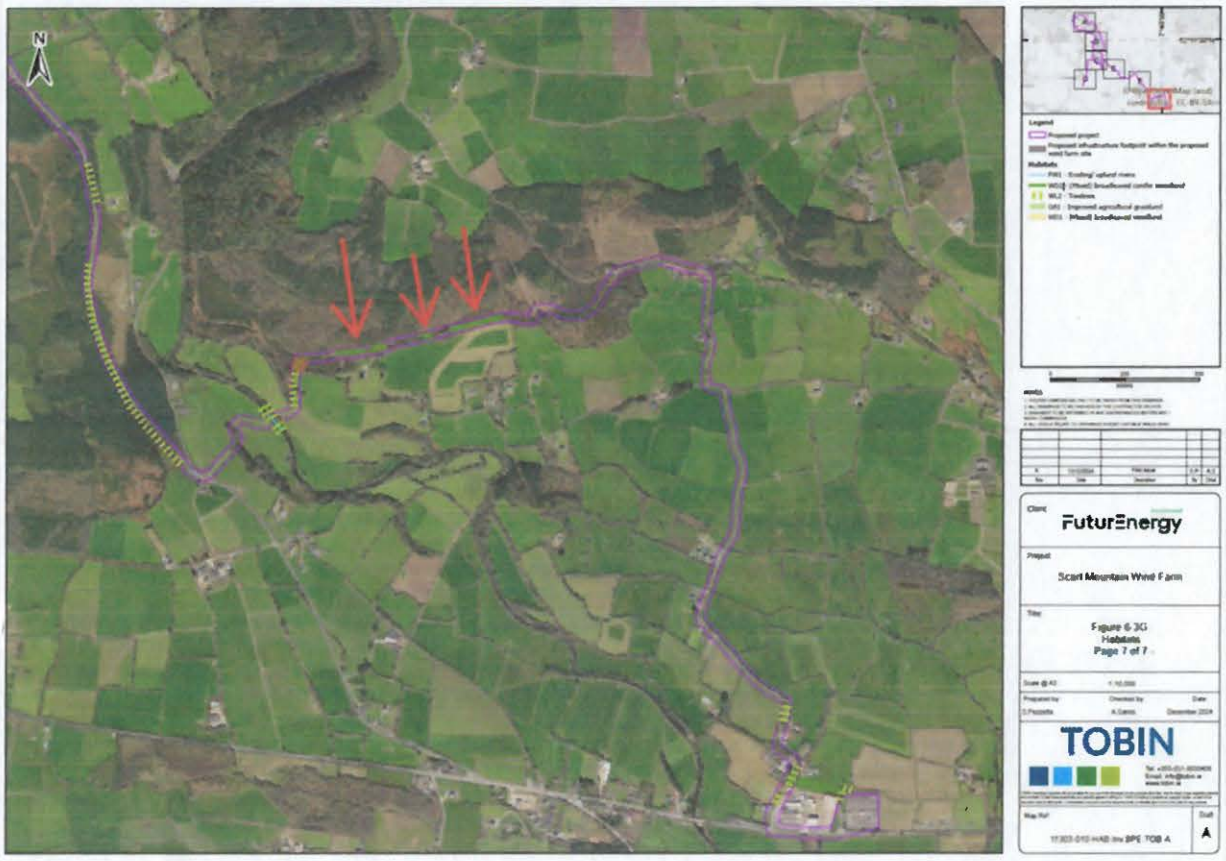
We submit the following and ask the Commission to keep it in mind as a legal requirement, as stated in the Inspector's report of the (refused) Dyrick Hill Wind Farm:

12.5.74. The Planning and Development Act, 2000, as amended, in section 171A(b), requires the Board to consider the likely direct and indirect effects of developments on biodiversity, with particular attention to the species and habitats protected under the Habitats and Birds Directive. Further, the under Article 27(4)(b) of the European Communities (Birds and Natural Habitats) Regulations 2011 to 2021(transposing the Habitats and Birds Directives into national legislation), requires public authorities to protected areas. In this instance, the loss of Annex I habitats, while not within a protected SAC/SPA, directly contradicts this requirement.' (page 92).
https://www.pleanala.ie/anbordpleanala/media/abp/cases/reports/317/r317265.pdf?r=241729620052

OMISSION OF HABITAT AND SUBSEQUENT LOSS THEREOF

After having crossed the Colligan River, the proposed GCR will cut through Inchindrislawood. As can be seen in the Applicant's Figure 6-3G: Habitats - Page 7 of 7 (EIAR Chapter 6: Biodiversity) shown below, the dark green highlights of the GCR in Inchindrislawood are labelled as **WD2 - (Mixed) broadleaved conifer woodland**, and there is a substantial amount marked.

Yet the EIAR entirely fails to address the presence, extent and ecological importance of WD2 woodland habitat, as well as how it will be directly affected by the proposed GCR construction phase. No field surveys or desktop review studies have been carried out for birds in and/or surrounding the area, and there is no mention of the works that are proposed to be carried out through/in it.



Source: Figure 6-3G: Habitats - Page 7 of 7 (EIAR Chapter 6: Biodiversity) with arrows added by us for clarity. (Full-size version available in **Appendix: Maps**)

WD2 (Mixed Broadleaved–Conifer Woodland) is recognised under the NPWS-adopted Fossitt (2000) classification as follows:

This general category includes woodland areas with mixed stands of broadleaved trees and conifers, where both types have a minimum cover of 25%, and a maximum of 75%. Trees may be either native or non-native species. Mixed broadleaved/conifer plantations are included if the canopy height is greater than 5 m, or 4 m in the case of wetland areas. Stands of immature or sapling trees are excluded (see immature woodland - WS2).

It is well-documented (i.e. NPWS, BirdWatch Ireland and NBDC) that WD2 (Mixed Broadleaved Woodland), typically dominated by native broadleaf species such as oak, ash, birch and hazel, with occasional conifers, provides essential breeding, roosting and foraging habitat for a diverse mix of bird species. These include Spotted Flycatcher (Amber-listed on the BOCCI) and Wood Warbler (Red-listed on the BOCCI), as well as raptors and owls such as Barn Owl, Long-eared Owl, Sparrowhawk, Buzzard, Kestrel, Red Kite and Peregrine Falcon. Several of these, including Barn Owl, Long-eared Owl, Red Kite and Peregrine Falcon, are listed under Annex I of the EU Birds Directive (2009/147/EC) and are of high or medium conservation concern in the BOCCI.

The structurally diverse canopy and understorey of WD2 woodland support abundant prey for insectivorous species, while mature trees and woodland edges provide critical nesting and roosting sites. The loss, fragmentation or degradation of this habitat can therefore significantly reduce available nesting and foraging opportunities, food resources, and disrupt ecological connectivity for woodland bird species of conservation concern.

The omission of mentioning and assessment of the WD2 woodland habitat within the EIAR represents a considerable lacuna in baseline habitat evaluation, likely impacts, mitigation needs, alternatives, and appropriate ecological protection measures. And, as a result, the EIAR fails to meet its basic legal obligations – without a full survey and impact assessment of this habitat, it is submitted that the Application cannot be considered compliant with EU or national environmental legislation.

CONCLUSION

In light of the extensive omissions, inconsistencies and inadequacies identified throughout this chapter, it is evident that the Applicant's EIAR and associated NIS fail to meet the minimum scientific and legal standards required under both EU and Irish environmental law. The absence of essential baseline ornithological surveys – particularly for key species such as the Kingfisher and Grey Wagtail – together with the Applicant's reliance on outdated and incomplete desktop data, prevents a full and informed assessment of the proposed GCR's potential impacts.

Given the hydrological connectivity of the Finisk River to the Blackwater River SAC and the Colligan River to the Dungarvan Harbour SPA, and the Applicant's failure to adequately assess and mitigate potential effects on these Natura 2000 sites, the precautionary principle must apply. In accordance with Article 6(3) of the Habitats Directive and established CJEU case law (including *Waddenzee*, *Sweetman*, *People Over Wind* and *Holohan*), permission cannot lawfully be granted where reasonable scientific doubt remains as to the absence of adverse effects on site integrity.

It is also submitted that the Commission cannot – and should not – rely on any information provided by the Applicant at a later date when/if the Commission requests further submissions or observations from the Application or invites them to respond to Observations submitted against the Application. Given the number of lacunae and misinformation and ambiguous statements that we have managed to find and shed light on in such a short amount of time and with limited resources and knowledge, the Commission CANNOT take what the Applicant provides as concrete fact. It is therefore of the utmost importance that the Commission consults all relevant statutory bodies and expert professional opinions and carry out its own thorough Natura Impact Assessment of the proposed GCR project.

Accordingly, it is submitted that An Coimisiún Pleanála cannot be satisfied that the proposed Scart Mountain GCR will not result in significant adverse impacts on protected habitats, species and EU-Designated conservation sites. The Application is therefore fundamentally deficient and should be refused.

Hydro-G

An Coimisiún Pleanála VA93.323791

Futurenergy Scart Mountain DAC

Scart Mountain II - The Sequel

proposal for

Development of a 110kV Grid Connection

To Service Nothing:

Scart Mountain Wind Farm (PA93.321522- 2024) - Undecided but Indefensible **'WFD High Status Sub Basin Blue Dot'** Wind Farm

Contrary to the Objectives of the Water Framework Directive

Contrary to Ireland's River Basin Management Plan 2022 – 2027

Contrary to Ireland's Water Action Plan 2024

Contrary to the 'Consideration of Alternatives' requirements of the EIA Directive

Contrary to the 4th National Biodiversity Plan & Nature Restoration Laws

Uplands of County Waterford Wind Exclusion Zone, Contrary to Proper Planning.

commissioned by

Knockmealdown Protection Group

for the benefit of

An Coimisiún Pleanála

Prepared by

Dr. Pamela Bartley, Expert Service Provider

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November 2025

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Project No.:	2025_WFs_Scart & Knockmealdown Protection Group_II_The Sequel
Report Status:	**Issue_II**
Report Title:	An Coimisiún Pleanála VA93.323791. Futurenergy Scart Mountain DAC Scart Mountain II - The Sequel. Proposal for Development of Grid Connection To service Nothing: Scart Mountain Wind Farm (ABP PA93.321522 - 2025) Undecided but Unjustified. Contrary to the Objectives of the Water Framework Directive, Contrary to Ireland's River Basin Management Plan 2022 – 2027, Contrary to Ireland's Water Action Plan 2024, Contrary to the Consideration of Alternatives' requirements of the EIA Directive, Contrary to the 4th National Biodiversity Plan & Nature Restoration Laws. Uplands of County Waterford Wind Exclusion Zone, Contrary to Proper Planning.
Date:	18th of November 2025
Prepared by:	Pamela Bartley Dr. Pamela Bartley B.Eng, M.SC., Ph.D.

Legislation of Particular Note to Case VA93.323791:

I. Local Government (Water Pollution) Acts 1977 & 1990.

II. Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (The Water Framework Directive).

& the Water Framework Directive's enacted Irish Statute Book Instruments:

III. European Communities Environmental Objectives (Surface Water) Regulations, S.I. No. 272 of 2009, as amended 2015, 2019, 2023.

IV. European Communities Environmental Objectives (Groundwater) Regulations, S.I. No. 9 of 2010, as amended 201, 2012, 2016, 2023.

V. Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment (**EIA Directive**).

& the EIA Directive's enacted Irish Statute Book Instruments:

VI. European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018. S.I. No. 296/2018.

VII. European Union (Environmental Impact Assessment) (Environmental Protection Agency Act 1992) (Amendment) Regulations 2022. S.I. No. 421/2022.

VIII. Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks.

IX. European Communities (Assessment and Management of Flood Risks) Regulations 2010. S.I. No. 122/2010 as amended European Communities (Assessment and Management of Flood Risks) (Amendment) Regulations 2015. S.I. No. 495/2015.

X. European Union (2024) REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on nature restoration and amending Regulation (EU) 2022/869. THE EUROPEAN PARLIAMENT THE COUNCIL Brussels, 15 March 2024.

XI. European Communities (Birds and Natural Habitats) Regulations, 2011. S.I. No. 477 of 2011.

XII. European Communities (Birds and Natural Habitats) (AMENDMENT) Regulations, 2021. S.I. No. S.I. No. 293 of 2021.

XIII. European Union (Drinking Water) Regulations 2023 (S.I. No. 99 of 2023).

XIV. European Communities Environmental Objectives (Freshwater Pearl Mussel) Regulations, 2009. S.I. No. 296 of 2009.

XV. European Union Environmental Objectives (Freshwater Pearl Mussel) (Amendment) Regulations, 2018. S.I. No. 355 of 2018.

XVI. European Communities (Quality of Salmonid Waters) Regulations, 1988. S.I. No. 293/1988.

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List of Abbreviations

Blue Dot	EPA and WFD term to signify important and rare pristine HSO river systems
CEMP	Construction & Environment Management Plan
EIA	Environmental Impact Assessment
EQO	Environmental Quality Objective
EPA	Environmental Protection Agency
FEI	Futurenergy Ireland – A Business involved in Wind Turbine Plantations
GSI	Geological Survey of Ireland
GW	Groundwater
ha	Hectares (area)
HSO	High Status Objective
km	kilometres (distance)
LAWPRO	Local Authority Water Action Programme (WFD Catchment Assessment teams)
m	metres (distance)
m^2	square metres (area 1m x 1m)
m OD	metres above Ordnance Datum (Above Sea Level)
NFGWS	National Federation of Group Water Schemes
POM	Programme of Measures, Water Action Plan 2024
PWS	Public Water Supply
RBDMP	River Basin Management Plan 2022 - 2027
SI	Statutory Instrument
S.I.	Site Investigation
SW	Surface Water
SWMP	Surface Water Management Plan
WAP	Water Action Plan (meaning Ireland's Water Action Plan 2024)
WEI	A business lobby group advocating for Wind Turbine Plantations across Rural Ireland Only
WFD	Water Framework Directive
ZOI	Zone of Influence
ZOC	Zone of Contribution

Case reference: VA93.323791

Executive Summary

- This report presents information for An Coimisiún Pleanála in relation to a proposed **110kV Grid Connection, Co. Waterford.** The administrators of planning refer to this type of case as 'Strategic Infrastructure Development' (ABP Reference No. **VA93.323791).** However, no Strategic Environmental Assessment has been completed by the Irish Government for this type of wind farm supporting development. No Strategic Environmental Assessment has been completed for the Government's Climate Action Plan and yet, in their decisions, An Coimisiún Pleanála persistently reference the Climate Action Plan over enacted European and Irish Statute Book Laws such as the EIA Directive and WFD Directive.

- The proposed development has been presented in October 2025 as a "separate" project to support a Wind Farm of the same name, which was lodged less than a year ago. The Scart Mountain Wind Farm (321522) is currently undecided and an ongoing saga continues in which it appears to observers that An Coimisiún Pleanála are aiding and assisting the applicant's agents by providing extended periods of time to submit Further Information to complete the original assessment, which was poor. And now, in the interim of the decision process, we have a second application before us to support the first application, which on a scientific and legislative basis was demonstrated to be unsupportable. The initial planning application for Scart Wind Farm had chosen, contrary to the requirements of the EIA Directive, an unsuitable High Status River catchment for development of 15 Turbines in lands immediately adjacent to a Refused 12 Turbine Wind Farm (Dyrick Hill 317265) .

- And yet here we are again. Are An Coimisiún Pleanála looking for feasibility for Grid Connection to support to a Grant of permission to Scart Mountain Wind Farm (321522)? If so, how are these 'separate' projects? How is this not project splitting?

- Earlier this year, the Knockmealdown Protection Group provided information to An Coimisiún Pleanála, as they are legally entitled to, that demonstrated the unjust nature of the Scart Mountain Wind Farm proposal to permanently change approximately 981.4 hectares of landscape and surface water catchments in north county Waterford and across two Mountains that are almost 500m OD (Above Sea Level). And here we are watching a dance between An Coimisiún Pleanála and Tobin Consulting Engineers and FuturEnergy (the applicant) in extended opportunities to add to the Scart Mountain Wind Farm's original EIAR as part of the SID process ongoing for Scart Mountain Wind Farm and in the meantime lodge an application for a Scart Mountain Grid Connection and the residents of the area watch on, incredulous.

- For the Wind Farm and Grid connection, the construction sites are proposed in uplands mapped by the EPA, LAWPRO and WFD Catchment Teams as High Status **Objective** Waters. The detail acknowledging the High Status Objective nature of the proposed area was completely lacking in the original wind farm application information presented to An Coimisiún Pleanála on behalf of the applicant. Again, for the current proposal, the original Scart Mountain Wind Farm EIAR Water Chapter has been submitted for a second time – essentially unchanged in any work completed except maps for a new development area – and yet the letter from Tobin to all stakeholders states that the Grid Connection is a 'separate' application. However, An Coimisiún Pleanála is invited to scrutinise and compare texts (such as page 9-6 '9.2.3 Field Surveys') in which the text and work completed is the exact same and the information used to complete the assessment is now 3 and 2 years out of date. Since the original application, the EPA has published new WFD Status information for Ireland's Rivers, which reports for the 2019 -2024 period. Therefore, the information in the original application documents is not current.

- The Tobin Planning Statement (September 2025) for the 'Grid Connection' states in the final para of the 'Executive Summary' that "The proposed development will facilitate the construction and operation of the Scart Mountain Wind Farm, which is a crucial piece of strategic infrastructure necessary to achieve Ireland's national renewable energy targets.". However, no planning consent exists for the Scart Mountain Wind Farm. Whilst the Planning Statement reminds An Coimisiún Pleanála that CALCDA demands that it must enable furtherance of Ireland's Climate Action Plan, the words "IN SO FAR AS PRACTICABLE" are KEY words that must be remembered by all parties. Legally, Ireland's obligations under the Water Framework Directive are the PRACTICABLE legislative instrument here. In addition, LEGALLY, the only SEA assessments completed for the government's renewable energy strategy are those in the County Development Plans and the Scart Mountain Wind Farm contravenes the SEA completed by Waterford County Council.

- On the matter of Waterford County Council's Renewable Energy Strategy (Appendix 7) adopted for 2022 – 2028 mapping the area as a Zone of 'EXCLUSION' for Wind Farm Development, in the Oireachtas on 4th November 2025 [https://www.oireachtas.ie/en/debates/question/2025-11-04/164/]: the Minister for Climate, Energy & the environment (Mr. Darragh O'Brien) stated that the government have no SEA on their onshore renewable energy targets because each County Development Plan had completed an SEA for its own strategies. Therefore, despite what FEI would try to claim in their EIAR Chapter 4: Planning-Policy-and-Development-Context for the proposed Grid Connection, Waterford County Council's Renewable Energy Strategy should be given the respect it deserves, it being the only plan on the table that has actual legal and scientific justification. FEI could move to Waterford's significant Off Shore environment and possibly comply with the Water Framework Directive, SEA Directive, EIA Directive and the Climate Action and Low Carbon Development Act (2015), as amended ("CALCDA").

- No defensible nor justified assessment can be completed by An Coimisiún Pleanála given the failure of the applicant, and its agents, to acknowledge or assess the impact of the combined, dependent, development on the actual mapped High Status Objective River Sub basins that are mapped by the EPA across three parts of the Wind Farm and Grid Connection development area. The applicant's agents focussed their mitigation design on the basis that they would not cause a deterioration in status. However, they completely missed the point, which is that some of the surface waters in their chosen co-dependent development area are required to be brought up to High Status because many are not meeting their EPA mapped High Status Objectives. The area chosen by FEI was not correctly scoped and is in contravention with the Objectives of the Water Framework Directive, as enacted into the Irish Statute Book by the Surface Water Regulations 2009, as amended.

- The applicant's agent's Planning Statement for the Grid Connection (page 2, Section 2.1, September 2025) states that "Together the proposed development and the Scart Mountain Wind Farm proposal form a single project for the purposes of EIA." Therefore, it is relevant for us to continue to discuss the proposed Wind Farm (2024) and the proposed Grid Connection (2025) in this independent assessment completed for the Knockmealdown Protection Group.

- This report is presented by Dr. Pamela Bartley on behalf of the Knockmealdown Protection Group. The author is considered an expert service provider in the matter of hydrogeology, hydrology and potential impacts. She has advised many state agencies. The author of this report is experienced in water related impact assessment guided by the EU EIA Directive and EPA (2022) Guidelines on EIARs. The author is a civil engineering hydrogeologist with Water, Land, Soils & Geology competencies.

- The purpose of this report is to present expert hydrological and hydrogeological information for An Coimisiún Pleanála consideration with respect to the potential for impact arising from the proposed altering of catchment dynamics across EPA mapped High Status Objective/Blue Dot High River Sub Basins: GLENNAFALLIA_010, GLENSHELANE_010 and FARNANE_010.

- This report is presented as a Submission from an expert hydrogeologist advising that the applicant's EIA Scoping should have concluded that that the area should not be progressed as a potential area for development because of the fact that the area is a WFD failing High Status Objective (HSO) river system. The EU Life website (https://www.watersoflife.ie/high-status-objective-water-bodies/ states ***"The EPA conclude that the ongoing loss of our most pristine rivers is a very significant concern. A large effort is required to protect the few remaining high status river sites and, where possible, return impacted ones to high status".*** No part of the EIAR or any associated documentation submitted to An Coimisiún Pleanála on behalf of the applicant references the High Status Objective baselines or potential impact on same.

- Waterford County Council's Renewable Energy Strategy (Appendix 7) adopted for 2022 – 2028 maps the dependent Wind Farm area as a Zone of 'EXCLUSION' for Wind Farm Development. Similarly, the proposed Grid Connection Route is dependent upon crossing the Finisk River in a mapped 'Exclusion Zone'. I offer that the Planning Authority understood that the land mass they mapped as 'EXCLUSION' is one of FEW AREAS NATIONALLY THAT CAN ACHIEVE RESTORATION TO A PRISTINE RIVER SYSTEM – HENCE THE HIGH STATUS **OBJECTIVE** MAPPING. In a December 2024 Planning Report, acknowledged by the authors to have been written by the agent and applicant together, they cite only the need for Wind Energy but fail to grasp the significance of the Water Framework Directive and Waterford County Council's understanding that they are caretakers for a High Status Water system, which is not found in many places in Ireland. In addition, unlike the Government's Wind Energy Targets, Waterford County Council have applied SEA and AA Screening to their policy, making it legally defensible in Planning.

- Hydro-G requests that An Coimisiún Pleanála ensures that the Scart Mountain Wind Farm and the Grid Connection are evaluated by the same inspector. If not, the inspector for the Grid Connection proposal is asked to read the Hydro-G (2025) report for the Scart Mountain Wind Farm proposal (321522), which was created for the benefit of the Knockmealdown Protection Group's Objection to Scart Mountain Wind Farm. (See Appendix)

- There are ample, defensible, justified reasons to REFUSE THE APPLICATION. Not all related to Water. Ecosystems are water related. Biodiversity is a water issue. Climate Action by virtue of Ecosystems and Water Protection is more aligned with Proper Planning than the enabling of large-scale catchment alteration by construction for the purposes of blind implementation of Government Policy that has no basis in science, biodiversity, environmental protection or Planning Law.

Statement of Expertise Pamela Bartley B.Eng., MSc., Ph.D

Dr. Pamela Bartley is a water focussed civil engineer and is considered an Expert Service Provider (ESP) in service to engineering consultants, planning authorities, the legal profession, Environment Sections of County Councils, Uisce Eireann, The National Federation of Group Water Schemes and nationally important limestone quarries. She is now regularly called upon by community groups to provide expert, reasoned, and justified independent assessment of renewable energy Environmental Impact Assessments conducted in their habitats that seem to be lacking true representation of local understanding of water systems and associated water dependent ecosystems in existence in the vicinity of proposed construction sites.

She has almost 30 years of experience in field-based practice working on construction sites, supervising borehole drilling, completing EIA Directive impact assessments, groundwater monitoring, modelling and abstraction point management. She is considered a specialist in karst hydrogeology and Public Water Supply: her Ph.D was a field based-karst limestone environment study and in the years after she completed CPD training with the GSI at their karst specialist course in the Burren.

Pamela is qualified and IOSH certified to act as PSDP (Project Supervisor Design Phase) & PSCS (Project Supervisor Construction Stage) as defined by the Health and Safety at Work (Construction) Regulations. It is her experience on construction sites that enables a correct prediction of risk and impact arising from the stripping of soils, importation of rock for the construction of enabling roads, office areas (compounds), toilet facilities for workers, excavation of linear drainage systems and quarrying.

Pamela's limited company is a registered Uisce Eireann Supplier (no. 1855) and Pamela Bartley is HSQE approved within Uisce Eireann as one of their Hydrogeologist Framework service providers. She has advised on Uisce Eireann's advancement of the National Water Resource Plan's resultant Supply Demand Balance Programme.

Upon completion of a Diploma in Water and Wastewater Technology at Sligo RTC she completed a degree in Civil Engineering at Queens University, Belfast and then completed a Master of Science in Environmental Engineering, which was followed by a hydrogeologically focussed Ph.D. on Groundwater Impact: both postgraduate degrees were completed within the school of Civil Engineering at Trinity College, Dublin.

Her key work areas are the assessment of potential impact to groundwater and surface water arising from large scale rock extraction and groundwater use for PWS. She specialises in the engineering of groundwater and large-scale water supply boreholes for PWS, GWS, Motorway Service Stations & Hotels. Part of her work requires the assessment of Zones of Contribution to Groundwater and Spring Abstraction Points. Other work areas include evaluation of discharges to groundwater and surface waters for compliance with Irish Regulations and the hydrological and hydrogeological assessments required for EIA. She has a skillset in the assessment of groundwater quality for water treatment process parameters and working in collaboration with water treatment plant designers. She is responsible for the successful, legally compliant, attainment of large-scale Section 4 Discharge Licences. Her private enterprise boreholes include a Whiskey Distillery in Louth, Kilronan Castle, Lakeland Dairies, The Killeshin Hotel, The Loughrea Hotel, The Charleville Park Hotel, Motorway Service Stations Obama Plaza and Galway Plaza.

As a result of work in evaluating planning appeals, Pamela has become specialist in planning evaluations in the context of enacted Irish Regulation and EU Directives concerning the water environment such as the Groundwater Regulations (S.I. No. 9 of 2010 & Amendment Regulations S.I. No. 366/2016), Surface Water Regulations (S.I. No. 272 of 2009 & Amendment Regulations S.I. No. 386 of 2015), Water Framework and Habitats' Directives. She has been an invited guest speaker at the then Bord Pleanála, The Irish Concrete Federation, The Health Service Executive, Environmental Health Officers National Conference, The Irish Planning Institute's National Conference, The International Association of Hydrogeologist's National Conference (Irish Branch) and has delivered hydrogeological lectures to the public during Science Week. In the past, she has held full time lecturing positions in third level institutions (WIT & CIT, 1996 – 1999), delivered practical laboratory instruction in the assessment of subsoils for the FETAC Site Assessor programme and also demonstrated hydraulics laboratory and practical field survey tutorial modules at Trinity College Dublin (1996). Pamela is a qualified and certified 'Site Assessor' and has been an interviewer of examination candidates in respect of eligibility for the Site Suitability FETAC Qualification: Hence she understands that the risk is high of soil mobilisation during construction on mountains. She is passionate about nature conservation and the fact that the government presented unjustified "targets" for renewable energy that were set without the application of Geographical Information Systems that properly acknowledged Ireland's unique environment.

Pamela Bartley's company is Bartley Hydrogeology ltd., a limited company established twenty years ago, registered to Trade As Hydro-G. The company holds the industry requisite professional indemnity insurance and employers, public and products liability insurances.

1.0 Introduction

In December 2024 the Scart Mountain Wind Farm proposal (321522) was presented to An Coimisiún Pleanála for their consideration under the mechanism of Strategic Infrastructure Development. That proposal is still before the Planning Authority and concerns 15 Turbine Masts, 45 Blades to be attached to 15 Hubs, a network of wide and excessively abnormal load bearing enabling roads, hectares of crushed rock (stone) compressed to make construction pads capable of supporting cranes to lift 70 to 80m long blades, 1,000s of metres of linear drainage channels excavated along each enabling road zig zagging up a to elevations of 400m Above Sea Level (the offices of the Ground Floor of An Coimisiún Pleanála's offices are c.6m Above Sea Level), and associated infiltration devices on mountains named Knocknanask (486m OD) and Knocknasheega (430m OD). The proposed Scart Mountain Wind Farm's hills form most of the land surface contributing to the headwaters of first order streams named the GLENNAFALLIA_010, the GLENSHELANE_010 and the Farnane_010, all of which are mapped by the EPA and Water Framework Directive teams as High Status Objective (HSO). The significance of the '_010' label on each stream is that this river is the first ('01') part of the river system. It is acknowledged that first order streams are the most important stretches of rivers in any hydrological system because the landscape around the headwaters of first order streams are generally landscapes that have escaped human interference to date. It is intended by Ireland's teams responsible for the implementation of the Water Framework Directive, River Basin Management Plan 2022-2027, Water Action Plan 2024 and the High Status, blue dot scientists of the EPA, and LAWPRO that we attempt to conserve the same landscapes that FuturEnergy, enabled by Tobin Consulting Engineers, wish to now use as large scale construction areas to meet Government Onshore 'Renewable Energy' Targets that can never be achieved.

Now, we have a second application for the Scart Mountain Wind Farm and this time it is for their Grid Connection, which the Planning Statement (Tobin, 2025) states is necessary to "facilitate and operate" the proposed Scart Mountain Wind Farm. Now we have a Cumulative Impact situation BUT NO NEW EIA DETAILS AT ALL. As far as Hydro-G can discern, the exact same EIAR has been submitted but the only changes have been an administrator in an office inserting new maps for an increased development area relating to the proposed Grid Connection. They have not even changed the front pages of Sections or the Headers on documents. There certainly are no new data and no reflection of the 2025 lodgement date requiring the EPA Envision Mapping (publicly available) Status published for 2019 – 2024 to be incorporated. The applicant's agents have NOT provided An Coimisiún Pleanála with any consideration of the interaction between the High Status Objective Rivers in the proposed Scart Mountain Wind Farm development area with the four rivers that will be affected by the proposed Scart Mountain Grid Connection (allegedly a 'separate development'). The EPA maps three High Status Objective (Blue dot) sub basins across the Grid Connection Route proposed: GLENNAFALLIA_010, GLENSHELANE_010 and FARNANE_010.

Many of the rivers in the Grid Route sub basins are listed publicly as LAWPRO Areas for Action (AFA) with Restoration Objectives, in the River Basin Management Plan 2022 – 2027, Water Action Programme 2024 and the associated 'Programme of Measures'. None of the government's published policies for these specific High Status Objective Rivers were acknowledged correctly by the agents or the applicant. Whilst some might say 'So what?', those failing to understand the significance of the WFD HSO failures are failing to grasp or understand that of 1,000s of streams and rivers in the entire island of Ireland, there are only a very small amount left that are pristine High Status. Some

of the rare High Status Objective Rivers of Ireland exist in the proposed Grid Connection Route and its parent project, the proposed Scart Mountain Wind Farm. 'Why here?' would be a better question. That is what An Coimisiún Pleanála is charged with: to answer the question and attempt to defend it if they were minded to grant permission: Why here? Why here, when there are large expanses of the country where rivers have no High Status Objective obligations placed upon them by the EPA? The only reasonable and defensible answer to 'Why here?' is that the applicant did not correctly apply the rules of the EIA 'Scoping stage'. Project scoping was not correctly completed. 'Consideration of Alternatives' was not correctly completed, as is required by the EIA Directive and clearly outlined in the EPA (2022) Guidelines.

2.0 Ill-informed Planning Justification

The proposed Scart Mountain Grid Connection is to service a proposed and undecided Scart Mountain Wind Farm whose Planning Statement (December 2024) acknowledges, in the opening sentence of the Executive Summary, as having been jointly written by Tobin (the applicant's agent) and by an employee of the applicant themselves, namely Paul Blout of FEI. Does this mean that the 'Planning Report' was essentially written by the business developer who stands to profit from the government's continued pay outs to the Wind Industry whether the development does or does not generate electricity?

It could be construed that there is bias in the Tobin (December 2024) Planning Statement. Attempts are made to continuously discredit the fact that Waterford County Council is proficient in their use of Geographical Information Systems and matters of the law, SEA and AA Screening, and there is a considerable academic effort to discredit Waterford County Council's ability to apply the laws of proper planning correctly, regardless of unjustified and indefensible Government Policy for Onshore Wind Energy targets.

What is missing from the applicant's presented case is the fact that Ireland's Wind Energy Strategy is technically and logistically infeasible and unattainable. In response to Mr. John McGuiness' PQ 103 question in the Oireachtas on the 5th of November 2024, Mr. Eamon Ryan admitted that Ireland's onshore Wind Targets were not tested using geospatial techniques (Wind Energy Generation – Tuesday, 5 Nov 2024 – Parliamentary Questions (33rd Dáil) – Houses of the Oireachtas; https://www.oireachtas.ie/en/debates/question/2024-11-05/103/#pq_103). The fact that Mr. Eamon Ryan admitted that they did not use geospatial techniques means that the government has not proven that their targets are logistically feasible given the biodiversity value, water quality, nature of housing development and the land area available in Ireland. Instead, wind energy targets were chosen by the then government based on modelling emissions and power systems. Therefore, Mr. Ryan's team decided that they wanted a certain emission reduction and set their target to that desire, regardless of any consideration of constraints posed by threats to Ireland's rivers, aquifers, water supply water to rural communities, Conservation Objective Natura 2000 sites and their endangered or protected species and habitats, nor were Housing Density nor Human Health implications considered in the selection of the onshore wind targets. It is for that reason that the results of the Strategic Environmental Assessment on Renewable targets cannot be published or defended by the Government. It would seem that the RTE reported current achievement of 5,000MW in wind energy provision (https://www.rte.ie/news/business/2025/0110/1489988-wind-power-ireland/) is the limit of what is feasible on the

basis of land use and Conservation Objective Natura 2000 sites. An Coimisiún Pleanála is hereby asked and supported to make their planning determination using a combination of geospatial and risk-based factors, just like Waterford County Council has done, and which the Irish Government has failed to do. Might a question be asked as to whether Ireland's housing crisis has not been helped at all because of the consequences of Mr. Eamon Ryan and WEI's efforts to push an indefensible and unhealthy Wind Energy target upon Rural Ireland? It would seem that so many SID Wind Farms and their associated grid connections are proposed in indefensible locations and this lack of professional judgement and overwhelming lodgement of SID Wind Farm applications to An Coimisiún Pleanála has resulted in valuable Planning resources and time lost.

Whilst in 2025 the judiciary may have been making moves to suggest that the Climate emergency must trump County Development Plans, only last week this is the official line from the Department of Energy in response to Donna McGettigan's Question in the House of the Oireachtas (4th November 2025) [https://www.oireachtas.ie/en/debates/question/2025-11-04/164/]:

> ***QUESTION (Donna McGettigan, SF, Clare)***
> *To ask the Minister for Climate; Energy and the Environment whether a strategic environmental assessment (SEA) has been, or is being, undertaken by his Department in respect of the National Territory Mapping for Renewable Electricity, being prepared under Article 15b of the Renewable Energy Directive (EU) 2023/2413 (RED III); if not, the reason his Department considers this mapping process to comply with the requirements of the SEA Directive (2001/42/EC) and the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. No. 435 of 2004), given that the mapping exercise constitutes a national plan setting the framework for future renewable energy development consents; if his Department intends to carry out a full SEA, incorporating consultation with prescribed authorities including the Irish Aviation Authority, AirNav Ireland, and the National Parks and Wildlife Service, before finalising or submitting the national map to the European Commission, as required under Article 15b(5) of RED III, which obliges Member States to ensure compliance with European Union environmental law; and if he will make a statement on the matter.*
>
> ***REPLY (Darragh O'Brien, Minister for Climate, Energy and the Environment, FFFG)***
> *Renewable Energy Directive (EU) 2023/2413 (RED III) requires EU Member States to carry-out national territory mapping (under Article 15b) to identify the domestic potential and the available areas that are necessary for the installation of renewable energy plants and their related infrastructure as required to meet Ireland's national contributions towards the overall EU renewable energy target of 42.5% by 2030.*
>
> *Noting that Article 15b states that 'Member States may use or build upon their existing spatial planning documents or plans' and noting that several local Planning Authorities have already identified lands suitable for renewable energy development, the coordinated mapping of the national territory has been undertaken based on the lands already identified for same, in City or County Development Plans.*
>
> *On this basis, all 31 local Planning Authorities were consulted, to obtain and collate the mapping and information that already identifies the potential opportunities for grid scale onshore renewables, in particular grid scale onshore wind and solar PV. This is included in several existing Development Plans and Wind Energy Strategies/Renewable Energy Strategies. These plans in themselves have been subject to environmental assessments and statutory public consultation (in accordance with the relevant provisions of the Planning and Development Act 2000) and are adopted by the Elected Members of each local Planning Authority.*
>
> *Using the mapping received from local Planning Authorities, collated maps for onshore wind and solar PV have been created showing all current local Planning Authority lands identified in a single map that amalgamates and harmonises the local authority lands identified into uniform national*

classifications. It does not alter or amend any existing plans, nor does it affect their status under any enactment. Any planning applications for development within any lands already identified as suitable for renewable energy developments will be subject to detailed assessment by the relevant Planning Authority and is subject to all relevant planning and environmental legislation and regulations.

In further consideration of Article 15b requirements, mapping of the maritime area has been undertaken to identity a number of sites currently available for the development of offshore wind energy. Four of these sites are included in the South Coast Designated Maritime Area Plan, as adopted by Government in October 2024, and were subject to a process of SEA and AA under the requisite regulations and directives. The other sites included in the offshore maritime area mapping for the purposes of Article 15b consist of sites already being considered in the planning system, in accordance with the policies and objectives of the National Marine Planning Framework. Any planning applications for development within any maritime areas for offshore renewable energy already designated will be subject to detailed assessment by the relevant Planning Authority and is subject to all relevant planning and environmental legislation and regulations.

Article 15c obliges EU Member States to ensure that competent authorities "adopt one or more plans designating [...] renewables acceleration areas for one or more types of renewable energy sources". RAAs are to be a "sub-set" of areas identified under Article 15b. The Draft RAA Plan (including rules on effective mitigation measures) will be subject to SEA and statutory public consultation (in accordance with Article 15d)."

The significance of the Minister for Minister for Climate, Energy and the Environment's response is that the SEA completed for the Waterford County Development Plan is the reason the government do not need to complete an SEA for their National Plan. Therefore, the Waterford County Development Plan's exclusion of the area is the legal instrument for this case.

3.0 Maladaptation

SPECIFIC REQUEST TO AN COIMISIÚN PLEANÁLA: CAN THE INSPECTOR'S REPORT AND THE MINUTES OF AN COIMISIÚN PLEANÁLA DISCUSSIONS ADDRESS THE ISSUE OF MALADAPTATION:

Maladaptation refers to actions or strategies that, while intended to address the challenges posed by climate change, inadvertently exacerbate the problem, or create new vulnerabilities. This can occur when adaptation measures are poorly planned, misaligned with the local conditions, or fail to account for long- term consequences.

The Ireland National Adaptation Framework – National Adaptation Plan 2025 (NAP 2025) - published by United Nations Framework Convention on Climate Change (UNFCCC) requires, as follows:

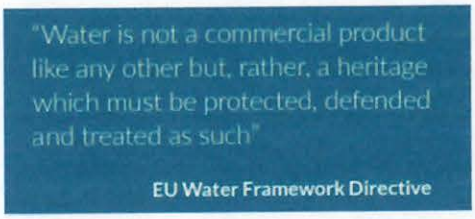
- p.42, "Avoiding Maladaptation: Ensure that adaptation actions do not inadvertently create new vulnerabilities or exacerbate existing ones."

- "Consideration of Climate Mitigation: Ensure that climate mitigation outcomes are considered alongside adaptation planning where appropriate."

- p. 47, As part of its annual review, the CCAC also considers developments made in terms of supporting a just transition in terms of both mitigation and adaptation – noting in its 2023 review the need to accelerate the integration of the just transition principles across all mitigation and adaptation policy development and implementation".

4.0 Receiving Water Environment

Ireland's Water Action Plan 2024 opens with a quote from the Water Framework Directive, as follows:



Water is a HERITAGE that must be protected, defended and treated as such. An Coimisiún Pleanála must ask why then have the agents for the applicant failed to acknowledge the uniqueness, rarity and value of the failing WFD High Status Objective heritage in the combined (separate?) project? In our Observation (Objection) to the originally proposed Scart Mountain Wind Farm we asked, **'How can An Coimisiún Pleanála complete an EIA in the absence of the complete dataset for EPA mapped information for the water systems?'**. We see now that An Coimisiún Pleanála has afforded the applicant's agent an opportunity to provide more information and an extension in time. Even though the Hydro-G report for the Knockmealdown Protection Group presented that information. Now, whilst An Coimisiún Pleanála has afforded the applicant's agents extra – and extra – time to complete their documents for Scart Mountain Wind Farm, we have a 'separate application' (indeed) for a proposed Grid Connection in which there will be four rivers affected. The Grid Connection will be crossing four watercourses:

- Watercourse 1: Scart Stream
- Watercourse 2: Bridge 1 Finisk River (Modeligo Bridge)
- Watercourse 3: Ballykerrin Middle Stream
- Watercourse 4: Colligan River

The Finisk River and Colligan River are part of/connected to Blackwater SAC and Dungarvan Harbor SPA.

Again, why would An Coimisiún Pleanála consent to such a Wind Farm and Grid Connection development in such a rare and important surface water area? On the same basis that the 'scale of development is at odds with the local environment' in planning determinations in urban settings, the same is true here: the scale of the development is at odds with the nature of the topography and rainfall runoff contribution zones to High Status Objective rivers, some of which are only Moderate Status and require significant improvements to comply with Ireland's commitments to Europe with respect to compliance with the Objectives of the Water Framework Directive. At no point in any of the EIAR documentation or appendices is there a joined up expansion of thinking querying the reporting of the Moderate Status relative to the required EPA designated High Status Objective. Again, An Coimisiún Pleanála is asked to justify how data from 2022 and 2023 can be accepted for a case that is likely to be decided in 2026, given the likely opportunity that will again be afforded the applicant's agents to supplement their original application details in light of community and independent professional observations. Regardless of any data that might be submitted in the future, the water quality parameters reported in the EIAR are BASIC and do not include chemicals that are specified in the Surface Water Regulations (2009, as amended) that are relevant to wind farms such as BOD and Bisphenols. **No baseline data of relevance has been submitted with respect to the proposed river crossing locations of the proposed Grid Connection Route. Refer to Figure 9-5 of the 2025 Water Chapter submitted for the Grid Connection planning application (VA93.323791).**

4.1 High Status Objective Information Access

THE GRID CONNECTION EIAR CHAPTER 9 IS THE EXACT SAME AS THE EIAR PREPARED A YEAR AGO FOR THE SCART MOUNTAIN WIND FARM. DESPITE EVERYTHING THAT **THE KNOCKMEALDOWN PROTECTION GROUP SUBMITTED WITH RESPECT TO THE UNIQUENESS OF THE PROPOSED WIND FARM'S AREA & ITS HIGH STATUS RIVERS**, the applicant's agents have not considered that important and made a decision that the Scart Mountain Grid connection was unnecessary in light of their oversights with respect to the High Status Blue Do catchments. **SPECIFIC REQUEST TO AN COIMISIÚN PLEANÁLA: FORMALLY, IN WRITTEN RECORD, ASK THE CATCHMENTS TEAM OF THE EPA WHY THESE HIGH STATUS OBJECTIVE SUB BASINS IN THE WIND FARM ARE SO CRUCIAL TO THE INTEGRITY OF IRELAND'S WATERS, HABITATS AND SPECIES. THE WIND FARM IS RELEVANT TO THIS GRID CONNECTION APPLICATION BECAUSE THE PLANNING STATEMENT FOR THE GRID CONNECTION STATES THAT THE GRID CONNECTION IS BEING PROPOSED TO FACILITATE THE OPERATION OF THE WIND FARM.**

Every single person in Ireland has access to EPA data, WFD Information and Geological information on the internet. Ireland is exemplary in its policy of making all data accessible to the public who are able to access computers. Again, we ask whether the authors of the EIAR are demonstrating the EIA Directive requisite competency in their fields? The information is publicly available. The EPA Envision Mapping System is accessed @ https://gis.epa.ie/EPAMaps/. The EPA provides 'you tube' tutorials here: https://www.catchments.ie/water-map/. The Geological Survey of Ireland's geological, geotechnical, Geoheritage, aggregate potential, landslide potential, groundwater and other data is accessible @ https://www.gsi.ie/en-ie/programmes-and-projects/planning/Pages/Data-and-Maps.aspx. With respect to the EPA Envision Mapping System @ https://gis.epa.ie/EPAMaps/, the first screen that appears is as shown in Plate 1.

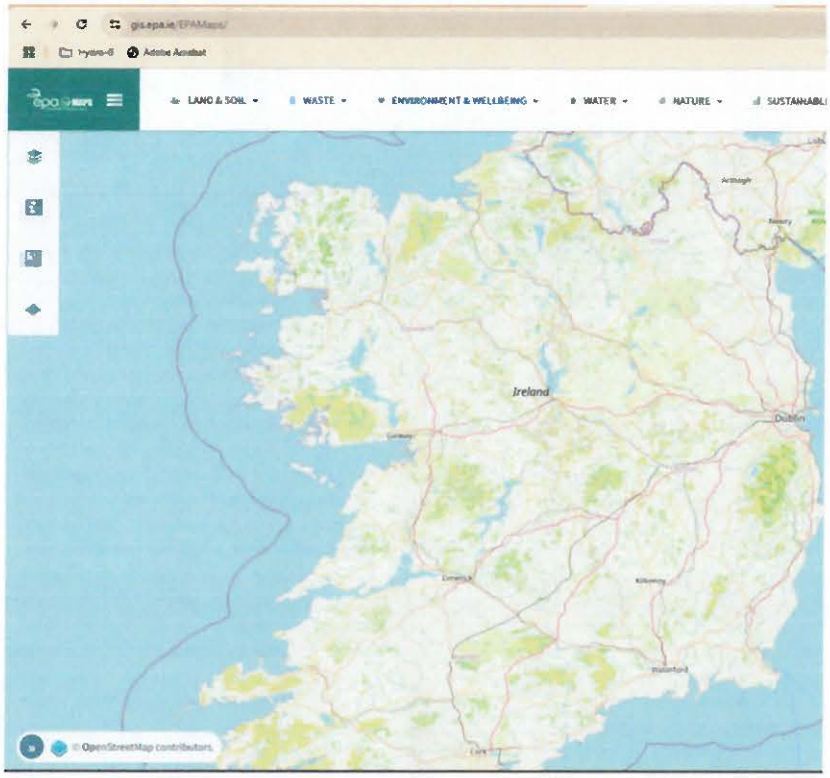


Plate 1 EPA Envision Mapping System @ https://gis.epa.ie/EPAMaps/, the first screen that appears.

When the EPA Envision Mapping System @ https://gis.epa.ie/EPAMaps/ first screen appears, as shown in Plate 1, one can then click the Green Box on the top LHS that states 'epamaps' and there is a drop down menu which enables you to explore many arenas as shown in Plate 2.



Plate 2 EPA Envision Mapping System https://gis.epa.ie/EPAMaps/, Drop Down Options from the 'epamaps' Box.

By clicking the 'WATER' tab, everyone has access to detailed **WFD mapping, Status, Risk, High Status Objective Rivers, Protected Water Areas**, and much more, as shown in Plate 3 in which Hydro-G has enabled the Tab named 'Status & Risk' on the top horizontal bar, to get a drop down menu on which the last Option to enable is 'High Status Objective Waters'. The pink squiggles on Plate 3 below are the High Status Objective Rivers as selected by the EPA to represent Ireland's best chance of retaining pristine water quality for future generations. There is even a full manual, published by Ireland's EU funded project 'Waters for Life', dedicated presenting a 'Framework of Best Practice Measures and Guidelines for the Protection and Restoration of High Status River Water Bodies' (RPS & Daly (2023). The Waters of Life Project report is available to all on the internet at the link https://www.watersoflife.ie/app/uploads/2023/08/Measures_Framework.pdf. The applicant has not presented any reference or acknowledgement of the published and publicly available Framework of Best Practice Measures and Guidelines for the Protection and Restoration of High Status River Water Bodies' (RPS & Daly (2023).

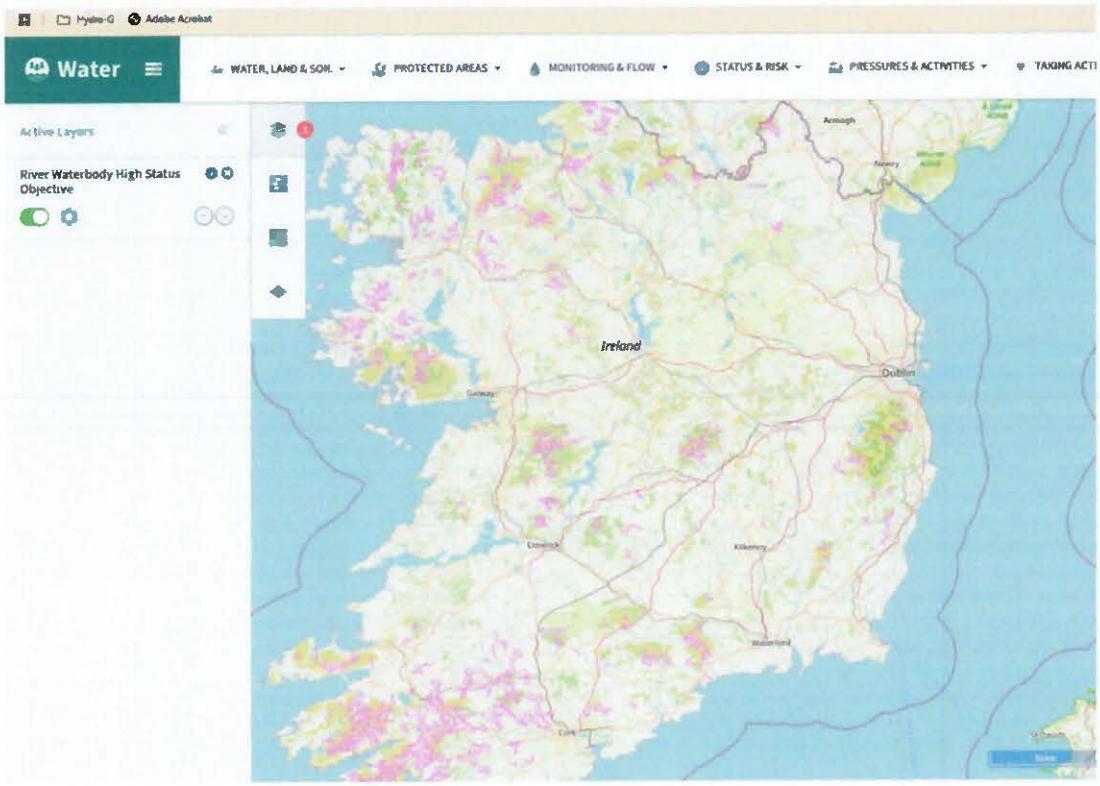


Plate 3 EPA Envision Mapping System @ https://gis.epa.ie/EPAMaps/, Clicking the 'Status & RisK' drop down menu enables presentation of High Status Objective Rivers.

With reference to Plate 3 and HSO rivers, An Coimisiún Pleanála Inspector is invited to observe the NATIONAL geographical spread of EPA mapped High Status **OBJECTIVE** Rivers. The word **OBJECTIVE** is very important because the pink shaded river systems are what the nation has committed to in Europe, for the purposes of maintaining headland waters in pristine states so that the contamination caused by humans in the low lands and developable areas can be somewhat diluted. However, we are not achieving High Status in those OBJECTIVE rivers yet. That is one of the purposes of the River Basin District 2022 – 2027 and the Water Action Plan 2024. There would appear to be large expanses of many other counties available to FEI and WEI to attempt to build more on shore wind turbine agglomerations.

With specific reference to High Status Objective Rivers, there is the publicly available EU cofounded Waters of LIFE website available @ https://www.watersoflife.ie/ and in which a specific information page is hereby made known to An Coimisiún Pleanála Inspector @ https://www.watersoflife.ie/high-status-objective-water-bodies/. "The Waters of LIFE is an EU LIFE Integrated Project (IP) which aims to help reverse the deterioration of Ireland's most pristine waters".

The Waters of Life website https://www.watersoflife.ie/high-status-objective-water-bodies/ states that *"High status surface water bodies are the rivers, lakes, estuarine and coastal waters with the best quality water. These waters are home to lots of species that are sensitive to pollution and would not survive in lower quality waters. High status waters have a natural physical form that has not been changed by human activities e.g. humans have not straightened the river channel or built hard structures to support the river banks. These waters have excellent water quality with little or no excess nutrients and healthy river beds, free of excess siltation."*

The Waters of Life website https://www.watersoflife.ie/high-status-objective-water-bodies/ continues in presenting that *"High Status Objective or "blue dot "waters bodies are water bodies which are either currently at high status or have been at high status in the recent past and for which a target of restoring them to high status has been set in the River Basin Management Plan for Ireland 2022 to 2027. The map viewer shows the location of all high status objective water bodies and sites in Ireland. It also indicates which of those are currently failing to meet the requirements for high status".*



Plate 4 Location of all high status objective water bodies and sites in Ireland.

Source https://www.watersoflife.ie/high-status-objective-water-bodies/

The Waters of Life website https://www.watersoflife.ie/high-status-objective-water-bodies/ continues in presenting that *"High status waters reflect largely undisturbed catchment conditions and status that is close to natural or pristine. They indicate the reference status that catchment management should strive to achieve. They may also be centres of high biodiversity or may contain rare and threatened habitats some of which are essential to survival of species with very particular ecological requirements such as the endangered fresh water pearl mussel. The presence of high status sites can contribute significantly to species diversity and these sites act as refuges for species that are a source for re-colonisation of river stretches that are recovering from pollution. High status sites and their catchments are also important providers of ecosystem goods and services and are areas of high natural capital value."*

The Waters of Life website https://www.watersoflife.ie/high-status-objective-water-bodies/ continues in presenting in relation to HSO Decline, that *"Unfortunately many sites previously at high status have lost their status over recent decades. In its most recent Water Quality Indicators Report Ireland's EPA reported a decline in the number of high status sites from almost one third (31%) of sites monitored in the 1980s to just under one fifth (17%) in 2017, and only 30 of these remaining high status sites are considered pristine. The EPA conclude that the ongoing*

loss of our most pristine rivers is a very significant concern. A large effort is required to protect the few remaining high status river sites and, where possible, return impacted ones to high status. Refer to Plate Z extracted from the https://www.watersoflife.ie/high-status-objective-water-bodies/website.



Plate 6 Ireland's Decline in High Status Sites from 1980, through to 2017 and 2022: Only 30 remain.
Source: https://www.watersoflife.ie/high-status-objective-water-bodies/

4.2 River Basin Management Plan 2022 – 2027 & Programme of Measures

The applicant makes no reference to the Programme of Measures (POM) published by the Irish Government (Appendix 2, Water Action Plan 2024). The Water Action Plan 2024's Appendix 2 Programme of Measures Report is available on the WAP 2024 website (https://www.gov.ie/en/department-of-housing-local-government-and-heritage/policy-information/river-basin-management-plan-2022-2027/) in which there is a link to an excel spreadsheet that for the National Areas for Action (AFA): named "Appendix 04 2024 03 11 National AFA with Catchment Projects identified", which provides reasons why HSO areas are being targeted by LAWPRO.

In the case of the **Grid Connection proposed**, the COLLIGAN_040 river crossing intersects a Priority Area for Action that is the **Colligan-Bricky-Dungarvan Harbour**. This is publicly available information that all citizens can access. The applicant has failed to technically and scientifically address the published and confirmed LAWPRO objective for implementing **Restoration** measures, which the government of Ireland has invested heavily in.

Appendix 2 POM Report in relation to HSO Rivers is available to the inspector at https://www.gov.ie/en/policy-information/8da54-river-basin-management-plan-2022-2027/ and scroll down to 'Water Action Plan Appendix 2'. Specific extracts relating to Action 5.5 of the POM Report (page 14) are provided by Hydro-G, as follows:

NFGWS prepares a drinking water source protection plan for public health areas for protection	DW source protection plan with protect measures to be actioned	Q4 2027	NFGWS	Regional Committees	
LAWPRO to prepare a template Protection Plan for Blue Dot Areas and roll out to all Blue Dots that are meeting their environmental objectives	Protection Plan for Blue Dots	Q4 2027	LAWPRO	LAs and Regional Committees / Blue Dot Steering Committee	Adequate resources for LAWPRO
Action 5.5	**LAWPRO, in cooperation with the EU LIFE IP Waters of LIFE project team, will publish a new Blue Dot Programme work plan for waters with a High Status Objective.**				
Steps Necessary for Delivery	**Proposed Output**	**Timeline**	**Lead Org**	**Stakeholder Support**	**Resources/Risks/Dependencies**
Blue Dots specific section in the template designed for the catchment management plans, to include work programmes/ action plans from implementing bodies with the greatest significant pressures on Blue Dots	Agreed template for Pilot Catchment Management Work Plans	Q4 2022	LAWPRO	EPA / All implementing bodies / Blue Dot Catchments Programme Steering Group	Long term resourcing of Blue Dot Programme. LAWPRO resource to deliver the template and coordination aspects of CMWP. Resourcing limitations of implementing bodies
Blue Dot section in each of the 46 Catchment Management Work Plans	46 Management Work Plans prepared	Q4 2024	LAWPRO	DHLGH / EPA / LA's / An Fóram Uisce / Regional Committees/ DHLGH Project Delivery Office / Blue Dot Catchments Programme Steering Group	Adequate resources in place for LAWPRO and coordination aspects of CMWP
Pilot community fora to inform the development and supports needed for local level initiatives specifically for Blue Dot waters	Recommendations on developments and supports required	Q4 2023	LAWPRO	Community Fora	Adequate resources in place for LAWPRO

Restoration and protection measures advanced in all Areas for Action with Blue Dots	Implementation of measures to improve WQ. Protection Plan which may include LCA assessment, inspection activities, enforcement action and planning controls	Q4 2027	Regional Committees / Local authorities	LAWPRO / Blue Dot Catchments Programme Steering Group.	Risk of inaction by responsible body/pressure owner. LA resource to be provided
Waters of LIFE Integrated Project to support the implementation of measures to protect and enhance High-Status Waters and thus to support the work of the Blue Dot Catchments Programme	Building technical understanding and capacity in relation to the design and implementation of measures. Promoting community and landowner ownership of the actions. Making recommendations that will inform the development of future agri-environment and forestry policies and provide for the long-term sustainable management of high-status areas	Q2 2028	DHLGH	LAWPRO / EPA / DAFM / Teagasc / Coillte / OPW / Forest Service / Local Development Companies. Waters of LIFE Steering Group. Blue Dot Catchments Programme Steering Group	Risk of inaction by responsible body/pressure owner. Technical learnings and innovations are developed. Poor integration of learnings from the project into mainstream policies and interventions including capacity, training, resources and enforcement.
Blue Dot Catchments Programme Communications and Engagement Plan implementation	Generate awareness amongst key audiences regarding the quality of our Blue Dot waters, focusing firstly on the key sectoral stakeholders who have the most impact on Blue Dots and on communities within Blue Dot catchments. Turn awareness into engagement and action, in the form of stewardship of Blue Dot waters	Ongoing	LAWPRO	Blue Dot Steering Group / Waters of LIFE IP / All relevant implementing bodies	Long term resourcing of Blue Dot Programme for measures, animation and activation of communities and implementing bodies
Action 5.6	**Catchment projects aimed at improving water quality to be advanced in 15 areas (including community initiatives, Rivers Trusts, EIPs, PEACE+)**				
Steps Necessary for Delivery	**Proposed Output**	**Timeline**	**Lead Org**	**Stakeholder Support**	**Resources/Risks/Dependencies**
Current Catchment Projects that will contribute to WFD water quality objectives	Include work programme for the project in the CMWP with appropriate reporting on implementation	Q1 2023	Catchment Project lead organisation	LAWPRO / Regional Committees	Meaningful engagement by Catchment Project
Addition of Catchment Projects during the lifetime of the RBMP	Revision of list	Ongoing	Project Delivery Office	LAWPRO	Meaningful engagement by Catchment Project

5.0 WFD Assessment Report Deficiencies

The WFD Report (Appendix 9-1) is the exact same WFD Report as was submitted in December 2024 for the Scart Mountain Wind Farm (alleged "separate project"). Only maps have been changed. One can now see how close trench excavations will be to the SAC.

The Water Chapter of the EIAR and the WFD Compliance Assessment Report (Appendix 9-1) presents information for An Coimisiún Pleanála EIA. However, there are characteristics of the receiving environment that are missing and they are of significance to the assessment of potential impact. Of particular concern is that the Scart Mountain Wind Farm and Grid Connection team's Appendix 9-1 WFD Compliance Report has concluded incorrectly on the basis of using the previous reporting phase of the WFD (2016 – 2021) mapped Status.

An Coimisiún Pleanála is hereby advised that the EPA's reporting for WFD Status 2016 2021 has now been updated on EPA Envision mapping to information for the period 2019 – 2024. Community groups will not present the most current data and assessments for the benefit of An Coimisiún Pleanála and the consultants acting for the developers. We are advising you that the WFD assessment is out of date the national baseline dataset reported by the agents is outdated. We will leave that with An Coimisiún Pleanála to add to their project scoping assistance they will send to the applicant in the guise of a Request for Further Information.

6.0 Indefensible Mitigation Measures

There are many issues with the Proposed Mitigation Measures that An Coimisiún Pleanála's Inspector is invited to explore. I will present an opening statement here that one cannot design Mitigation Measures unless the Baseline Environment has been correctly determined.

Tobin Consulting Engineers' EIAR (2025) for the Grid Connection and its Chapter 19's Mitigation Measures Table presents a Mitigation Measure 'MM46' that provides ZERO MITIGATION. There are a lot of words but no actual mitigation: MW46 Mitigation Measure states that *"The SWMP will be implemented by the appointed contractor and will be regularly audited throughout the construction phase. The Environmental Manager will be required to stop works on site if he/she is of the opinion that a mitigation measure or corrective action is not being appropriately or effectively implemented."*

Issues with the texts presented in the Mitigation Measures Table include, as follows:

> *"The SWMP will be implemented by the appointed contractor and will be regularly audited throughout the construction phase".*

I hereby swear that the ink-on-paper Mitigation Measures are rarely implemented in the way that the texts of the EIARs state they will be. Historically, An Coimisiún Pleanála seems to have taken it in good faith and trust that what is written will happen. Unfortunately, it is not guaranteed that a developer will honour the Conditions of Grant of

Planning. In this Area for Action catchment the luxury of trust is not available. Construction Phase Failures are common and actual experience in the following cases prove that trust in Mitigation Measures is unfounded:

- Tullynamoyle Windfarm 5 Ltd. (Inspector's Report ABP-312895-22). A site refused permission by Leitrim County Council and Granted by An Coimisiún Pleanála on the basis of trust in proposed any pre works Mitigation Measures, which were repeatedly committed to in Responses to Further Information by Jennings O'Donnovan for the developer. It just might be the case that there are issues within months regarding with compliance, IFI and Leitrim County Council.

- Meenbog https://www.pleanala.ie/en-ie/case/300460. In 2018 An Coimisiún Pleanála accepted a conclusion in the Lands, Soils and Geology Chapter that ***"No significant impacts on the soil and geology of the site of proposed development will occur."*** Yet, there was a failure. In An Coimisiún Pleanála 'Reasons and Considerations' supporting a Grant of Permission for Meenbog Windfarm the opening statement is that *"Having regard to: (a) the national targets for renewable energy contribution of 40% gross electricity consumption ...."*. However, Mr. Justice Holland is reported by the *Irish Times* (11th April, 2024) as ruling that *"the integrity of the planning and environmental law systems "weighs heaviest" in this case of all the factors in play and favour granting the injunction. He did not see that the "undoubted public interest in wind energy" weighs "much at all" in favour of exercising his discretion against making the order."* [Hydro-G provides clarification that Mr. Justice Holland has restrained the developers from finishing their "largely complete" 19-turbine project.] Mr Justice Holland said the developers submitted a report of a civil and environmental engineering expert to the EPA estimating that in the November 2020 incident 65,740m³ of subsoil entered a river and ended up on nearby European-protected sites, "causing significant environmental damage". Some agents of wind energy lobbying groups, and their associated media outlets, appear to be extolling the recent ruling of Mr. Justice Humphreys in the High Court as a 'win' for the Wind Industry. However, they are mistaken – the environment and planning laws will ultimately win over business lobbyists. The recent determination of Mr. Justice Humphreys in the Coolglass case related to Visual Impact, the Inspector's sole reliance on the County Development Plan and PROCEDURAL matters in the way the case had been evaluated. Mr. Justice Humphreys ruled on the 10th of January 2025, in the High Court Hearing on An Coimisiún Pleanála's refusal of the Coolglass Windfarm (https://www.pleanala.ie/en-ie/case/317809), that the importance of renewable energy as a climate action measure must be taken seriously and has precedent over visual impact and/or other seemingly aesthetic concerns. However, as a water professional I would like to draw An Coimisiún Pleanála's focus to Mr. Justice Holland's April 2024 ruling, again in the High Court, where it was determined that the urgent need for action in climate and the provision of renewable energy sites does not preclude the legislative requirements of the established environmental legislation. Notwithstanding the need for climate action and renewable energy, no need can preclude us from the implementation of the Birds and Habitats Regulations and the Objectives of the Water Framework Directive's Irish Statutory and legal instruments: herein the most relevant being the Surface Water Regulations (2009, as amended). Mr. Justice Holland is reported by the *Irish Times* (11th April 2024) as ruling that "the integrity of the planning and environmental law systems weighs heaviest". He did not see that the "undoubted public interest in wind energy" weighs "much at all" in favour of exercising his discretion against making his order. We applaud and welcome An Coimisiún Pleanála's Press Release (15th January 2025

https://www.pleanala.ie/getmedia/c9241e10-1cb5-44ae-85e6-66b2fea0a788/Renewables-decisons-statement-15-01-25_1.pdf?ext=.pdf) following Mr. Justice Humphreys' ruling. An Coimisiún Pleanála quite rightly came out strong in countering the misinformation presented by WEI and one of their primary consultants and agents Mr. Brian Keville of MKO. In addition, An Coimisiún Pleanála would be well supported by all involved in environmental law and biodiversity if they appealed Mr. Justice Humphreys ruling. Again, Mr. Justice Holland is supported in December 2024 by Ms. Justice Butler in the Court of Appeal when she essentially ruled that renewable energy targets or not, developer insolvency risks or not, the laws of planning and environmental protection must take precedent. It is well understood and reported that the Meenbog Windfarm was granted to enable an Amazon Datacentre. We take it in good faith that government pressure on An Coimisiún Pleanála is a thing of the past.

- Kilgarvan PWS, Co. Kerry, placed on Boil Notice and Do Not Consume because of a slide on a hill close to the Lake source for PWS.

- Brosna PWS, Co Kerry, placed on THM carcinogenic alert because of a lands slide upgradient in the catchment. You can be sure that the EAR concluded No Potential for Impact. Yet, there is impact. An Coimisiún Pleanála must understand the inviolability of the lands connected to High Status Objective rivers to Water Professionals. The proposed Scart Mountain Wind Farm and Grid Connection area of North Waterford is not open for consideration for construction. Hence, it is mapped as an Exclusion Zone. It is not as if County Waterford does not have ample far offshore capabilities. However, WEI and FEI see the landscape as low hanging fruit, worth the effort of attempted exploitation in the balance sheet of the costs to moving their business opportunities off shore.

We can be sure there are more examples of failure. However, those listed as ones that I have direct experience of.

The risk posed is too high. Agents for the applicant have considered the real life detail for actual construction sites. An Coimisiún Pleanála does not have all the information before them to complete their EIA.

The complexities of the issues are obvious when one considers the detail of the 91 page ruling by David Holland on the 10/4/24 relating to Donegal County Council v Planree & Mid-Cork Electrical – S.160 PDA 2000 [2024] IEHC 193 [meaning the "Meenbog Windfarm"] [https://ww2.courts.ie/acc/alfresco/6b028113-1030-41e2-8c63-41a65226a071/2024_IEHC_193.pdf/pdf#view=fitH]. Taking an applicant's agents word on Mitigation Measures is not always the correct planning foundation for environmental protection or climate action. With respect to Chapter 19's 'Monitoring the Effect of the MM46 Mitigation measure', the text of Tobin's table states that "*It is recommended that local surface water features at the proposed wind farm site boundary are monitored preconstruction and during construction to take account of any variations in the quality of the local surface water environment as a result of activities related to the proposed wind farm site*".

Hydro-G suggests to An Coimisiún Pleanála that 'Recommended' is an optional action and offers ZERO protection. If An Coimisiún Pleanála are minded to Condition monitoring, who would An Coimisiún Pleanála take legal action

against? The answer, we know, is no one. Waterford County Council would be charged with enforcement in an area they mapped as exclusion for wind farms and here we have an application for a grid connection route, with mitigation measures, to facilitate development in an exclusion zone.

Hydro-G and the Knockmealdown Protection Group do not need to dissect the deficiencies in every Mitigation Measure related to water. The agent for the applicant has not presented Mitigation Measures appropriate for the sites selected. The River Basin Management Plan 2022 – 2027 has specified AFAs and POMs for the rivers of the proposed Scart Mountain Wind Farm and the **Colligan-Bricky-Dungarvan Harbour** downstream of the proposed Grid Connection.

7.0 Uisce Eireann Scoping Response Ignored by the Applicant's Agents

Uisce Eireann for the Scart Mountain Wind Farm, which this grid connection application is linked to, highlights that the EIAR contains no details about certain PWS etc and that the developer should submit information on that AND that they should contact Uisce Eireann prior to submitting Application in for the Grid Connection - which by the looks of the documents provided for this Application, **the developer did not do this.**

SPECIFIC REQUEST TO AN COIMISIÚN PLEANÁLA: Follow this up with Uisce Eireann and the applicant's agents.

8.0 Modeligo Group Water Scheme Source Ignored by the Applicant's Agents

The Modeligo Group Water Scheme's source is at the commencement of the Grid Connection Route.

SPECIFIC REQUEST TO AN COIMISIÚN PLEANÁLA: Evaluate the Mitigation Measures presented by the applicant's agents to avoid grid connection trench excavations intersecting the pipework that conveys water from the GWS source to over 200 homes, farms, businesses and a school. We would value reading An Coimisiún Pleanála's reasoning on how the lacunae is acceptable/mitigatable. It is not. But we look forward to reading An Coimisiún Pleanála's offering on this.

9.0 Discussion

I refer An Coimisiún Pleanála to a copy of a letter that was delivered by hand to the then Taoiseach in October 2024 (see Appendix) – the omission of significant detail in EIARs for Renewable Energy from Wind is of concern to experts. Nothing has changed since we penned that letter. If anything, things are worse because the bias in renewable energy application documents is fuelled now by a perceived rational government drive towards achieving targets that were subject neither to SEA nor with the benefit of Geospatial techniques in which High Status Rivers, protected habitats and species, household Eircodes, schools and other important layers of information were integrated.

The applicant's agent's Planning Statement for the Grid Connection (page 2, Section 2.1, September 2025) states that "Together the proposed development and the Scart Mountain Wind Farm proposal form a single project for the purposes of EIA." Therefore, it is relevant for us to continue to discuss the proposed Wind Farm (2024) and the proposed Grid Connection (2025) in this independent assessment completed for the Knockmealdown Protection Group.

The Tobin Planning Statement (September 2025) for the 'Grid Connection' states in the final para of the 'Executive Summary' that "The proposed development will facilitate the construction and operation of the Scart Mountain Wind Farm, which is a crucial piece of strategic infrastructure necessary to achieve Ireland's national renewable energy targets." However, no planning consent exists for the Scart Mountain Wind Farm. Whilst the Planning Statement reminds An Coimisiún Pleanála that CALCDA demands that it must enable furtherance of Ireland's Climate Action Plan, the words "IN SO FAR AS PRACTICABLE" are KEY words that must be remembered by all parties. Legally, Ireland's obligations under the Water Framework Directive are the PRACTIABLE legislative instrument here. In addition, LEGALLY, the only SEA assessments completed for the government's renewable energy strategy are those in the County Development Plans, and the Scart Mountain Wind Farm contravenes the SEA completed by Waterford County Council.

On the matter of Waterford County Council's Renewable Energy Strategy (Appendix 7) adopted for 2022 – 2028 mapping the area as a Zone of 'EXCLUSION' for Wind Farm Development, in the Oireachtas on 4th November 2025 [https://www.oireachtas.ie/en/debates/question/2025-11-04/164/]: the Minister for Climate, Energy & the environment (Mr. Darragh O'Brien) stated that the government have no SEA on their onshore renewable energy targets because each County Development Plan had completed an SEA for its own strategies. Therefore, despite what FEI would try to claim in their EIAR Chapter 4: Planning-Policy-and-Development-Context for the proposed Grid Connection, Waterford County Council's Renewable Energy Strategy should be given the respect it deserves, it being the only plan on the table that has actual legal and scientific justification. FEI could move to Waterford's significant Off Shore environment and possibly comply with the Water Framework Directive, SEA Directive, EIA Directive and the Climate Action and Low Carbon Development Act (2015), as amended ("CALCDA").

No defensible nor justified assessment can be completed by An Coimisiún Pleanála given the failure of the applicant, and its agents, to acknowledge or assess the impact of the combined, dependent, development on the actual mapped High Status Objective River Sub basins that are mapped by the EPA across three parts of the Wind Farm and downstream of the Grid Connection development area in the Colligan-Bricky-Dungarvan Harbour. The applicant's agents focussed their mitigation design on the basis that they would not cause a deterioration in status. However, they completely missed the point, which is that some of the surface waters in their chosen co-dependent development area are required to be brought up to High Status because many are not meeting their EPA mapped High Status Objectives. The area chosen by FEI was not correctly scoped and is in contravention with the Objectives of the Water Framework Directive, as enacted into the Irish Statute Book by the Surface Water Regulations 2009, as amended.

There is no record of communication or consultation with the EPA/WFD 'Blue Dot' scientist for the region and no record of consultation with LAWPRO. Therefore, there has been no consultation with any party that will play a role in the achievement of the River Basin Management Plan 2022 – 2027 or the Water Action Plan 2024, in which significant improvements are required across all water bodies and all catchments, with a special emphasis of restoration of High Status Water bodies. The Water Chapter 9's Table 9.11 presents site data for Q Ratings (ecological health of a river). At no point is the EIAR reported Poor to Moderate Status discussed in the context of the fact that Ireland has only a few years remaining to bring High Status Objective rivers back from the brink of ecological annihilation. It is certain that to propose or sanction construction activity of the scale required for 15 turbines and all associated enabling roads and drainage will not help in our restoration efforts. The final Page of the Aquatic Survey Report (Appendix 6-3, page 28) closes with a statement that the majority of the sites (meaning rivers surveyed) have moderate status, "while only a few are achieving the target Q4 good status water quality required under the WFD" . Source: Aquatic Survey Report (Appendix 6-3, page 28).

> As such the majority of the sites have a moderate status, while only a few are achieving the target Q4 good status water quality required under the WFD. It is likely that diffuse agricultural and forestry enrichment are contributing factors to the localised declines in water quality. Macroinvertebrate diversity corresponded with habitat suitability, with greater diversity recorded in areas of better habitat. In the Irish context, biological water quality in the study area is considered good, considering the range of pressures on surface waters at a national level, such as nutrient, organic, chemical, and sediment pollution.
>
> IFI and EPA have identified significant pressures for waterbodies that are at risk of not meeting their water quality objectives under the WFD by incorporating over 140 datasets, a suite of modelling tools, and local knowledge from field and enforcement staff from the local authorities. While there are a multitude of pressures in every waterbody, the significant pressures are those pressures which need to be addressed in order to improve water quality. A robust scientific assessment process has been carried out to determine which pressures are the significant pressures. The Blackwater River and its tributary, the Glennafallia are categorised as watercourses under significant pressure from forestry and industry (EPA 2024).

Again, across all of the team involved in assessing the water baseline environment, and assessment of potential impacts arising from the development under consideration, the point is missed that the requirement of the WFD is that all waters must achieve "AT LEAST GOOD Status", but some rivers must achieve High Status – those rivers are published in the River Basin Management Plan for Ireland 2022 – 2027's excel spreadsheet detailing Areas for Action and High Status Objectives. That is the reason that the Glenshelane and Glennafallia are mapped as HIGH STATUS OBJECTIVES. An Coimisiún Pleanála must consider that the information for the baseline presented is not complete and neither is the Impact Assessment that is reported in compliance with the requirements of the EIA Directive. Neither is the Water Framework Directive Compliance Report correctly concluded for the same reason.

Similarly, the final paragraph of the Aquatic Survey Report states that the Blackwater River and tributaries are reported by the EPA as under significant pressure from forestry and industry (EPA, 2024). How then could the agents for the applicant conclude that **more forestry action (tree felling)** and **more industry (construction sites** numbering at least 20 sites including the 15 proposed turbines, site office compound and toilet facilities, roads, drainage works and quarries) are the solution or key to reducing risk and improving water quality? How could An Coimisiún Pleanála independently conclude that the development is defensible. Any professional with water and legal expertise would conclude that the development proposal is indefensible in the context of the River Basin Management Plan 2022 - 2027, the Programme of Measures, Water Framework Directive Objectives, the actual failing status of some of the

High Status Objective streams and rivers of the proposed development area, as reported by the EPA on their Envision mapping system that is publicly available to all.

This 2024 EIAR was submitted to An Coimisiún Pleanála so that they can complete an Environmental Impact Assessment. Agents for the applicant appear to be attempting to portray that the true principles of the commencement of EIA have been applied in their selection of sites. If the applicant had correctly applied the principles of Screening for constraints, Avoidance and Consideration of Alternatives, the development should not have proceeded any further and we should not have had to interrogate the EIAR because the applicant and their agents have not applied the principles of Environmental Impact Assessment correctly.

Waterford County Council have ruled that the area is EXCLUDED from suitability for Wind as a Renewable Energy. It should be a speedy process, one would imagine, for An Coimisiún Pleanála to quickly determine the justified SEA, AA, ecological, biodiversity, WFD and water related reasons that resulted in mapping for Renewable Energy development as 'EXCLUDED' (Waterford County Council, 2022 – 2028 Development Plan, Appendix 7). The reasons for exclusion are firmly grounded in the laws relating to maintaining the Heritage of Water and Biodiversity.

Overall, the information presented by the applicant is lacking and there are gross omissions of factual information. No correct evaluation is documented with respect to potential to affect implementation of the River Basin Management Plan 2022 – 2027. The Colligan-Bricky-Dungarvan Harbour is mapped for RESTORATION by LAWPRO and the EPA's WFD Team of Blue Dot Scientists. The developer has not presented Mitigation Measures appropriate to the state of the baseline environment relative to where it is supposed to be from a WFD compliance perspective. The River Basin Management Plan 2022 – 2027 has specified AFAs and POMs for the streams and rivers in the proposed area and those POMs do not include building 15 Wind Turbines, a Grid connection and all that goes with that.

In the preliminary study for Management Strategies for the Protection of High status Water Bodies, completed for the EPA STRIVE Programme 2007-2013, it was concluded that **"There is sufficient knowledge to establish locally effective strategies for the protection of high status water bodies."** (Irvine & Chuanigh, 2010). What is needed is continued support from An Coimisiún Pleanála in the matter of environmental protection and proper planning. Ireland is attempting to implement that protection by virtue of the River Basin Management Plan 2022 – 2027, the associated Programme of Measures, and the Water Action Plan 2024. For high status waters the key to success will be that developers honour the plans and that An Coimisiún Pleanála supports the EPA, LAWPRO, WFD Blue Dot Scientists and citizens such as those who have gathered as the Knockmealdown Protection Group – this is citizen scientist in action. This is what the WAP and POMs requires. Citizen Science is exactly what was advocated by the RPS & Daly (2023) report entitled 'Framework of Best Practice Measures and Guidelines for the Protection and Restoration of High Status River Water Bodies' concluded. The Waters of Life Project report is available to all on the internet at the link https://www.watersoflife.ie/app/uploads/2023/08/Measures_Framework.pdf.

Again, we close with the request that An Coimisiún Pleanála ensures that the Scart Mountain Wind Farm and the Grid Connection are evaluated by the same inspector. If not, the inspector for the Grid Connection proposal is asked to read the Hydro-G (2025) report for the Scart Mountain Wind Farm proposal (321522), which was created for the benefit of the Knockmealdown Protection Group's Objection to Scart Mountain Wind Farm.

10.0 Recommendation

There are many reasons to support An Coimisiún Pleanála's refusal of both the Grid Connection and the associated wind farm ("separate" developments and separate applications, allegedly). It is recommended that An Coimisiún Pleanála refuse permission to the proposed Grid Connection development for the reasons that

(1) The grid connection is only proposed to serve turbines that should not be granted permission in catchments that contain rivers and streams that are mapped by the EPA as High Status Objective rivers, some of which are failing in their Water Framework Directive Obligations.

(2) The risk posed by construction is unacceptable and cannot be mitigated. This is an elevated steeply sloped landscape draining the catchments of streams and rivers that are mapped in the RBMP and WAP as RESTORATION Areas for Action with High Status Objectives. The applicant has failed to present any information to An Coimisiún Pleanála for EIA with respect to how the development proposal will aid WFD, RBMP and WAP efforts to RESTORE and Improve the status of waterbodies to the required High Status specific to this proposed Wind Farm development area and how the Restoration Objective for the **Colligan-Bricky-Dungarvan Harbour** will actually be assisted and not hampered. Neither has any information been presented to An Coimisiún Pleanála to demonstrate that there is Headroom or Assimilation Capacity in the receiving waters for any receipt of drainage waters arising.

(3) The scoping response instructions and Observation remarks for the Scart Mountain Windfarm issued by Uisce Eireann have not been addressed by the applicant's agents.

(4) The threat to the source and water mains distribution system of the Modeligo Group Water Scheme was also ignored completely.

Pamela Bartley

Signed: _____ Date: 18th November 2025

Dr. Pamela Bartley BEng, MSc, PhD

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APPENDIX:

LETTER TO AN TAOISEACH MR. SIMON HARRIS

To: An Taoiseach Mr. Simon Harris.

Date: 12th October 2024.

From: Professor Paul Johnston, Trinity College Dublin; Professor Mike Gormally, University of Galway; Dr Pamela Bartley, Hydro-G.

Purpose of Note: Windfarm applications in Ireland: Effect of the Inadequacy of Environmental Impact Assessments - concerns of experts.

Dear Simon

We, the undersigned, have all acted as advisors to competent authorities and understand the intricacies of the Statutory Instruments enacted in Ireland and their parent Directives issued from Europe. We are writing this note to share with you our strong concerns relating to the implementation of Ireland's EIA Regulations and its parent Directive in relation to windfarm proposals and planning applications in Ireland.

As experts in our fields, we would ask you to consider that Ireland's Wind Energy Strategy, as it currently operates, is not sustainable and is not aligned with, among other legal instruments, the European Union's Nature Restoration Law, in which biodiversity must be restored. The European Union Regulation (EU) 2024/1991 of the European Parliament and of the Council of 24 June 2024 on nature restoration and amending Regulation (EU) 2022/869 clearly sets out targets for the year 2030, i.e. less than 7 years' time. Much other existing environmental legislation is in conflict with our national requirements for siting increasing numbers of windfarms.

We ask that you give serious consideration to this letter. With the recent changes in EU legislation we, as a nation, now have the required supports to get this right. We also have the scientific evidence to ensure that we do not repeat the mistakes of our forebears when much of our nature was destroyed by intensive agriculture, commercial forestry and peat extraction practices. While our forebears could argue that they did not realise the full extent of the environmental degradation caused by their actions, our generation does not have that excuse and the next generation will judge us on that basis.

We are writing this note as Nationally Recognised Subject Matter Experts with experience, as follows, with biographic notes below:

- Paul Johnston's 50 years of academic and state advisory positions in Hydrogeology & Peatlands.
- Mike Gormally's 30 years of academic and research experience in Applied Ecology, Biodiversity and Wetlands.
- Pamela Bartley's 30 years of Site Investigation, Construction, Research, Planning, the Law and Impact Assessment.

In our expert subject matters, we have reviewed many Environmental Impact Assessment Reports (EIARs) relating to windfarms in Ireland in the last number of years and are familiar with the details of wind turbine construction.

Here, we state categorically that there are significant problems with the EIA process for wind power. The EIAs for wind power submitted to either County Councils or An Board Pleanála as Strategic Infrastructure Development (SID) are rarely correctly informed, are most often incorrectly concluded and they are, more often than not, indefensible in the context of the legislation enacted in Ireland to protect water as a resource (The Water Framework Directive

and associated Irish Statutory Regulations), water as a Source of Public Water Supply (The Drinking Water Regulations, 2023) and our valued birds, species and habitats (The Birds and Habitats Regulations and associated Directive). It is of great concern to us to read in windfarm EIARs, statements such as "No Impact" or "Mitigatable Impact" regarding drinking water, peatlands, birds, bats *etc.,* without sufficient robust data to support these statements. The repeated evidence of poor investigation practices and inadequate survey methods leads to a situation that does not align with either Ireland's Statutory Instrument or the EU Directive for Environmental Impact Assessment. This is borne out by An Bord Pleanála's continued planning decision refusals on points of environmental law, and explains the frequent referrals for judicial review.

Many of the EIAR chapters we have reviewed do not adhere to EPA Guidelines on the information to be contained in Environmental Impact Assessment Reports (2022). On a regular basis, we observe EIAR contents that provide significant potential risks to landscape, water, environment, birds, bats etc for reasons including, but not limited to, the following:

- Inappropriate site and landscape selection.
- Inadequate baseline data.
- Outdated bird survey methodologies.
- Impact predictions being presented without satisfactory supporting evidence.
- Mitigation measures lacking sufficient detail and understanding, with the result that the success of proposed mitigation measures cannot be guaranteed, as demonstrated by the Meenbog Windfarm bog slide in Co. Donegal.
- Poor consultation with community groups; and a general lack of clarity, to say the least.

"*Maintaining objectivity*" is one of the fundamental principles of best practice in Environmental Impact Assessment (EPA, 2020) yet the tone of the majority of the windfarm EIARs we have reviewed to date has been to present the proposed wind farm in the best possible light so that the development has the best chance of succeeding in the planning process. The negative impacts of built, or partially built, Irish windfarms that have made the national/international news is testament to the outcome of such practices: some Public Water Supply Sources have been severely damaged with THM issues due to landslides, and salmonid rivers have been inundated with peat slides. In addition, there are unassessed potential persistent chemical risks posed to waters used to supply the public.

A quick snapshot is provided here to give you some brief examples of **poor practice** we have documented in windfarm EIARs in recent years.

1. **Targeting peatlands and bog wetlands as potential windfarm sites:**
   Beyond all scientific doubt, building turbines in peat will negatively affect biodiversity and increase carbon loss from this habitat through the required drainage, foundations and infrastructure. Damage arising from construction releases more carbon from the peatland. The long-term sustainable approach is the restoration of bog wetlands. A strategy of restoration, rather than any construction whatsoever, will provide a reduction in carbon emissions from the peatland in perpetuity. The societal benefits will be better water quality, reduction in flood events, a reversal of biodiversity loss and more opportunities for people to connect with nature resulting in better physical/mental health outcomes, as recognized in the Climate Action Plan, a derivative of the Paris Agreement. Moreover, since 1987, Ireland has been a signatory of the international Ramsar convention which provides for the protection and promotion of wetlands including peatlands. The case that windfarms in

peatlands are incompatible with these requirements is rarely even considered appropriately in EIARs.

2. **Bird survey methodologies currently employed by consultancies in Ireland for wind farm EIARs:**
   Bird mortality due to collision with wind turbine blades is universally accepted. The daytime observational methods used in Irish EIARs are outdated and do not record bird movements during night-time hours. Thermal imaging and passive audio recording are now best practice technologies widely available for more than 10 years, yet, to date, we have not observed these methods in any of the windfarm EIARs we have reviewed. In addition, passerines (perching birds) are not generally considered in Irish EIARs despite recent scientific literature indicating that mortality rates are significantly underestimated due to the small size of these birds.

3. **Failure to acknowledge the requirements of the Drinking Water Regulations (2023) in wind farm EIARs:**
   The Statutory Instrument detailing the protection of drinking water and health of citizens is clear and detailed in its legal requirements. In most EIARs for wind power, there is a complete lack of acknowledgement of the Drinking Water Regulation's required Risk Assessment.

4. **Failure to correctly acknowledge the now short time frame for Ireland's compliance with the Objectives of the Water Framework Directive:**
   Ireland is fast approaching the 2027 deadline for WFD compliance, for which we have had 24 years to work towards. Time is now running out. Whilst previously County Councils and The Board *may* have had some justification in permitting development consent in catchments not currently meeting WFD Obligations, that time has now passed, and the nation now has 2 years to bring all rivers to '*at least*' Good Status. The impact of windfarms is frequently incompatible with meeting this objective.

We bring to your attention to Ireland's 4th National Biodiversity Action Plan (2023-2030) which, using a "*whole government, whole society*" approach, "*aims to deliver the transformative changes required to the ways in which we value and protect nature*". The aim is to "*ensure that every citizen, community, business, local authority, semi-state and state agency has an awareness of biodiversity and its importance, and of the implications of its loss, while also understanding how they can act to address the biodiversity emergency as part of a renewed national effort to "act for nature"*." In addition, The Wildlife (Amendment) Act 2023 introduced a new public sector duty on biodiversity. The legislation provides that every public body, as listed in the Act, is obliged to have regard to the objectives and targets in the National Biodiversity Action Plan. See https://www.npws.ie/legislation for further details.

We recognize the pressing need for the development of renewable energies which is resulting in considerable pressure on EIA consultancies to "deliver" for both the Government in its 'Climate Objectives' and for the developer, who is their client. Nevertheless, we have observed a significant absence of objectivity in parts of the required EIARs. There is real conflict between the requirements of historical as well as current environmental legislation and the equal need for development of windfarms as sources of renewable energy. A resolution for this conflict may lie in an integrated national landuse policy but meanwhile, there is an urgent need to have a genuine conversation about the above issues and we would be happy to be part of that conversation.

The existing and growing resistance to terrestrial windfarms due to their environmental impact is frequently justified and exacerbated by inadequate EIARs which result in extra delays and costs as well as in poor planning decisions. This conflict between the requirements of environmental legislation and the need for increased wind power is unsustainable.

When it comes to protecting our environment and its increasingly important ecosystem services on which the human race depends, an excerpt from the famous song "Big Yellow Taxi" by Joni Mitchell comes to mind.

"Don't it always seem to go

That you don't know what you got 'til it's gone?"

We thank you for your time and look forward to discussing the issues with you.

Professor Paul Johnston	Professor Mike Gormally FRES	Dr. Pamela Bartley
Dept Civil & Environmental Eng.	Director of Applied Ecology Unit	Hydro-G
Trinity College Dublin	University of Galway	Galway
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BIOGRAPHICAL NOTES

PAUL JOHNSTON

Paul is a Professor at Trinity College Dublin's Department of Civil, Structural & Environmental Engineering, specialising in peatland hydrology, hydrogeology and ecohydrology. He has acted as a specialist advisor to An Bord Pleanála, NPWS, multiple Government Departments, Teagasc, the EPA, the National Roads Authority (now TII). Paul has advised NPWS on ecohydrology and he is the mentor for NPWS's first ever employed ecohydrologist: Professor Shane Regan, who himself is a lecturer now in UCD.

MIKE GORMALLY

Mike is the Director of the Applied Ecology Unit (AEU) at the University of Galway, which has a strong track record in applied ecological research. His unit has undertaken applied ecological research on internationally famous ecosystems such as disappearing lakes (turloughs), peatlands, unregulated flood meadows and coastal grasslands (machairs) as well as terrestrial invertebrates as bioindicators of habitat quality. Mike, an active member of the County Galway Heritage Forum and Irish Ramsar Wetland Committee, also lectures in Environmental Impact Assessment (EIA) to both BSc and MSc students.

PAMELA BARTLEY

Pamela is a civil engineering hydrogeologist and water supply engineer. She has had her own limited company for over 20 years. She is the only water supply engineering hydrogeologist in Ireland to be certified, accredited and experienced to act as a Construction Regulation compliant Project Supervisor Design Phase (PSDP) and Project Supervisor Construction Phase (PSCS). Her expertise includes the assessment of and interaction between the law, water and bedrock to enable functioning of Regionally important quarries in Ireland, which are required to support the housing policies of Government. She therefore understands how construction can be completed within the legislative framework. She has adjudicated cases and Oral Hearings for An Bord Pleanála. Pamela is hydrogeological lead consultant, for all counties of the western coast and northern boundary, in the delivery of Uisce Eireann's Supply Demand Balance Programme that grew from the National Water Framework Plan. Pamela has written advice papers on Irish Statutory Instruments enacted for the Water Framework Directive (WFD) and presented to the National Planning conference and Environmental Health Officers of the HSE. Her PhD, completed 20 years ago, is still a hot topic: Nitrates, Groundwater & Dairy Agriculture.

APPENDIX:

HYDRO-G (2025) REPORT FOR THE SCART MOUNTAIN WIND FARM PROPOSAL (CASE REF.: 321522)

Hydro-G

An Bord Pleanála PA93.321522

Futurenergy Proposed Scart Mountain Wind Turbine Constructions

proposal to

Construct in Catchments of High Status Objective Rivers Failing WFD Objectives

with

Pads, Roads and Quarries and Extensive artificial Drainage (with Culverts and Bridges)

Contrary to the Objectives of the Water Framework Directive

Contrary to Ireland's River Basin Management Plan 2022 – 2027

Contrary to Ireland's Water Action Plan 2024

Contrary to the 'Consideration of Alternatives' requirements of the EIA Directive

Contrary to the 4th National Biodiversity Plan & Nature Restoration Laws

Uplands of County Waterford Wind Exclusion Zone = Contrary to Proper Planning

commissioned by

Knockmealdown Protection Group

for the benefit of

An Bord Pleanála

Prepared by

Dr. Pamela Bartley, Expert Service Provider

Hydro-G

February 2025

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Project No.:	2025_WFs_Scart & Knockmealdown Protection Group
Report Status:	**Issue_1**
Report Title:	An Bord Pleanála PA93.321522. Futurenergy Proposed Scart Mountain Wind Turbine Constructions in High Status Objective Headwater Catchments, Contrary to the Objectives of the Water Framework Directive, Contrary to Ireland's River Basin Management Plan 2022 – 2027, Contrary to Ireland's Water Action Plan 2024, Contrary to the Consideration of Alternatives' requirements of the EIA Directive, Contrary to the 4th National Biodiversity Plan & Nature Restoration Laws. Uplands of County Waterford Wind Exclusion Zone, Contrary to Proper Planning.
Date:	26th of February 2025
Prepared by:	Pamela Bartley Dr. Pamela Bartley B.Eng, M.SC., Ph.D.

Legislation of Particular Note to SID Case PA93.321522:

I. Local Government (Water Pollution) Acts 1977 & 1990.

II. Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (The Water Framework Directive).

& the Water Framework Directive's enacted Irish Statute Book Instruments:

III. European Communities Environmental Objectives (Surface Water) Regulations, S.I. No. 272 of 2009, as amended 2015, 2019, 2023.

IV. European Communities Environmental Objectives (Groundwater) Regulations, S.I. No. 9 of 2010, as amended 201, 2012, 2016, 2023.

V. Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment (**EIA Directive**).

& the EIA Directive's enacted Irish Statute Book Instruments:

VI. European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018. S.I. No. 296/2018.

VII. European Union (Environmental Impact Assessment) (Environmental Protection Agency Act 1992) (Amendment) Regulations 2022. S.I. No. 421/2022.

VIII. Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks.

IX. European Communities (Assessment and Management of Flood Risks) Regulations 2010. S.I. No. 122/2010 as amended European Communities (Assessment and Management of Flood Risks) (Amendment) Regulations 2015. S.I. No. 495/2015.

X. European Union (2024) REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on nature restoration and amending Regulation (EU) 2022/869. THE EUROPEAN PARLIAMENT THE COUNCIL Brussels, 15 March 2024.

XI. European Communities (Birds and Natural Habitats) Regulations, 2011. S.I. No. 477 of 2011.

XII. European Communities (Birds and Natural Habitats) (AMENDMENT) Regulations, 2021. S.I. No. S.I. No. 293 of 2021.

XIII. European Union (Drinking Water) Regulations 2023 (S.I. No. 99 of 2023).

XIV. European Communities Environmental Objectives (Freshwater Pearl Mussel) Regulations, 2009. S.I. No. 296 of 2009.

XV. European Union Environmental Objectives (Freshwater Pearl Mussel) (Amendment) Regulations, 2018. S.I. No. 355 of 2018.

XVI. European Communities (Quality of Salmonid Waters) Regulations, 1988. S.I. No. 293/1988.

An Bord Pleanála PA93.321522

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List of Abbreviations

Blue Dot	EPA and WFD term to signify important and rare pristine HSO river systems
CEMP	Construction & Environment Management Plan
EIA	Environmental Impact Assessment
EQO	Environmental Quality Objective
EPA	Environmental Protection Agency
FEI	Futurenergy Ireland – A Business involved in Wind Turbine Plantations
GSI	Geological Survey of Ireland
GW	Groundwater
ha	Hectares (area)
HSO	High Status Objective
km	kilometres (distance)
LAWPRO	Local Authority Water Action Programme (WFD Catchment Assessment teams)
m	metres (distance)
m^2	square metres (area 1m x 1m)
m OD	metres above Ordnance Datum (Above Sea Level)
NFGWS	National Federation of Group Water Schemes
POM	Programme of Measures, Water Action Plan 2024
PWS	Public Water Supply
RBDMP	River Basin Management Plan 2022 - 2027
SI	Statutory Instrument
S.I.	Site Investigation
SW	Surface Water
SWMP	Surface Water Management Plan
WAP	Water Action Plan (meaning Ireland's Water Action Plan 2024)
WEI	A business lobby group advocating for Wind Turbine Plantations across Rural Ireland Only
WFD	Water Framework Directive
ZOI	Zone of influence
ZOC	Zone of Contribution

An Bord Pleanála PA93.321522

Executive Summary

- This report presents information for An Bord Pleanála in relation to a proposed Strategic Infrastructure Development by Futurenergy Scart Mountain Designated Activity Company (Applicant) (ABP Reference No. PA93.321522). The proposed development would result in permanent change of 981.4 hectares, approximately, of landscape and surface water catchments in north county Waterford and across two Mountains that are almost 500m OD (Above Sea Level). Construction sites are proposed in uplands mapped by the EPA, LAWPRO and WFD Catchment Teams as High Status Objective Waters. The detail acknowledging the High Status Objective nature of the proposed area is completely lacking in the information presented to The Board on behalf of the applicant. A significant academic effort has been expended by Tobin and their client's representative, Paul Blout of FEI, to author a Planning Statement that appears to plead ignorance of the scarcity of High Status Objective Waters in Ireland and appears to discredit the competency and diligence of Waterford County Council in their acknowledgement of Ireland's obligations to Europe with respect to Water Law (the WFD), the River Basin Management Plan and Water Action Plan for Ireland. No defensible nor justified assessment can be completed by An Bord Pleanála given the failure of the applicant, and its agents, to acknowledge or assess the impact of the development on the High Status Objective Waters in the proposed development area. The applicant's agents focussed their mitigation design on the basis that they would not cause a deterioration in status. However, they completely missed the point, which is that the surface waters in their chosen development area are required to be brought up to High Status because many are not meeting their EPA mapped High Status Objectives. The area chosen by FEI was not correctly scoped and is in contravention with the Objectives of the Water Framework Directive, as enacted into the Irish Statute Book by the Surface Water Regulations 2009, as amended.

- This report has been presented by Dr. Pamela Bartley on behalf of the Knockmealdown Protection Group. The author is considered an expert service provider to many state agencies. The author of this report is experienced in water related impact assessment guided by the EU EIA Directive and EPA (2022) Guidelines on EIARs. The author is also a civil engineer with Land, Soils & Geology competencies.

- The purpose of this report is to present expert hydrological and hydrogeological information for the Board's consideration with respect to the potential for impact arising from the proposed altering of catchment dynamics over the 981.4 ha proposed; the deep and wide reinforced steel foundations (22 to 28m diameter, 5m deep); two number mini quarries up to 10m deep (named borrow pits by the applicant's agents but the correct modern terminology is quarry); infiltration pits; 100s of kms of extreme load bearing, wide, roadways, 100s of kms of linear drainage channels across elevated uplands that have a direct hydrological link to failing High Status Objective surface waters.

- The information presented to the Board by agents for the developer (applicant) clearly identifies the development area encompassing Knocknanask (486m OD) and Knocknasheega (430m OD) and the applicant's maps are clearly showing that the GLENNAFALLIA_010 and GLENSHELANE_010 are mapped by the EPA WFD Team as **High Status Objective** (HSO) headwater streams that commence in those same hills. The conclusions of no potential for impact are not justified by virtue of the fact that the applicant fails to acknowledge that the rivers are not all meeting their HSO and yet the applicant proposes, amongst many other activities, to connect the hills and proposed turbines by a trench through a ravine that would really require an aqueduct type bridge because of the steepness of the valley sides. No information is presented by the applicant as to how a directional driller will gain access to the floor of the valley in which the High Status River sits, under which they wish to drill.

- This report is presented as a Submission from an expert hydrogeologist advising that the applicant's EIA Scoping should have concluded that that the area should not be progressed as a potential area for development because of the fact that the area is a WFD failing High Status Objective (HSO) river system. The EU Life website (https://www.watersoflife.ie/high-status-objective-water-bodies/ states ***"The EPA conclude that the ongoing loss of our most pristine rivers is a very significant concern. A large effort is required to protect the few remaining high status river sites and, where possible, return impacted ones to high status".*** No part of the EIAR or any associated documentation submitted to the Board on behalf of the applicant references the HSO baseline or potential impact on same.

- Waterford County Council's Renewable Energy Strategy (Appendix 7) adopted for 2022 – 2028 maps the area as a Zone of 'EXCLUSION' for Wind Farm Development. I offer that the Planning Authority understood that the land mass they mapped as 'EXCLUSION' is one of FEW AREAS NATIONALLY THAT CAN ACHIEVE RESTORATION TO A PRISTINE RIVER SYSTEM – HENCE THE HIGH STATUS **OBJECTIVE** MAPPING. In a December 2024 Planning Report, acknowledged by the authors to have been written by the agent and applicant together, they cite only the need for Wind Energy but fail to grasp the significance of the Water Framework Directive and Waterford County Council's understanding that they are caretakers for a High Status Water system, which is not found in many places in Ireland. In addition, unlike the Government's Wind Energy Targets, Waterford County Council have applied SEA and AA Screening to their policy, making it legally defensible in Planning.

- There are ample, defensible, justified reasons to **REFUSE THE APPLICATION. Not all related to Water. Ecosystems are water related. Biodiversity is a water issue. Climate Action by virtue of Ecosystems and Water Protection is more aligned with Proper Planning than the enabling of large-scale catchment alteration by construction for the purposes of blind implementation of Government Policy that has no basis in science, biodiversity, environmental protection or Planning Law.**

Statement of Expertise Pamela Bartley B.Eng., MSc., Ph.D

Dr. Pamela Bartley is a water focussed civil engineer and is considered an Expert Service Provider (ESP) in service to engineering consultants, planning authorities, the legal profession, Environment Sections of County Councils, Uisce Eireann, The National Federation of Group Water Schemes and nationally important limestone quarries. She is now regularly called upon by community groups to provide expert, reasoned, and justified independent assessment of renewable energy Environmental Impact Assessments conducted in their habitats that seem to be lacking true representation of local understanding of water systems and associated water dependent ecosystems in existence in the vicinity of proposed construction sites.

She has almost 30 years of experience in field-based practice working on construction sites, supervising borehole drilling, completing EIA Directive impact assessments, groundwater monitoring, modelling and abstraction point management. She is considered a specialist in karst hydrogeology and Public Water Supply: her Ph.D was a field based-karst limestone environment study and in the years after she completed CPD training with the GSI at their karst specialist course in the Burren.

Pamela is qualified and IOSH certified to act as PSDP (Project Supervisor Design Phase) & PSCS (Project Supervisor Construction Stage) as defined by the Health and Safety at Work (Construction) Regulations. It is her experience on construction sites that enables a correct prediction of risk and impact arising from the stripping of soils, importation of rock for the construction of enabling roads, office areas (compounds), toilet facilities for workers, excavation of linear drainage systems and quarrying.

Pamela's limited company is a registered Uisce Eireann Supplier (no. 1855) and Pamela Bartley is HSQE approved within Uisce Eireann as one of their Hydrogeologist Framework service providers. She has advised on Uisce Eireann's advancement of the National Water Resource Plan's resultant Supply Demand Balance Programme.

Upon completion of a Diploma in Water and Wastewater Technology at Sligo RTC she completed a degree in Civil Engineering at Queens University, Belfast and then completed a Master of Science in Environmental Engineering, which was followed by a hydrogeologically focussed Ph.D. on Groundwater Impact: both postgraduate degrees were completed within the school of Civil Engineering at Trinity College, Dublin.

Her key work areas are the assessment of potential impact to groundwater and surface water arising from large scale rock extraction and groundwater use for PWS. She specialises in the engineering of groundwater and large-scale water supply boreholes for PWS, GWS, Motorway Service Stations & Hotels. Part of her work requires the assessment of Zones of Contribution to Groundwater and Spring Abstraction Points. Other work areas include evaluation of discharges to groundwater and surface waters for compliance with Irish Regulations and the hydrological and hydrogeological assessments required for EIA. She has a skillset in the assessment of groundwater quality for water treatment process parameters and working in collaboration with water treatment plant designers. She is responsible for the successful, legally compliant, attainment of large-scale Section 4 Discharge Licences. Her private enterprise boreholes include a Whiskey Distillery in Louth, Kilronan Castle, Lakeland Dairies, The Killeshin Hotel, The Loughrea Hotel, The Charleville Park Hotel, Motorway Service Stations Obama Plaza and Galway Plaza.

As a result of work in evaluating planning appeals, Pamela has become specialist in planning evaluations in the context of enacted Irish Regulation and EU Directives concerning the water environment such as the Groundwater Regulations (S.I. No. 9 of 2010 & Amendment Regulations S.I. No. 366/2016), Surface Water Regulations (S.I. No. 272 of 2009 & Amendment Regulations S.I. No. 386 of 2015), Water Framework and Habitats' Directives. She has been an invited guest speaker at An Bord Pleanála, The Irish Concrete Federation, The Health Service Executive, Environmental Health Officers National Conference, The Irish Planning Institute's National Conference, The International Association of Hydrogeologist's National Conference (Irish Branch) and has delivered hydrogeological lectures to the public during Science Week. In the past, she has held full time lecturing positions in third level institutions (WIT & CIT, 1996 – 1999), delivered practical laboratory instruction in the assessment of subsoils for the FETAC Site Assessor programme and also demonstrated hydraulics laboratory and practical field survey tutorial modules at Trinity College Dublin (1996). Pamela is a qualified and certified 'Site Assessor' and has been an interviewer of examination candidates in respect of eligibility for the Site Suitability FETAC Qualification: Hence she understands that the risk is high of soil mobilisation during construction on mountains. She is passionate about nature conservation and the fact that the government presented An Bord Pleanála and County Councils with a poison chalice, contrary to proper planning, the "targets" for renewable energy were published in ignorance of the benefit of Geographical Information Systems that properly acknowledged Ireland's unique environment.

Pamela Bartley's company is Bartley Hydrogeology ltd., a limited company established twenty years ago, registered to Trade As Hydro-G. The company holds the industry requisite professional indemnity insurance and employers, public and products liability insurances.

An Bord Pleanála PA93.321522

1.0 Introduction

In December 2024 the Scart Mountain Wind Farm proposal was presented to the Board for their consideration under the mechanism of Strategic Infrastructure Development. The proposal before the Board in case PA93.321522 concerns 15 Turbine Masts, 45 Blades to be attached to 15 Hubs, a network of wide and heavy load bearing enabling roads, hectares of crushed rock (stone) compressed to make construction pads capable of supporting cranes to lift 70 to 80m long blades, 1,000s of metres of linear drainage channels excavated along each enabling road zig zagging up a to elevations of 400m Above Sea Level (the offices of the Ground Floor of the An Board Pleanala offices are c.6m Above Sea Level), and associated infiltration devices on mountains named Knocknanask (486m OD) and Knocknasheega (430m OD). The hills form most of the land surface contributing to the headwaters of first order streams named the GLENNAFALLIA_010, the GLENSHELANE_010 and the Farnane_010, all of which are mapped by the EPA and Water Framework Directive teams as High Status Objective (HSO). The significance of the '_010' label on each stream is that this river is the first ('01') part of the river system. It is acknowledged that first order streams are the most important stretches of rivers in any hydrological system because the landscape around the headwaters of first order streams are generally landscapes that have escaped human interference to date. It is intended by Ireland's teams responsible for the implementation of the Water Framework Directive, River Basin Management Plan 2022-2027, Water Action Plan 2024 and the High Status, blue dot scientists of the EPA, and LAWPRO that we attempt to conserve the same landscapes that Futurenergy, enabled by Tobin Consulting Engineers, wish to now use as large scale construction areas to meet Government Onshore 'Renewable Energy' Targets that can never be achieved.

The applicant has not presented the Board with any meaningful acknowledgement of the fact that all construction has impacts, that all proposals to use large excavators and massive earth moving trucks to enable turbine erection earthworks WILL materially change the rainfall runoff characteristic of over 900 hectares (*i.e.,* 9,000,000 m^2 or 9 million square metres) in a landscape that can tolerate no change because the High Status Objectives are currently failing at this location. The rivers in question are listed publically as LAWPRO Areas for Action (AFA) with Restoration Objectives, in the River Basin Management Plan 2022 – 2027, Water Action Programme 2024 and the associated 'Programme of Measures'. None of the government's published policies for these specific High Status Objective Rivers were acknowledged in the information submitted to the Board by the agents or the applicant. The streams draining from the proposed development area are the GLENNAFALLIA_010 river draining from the western side of Knocknanask mountain, which is currently mapped as meeting its High Status Objective (2016 – 2021) but shortly after the mountain it deteriorates to Moderate Status (failing HSO), the GLENSHELANE_010 draining from the middle of the proposed development area, *i.e.,* to the east of Knocknanask and to the west Knocknasheega, is mapped as Moderate Status and currently failing its Water Framework Directive High Status Objective, and the Farnane_010 draining from the east of the boundary of the proposed development area is meeting its High Status Objective. The applicant proposes development of numerous construction sites, and roads and drainage channels, on hills either side of a HSO River that is failing in its WFD Objectives. Whilst some might say 'So what?', those failing to understand the significance of the WFD HSO failures are failing to grasp or understand that of 1,000s of streams and rivers in the entire island of Ireland, we only have a very small amount left that are close to the pristine High Status required. 'Why here?' would be a better question. That is what the Board is charged with: to answer the question and attempt

to defend it if they were minded to grant permission: Why here? Why here, when there are large expanses of the country where rivers have no High Status Objective obligations placed upon them by the EPA? The only reasonable and defensible answer to 'Why here?' is that the applicant did not correctly apply the rules of the EIA 'Scoping stage'. Project scoping was not correctly completed. 'Consideration of Alternatives' was not correctly completed, as is required by the EIA Directive and clearly outlined in the EPA (2022) Guidelines.

2.0 Ill Informed Planning Statement

The Planning Statement for the proposed Scart Mountain Wind Farm (December 2024) acknowledges, in the opening sentence of the Executive Summary, as having been jointly written by Tobin (the applicant's agent) and by an employee of the applicant themselves, namely Paul Blout of FEI. Does this mean that the 'Planning Report' was essentially written by the business developer who stands to profit from the government's continued pay outs to the Wind Industry whether the development does or does not generate electricity?

It could be construed that there is bias in the Tobin (December 2024) Planning Statement. Attempts are made to continuously discredit the fact that Waterford County Council is proficient in their use of Geographical Information Systems and matters of the law, SEA and AA Screening, and there is a considerable academic effort to discredit Waterford County Council's ability to apply the laws of proper planning correctly, regardless of unjustified and indefensible Government Policy for Onshore Wind Energy targets.

What is missing from the applicant's presented case is the fact that Ireland's Wind Energy Strategy is technically and logistically infeasible and unattainable. In response to Mr. John McGuiness' PQ 103 question in the Oireachtas on the 5th of November 2024, Mr. Eamon Ryan admitted that Ireland's onshore Wind Targets were not tested using geospatial techniques (Wind Energy Generation – Tuesday, 5 Nov 2024 – Parliamentary Questions (33rd Dáil) – Houses of the Oireachtas & https://www.oireachtas.ie/en/debates/question/2024-11-05/103/#pq_103). The fact that Mr. Eamon Ryan admitted that they did not use geospatial techniques means that the government has not proven that their targets are logistically feasible given the biodiversity value, water quality, nature of housing development and the land area available in Ireland. Instead, wind energy targets were chosen by the then government based on modelling emissions and power systems. Therefore, Mr. Ryan's team decided that they wanted a certain emission reduction and set their target to that desire, regardless of any consideration of constraints posed by threats to Ireland's rivers, aquifers, water supply water to rural communities, Conservation Objective Natura 2000 sites and their endangered or protected species and habitats, nor were Housing Density nor Human Health implications considered in the selection of the onshore wind targets. It is for that reason that the results of the Strategic Environmental Assessment on Renewable targets cannot be published or defended by the Government. It would seem that the RTE reported current achievement of 5,000MW in wind energy provision (https://www.rte.ie/news/business/2025/0110/1489988-wind-power-ireland/) is the limit of what is feasible on the basis of land use and Conservation Objective Natura 2000 sites. The Board is hereby asked and supported to make their planning determination using a combination of geospatial and risk-based factors, just like Waterford County Council has done, and which the Irish Government has failed to do. Might a question be asked as to whether

Ireland's housing crisis has not been helped at all because of the consequences of Mr. Eamon Ryan and WEI's efforts to push an indefensible and unhealthy Wind Energy target upon Rural Ireland? It would seem that so many SID Wind Farms are proposed in indefensible locations and this lack of professional judgement and overwhelming lodgement of SID Wind Farm applications to the Board has resulted in valuable Planning resources and time lost.

3.0 Receiving Water Environment

Ireland's Water Action Plan 2024 opens with a quote from the Water Framework Directive, as follows:

> "Water is not a commercial product like any other but, rather, a heritage which must be protected, defended and treated as such"
>
> **EU Water Framework Directive**

The protection of waters in the Knockmealdown area and specifically in the lands chosen by FEI for their proposed Scart Mountain affair, is a HERITAGE that must be protected, defended and treated as such. The Board must ask why then have the agents for the applicant failed to acknowledge the uniqueness, rarity and value of the failing WFD High Status Objective heritage? Or perhaps the real question is: How can the Board complete an EIA in the absence of the complete dataset for EPA mapped information for the water systems? Even now that this report presents the information, why would the Board consent to such a scale of development in such a rare and important surface water area? On the same basis that the 'scale of development is at odds with the local environment' in planning determinations in urban settings, the same is true here: the scale of the development is at odds with the nature of the topography and rainfall runoff contribution zones to High Status Objective rivers, some of which are only Moderate Status and require significant improvements to comply with Ireland's commitments to Europe with respect to compliance with the Objectives of the Water Framework Directive. At no point in any of the EIAR documentation or appendices is their a joined up expansion of thinking querying the reporting of the Moderate Status relative to the required EPA designated High Status Objective.

3.1 High Status Objective information Access

Every single person in Ireland has access to EPA data, WFD Information and Geological information on the internet. Ireland is exemplary in its policy of making all data accessible to the public who are able to access computers. Again, we ask whether the authors of the EIAR are demonstrating the EIA Directive requisite competency in their fields? The information is publically available. Why is it not presented to the Board in the EIAR? The EPA Envision Mapping System is accessed @ https://gis.epa.ie/EPAMaps/. The EPA provides 'youtube' tutorials here: https://www.catchments.ie/water-map/. The Geological Survey of Ireland's geological, geotechnical, Geoheritage, aggregate potential, landslide potential, groundwater and other data is accessible @ https://www.gsi.ie/en-ie/programmes-and-projects/planning/Pages/Data-and-Maps.aspx. With respect to the EPA Envision Mapping System @ https://gis.epa.ie/EPAMaps/, the first screen that appears is as shown in Plate 1.

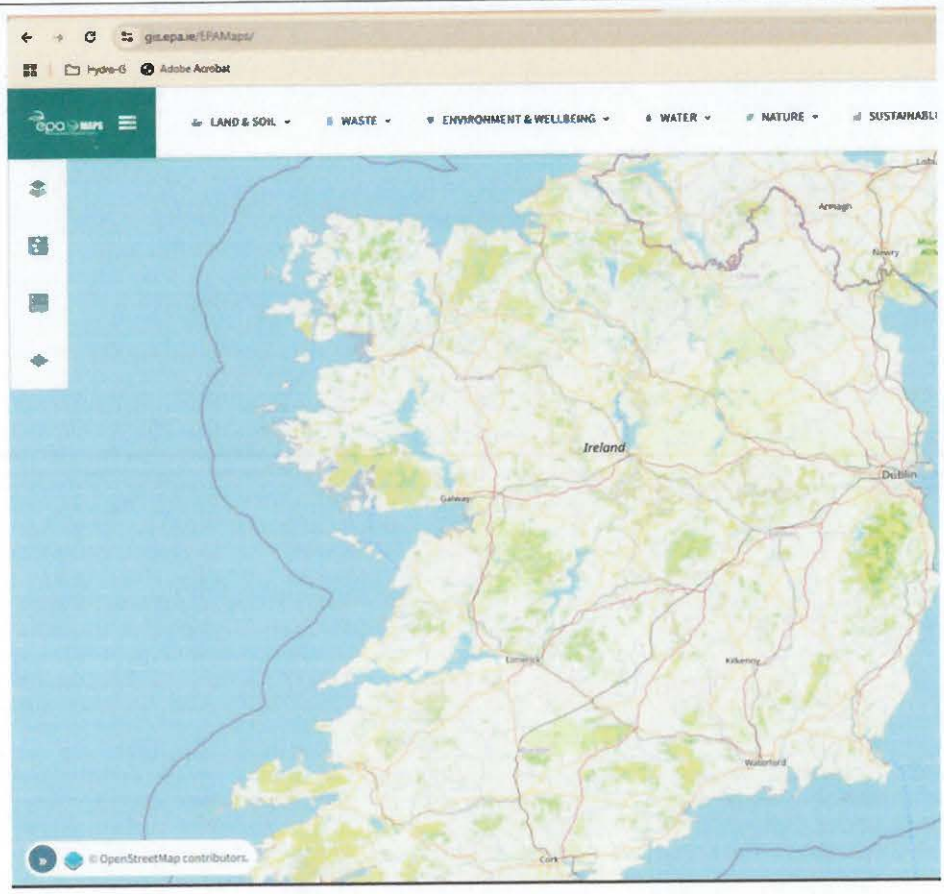


Plate 1 EPA Envision Mapping System @ https://gis.epa.ie/EPAMaps/, the first screen that appears.

When the EPA Envision Mapping System @ https://gis.epa.ie/EPAMaps/ first screen appears, as shown in Plate 1, one can then click the Green Box on the top LHS that states 'epamaps' and there is a drop down menu which enables you to explore many arenas as shown in Plate 2.



Plate 2 EPA Envision Mapping System https://gis.epa.ie/EPAMaps/, Drop Down Options from the 'epamaps' Box.

By clicking the 'WATER' tab, everyone has access to detailed **WFD mapping, Status, Risk, High Status Objective Rivers, Protected Water Areas**, and much more, as shown in Plate 3 in which Hydro-G has enabled the Tab named 'Status & Risk' on the top horizontal bar, to get a drop down menu on which the last Option to enable is 'High Status Objective Waters'. The pink squiggles on Plate 3 below are the High Status Objective Rivers as selected by the EPA to represent Ireland's best chance of retaining pristine water quality for future generations. There is even a full manual, published by Ireland's EU funded project 'Waters for Life', dedicated presenting a 'Framework of Best Practice Measures and Guidelines for the Protection and Restoration of High Status River Water Bodies' (RPS & Daly (2023). The Waters of Life Project report is available to all on the internet at the link https://www.watersoflife.ie/app/uploads/2023/08/Measures_Framework.pdf. The applicant has not presented any reference or acknowledgement of the published and publically available Framework of Best Practice Measures and Guidelines for the Protection and Restoration of High Status River Water Bodies' (RPS & Daly, 2023).

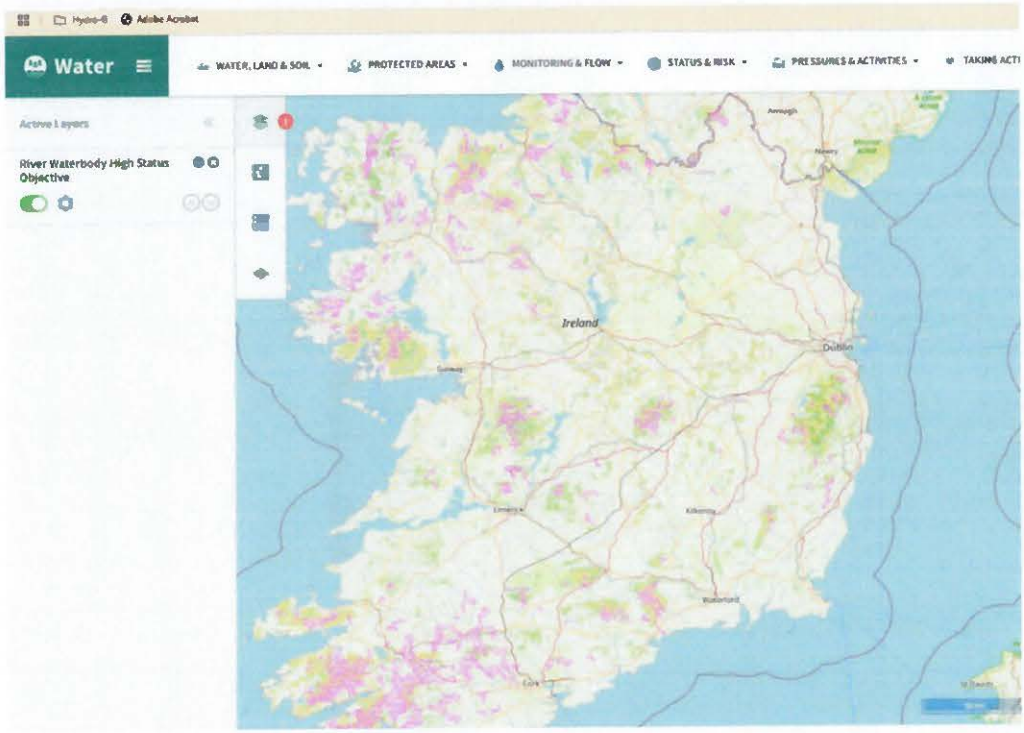


Plate 3 EPA Envision Mapping System @ https://gis.epa.ie/EPAMaps/, Clicking the 'Status & RisK' drop down menu enables presentation of High Status Objective Rivers.

With reference to Plate 3 and HSO rivers, the Board's Inspector is invited to observe the NATIONAL geographical spread of EPA mapped High Status **OBJECTIVE** Rivers. The word **OBJECTIVE** is very important because the pink shaded river systems are what the nation has committed to in Europe, for the purposes of maintaining headland waters in pristine states so that the contamination caused by humans in the low lands and developable areas can be somewhat diluted. However, we are not achieving High Status in those OBJECTIVE rivers yet. That is one of the purposes of the River Basin District 2022 – 2027 and the Water Action Plan 2024. There would appear to be large expanses of many other counties available to FEI and WEI to attempt to build more on shore wind turbine agglomerations that would not have the Grid capacity to be of any use to anyone (https://gript.ie/2024-worst-year-on-record-for-wind-power-lost-as-electricity-supplied-by-wind-falls/) except to their own business potential to continue to increase their revenue and receipt of Irish citizen funds by way of the PSO levy funds.

With specific reference to High Status Objective Rivers, there is the publically available EU cofounded Waters of LIFE website available @ https://www.watersoflife.ie/ and in which a specific information page is hereby made known to the Board's Inspector @ https://www.watersoflife.ie/high-status-objective-water-bodies/. "The Waters of LIFE is an EU LIFE Integrated Project (IP) which aims to help reverse the deterioration of Ireland's most pristine waters".

The Waters of Life website https://www.watersoflife.ie/high-status-objective-water-bodies/ states that *"High status surface water bodies are the rivers, lakes, estuarine and coastal waters with the best quality water. These waters are home to lots of species that are sensitive to pollution and would not survive in lower quality waters. High status waters have a natural physical form that has not been changed by human activities e.g. humans have not straightened the river channel or built hard structures to support the river banks. These waters have excellent water quality with little or no excess nutrients and healthy river beds, free of excess siltation."*

The Waters of Life website https://www.watersoflife.ie/high-status-objective-water-bodies/ continues in presenting that *"High Status Objective or "blue dot "waters bodies are water bodies which are either currently at high status or have been at high status in the recent past and for which a target of restoring them to high status has been set in the River Basin Management Plan for Ireland 2022 to 2027. The map viewer shows the location of all high status objective water bodies and sites in Ireland. It also indicates which of those are currently failing to meet the requirements for high status".*



Plate 4 Location of all high status objective water bodies and sites in Ireland.

Source https://www.watersoflife.ie/high-status-objective-water-bodies/

3.2 The Rivers of the Proposed Development Area

The Waters of Life website https://www.watersoflife.ie/high-status-objective-water-bodies/ continues in presenting that *"High status waters reflect largely undisturbed catchment conditions and status that is close to natural or pristine. They indicate the reference status that catchment management should strive to achieve. They may also be centres of high biodiversity or may contain rare and threatened habitats some of which are essential to survival of species with very particular ecological requirements such as the endangered fresh water pearl mussel. The presence of high status sites can contribute significantly to species diversity and these sites act as refuges for species that are a source for re-colonisation of river stretches that are recovering from pollution. High status sites and their catchments are also important providers of ecosystem goods and services and are areas of high natural capital value."*

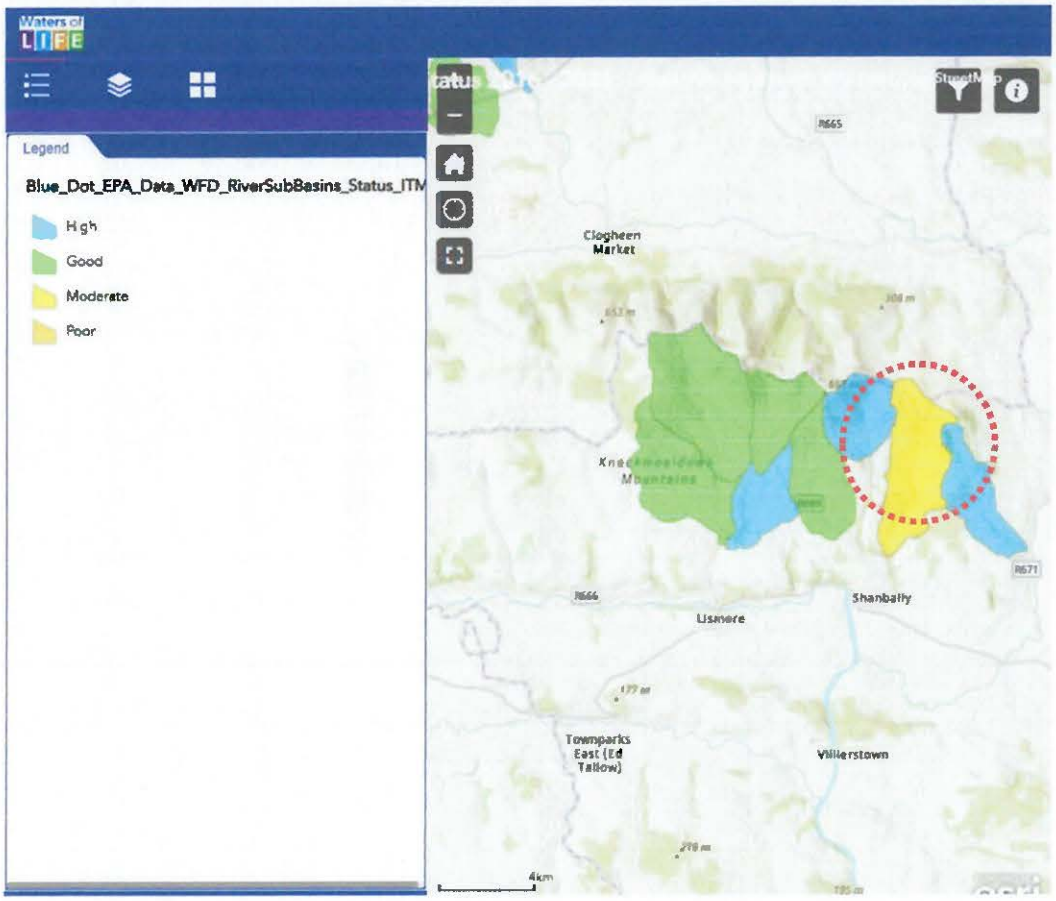


Plate 5 Actual Status of High Status Objective Rivers in the Scartmountain proposed Wind Farm Development Area. Hydro-G annotation encircling the three river system catchments associated with the two hills proposed to accommodate 15 FEI Turbines. Annotated https://www.watersoflife.ie/high-status-objective-water-bodies/.

Hydro-G offers that it can be observed from Plate 5 that the two rivers bounding the development area are achieving their High Status Objective but the river central to, and proposed to receive runoff from both hill's construction sites, is only Moderate Status but should be High Status. None of this information is presented in the EIAR and the significance of it has not yet been assessed.

The Waters of Life website https://www.watersoflife.ie/high-status-objective-water-bodies/ continues in presenting in relation to HSO Decline, that ***"Unfortunately many sites previously at high status have lost their status over recent decades. In its most recent Water Quality Indicators Report Ireland's EPA reported a decline in the number of high status sites from almost one third (31%) of sites monitored in the 1980s to just under one fifth (17%) in 2017, and only 30 of these remaining high status sites are considered pristine. The EPA conclude that the ongoing loss of our most pristine rivers is a very significant concern. A large effort is required to protect the few remaining high status river sites and, where possible, return impacted ones to high status.*** Refer to Plate Z extracted from the https://www.watersoflife.ie/high-status-objective-water-bodies/website.



Plate 6 Ireland's Decline in High Status Sites from 1980, through to 2017 and 2022: Only 30 remain.
Source: https://www.watersoflife.ie/high-status-objective-water-bodies/

3.4 River Basin Management Plan 2022 – 2027 & Programme of Measures

The applicant has not presented any information regarding their proposal and its ability to comply with the Programme of Measures (POM) published by the Irish Government (Appendix 2, Water Action Plan 2024).

The Water Action Plan 2024's Appendix 2 Programme of Measures Report is available on the WAP 2024 website and there is a link to an excel spreadsheet that lists all HSO rivers that are targeted as Areas for Action (AFA) and reasons why HSO areas are being targeted by LAWPRO. This is publically available information that all citizens can access. The applicant has failed to acknowledge, or consider in their Impact Assessment, the published proposed catchment restoration measures, which the government of Ireland has invested heavily in.

Direct extracts from the Appendix 2 POM Report in relation to HSO Rivers are provided here for the Board's convenience but the Inspector can access the Report at https://www.gov.ie/en/policy-information/8da54-river-basin-management-plan-2022-2027/ and scroll down to 'Water Action Plan Appendix 2'. Specific extracts relating to Action 5.5 of the POM Report (page 14) are provided by Hydro-G, as follows:

NFGWS prepares a drinking water source protection plan for public health areas for protection	DW source protection plan with protect measures to be actioned	Q4 2027	NFGWS	Regional Committees	
LAWPRO to prepare a template Protection Plan for Blue Dot Areas and roll out to all Blue Dots that are meeting their environmental objectives	Protection Plan for Blue Dots	Q4 2027	LAWPRO	LAs and Regional Committees / Blue Dot Steering Committee	Adequate resources for LAWPRO
Action 5.5	**LAWPRO, in cooperation with the EU LIFE IP Waters of LIFE project team, will publish a new Blue Dot Programme work plan for waters with a High Status Objective.**				
Steps Necessary for Delivery	**Proposed Output**	**Timeline**	**Lead Org**	**Stakeholder Support**	**Resources/Risks/Dependencies**
Blue Dots specific section in the template designed for the catchment management plans, to include work programmes/ action plans from implementing bodies with the greatest significant pressures on Blue Dots	Agreed template for Pilot Catchment Management Work Plans	Q4 2022	LAWPRO	EPA / All implementing bodies / Blue Dot Catchments Programme Steering Group	Long term resourcing of Blue Dot Programme. LAWPRO resource to deliver the template and coordination aspects of CMWP. Resourcing limitations of implementing bodies
Blue Dot section in each of the 46 Catchment Management Work Plans	46 Management Work Plans prepared	Q4 2024	LAWPRO	DHLGH / EPA / LA's / An Fóram Uisce / Regional Committees/ DHLGH Project Delivery Office / Blue Dot Catchments Programme Steering Group	Adequate resources in place for LAWPRO and coordination aspects of CMWP
Pilot community fora to inform the development and supports needed for local level initiatives specifically for Blue Dot waters	Recommendations on developments and supports required	Q4 2023	LAWPRO	Community Fora	Adequate resources in place for LAWPRO

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Restoration and protection measures advanced in all Areas for Action with Blue Dots	Implementation of measures to improve WQ. Protection Plan which may include LCA assessment, inspection activities, enforcement action and planning controls	Q4 2027	Regional Committees / Local authorities	LAWPRO / Blue Dot Catchments Programme Steering Group.	Risk of inaction by responsible body/pressure owner. LA resource to be provided
Waters of LIFE Integrated Project to support the implementation of measures to protect and enhance High-Status Waters and thus to support the work of the Blue Dot Catchments Programme	Building technical understanding and capacity in relation to the design and implementation of measures. Promoting community and landowner ownership of the actions. Making recommendations that will inform the development of future agri-environment and forestry policies and provide for the long-term sustainable management of high-status areas	Q2 2028	DHLGH	LAWPRO / EPA / DAFM / Teagasc / Coillte / OPW / Forest Service / Local Development Companies. Waters of LIFE Steering Group. Blue Dot Catchments Programme Steering Group	Risk of inaction by responsible body/pressure owner. Technical learnings and innovations are developed. Poor integration of learnings from the project into mainstream policies and interventions including capacity, training, resources and enforcement.
Blue Dot Catchments Programme Communications and Engagement Plan implementation	Generate awareness amongst key audiences regarding the quality of our Blue Dot waters, focusing firstly on the key sectoral stakeholders who have the most impact on Blue Dots and on communities within Blue Dot catchments. Turn awareness into engagement and action, in the form of stewardship of Blue Dot waters	Ongoing	LAWPRO	Blue Dot Steering Group / Waters of LIFE IP / All relevant implementing bodies	Long term resourcing of Blue Dot Programme for measures, animation and activation of communities and implementing bodies
Action 5.6	**Catchment projects aimed at improving water quality to be advanced in 15 areas (including community initiatives, Rivers Trusts, EIPs, PEACE+)**				
Steps Necessary for Delivery	**Proposed Output**	**Timeline**	**Lead Org**	**Stakeholder Support**	**Resources/Risks/Dependencies**
Current Catchment Projects that will contribute to WFD water quality objectives	Include work programme for the project in the CMWP with appropriate reporting on implementation	Q1 2023	Catchment Project lead organisation	LAWPRO / Regional Committees	Meaningful engagement by Catchment Project
Addition of Catchment Projects during the lifetime of the RBMP	Revision of list	Ongoing	Project Delivery Office	LAWPRO	Meaningful engagement by Catchment Project

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4.0 Scartmountain EIAR's WFD Assessment Report Deficiencies

The WFD Report (Appendix 9-1) does not mention, at all, that rivers in the proposed development area are failing to meet their EPA and WFD Envision mapping as High Status Objective surface waters. The applicant does not mention that the rivers within their proposed development area are listed as Restoration rivers by LAWPRO and the Blue Dot Scientists of the EPA's WFD Teams.

The Water Chapter of the EIAR and the WFD Compliance Assessment Report (Appendix 9-1) presents information for the Board's EIA. However, there are characteristics of the receiving environment that are missing and they are of significance to the assessment of potential impact. For example, Table 2-1 of Appendix 9-1 is presented here as it appears in the applicant's presentation to the Board.

Tobin Appendix 9-1 WFD Compliance Report Table

Table 2-1: Water Body Status (https://www.catchment.ie) within 2km of development

Waterbody Code	Name	Current Status 2016-2021	Development within area	Infrastructure
IE_SW_18G100040	Glennafallia_010	High	Yes	T1, T2
IE_SW_18G110300	Glenshelane_010	Moderate	Yes	T3 to T7
IE_SW_18G100200	Glennafallia_020	Moderate	Yes	Site Entrance
IE_SW_18F020300	Finisk_020	Moderate	Yes	GCR
IE_SW_18F020500	Finisk_030	High	Yes	Substation, borrow pit 2 T14, T15, GCR
IE_SW_18F060300	Farnane_010	High	Yes	Borrow pit 1 T8 – T13, GCR
IE_SW_18M260940	Moneygorm_010	Moderate	Yes	100m of road upgrade, TDR works area
IE_SE_17C010300	Colligan_040	Good	Yes	GCR
IE_SE_16G030200	Glenboy_010	Good	No	NA
IE_SE_16S022200	Suir_160	Good	No	NA
IE_SW_18F020100	Finisk_010	Good	No	NA
IE_SE_16G050100	Glengalla_010	Good	No	NA

However, Hydro-G would add more significant information to complete the Tobin Table 2-1 (Appendix 9-1, WFD Compliance Report) as shown in Hydro-G's Table 1, overleaf.

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Table 1 **Hydro-G's Additional Columns added to Tobin's Table 2-1 of the WFD Compliance Assessment Report (Appendix 9-1 of the application files on line).**

PRESENTED In the Tobin WFD Report		MISSING INFORMATION	PRESENTED In the Tobin WFD Report	MISSING INFORMATION		PRESENTED In the Tobin WFD Report		MISSING INFORMATION
Waterbody Code	Name	High Status Objective River	EPA Mapped Status 2016-2021	WFD HSO Compliant	EPA 3rd Cycle Risk Mapping	Development within area	Infrastructure	Priority Area for Action [AFA] (Water Action plan 2024)*
IE_SW_18G100040	Glennafallia _010	YES	High	YES	REVIEW	Yes	T1, T2	YES, Owennashad - Blue Dot, LAWPRO Confirmed AFA. RESTORATION
IE_SW_18G110300	Glenshelane_010	YES	Moderate	NO	REVIEW	Yes	T3 to T7	No
IE_SW_18G100200	Glennafallia_020	YES	Moderate	NO	REVIEW	Yes	Site Entrance	YES, Owennashad - Blue Dot, LAWPRO Confirmed AFA. RESTORATION
IE_SW_18F020300	Finisk_020	No	Moderate	NO	REVIEW	Yes	GCR	No
IE_SW_18F020500	Finisk_030	No	High	YES	Not At Risk	Yes	Substation, borrow pit 2 T14, T15, GCR	No
IE_SW_18F060300	Farnane _010	YES	High	YES	Not At Risk	Yes	Borrow pit 1 T8 – T13, GCR	No
IE_SW_18M260940	Monegorm_010	No	Moderate	Not a HSO River but Status is actually Good now and not Moderate, as reported in EIAR.	REVIEW	Yes	100m of road upgrade, TDR works area	no
IE_SE_17C010300	Colligan_040	No	Good	Yes	Not At Risk	Yes	GCR	YES, Colligan-Bricky-Dungarvan Harbour. LAWPRO Confirmed AFA. RESTORATION
IE_SE_16G030200	Glenboy_010	No	Good	The applicant does not propose development in any of the NON HSO River Catchments!		No	NA	
IE_SE_16S022200	Suir_160	No	Good			No	NA	
IE_SW_18F020100	Finisk_010	No	Good			No	NA	
IE_SE_16G050100	Glengalla_010	No	Good			No	NA	

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Of particular concern is that the Scart Mountain Wind Farm team's Appendix 9-1 WFD Compliance Report has concluded incorrectly on the basis of using the **current** mapped status **rather than** the required mapped High Status Objectives. For example, Table 2-1 of the WFD Assessment Report (Appendix 9-1) presents Water Body Status and it is noted as follows:

- High Status **Objectives** are not reported in the EIAR's Table 2-1 of Appendix 9-1. Hydro-G has added this information for the Board's convenience in their own EIA.

- Of the eight surface water bodies listed for the proposed development area, although ALL eight are mapped by the EPA as having High Status Objectives, there are only three waterbodies actually currently attaining High Status Water Bodies.

- The applicant proposes Two Quarries in the actual High Status river catchments (Borrow Pits they call them, but they are quarries). Nowhere in the EIAR is detail provided regarding how the rock will be broken, blasted with explosives, excavated or otherwise. No Impact Assessment is presented in the context of the requirement to maintain the HSO characteristic.

- The applicant proposes ten of their proposed 15 turbine construction areas in High Status river catchments. No Impact Assessment is presented in the context of the requirement to maintain the HSO characteristic.

- The applicant proposes that ALL SITE VEHICLES will enter the construction areas of all turbines via an entrance that is in the catchment of the Glenafallia_020 river that is currently reported by the EPA as Moderate Status (2016 – 2021) even though it is mapped by the EPA on the publicly available Envision mapviewer (https://gis.epa.ie/EPAMaps/Water) as a **High Status Objective river.** There is no confidence in the detail presented to the Board for their own EIA.

- The applicant proposes five turbine construction sites in the catchment of the Glenshelane_010, which is currently reported by the EPA as Moderate Status but is also reported on EPA Envision as a High Status Objective River. The river is therefore failing to meet its WFD HSO. No mention is made of this in the WFD Compliance Report.

On the basis of the lacunae listed above,

1. The applicant's WFD Compliance Report's Section 4 is **INCORRECT,**
2. The detail of the applicant's Table 4-2: "Compliance of the proposed wind farm with the environmental objectives of the WFD" is **INCORRECT,** and
3. The detail of the applicant's WFD Compliance Report's Section 5 Conclusions are **INCORRECT.**

The correct Conclusion of the WFD Assessment is that **Surface waters in the development area are NOT meeting their High Status Objective: some streams are mapped by the EPA as Moderate when they are supposed to be achieving**

High Status. Therefore, the applicant's conclusion that there will not be a deterioration in status is missing the critical detail of the WFD. Any actions in this catchment must bring changes that will result in the rivers improving from their current Moderate Status to Good Status and then to High Status, *i.e.* two orders of status magnitude better.

It is beyond doubt that the scale of construction proposed will **NOT** bring about changes that will significantly enhance and improve water quality. When one makes an omelette, one must break eggs. Only an environmental scientist based at a desk could perceive, in naivety, that road construction, excavators, trucks, diggers, quarries and drainage channels across steeply sloped mountains will present a 'mitigatable' effect on water quality in rivers prone to spate flow.

5.0 Indefensible Mitigation Measures

There are many issues with the Proposed Mitigation Measures that the Board's Inspector is invited to explore. I will present an opening statement here that one cannot design Mitigation Measures unless the Baseline Environment has been correctly determined. In the case before us, the failing WFD Objectives and High Status Objective nature of the Baseline Environment has neither been reported or acknowledged.

Tobin Consulting Engineers' EIAR (2024) and Chapter 19's Mitigation Measures Table presents a Mitigation Measure 'MM46' that provides ZERO MITIGATION. There are a lot of words but no actual mitigation: MW46 Mitigation Measure states that *"The SWMP will be implemented by the appointed contractor and will be regularly audited throughout the construction phase. The Environmental Manager will be required to stop works on site if he/she is of the opinion that a mitigation measure or corrective action is not being appropriately or effectively implemented. No instream works are proposed on the Glenshelane River crossing. The proposed bridge span is 19 m and there are no works with 3.5 m from the banks of the Glenshelane River."* Issues with the texts presented in the Mitigation Measures Table include, as follows:

> *"The SWMP will be implemented by the appointed contractor and will be regularly audited throughout the construction phase".*

I hereby swear that the ink-on-paper Mitigation Measures are rarely implemented in the way that the texts of the EIARs state they will be. Historically, the Board seems to have taken it in good faith and trust that what is written will happen. Unfortunately, it is not guaranteed that a developer will honour the Conditions of Grant of Planning. In this particular High Status Objective, Area for Action, catchment the luxury of trust is not available when we have such low numbers of High Status Waters. Construction Phase Failures are common and actual experience in the following cases prove that trust in Mitigation Measures is unfounded:

- Tullynamoyle Windfarm 5 Ltd. (Inspector's Report ABP-312895-22). A site refused permission by Leitrim County Council and Granted by the Boar on the basis of trust in proposed any pre works Mitigation Measures, which were repeatedly committed to in Responses to Further Information by Jennings O'Donnovan for the developer.

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It just might be the case that there are issues within months regarding with compliance, IFI and Leitrim County Council.

- https://www.pleanala.ie/en-ie/case/300460. In 2018 the Board accepted a conclusion in the Lands, Soils and Geology Chapter that ***"No significant impacts on the soil and geology of the site of proposed development will occur."*** Yet, there was a failure. In the Board's 'Reasons and Considerations' supporting a Grant of Permission for Meenbog Windfarm the opening statement is that "*Having regard to: (a) the national targets for renewable energy contribution of 40% gross electricity consumption by 2020....*". However, Mr. Justice Holland is reported by the *Irish Times* (11th April, 2024) as ruling that "*the integrity of the planning and environmental law systems "weighs heaviest" in this case of all the factors in play and favour granting the injunction. He did not see that the "undoubted public interest in wind energy" weighs "much at all" in favour of exercising his discretion against making the order.*" [Hydro-G provides clarification that Mr. Justice Holland has restrained the developers from finishing their "largely complete" 19-turbine project.] Mr Justice Holland said the developers submitted a report of a civil and environmental engineering expert to the EPA estimating that in the November 2020 incident 65,740m^3 of subsoil entered a river and ended up on nearby European-protected sites, "causing significant environmental damage". Some agents of wind energy lobbying groups, and their associated media outlets, appear to be extolling the recent ruling of Mr. Justice Humphreys in the High Court as a 'win' for the Wind Industry. However, they are mistaken – the environment and planning laws will ultimately win over business lobbyists. The recent determination of Mr. Justice Humphreys in the Coolglass case related to Visual Impact, the Inspector's sole reliance on the County Development Plan and PROCEDURAL matters in the way the case had been evaluated. Mr. Justice Humphreys ruled on the 10th of January 2025, in the High Court Hearing on the Board's refusal of the Coolglass Windfarm (https://www.pleanala.ie/en-ie/case/317809), that the importance of renewable energy as a climate action measure must be taken seriously and has precedent over visual impact and/or other seemingly aesthetic concerns. However, as a water professional I would like to draw the Board's focus to Mr. Justice Holland's April 2024 ruling, again in the High Court, where it was determined that the urgent need for action in climate and the provision of renewable energy sites does not preclude the legislative requirements of the established environmental legislation. Notwithstanding the need for climate action and renewable energy, no need can preclude us from the implementation of the Birds and Habitats Regulations and the Objectives of the Water Framework Directive's Irish Statutory and legal instruments: herein the most relevant being the Surface Water Regulations (2009, as amended). Mr. Justice Holland is reported by the *Irish Times* (11th April 2024) as ruling that "the integrity of the planning and environmental law systems weighs heaviest". He did not see that the "undoubted public interest in wind energy" weighs "much at all" in favour of exercising his discretion against making his order. We applaud and welcome the Board's Press Release (15th January 2025 https://www.pleanala.ie/getmedia/c9241e10-1cb5-44ae-85e6-66b2fea0a788/Renewables-decisons-statement-15-01-25_1.pdf?ext=.pdf) following Mr. Justice Humphreys' ruling. The Board quite rightly came out strong in countering the misinformation of presented by WEI and one of their primary consultants and agents Mr. Brian Keville of MKO. In addition, the Board would be well supported by all involved in environmental law and biodiversity if they appealed Mr. Justice Humphreys ruling. Again, Mr. Justice Holland is supported in December 2024 by Ms. Justice Butler in the Court of Appeal when she essentially ruled that renewable energy targets or not, developer insolvency risks or not, the laws of planning and environmental protection must take

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precedent. It is well understood and reported that the Meenbog Windfarm was granted to enable an Amazon Datacentre. We take it in good faith that government pressure on the Board is a thing of the past.

- Kilgarvan PWS, Co. Kerry, placed on Boil Notice and Do Not Consume because of a slide on a hill close to the Lake source for PWS.

- Brosna PWS, Co Kerry, placed on THM carcinogenic alert because of a lands slide upgradient in the catchment. You can be sure that the EAR concluded No Potential for Impact. Yet, there is impact. The Board must understand the inviolability of the lands connected to High Status Objective rivers to Water Professionals. The proposed Scartmountain Wind Farm area of North Waterford is not open for consideration for construction. Hence, it is mapped as an Exclusion Zone. It is not as if County Waterford does not have ample far offshore capabilities. However, WEI and FEI see the landscape as low hanging fruit, worth the effort of attempted exploitation in the balance sheet of the costs to moving their business opportunities off shore.

- I am sure there are more examples of failure. However, those listed as ones that I have direct experience of.

Tobin Consulting Engineers EIAR (2024) and Chapter 19's Mitigation Measures Table presents more text for Mitigation Measure 'MM46' and states that *"No instream works are proposed on the Glenshelane River crossing. The proposed bridge span is 19 m and there are no works with 3.5 m from the banks of the Glenshelane River."* Hydro-G offers to the Board that you would have to see it to believe it! I drove the catchments on Saturday the 8th of February and I attest that the plan view maps cannot convey the stark and steep slopes in the valley of the First Order High Status Objective Glenshelane stream in which they propose a 3.5m works exclusion zone from the river. The 3.5m exclusion zone from the river takes no account whatsoever of GRAVITY. A bathroom in the Board's offices likely has a 3.5m width and 3 Cubicles. Can you imagine a drilling rig being separated from a High Status Objective River by the width of 3 toilet Cubicles? The point is that the ink on paper provides no Mitigation at all in real life. If this were Roman Times, they would propose an aqueduct type bridge to span the valley but no developer will tolerate that expense or risk of high power cables overground, do they? Alternatively, they could have proposed an additional 150m length of underground cabling and remained on the established road verges but then they would have had to enter into lands of County Tipperary and no developer seems to want to admit cross border development, which is odd to say the least, because this is allegedly a nationally Strategic Infrastructure Project, so why not cross county borders? Instead, the developer proposes to excavate significant lengths of trenches into a valley with 16% slopes (1m fall for every 7m horizontal distance) on lands in which their construction spoil can readily flow along the valley sides of the High Status Objective Glenshelane river, which is already failing its HSO by virtue of a currently mapped Moderate Status. Hydro G presents a crude Cross Section, that every person can access on Google Earth pro, as Plate 7. Hydro-G has annotated the cross section to show the uselessness of the applicant's proposed 3.5m works exclusion zone when the side slopes of the valley leading to the HSO river is 16%. Gravity will win. The risk posed is too high. Agents for the applicant have not presented this type of detail for the baseline to the Board. The Board does not have all the information before them to complete their EIA.

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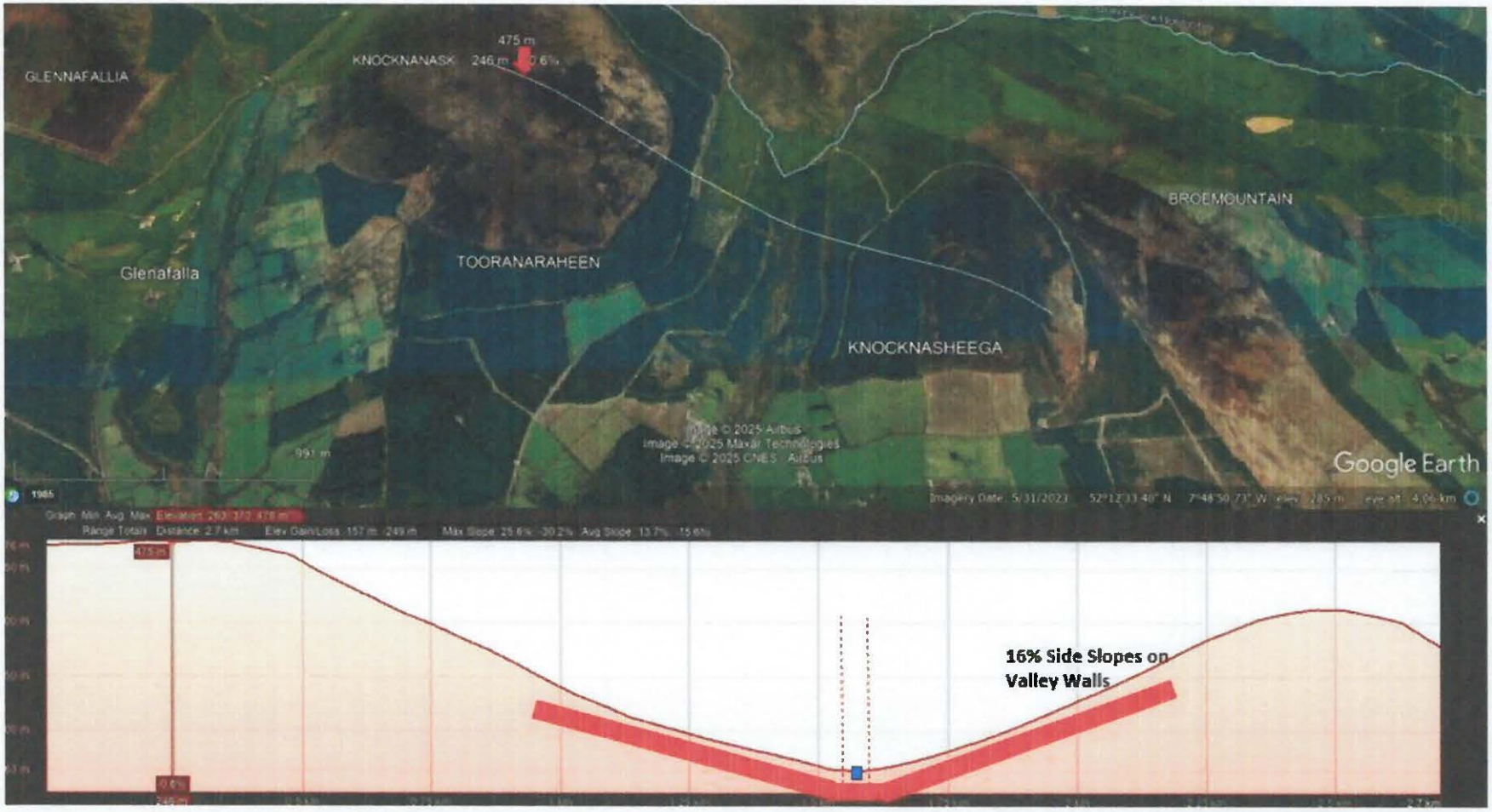


Plate 7 INDICATIVE Google Earth Pro Cross Section of the proposed GCR trenches in the Glenshelane River Valley ( )between the two Hills proposed for Construction of 15 Turbine hardcore pads and roads. The applicant's proposed 3.5m 'works exclusion zone' 'Mitigation Measure MM43' is shown with vertical red dashed lines = INEFFECTIVE AND USELESS in a valley with 16% side slopes (1m fall for 7m horizontal). Note Directional Drilling Proposed under WFD HSO waterbody.

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With respect to Chapter 19's 'Monitoring the Effect of the MM46 Mitigation measure', the text of Tobin's table states that *"It is recommended that local surface water features at the proposed wind farm site boundary are monitored preconstruction and during construction to take account of any variations in the quality of the local surface water environment as a result of activities related to the proposed wind farm site".*

Hydro-G suggests to the Board that 'Recommended' is an optional action and offers ZERO protection.

If the Board are minded to Condition *"wind farm site boundary"* monitoring, will the Board take legal action on Tobin or FEI if there is a failure. Can the Board qualify that responsibility explicitly, please? Waterford County Council has 'EXCLUDED' the lands for Wind Farm development because they believe that the area cannot sustain construction pressure. How and who will assign the person hour resources to implement Board-requested 'policing' of a developer who has failed to heed the legal basis of the 'EXCLUDED' from Wind Development Zoning and failed to acknowledge the failing High Status Objective and Water Framework Directive legal responsibilities and obligations of the State?

In addition, Tobin offers in the Monitoring Measures text of MM46 that *"Where elevated turbidity is noted both upstream and downstream, visual checks will be undertaken."*

Hydro-G offers that the proposed measure will NOT aid or mitigate against damage to the ecological receptors in the High Status Objective streams and Areas for Action of the RBMP 2022-2027's published POMs for the surface water systems draining from the hills proposed for the construction sites.

Hydro-G and the Knockmealdown Protection Group do not need to dissect the deficiencies in every Mitigation Measure related to water. The developer (applicant) has not presented Mitigation Measures appropriate to the state of the baseline environment relative to where it is supposed to be from a WFD compliance perspective. The River Basin Management Plan 2022 – 2027 has specified AFAs and POMs for the streams and rivers in the proposed area and those POMs do not include building 15 Wind Turbines and all that goes with that.

6.0 Section 4 Licensing under the Water Pollution Act

The applicant has failed to acknowledge that all waters arising at each of the two proposed quarries (Borrow Pits) will require Section 4 Discharge Licensing under the Water Pollution Act. Water from quarries is considered Trade Effluent. The rock will be quarried to create the trenches, foundations and substation.

Another issue lacking is that the applicant has failed, in their Water Chapter, to present to the Board any data that would enable the Board to complete the requisite 'In Combination' assessment as is required under Water Framework Directive itself. The "combined approach" requires demonstration that all of the Strategic Infrastructure applications before the board are considered together to ensure that the construction site's discharges will have Section 4 Emission Limit Values and quality standards that will enable the proposed receiving water systems to

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comply with the High Status Objective of the Surface Water Regulations. The Board is requested to clarify with the EPA what the available 'HEADROOM' (DoEHLG, 2011) is for the current rivers that are Moderate Status but are required to be High Status. Based on my experience of Section 4 Discharge Licensing there is no 'HEADROOM' and no assimilation capacity, as is required by (DoEHLG, 2011), in the receiving waters to receive the construction site's runoff and discharge.

As is shown in the DWGS for the application, there will be extensive areas of Spoil Management and water management treatment systems adjacent to each of the proposed 15 turbines, the proposed substation construction site and along all trench excavation routes. All water management will be by drainage channels to existing surface waters. Agents for the applicant claim to pose no risk to deterioration in status. However, as previously outlined, they have missed the point of the legislation relating to the WFD: the obligation is to act in a way that will improve the status of the water from the currently mapped Moderate to the required High Status. Again, the Area for Action Plans of LAWPRO and the EPA's WFD Blue Dot Scientists have neither been acknowledged not relevant POM statutory agents been consulted with.

Although welfare facilities will be required under the Health and Welfare at Work Regulations, there is no information for the Board to assess with respect to the 2-3 years of construction workers' toilet and canteen facilities. No impact assessment details are presented to the Board for their consideration.

7.0 Discussion

Scart Mountain Wind Farm's EIAR (Tobin, 2024) Chapter 9 Hydrology and Hydrogeology mentions **not once** the term HIGH STATUS OBJECTIVE. Indeed, the agents for the applicant use Good Status Environmental Quality Objective (EQO) concentrations as references in their reporting of their own spot measurement recording of water quality in Tables 9.10 and 9.11 for the only two water sampling events of the entire study. If one does not acknowledge the HIGH STATUS OBJECTIVE obligations and High Status EQOs of and relevant to the Study Area there can be no confidence in the Impact Assessment. There are deficiencies and omissions of information that have significant implications with respect to the completeness of information before the Board for their obligation to complete an independent EIA. I refer the Board to a copy of a letter that was delivered by hand to the then Taoiseach in October 2024 (Appendix A) – the omission of significant detail in EIARs for Renewable Energy from Wind is of concern to experts.

There is no record of communication or consultation with the EPA/WFD 'Blue Dot' scientist for the region and no record of consultation with LAWPRO. Therefore, there has been no consultation with any party that will play a role in the achievement of the River Basin Management Plan 2022 – 2027 or the Water Action Plan 2024, in which significant improvements are required across all water bodies and all catchments, with a special emphasis of restoration of High Status Water bodies. The Water Chapter 9's Table 9.12 presents site data for Q Ratings (ecological health of a river). At no point is the EIAR reported Poor to Moderate Status discussed in the context of the fact that Ireland has only a few years remaining to bring High Status Objective rivers back from the brink of ecological annihilation. It is certain that to propose or sanction construction activity of the scale required for 15 turbines and all associated enabling roads and drainage will not help in our restoration efforts. The final Page of the Aquatic Survey Report (Appendix 6-3, page 28) closes with a statement that the majority of the sites (meaning rivers

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surveyed) have moderate status, "while only a few are achieving the target Q4 good status water quality required under the WFD" . Source: Aquatic Survey Report (Appendix 6-3, page 28).

> As such the majority of the sites have a moderate status, while only a few are achieving the target Q4 good status water quality required under the WFD. It is likely that diffuse agricultural and forestry enrichment are contributing factors to the localised declines in water quality. Macroinvertebrate diversity corresponded with habitat suitability, with greater diversity recorded in areas of better habitat. In the Irish context, biological water quality in the study area is considered good, considering the range of pressures on surface waters at a national level, such as nutrient, organic, chemical, and sediment pollution.
>
> IFI and EPA have identified significant pressures for waterbodies that are at risk of not meeting their water quality objectives under the WFD by incorporating over 140 datasets, a suite of modelling tools, and local knowledge from field and enforcement staff from the local authorities. While there are a multitude of pressures in every waterbody, the significant pressures are those pressures which need to be addressed in order to improve water quality. A robust scientific assessment process has been carried out to determine which pressures are the significant pressures. The Blackwater River and its tributary, the Glennafallia are categorised as watercourses under significant pressure from forestry and industry (EPA 2024).

Again, across all of the team involved in assessing the water baseline environment, and assessment of potential impacts arising from the development under consideration, the point is missed that the requirement of the WFD is that all waters must achieve "AT LEAST GOOD Status", but some rivers must achieve High Status – those rivers are published in the River Basin Management Plan for Ireland 2022 – 2027's excel spreadsheet detailing Areas for Action and High Status Objectives. That is the reason that the Glenshelane and Glennafallia are mapped as HIGH STATUS OBJECTIVES. The Board must consider that the information for the baseline presented is not complete and neither is the Impact Assessment that is reported in compliance with the requirements of the EIA Directive. Neither is the Water Framework Directive Compliance Report correctly concluded for the same reason. 27

Similarly, the final paragraph of the Aquatic Survey Report states that the Blackwater River and tributaries are reported by the EPA as under significant pressure from forestry and industry (EPA, 2024). How then could the agents for the applicant conclude that **more forestry action (tree felling)** and **more industry (construction sites** numbering at least 20 sites including the 15 proposed turbines, site office compound and toilet facilities, roads, drainage works and quarries) are the solution or key to reducing risk and improving water quality? How could the Board independently conclude that the development is defensible. Any professional with water and legal expertise would conclude that the development proposal is indefensible in the context of the River Basin Management Plan 2022 - 2027, the Programme of Measures, Water Framework Directive Objectives, the actual failing status of some of the High Status Objective streams and rivers of the proposed development area, as reported by the EPA on their Envision mapping system that is publically available to all.

This 2024 EIAR was submitted to the Board so that they can complete an Environmental Impact Assessment. Agents for the applicant appear to be attempting to portray that the true principles of the commencement of EIA have been applied in their selection of sites. If the applicant had correctly applied the principles of Screening for constraints, Avoidance and Consideration of Alternatives, the development should not have proceeded any further and we should not have had to interrogate the EIAR because the applicant and their agents have not applied the principles of Environmental Impact Assessment correctly.

Waterford County Council have ruled that the area is EXCLUDED from suitability for Wind as a Renewable Energy. It should be a speedy process, one would imagine, for the Board to quickly determine the justified SEA, AA,

ecological, biodiversity, WFD and water related reasons that resulted in mapping for Renewable Energy development as 'EXCLUDED' (Waterford County Council, 2022 – 2028 Development Plan, Appendix 7). The reasons for exclusion are firmly grounded in the laws relating to maintaining the Heritage of Water and Biodiversity.

Overall, the information presented by the applicant is lacking and there are gross omissions of factual information. No acknowledgment is given to the River Basin Management Plan 2022 – 2027. No cognisance is portrayed regarding the fact that rivers in the development area are earmarked for RESTORATION by LAWPRO and the EPA's WFD Team of Blue Dot Scientists. The developer has not presented Mitigation Measures appropriate to the state of the baseline environment relative to where it is supposed to be from a WFD compliance perspective. The River Basin Management Plan 2022 – 2027 has specified AFAs and POMs for the streams and rivers in the proposed area and those POMs do not include building 15 Wind Turbines and all that goes with that. In the preliminary study for Management Strategies for the Protection of High status Water Bodies, completed for the EPA STRIVE Programme 2007-2013, it was concluded that **"There is sufficient knowledge to establish locally effective strategies for the protection of high status water bodies."** (Irvine & Chuanigh, 2010). What is needed is continued support from the Board in the matter of environmental protection and proper planning. Ireland is attempting to implement that protection by virtue of the River Basin Management Plan 2022 – 2027, the associated Programme of Measures, and the Water Action Plan 2024. For high status waters the key to success will be that developers honour the plans and that the Board supports the EPA, LAWPRO, WFD Blue Dot Scientists and citizens such as those who have gathered as the Knockmealdown Protection Group – this is citizen scientist in action. This is what the WAP and POMs requires. Citizen Science is exactly what was advocated by the RPS & Daly (2023) report entitled 'Framework of Best Practice Measures and Guidelines for the Protection and Restoration of High Status River Water Bodies' concluded. The Waters of Life Project report is available to all on the internet at the link https://www.watersoflife.ie/app/uploads/2023/08/Measures_Framework.pdf.

8.0 Recommendation

It is recommended that the Board refuse permission to the proposed Scart Mountain Wind Farm development for the reason that the proposal to build more turbines should never have been considered in the catchments that contain rivers and streams that are mapped by the EPA as High Status Objective rivers, some of which are failing in their Water Framework Directive Obligations. The risk posed by construction is unacceptable and cannot be mitigated. This is an elevated steeply sloped landscape draining the catchments of streams and rivers that are mapped in the RBMP and WAP as RESTORATION Areas for Action with High Status Objectives. The applicant has failed to present any information to the Board for EIA with respect to how the development proposal will aid WFD, RBMP and WAP efforts to RESTORE and Improve the status of waterbodies to the required High Status specific to this proposed development area. Neither has any information been presented to the Board to demonstrate that there is Headroom or Assimilation Capacity in the receiving waters for any receipt of drainage waters arising.

Pamela Bartley

Signed: _____ Date: 26th of February 2025

Dr. Pamela Bartley BEng, MSc, PhD

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COLLIGAN RIVER & FINISK RIVER CROSSINGS

This chapter addresses the fact that the Applicant's environmental assessment for the Scart Mountain Grid Connection Route (GCR) is incomplete, inconsistent and based on unverified assumptions, particularly regarding Horizontal Directional Drilling (HDD) at the Colligan River and Finisk River. Essential ground, habitat and species investigations were not carried out, and the Applicant admits these will only occur later (should permission be granted), leaving significant scientific uncertainty. The risks of drilling fluid releases, structural failures and sediment pollution pose serious potential impacts on sensitive downstream habitats and EU-protected sites, while survey data provided is insufficient, misleading or contradictory. With no cumulative impact assessment and ambiguity around the actual HDD route, the Application fails to meet required legal and ecological standards.

KEY POINT SUMMARY

- Lack of baseline investigations
- Applicant admits investigations are pending
- Failure to remove scientific doubt
- High environmental risks associated with HDD
- HDD sites hydrologically connected to three EU-protected sites
- The Applicant understates the severity of potential impacts on protected habitats and species.
- Inadequate and non-existent ecological (e.g. aquatic and ornithological) surveys
- Ambiguity and contradictions regarding HDD location at Colligan River
- Cumulative effects not addressed
- Potential non-compliance with EU environmental law
- Applicant's mitigation measures are speculative and lack evidence that they can prevent serious environmental impact.

LACK OF INVESTIGATIONS AT COLLIGAN RIVER AND FINISK RIVER CROSSINGS

In their EIAR Chapter 8: Land, Soils & Geology, the Applicant states (in relation to the HDD construction phase on the Grid Connection Route):

'The baseline environment of the proposed wind farm site and its auxiliary areas (including the proposed grid connection route (GCR) and works areas of the proposed turbine delivery route (TDR)) was thoroughly investigated through extensive desk studies and field inspections.' (page 8-1)

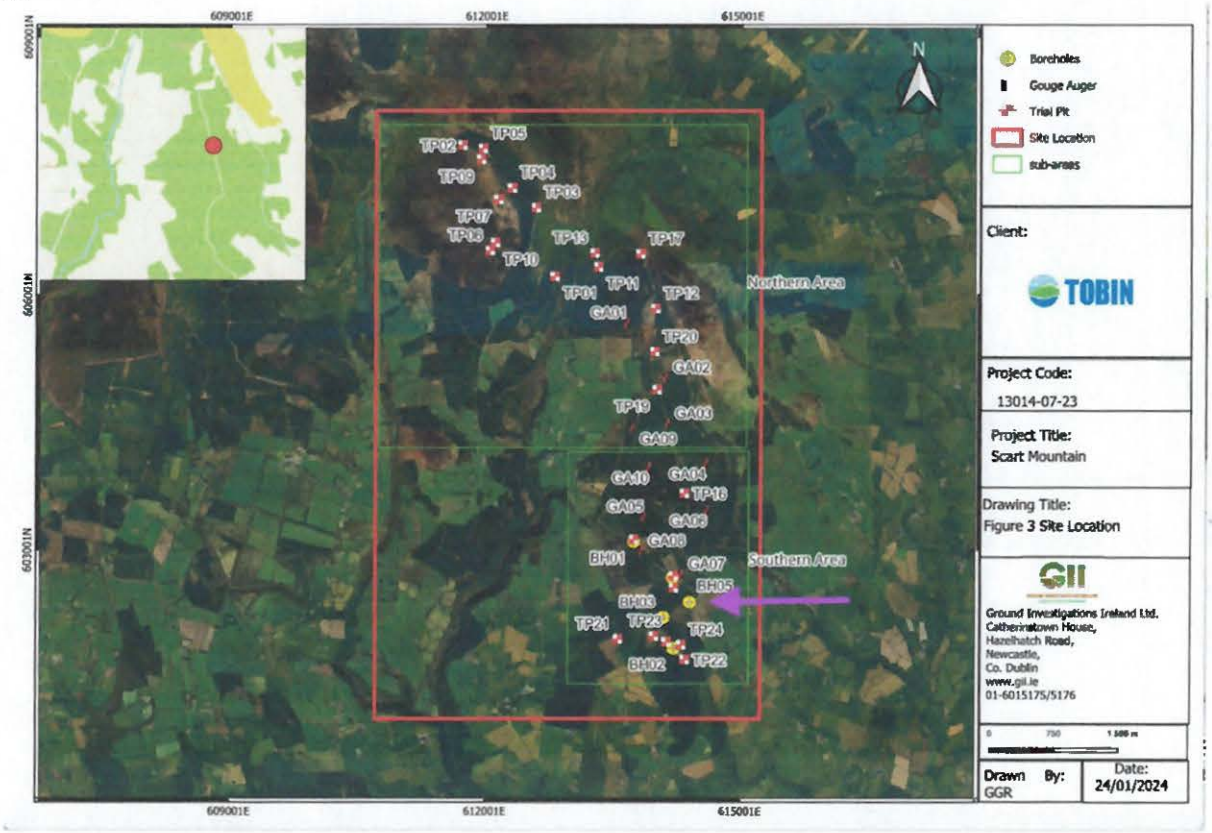
This statement is entirely misleading.
1. There was no field / aquatic river study done below the Colligan HDD site, which would be the receiving environment if HDD works went wrong.
2. There were no field studies carried out on the breeding and nesting habitat sites of the Kingfisher and Grey Wagtail of the Colligan River environment – both of which have been recorded in that area (this has been addressed in more detail in our chapter, **2: Ornithology**).

Therefore, the Applicant's statement above is incorrect and misleading as the baseline environmental investigation for the GCR was by no means thorough or extensive. It was, in part, non-existent.

In the EIAR Chapter 8: Land, Soils & Geology, the Applicant states:
'*A ground investigation (GI) was carried out from October 2023 to January 2024 to determine the subsurface conditions at the proposed wind farm site and on the proposed GCR crossing of the River Colligan.*' (page 8-5)

Then the Applicant goes on to state: '*A borehole (BH05), was undertaken at the River Colligan crossing. Clayey SAND and Clayey GRAVEL was encountered to 4.3m bgl.*' (page 8-30)

This statement is entirely misleading.
Borehole 5 (BH05) is several kilometres away from the proposed crossing of the River Colligan. We have marked where the Applicant's BH05 is with a purple arrow below. We haven't marked the River Colligan on the map as the map, even at this scale, does not show it.



Source: Appendix 1: Site Location Plan of the Applicant's EIAR Appendix 2-9: Site Investigation Report

There is no evidence of **any** baseline environmental investigation having taken place along the GCR whatsoever. The Applicant's claim that '*A ground investigation (GI) was carried out … to determine the subsurface conditions … on the proposed GCR crossing of the River Colligan*' with '*a borehole .. at the River Colligan crossing*' is seriously misleading and the lack of investigation is of great concern. This omission of environmental investigation would be unacceptable under any circumstances. The fact that the Colligan River is hydrologically connected to the Dungarvan Harbour SPA makes the omission even more concerning.

Even if the location of BH05 has been marked wrongly on the map or the information given is down to some sort of clerical error, it leaves an even bigger issue. The Applicant has, in fact, proposed two different areas for the HDD crossing. For the environmental investigation to be comprehensive, two different boreholes would be needed. Yet we are currently presented with just one, kilometres away from where it should be. The 'multiple crossing points' will be addressed later as this, in itself, is an issue

Furthermore, the Colligan River is not the only location for HDD works, as there are three other watercourses along the GCR. And for all three, there is absolutely no evidence of any physical ground investigations having been carried out to determine the subsurface conditions and suitability for HDD works. Another proposed HDD crossing is of the Finisk River at Modeligo Bridge. As part of the Blackwater River SAC, the Finisk River holds EU Directive (92/43/EEC) Annexed Species and Habitats and, as such, requires an extensive and thorough baseline environmental assessment.

Our concerns that appropriate investigations and assessments have not been carried out along the GCR and at the river crossings are fully supported by the Applicant's evidence admission that they have, in fact, NOT done so: In the EIAR Appendix 2-5: Grid Connection Construction Methodology, the purpose of which is to '*outline and explain the construction techniques and methodologies which will be implemented during construction of the Scart Mountain Wind Farm grid connection to the existing ESB Dungarvan 110 kV Substation*' and has been submitted as part of the final Application for the Commission to consider, the Applicant states:

3 Preliminary Site Investigations
It will be required to carry out preliminary site investigations along the cable route prior to construction to confirm design assumptions.
The following items may be carried out for the grid connection cable route:

- *Silt trenches at locations of service crossings. (Full Road/track width).*
- *Trial holes along the route to ascertain ground conditions and thermal resistivity of the soil.*
- *Trial holes at any potential joint bay positions to ascertain ground conditions and thermal resistivity of the soil.*

(page 15) [highlighted for emphasis}

8.10 Horizontal Directional Drilling
[…]
Detailed site investigation works will be completed at each of the HDD locations to confirm ground conditions at detailed design stage. *This information* ***will be obtained by completing boreholes at each location,*** *the* ***results from the borehole data will be used to design the HDD and crossing depths. A bespoke design will be prepared for each HDD crossing*** *by a specialist drilling contractor.* ***Each individual HDD design will be subject to prior EirGrid review and approval.*** *As part of each HDD design, an Outline Frac-Out Mitigation Plan will be prepared by the contractor which will detail the measures which will be implemented to prevent, contain, control and stop any frac-out.*
[highlighted for emphasis]

All of the terminology in bold above, is in the future tense. Highlighting the fact that the Applicant has not yet carried out any site investigations along the GCR and that the proposed design and detailing are 'assumptions' dressed up as facts. The required work has not been done.

They have no concrete results for any of the watercourse crossings, and thus the design for each HDD cannot be deemed as final. We also cannot find any EirGrid review and approval. Therefore, any information submitted in this Application is purely speculative and conceptual. The Application is worryingly misleading and unacceptably incomplete. The Commission cannot and should not accept such an Application as it is an incomplete EIAR. The Commission certainly cannot be certain **beyond any reasonable doubt** that negative impacts won't occur.

THE IMPORTANCE OF GROUND INVESTIGATION AND CONSEQUENCES OF ITS OMISSION

While researching the topic of drilling fluids for HDD works, we came across the following information in the EIAR Hydrology Chapter for the proposed Gortyrahilly Wind Farm EIAR (case ref: 314602):

Breakout and Drilling Fluid Returns
It is assumed that a drilling fluid similar to ***Clearbore*** *will be used and the Material Safety Datasheet (Appendix 9.5) for any fluid used must be followed.*
Generally speaking, drilling fluids used in HDD practices are released at the beginning (launch) and termination (reception) sites of a borehole path, collected and disposed of properly. ***However, breakouts can in theory occur as a result of unstable conditions within the drilled bore due to low cohesion; for example, 1) the swelling and hydration of clay materials, 2) the movement and dispersion of clay minerals, 3) water blocks, and 4) low-permeability of mud cakes. Drill fluid returns/frackouts can occur as a result of: poor drilling methods, and/or improper mud formulation used in bore drilling which can cause stability issues within the bore****. Given the local lithology of the site with underlying sandy, clayey gravel and tills, potentials for breakouts must be considered. Breakouts can lead to failure in returns at either end of the bore path and subsequent drill mud being released outside the bore to the receiving environment (i.e., soils, subsoils, ground and/or surface waters). In the case of a major spill, the leak should be stopped if safe to do so, contained and prevented from entering drains or water courses. Any recoverable product will be collected, similar in means of a hydrocarbon spill, and disposed of properly. If a significant quantity of material enters drains or watercourses, emergency services will be advised immediately.* [highlighted for emphasis]
Source: Gortyrahilly Wind Farm EIAR, Chapter 9: Hydrology

This risk description highlights the absolutely essential nature of ground investigation to determine subsurface conditions. These must be done **prior** to submitting this planning Application. At this point in time, the Applicant does not know if the proposed route and works for the GCR are safe or viable. This application is speculative.

Furthermore, and as a result: Any and all mitigation measures put forward by the Applicant pertaining to the HDD process of the Colligan and Finisk Rivers are unreliable as one cannot mitigate for an unknown or poor environmental baseline survey.

By failing to provide a baseline environmental assessment, the Applicant is denying the Commission a full and complete assessment of the conditions pertaining to the HDD river crossings of the Colligan River and Finisk River, and therefore **fails to remove all scientific doubt** regarding potential adverse impacts on the EU-protected waterways and the species therein. As a result, the Commission is unable to make a truly informed decision on the Application, and therefore cannot be expected to grant permission.

THE POTENTIAL NEGATIVE IMPACTS OF HDD WORKS ON SIX WATERCOURSES AND THREE EU-DESIGNATED SITES

In the Natura Impact Statement (NIS), Section 4.1.2.1 Habitat Degradation due to Water Quality Impacts, the Applicant states:
'Horizontal directional drilling will be employed at six watercourse crossings along the proposed GCR. All of the proposed HDD sites are either within or hydrologically connected to a European site, a summary of these crossings is outlined in Table 4-1 below.' (page 12)

In Section 5: Conclusion of Appropriate Assessment Screening Report, they state:
'Three European sites were identified as within the zone of influence of the proposed project are the Blackwater River (Cork/Waterford) SAC (002170), the Dungarvan Harbour SPA (004032), and the Blackwater Estuary SPA (004028). A total of thirteen watercourses drain from the proposed project, and all eventually flow into rivers that form part of the Blackwater River (Cork/Waterford) SAC, Blackwater Estuary SPA, and the Dungarvan Harbour SPA.' (page 15)

And in their EIAR Chapter 15: Cultural Heritage, Section 15.5 Potential Effects, Construction Phase, they state:
'The construction of the proposed GCR will require trenchless techniques to carry the cable beneath any watercourses and as such no direct effects are predicted upon watercourse channels.' (page 15-60)

We ask the Commission to consider this: How can the Applicant assert that there is '*no direct predicted effects to watercourse channels*', when they also state:

'Horizontal directional drilling (HDD) will be required when installing the grid connection cable across the watercourses. ***Where HDD is required under watercourses, there is a risk of structural fracturing or collapse of rivers/streams. Furthermore, during trenchless construction there is the potential for the frac out drilling lubricant (e.g. bentonite). This is, in effect, very fine suspended solids which can lead to water quality impacts and habitat degradation downstream****. All of the proposed HDD sites are either within or hydrologically connected to a European site, a summary of these crossings is outlined in Table 4-1 below.* (NIS; page 11) [highlighted for emphasis]

Without doubt '*a structural fracturing or collapse*' of a river or stream would have a **profound effect** on their existing channels and receiving physical and biological environment. And in the case of the watercourses of the Application – Finisk River and Colligan River – the receiving environments are the Blackwater River SAC, Dungarvan Harbour SPA and the Blackwater Estuary SPA. All protected by enforceable European legislation.

The Applicant seriously underplays the potential negative effects of HDD on water crossings of three EU-Designated – and thus EU-protected – sites.

Therefore, we would like to take this opportunity to provide the Commission with a clearer understanding of the HDD process and its serious potential effects on the environment when it goes wrong.

Drilling Fluids (such as Bentonite / Clear Bore Mud Slurry) used during HDD works

Firstly, as a reminder, the EIAR Chapter 6: Biodiversity states:
Water Quality Impacts
Directional drilling will be carried out under four rivers, the Colligan River, the Ballykerin Middle Stream, the Finisk River and the Scart_18 Stream as part of the proposed GCR

infrastructure. At each location a launch and reception pit will be excavated. During these works ***there is potential for impacts to occur from sediment runoff and drill lubricant (e.g. bentonite) pollution****.* (page 6-57) [highlighted for emphasis]

And the NIS states:
Horizontal directional drilling (HDD) will be required when installing the grid connection cable across the watercourses. […] Furthermore, during trenchless construction ***there is the potential for the frac out drilling lubricant (e.g. bentonite)****. This is, in effect, very fine suspended solids which can lead to water quality impacts and habitat degradation downstream.* (page 11) [highlighted for emphasis]

And in EIAR Appendix 2-8: Construction Environmental Management Plan, it states:
'If ground conditions are unfavourable, the drilling process will need to be repeated using progressively larger drill heads until the required size is achieved.' (page 17)
This repetition of drilling will require the use of even more drilling lubricant solutions such as bentonite or clear bore mud slurry, multiplying the risk with each pass.

Then the Applicant states:
5.1.9 Directional Drilling
Drilling fluid required for the directional drilling process will be used sparingly and only as required to avoid an excess and will be appropriately stored when not in use. (page 31)

It is important to understand the HDD process to appreciate why we feel this is a misleading assessment that underplays the dangers involved in using drilling fluid in the HDD process. Here is an outline of the HDD process:

A single HDD process involves three stages, and bentonite / clear bore is used in each stage:

Stage 1. Pilot Hole: Drilling fluid is pumped through the drill pipe to the drill bit where high-pressure jets and the bit will grind the soils ahead of the drill stem. The drilling fluid will also carry the cuttings back to the entrance pit at the drill rig.

Stage 2. Pre-Reaming: Bentonite and other additives will be used to ensure a clean and stable hole. Bentonite is used to create a 'cake layer' around the outside of the hole during pre-reaming. This will help with the stability of the bore hole and with fluid loss or infiltration. Additives such as polymers are used to help break up the clay soils. A more evenly mixed drilling fluid will prevent any blockages inside of the bore hole.

Stage 3. Pipe Pullback: As the product pipe is pulled into the drill hole, drilling fluid is pumped down hole to provide lubrication to the product pipe.
Source: https://www.hadleeandbrunton.co.nz/what-is-horizontal-directional-drilling/? and https://www.geoengineers.com/wp_content/uploads/2018/02/1h_hdd_construction_process_notes_2.pdf

The HDD process increases the risk of bentonite / clear bore mud slurry release by a factor of three. With six HDD crossings proposed in the overall Scart Mountain project, and four in the GCR itself, there is the potential risk of bentonite release to up to 18 times for the overall project, and 12 for the GCR.

The level of risk is amplified by ground conditions and, as the appropriate investigations have not taken place, the risks and suitability of the Application are unknown.

ADDITIONAL ENVIRONMENTAL INFORMATION OMITTED BY THE APPLICANT

This section is in relation to the bentonite / clear bore drilling fluid used in the HDD process, and the **negative effects of a bentonite / clear bore release on the receiving environment.**

It is known and widely publicised that bentonite and its derivatives can contain harmful bacteria and heavy metals such as lead, arsenic and mercury. With a document from Scotland and Northern Ireland's Netregs Environmental Guidance body stating:

'Bentonite can be highly polluting to water if it is released into the environment.'
Source: https://www.netregs.org.uk/environmental-topics/materials-fuels-and-equipment/materials-and-equipment-used-on-construction-sites/using-bentonite-on-construction-sites/

As shown and demonstrated in several scientific papers and technical reports, other environmental issues and concerns associated with the HDD process at water crossings include:

As bentonite clay has low hydraulic conductivity and high water-holding capacity, substantial deposits from drilling-mud releases may reduce soil permeability. In some settings, this can restrict groundwater movement, although the extent of hydrological alteration in wetlands depends on local soil characteristics, the amount of released material, and wetland type.

Changes to wetland hydrology can negatively affect wetland plant establishment and growth. Hydrological regime (water depth, flow and so on) is a primary driver of wetland vegetation patterns, and alterations can stress or inhibit plant communities.

Released drilling mud can increase turbidity, reducing light availability for submerged aquatic plants. High suspended sediment levels can impede photosynthesis and interfere with seedling germination and plant growth.

Drilling-mud releases that significantly elevate suspended fine sediments in streams and rivers can disrupt aquatic invertebrate communities. Increased turbidity and fine sediment intrusion into streambeds can lead to higher invertebrate drift rates and degraded habitat quality.

Elevated levels of suspended sediments (including clay particles) have been shown to trigger substantial increases in downstream drift of stream macroinvertebrates. Fine sediments fill interstitial spaces, reduce habitat quality and dislodge organisms into the water column.

According to a review by Scott Reid (1998) of environmental issues associated with HDD at water crossings, while HDD has the potential to reduce sediment generation compared to open-cut methods, it cannot automatically be assumed to be the most environmentally sound crossing technique. The review emphasises that inadvertent drilling-fluid releases remain a significant risk, that case-study data are scarce, and that environmental impacts similar to sediment discharges may result. Consequently, HDD should be treated as a method requiring rigorous mitigation, and also supports our statement that it requires proper assessment (prior to submitting an Application).

Source:
https://www.researchgate.net/publication/30481881_Review_of_environmental_issues_associated_with_horizontal_directional_drilling_at_water_crossings

Furthermore, in EIAR Appendix 2-8: Construction Environmental Management Plan, 5.1.9 Directional Drilling, the Applicant states:
The fluid used during the process is inert, natural and biodegradable (e.g. Clear Bore™). (page 31)
While we commend the Applicant on choosing a product that is '*inert, natural and biodegradable*', we would also like to draw to the Commission's attention that the Safety Data Sheet for Clear Bore™ contains the following: *Accidental release: In the event of a major spill, prevent spillage from entering drains or water courses. […] If a significant quantity of material enters drains, advise emergency services.*' Which shows that while labelling it biodegradable, even the manufacturer does not guarantee zero environmental risk with its warnings of keeping spills away from drains and water courses. And the abovementioned EIAR Chapter 9: Hydrology for Gortyrahilly Wind Farm supports this further.
It is assumed that a drilling fluid similar to ***Clearbore*** *will be used and the Material Safety Datasheet (Appendix 9.5) for any fluid used must be followed. […] In the case of a major spill, the leak should be stopped if safe to do so, contained and* ***prevented from entering drains or water courses****. Any recoverable product will be collected,* ***similar in means of a hydrocarbon spill****, and disposed of properly. If a significant quantity of material enters drains or watercourses, emergency services will be advised immediately.* [highlighted for emphasis]

The Applicant has failed to address the negative impacts adequately / at all in their Application.

Suspended Solids/Silt
The following statement comes from the Application for the proposed Dyrick Hill Wind Farm development (An Coimisiún Pleanála case ref: 317265; refused but at Judicial Review), which is proposed to be sited directly adjacent to the proposed Scart Mountain Wind Farm and whose GCR overlaps the Scart Mountain GCR at two points (something the Scart Mountain Applicant has completely failed to mention in their Application by the way). As such, this has relevance to the proposed Scart Mountain development in regard to Cumulative Effects due to both Developers proposing to use HDD at the Finisk and Colligan Rivers.

In their NIS, the Dyrick Hill Wind Farm Applicant states the following possibility:
5.2.1.1 Release of suspended solids.
Earthworks and excavations associated with the grid connection route crossing of the Colligan River will have the potential to generate particulate/silt-laden surface waters from the works area and for this to be discharged via runoff or existing roadside drains to the Colligan River and on downstream to the wetland habitats of the Dungarvan Harbour SPA. (page 170)

Hydrocarbons
In their NIS, the Dyrick Hill Wind Farm Applicant states the following possibility:
5.2.1.2 Release of hydrocarbons
Similar to suspended solids arising from excavation activities, hydrocarbons accidentally introduced to the Colligan River during works associated with the grid connection route crossing will be conveyed downstream to the wetland habitats of the Dungarvan Harbour SPA.

Hydrocarbons are a pollutant risk due to their toxicity to all flora and fauna organisms, including the special conservation interest bird species of this SPA. Potential incidents or accidental release of contaminants will likely be short lived or temporary, however the potential impacts to downstream receptors such as wetland habitats and special conservation interest bird species can be long lasting. (page 171)

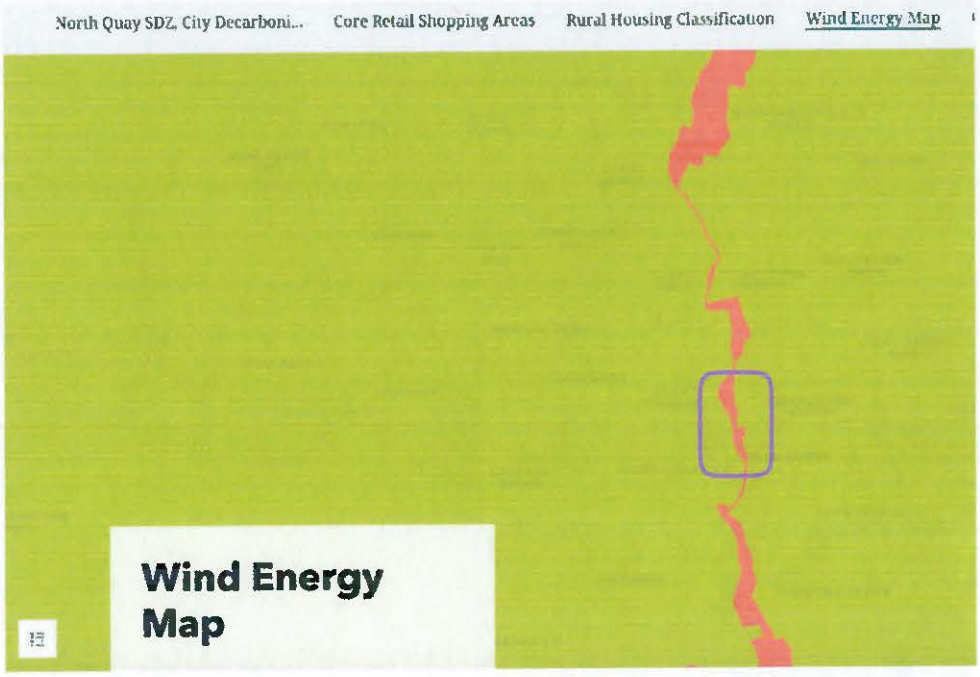
In addition to the polluting effects of hydrocarbons described here, we wish to draw the Commission's attention to the intended meaning behind the above-used terms *'short-lived'* and *'temporary'* by referring to the framework set out by the Chartered Institute of Ecology and Environmental Management (CIEEM) in its Guidelines for Ecological Impact Assessment. CIEEM provides a structured approach for describing the duration of impacts, giving indicative examples of what each category typically represents. Within this framework, *temporary* impacts are generally those lasting up to around a year; *short-term* impacts may last from roughly one to seven years; *medium-term* impacts can extend from about seven to fifteen years; and *long-term* impacts may persist for periods exceeding twenty-five years. This categorisation helps clarify the likely duration of effects and provides a consistent basis for interpreting impact timescales.

Source: https://cieem.net/wp-content/uploads/2018/08/EclA-Guidelines-v1.3-Sept-2024.pdf

We ask the Commission to seriously consider the environmental impact on two Irish SACs and one SPA lasting up to seven years (*'short-lived'*) and the devastation this will cause to the legally EU-protected physical and biological receptors involved. (We draw to the Commission's attention as an example the devastating environmental disaster in the Blackwater River SAC in Cork in August 2025 in which tens of thousands of fish were killed due to a pollutant being released into the water.)

FAILURE TO MENTION OR ADDRESS THAT THE FINISK RIVER HDD CROSSING IS LOCATED WITHIN A WIND EXCLUSION ZONE

The Finisk River is located within the Wind Exclusion Zone of the Waterford City & Council Development Plan (2022-2026) as is shown in the map below. **The Applicant has entirely failed to include this important piece of information within their Application:**



Source: Extract from WCCDP Wind Energy Map, with purple circle added by us to show location of proposed GCR HDD crossing over Finisk River. Full-size version available in our **Appendix: Maps.**

And while this specific GCR Application does not include any turbines, it is still a wind energy development and part of the overall wind farm development/application (as the Applicant themselves clearly state). Therefore when considering all of the points mentioned in this Observation, to even consider that the proposed Scart Mountain Wind Farm and GCR will be without risk is impossible to conceive, especially when one takes into account the WCCDP wind farm suitability site assessments, which have been informed by all the relevant governmental bodies and environmental experts.

The Applicant may suggest that their project, although shown by their own admission to have the potential to cause significant negative impacts on the Blackwater SAC and the Dungarvan Harbour SPA habitats and species, may still be permitted for imperative reasons of overriding public interest. Yet this line of argument is only permitted to proceed **if there is an absence of other alternatives.** We take this opportunity to remind/inform the Commission that there are many areas in County Waterford that have been designated as 'Preferred' and 'Open for Consideration' for wind farm development and as such this clearly shows the existence of an alternative for the Applicant to pursue. We refer the Commission to our chapter, Waterford County Development Plan Wind Energy Strategy Zoning for more detailed information about this.

We refer the Commission to our chapters **13. Failure to Provide Required Zoning Information** and **9. Waterford City & County Council Development Plan 2022-2028 Wind Energy Strategy Zoning** for more details.

BACKGROUND INFORMATION ON THE ECOLOGICAL RECEPTOR THAT IS THE COLLIGAN RIVER

The Colligan River is the main hydrological pathway that flows into Dungarvan Harbour, which is a recognised Special Protection Area (SPA) under the EU Birds Directive, and is classed as site no. 004032. It is also a proposed Natural Heritage Area (00663), 'for

biodiversity reasons and the geodiversity of an active sedimentation system should be highlighted as part of that designation'.
Sources: https://www.npws.ie/protected-sites/spa/004032 and *The Geological Heritage of Waterford – An Audit of County Waterford's Geological Sites* (page 56)

With the proposed HDD of the Colligan River lying 4km upriver or possibly closer (and ambiguity about the actual location of the Colligan HDD crossing – please see below for more on this), this puts the HDD crossing within the Zone of Influence of the Dungarvan Harbour SPA.

Therefore, any potential release of a sedimentary hydrocarbon or bentonite / clear bore mud slurry will have an adverse effect on the EU-Designated Dungarvan Harbour SPA habitats and, in turn, the EU-protected and Special Conservation species that it supports.

With the EU Birds Directive paying special attention to wetland areas, the possibility now arises whereby not only is there a risk of devastating impacts on wildlife, but a negative financial implication for Ireland is not beyond the realms of reality. And it shall be the State (and therefore taxpayers) who is liable for any fines due (as was the case with Derrybrien Wind Farm in Co Galway), NOT the Developer.

The Applicant's assertion that the implementation of renewable energy trumps biodiversity and the EU Habitats and Birds Directives (among others) is inaccurate, environmentally misguided and will be found wanting if it needs to be tested by the European Court of Justice. (We refer the Commission to our chapter: Rebuttal of Legal and Policy Arguments for more on this).

THE INADEQUATE AQUATIC SURVEY OF THE COLLIGAN RIVER

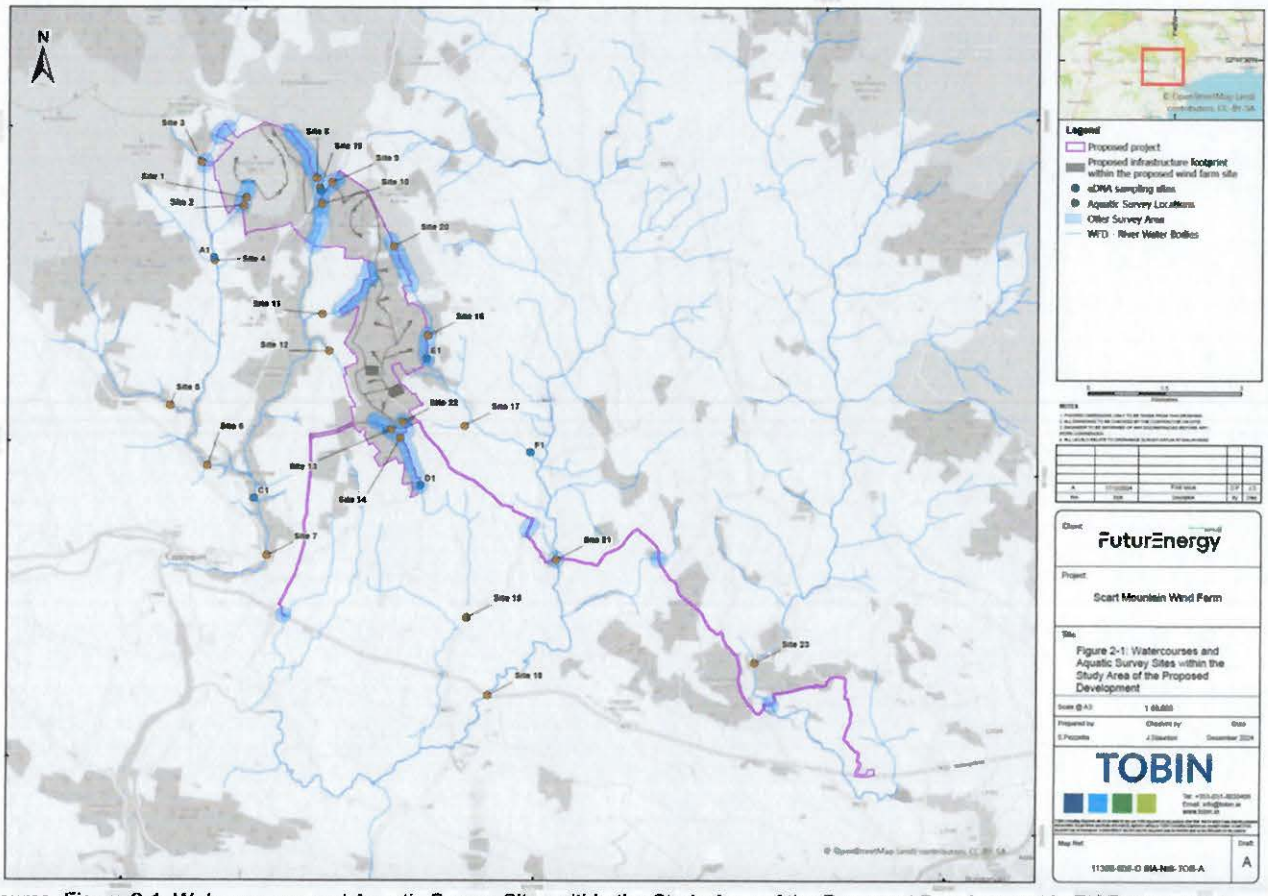
We refer the Commission to our **Chapter 1. Biodiversity** for full information on this.

However, we also include a brief summary here for the Commission's reference.

It is submitted that the Applicant has carried out a wholly inadequate and incomplete aquatic survey of the Colligan River.

Survey site 23 (see map below) is upstream of the proposed HDD crossing of the Colligan River. That serves no purpose. To understand what is at risk from HDD, the survey needs to be conducted downstream of the site. Water, sediment and pollutants flow downstream, not up. The Applicant has completely failed to include, address and assess what aquatic life lies **below** the HDD crossing and in the direct hydrological path of an HDD pollution event.

Furthermore: Site 23 is the **only** aquatic site surveyed on the Colligan River – which in itself is a totally inadequate and incomplete assessment of this ecologically important waterway. The Applicant has once again failed to provide the Commission with a truly informed environmental baseline study **that would remove all scientific doubt** regarding potential adverse impacts on the EU-protected waterways and the species therein. And also, as a result, any mitigation measures proposed are of an incorrect and false origin. **The Applicant has not employed survey methodology that meet the requirement of the EIAR.**



Source: Figure 2-1: Watercourses and Aquatic Survey Sites within the Study Area of the Proposed Development in EIAR Appendix 6-3: Aquatic Survey Report

THE FINISK RIVER:
THE CONTRADICTIONS AND MISLEADING ASSESSMENTS IN THE EIAR AND NIS

We refer the Commission to our **Chapter 1. Biodiversity** for full information on this.

AN INCOMPLETE AND INADEQUATE ORNITHOLOGY SURVEY

We refer the Commission to our **Chapter 2. Ornithology** chapter for full information on this.

TWO PROPOSED HDD CROSSING LOCATIONS AT THE COLLIGAN RIVER

We bring to the Commission's attention the incomplete and misleading assessment of the HDD crossing at the Colligan River, with the Applicant proposing two (possibly three) different HDD crossing sites. One would forgive the Commission for thinking the Applicant is proposing a singular HDD of the Colligan River as it is so well interwoven into the GCR summary. Yet one cannot forgive the Applicant for their seeming uncertainty of where they will be running the GCR. As is shown below, they provide conflicting details in three different places (from what we have found in our limited timeframe of examining all the documentation, but there could be more).

As this is all provided in the **same** documentation – the EIAR Appendix 2-5: Grid Connection Construction Methodology – it cannot be excused by, let's say, the fact that the original EIAR was created and submitted in December 2024, while the Application for the GCR was submitted separately ten months later, so there might have been a change in route design during those ten months.

Description 1 (page 6):
2 Proposed Grid Connection Route Summary
The route continues south on the R-672 for approximately 1.8 km before turning north on to the L-5103 local road. ***About 250 metres along this local road, the route enters Coillte lands to under cross the Colligan River by means of HDD****. On the eastern side of the Colligan River, the route must cross about 130 metres of private lands before entering the Coillte forestry tracks in Inchindrislawood before reaching the L-3003 local road.*
[highlighted for emphasis]

(As a side note, we ask the Commission to consider: Where is the statutory required complete assessment of the 'Coillte lands' and 'Inchindrislawood' habitats and the ecologically present receptors that are subject to any potential negative impacts from an HDD crossing and excavation of lands for an underground cable route? It isn't anywhere in the Application – yet another lacuna that **fails to remove all scientific doubt** regarding potential adverse impacts.)

Description 2 (pages 11 & 12):
2.3.5 Route Section 5 Summary (Chainage 9120 m to 10970 m)
This section of the grid connection route follows the R-672 regional road from junction with the L-5065 in Colliganmountain to the junction with the L-5103 in the townland of Colliganwood where ***the route enters private lands****.* [highlighted for emphasis]

2.3.6 Route Section 6 Summary (Chainage 10970 m to 11560 m)
This section of the grid connection route is within private lands to achieve a crossing of the Colligan River. From the R672, *the route follows an existing access track to the launch area for a HDD undercrossing of the Colligan River. The reception area for this HDD will be situated in private lands on the eastern bank of this river to allow a drilled undercrossing of the river. Within the private lands on the eastern side of the river, the route continues in a new access track to the Coillte lands in the townland of Inchindrislawood.*
[highlighted for emphasis]

Description 3 (page 8):
2.3 Section-by-Section Summary
As an aid to understanding, the grid route has been broken into nine shorter sections as shown Table 2.2 Grid Connection Route Section Summary
Section 6: From L-5103 junction entering ***Coillte lands to undercross Colligan River*** *into private lands 0.6km*
Note: The Applicant also states here *'Each of these route sections is described in further detail in the Sections 2.3.1 to 2.3.8 below.'* And the description for Section 6 there differs to what has been written in this text above.

We will now highlight the differences – they may be subtle but are of great significance:

Description 1: the HDD crossing is proposed to be about **250 metres along the L-5103 local road after its junction with the R-672.** And the route enters **Coillte lands** to under cross the Colligan River by means of HDD. (See orange line in map below.)

Description 2: the HDD crossing is proposed to be **AT** the junction of the R-672 with the L-5103. And **the route enters private lands (directly off the R-672, not 250m along the L-5103) to achieve a crossing of the Colligan River.** From the R672, the route follows an existing access track to the launch area for an HDD undercrossing of the Colligan River. (See purple line in map below.)

Description 3: the description here is very vague and confusing. '*From L-5103 junction entering **Coillte lands***' gives two possible impressions:

1. that immediately at junction L-5103, the route enters Coillte lands. Yet as can be seen on the map below, Coillte does not own lands here; it is private land. And there is no Coillte land between the R-672/L-5103 junction and the Colligan River here.
2. That at some point from L-5103 (it could be much further down from junction R-672), the route enters Coillte land. But then we have '*to undercross Colligan River into private lands*', and there are no private lands directly on the opposite banks of the Colligan River in this instance.

For illustrative purposes, we have provided a map showing the location of both possible HDD crossings as can be ascertained from the Applicant's documentation and descriptions. Unfortunately, due to the ambiguity of Description 3, we have not included that in the map, but the Commission will clearly see that there is no Coiltte land at the said R-672/L-5103 junction, nor are there any private lands on the banks directly opposite any Coiltte land.



Source: landdirect.ie; accessed 08 November 2025, with orange and purple lines added by us for illustrative purposes

[Disclaimer: The orange line depicting Description 1 is not meant to be an exact accurate depiction as it has been drafted to the closest point of Coillte land from the L-5103/R-672 junction and it is not stated in the text above exactly how far within Coillte land option 1 travels before crossing into private lands, but it gives an overview of the difference in habitat and location.]

We also refer the Commission to the section entitled **Ambiguity as to the HDD Crossing Location at the Colligan River** in our **Chapter 14. No Evidence of Legal Consent or Interest in Land**, regarding the land directly above the orange line that crosses the river: Folio WD15727F.

With all this in mind, it is submitted that there are two (perhaps three?) HDD crossing locations presented – each of which is very different in habitat to the other. But they have one thing in common: the complete lack of a clear, complete and appropriate assessment of the habitat and species therein/surrounding it/using it.

This ambiguous location of HDD crossing, unknown habitat of the HDD crossing, lack of

Appropriate Assessment leaves a large lacuna on the Application. And as such, the **Application fails to meet the requirements of the EIAR.**

We submit the following and ask the Commission to keep it in mind as a legal requirement, as stated in the Inspector's report of the (refused) Dyrick Hill Wind Farm:

12.5.74. The Planning and Development Act, 2000, as amended, in section 171A(b), requires the Board to consider the likely direct and indirect effects of developments on biodiversity, with particular attention to the species and habitats protected under the Habitats and Birds Directive. Further, the under Article 27(4)(b) of the European Communities (Birds and Natural Habitats) Regulations 2011 to 2021(transposing the Habitats and Birds Directives into national legislation), requires public authorities to protected areas. In this instance, the loss of Annex I habitats, while not within a protected SAC/SPA, directly contradicts this requirement.' (page 92).
https://www.pleanala.ie/anbordpleanala/media/abp/cases/reports/317/r317265.pdf?r=241729620052

AMBIGUITY REGARDING NUMBER OF GCR OPTIONS AND FINAL GCR ROUTE

In addition to the Applicant's ambiguity / uncertainty of exactly where they are planning to run the GCR under the Colligan River (mentioned above), they also present ambiguity regarding **the number of GCRs**.

In Appendix-2-5-Grid-Connection-Construction-Methodology, Section 8.10 Horizontal Directional Drilling, it states:
*Horizontal Direction Drilling (HDD) is a method of drilling under obstacles such as bridges, railways or watercourses in order to install cable ducts under the obstacle. […] There are several bridges and culverts on **both UGC route options** which will require HDD due to there being insufficient cover and depth in the bridge to cross within the bridge deck. [highlighted for emphasis]*

And in Section 8.12 Replacement of Existing Culverts, it states:
*Given the length of **both route options**….*

With these admissions – and the fact that the Applicant has nothing more than, by their own acknowledgement, a concept design at this (planning application submission) stage, the Commission must in all seriousness ask itself this: What exactly are you considering here and what would you possibly be granting approval to?

The Applicant has:

- Stated they have two route options (above).

- Failed to carry out site investigations along the entire GCR, therefore have no idea what their concept design will come across:
  The exact location of the UGC within the curtilage of the existing roads, access tracks and private lands may be subject to minor modification following confirmatory site investigations to be undertaken prior to construction. (Appendix 2-5: Grid Connection Construction Methodology, Section 2 Proposed GCR Summary)
  *It will be required to carry out preliminary site investigations along the cable route prior to construction to **confirm design assumptions**.* Investigations include: Trial holes along the route and at any potential joint bay positions **to ascertain ground conditions and thermal resistivity of the soil.** (Appendix 2-5: Grid Connection Construction Methodology, Section 3 Preliminary Site Investigations) [highlighted for emphasis}

Detailed site investigation works will be completed at each of the HDD locations to confirm ground conditions at detailed design stage. *[…] the* ***results from the borehole data will be used to design the HDD and crossing depths. A bespoke design will be prepared for each HDD crossing […]. Each individual HDD design will be subject to prior EirGrid review and approval.*** (Appendix 2-5: Grid Connection Construction Methodology, Section 8.10 Horizontal Directional Drilling) [highlighted for emphasis]

- Failed to carry out surveys regarding the existing underground services (water, gas, electricity, telecoms, existing cables, etc), and therefore has no idea of their presence or location.
  In advance of any construction activity, the contractor will undertake additional surveys of the proposed route to confirm the presence or otherwise of any services. If found to be present, the relevant service provider will be consulted with in order to determine the requirement for specific excavation or relocation methods and to schedule a suitable time to carry out works. (Appendix 2-5: Grid Connection Construction Methodology, Section 10 Relocation of Existing Services)
  Service providers should have been contacted at the very start to ascertain where they have their underground services, and therefore inform a proper design of the GCR.

- Provided no evidence of any consultation with Waterford County Council

- Failed to address the recommendations/requests from the Department of Transport (See Scoping Request Response) and Uisce Eireann (Modelgo PWS; See Scoping Request Response).

- Failed to address the remarks made by TII and Uisce Eireann in their Observations against the associated Scart Mountain Wind Farm Application (see Observations made in response to the proposed wind farm after its Application had been submitted to the Commission – case ref: 321522 included in our **Appendix: Scart Mountain Wind Farm Observations**, with highlights in red)

- Provided two – possibly three – options regarding Section 6 of the proposed GCR: where does it leave the L-5103, where does it cross the Colligan River, and where does it run from the Colligan River banks to Section 7 of the GCR (see our section on this above).

Again: **What exactly is the Commission looking at here, being asked to consider and what would the Commission possibly be granting approval to?** Because with all of the above presented as such, it is safe to say that the Commission cannot in all honesty be sure.

FAILURE TO ADDRESS THE CUMULATIVE EFFECTS OF THE PROPOSED DEVELOPMENT WITH (AT LEAST) TWO OTHER PROPOSED WIND FARM PROJECTS

We refer the Commission to our **Chapter 15: Cumulative Impacts** on this regarding the Applicant's distinct lack of addressing or mentioning the cumulative effects of their proposed GCR with the proposed Dyrck Hill Wind Farm (case ref: 317265) and Coumnagappul Wind Farm (case ref: 318446) Grid Connection Routes.

POTENTIONAL CUMULATIVE EFFECTS OF THE OVERALL SCART MOUNTAIN PROJECT

The Applicant has stated throughout that this development – the Scart Mountain Wind Farm Grid Connection Route – is one part of the overall Scart Mountain project; the second part being the Scart Mountain Wind Farm itself. And it has asked the Commission to consider both as one project. Examples include:

This application, and the wind farm application (ABP Ref. 321522) are functionally interdependent and constitute a single project.

We note that the subject proposed development and the proposed wind farm development form a single project.

Together the proposed development and the Scart Mountain Wind Farm proposal form a single project for the purposes of EIA.

With that in mind, we ask the Commission to consider this:
All of the doubts, concerns and risks that have been mentioned and highlighted in this chapter are included in just ONE aspect of the proposed development – the GCR HDD water crossings. It does not consider the entire GCR or the main wind farm site construction, which has huge potential to further increase the risk to the surrounding unique and vulnerable environment, the Dungarvan Harbour SPA, the Blackwater River SAC and all the protected species therein.

The cumulative effects of the GCR, haul route and wind farm site in the construction phase all have the potential of long-lasting and potentially irreversible environmental impacts on the Dungarvan Harbour SPA, the Blackwater River SAC and all the protected species therein. To expect the Applicant's mitigation measures to function at 100% success rate is beyond believable, especially when you consider the unacceptably vague, speculative and misleading nature of the Application. The environmental and legal repercussions could cost the State of Ireland (NOT the Applicant) dearly.

The Applicant's assertion that the implementation of renewable energy trumps biodiversity is divisive and scientifically inaccurate. **Renewable energy tackles the cause of climate change.** But a zero-carbon world would still face ecological collapse if biodiversity is lost. **Biodiversity tackles the consequences and stabilises the planet.** Biodiversity is the planet's *life-support system*. Destroying it weakens Earth's ability to heal itself even if emissions fall. **Climate mitigation and biodiversity protection must work hand in hand**, not compete for policy or investment priority.

On a final note of importance and relevance, we ask the Commission to consider the ability of the Applicant to comply fully in all aspects of the following statement and taking due regard of all our aforementioned doubts, concerns and the risks posed by the overall proposed Scart Mountain development into account:

The overall aim of the EU Habitat Directive is to maintain or restore the favourable conservation status of habitats and species and with the favourable conservation of species being achieved when:

- *Population dynamics data on species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitat and*
- *The natural range of species is neither being reduced nor is likely to be reduced for the foreseeable future.*

It is therefore essential that any decision regarding this proposed development demonstrates clear and credible evidence that these legal and ecological obligations can and will be met in full.

We submit that the mitigation measures proposed by the Applicant have not shown that they can definitely achieve the above and our doubts, concerns and the risks associated with the proposed Scart Mountain development are too big to ignore. It is therefore our strong belief that permission for the Application should be denied.

CONCLUSION

Given the number of lacunae, misinformation and ambiguous statements in the Application that we have managed to find and shed light on, the Commission cannot take what has been written in the Application as concrete fact. It is therefore of the utmost importance that the Commission consults all relevant statutory bodies and expert professional opinions and carry out a thorough Natura Impact Assessment of the proposed project before a decision is given on this Application. However, looking at the data available and the proposed actions (for this sole project and as a part of the overall Scart Mountain project) – and with all the points that have been highlighted in this chapter and overall Observation – we urge the Commission to consider refusing permission

We appreciate the task ahead for the Commission, and its expert advisors, is a difficult one and one that involves unearthing the hidden details, determining the truth behind ambiguous or misleading statements and researching the truth behind the misinformation, yet we have faith in the ability and integrity of the Commission and their representatives to carry this task out in a thorough and professional manner befitting their important position.

KEY POINT SUMMARY

- Silt fencing is unreliable and prone to failure even when installed correctly.
- Irish guidance states silt fencing cannot be used as the sole protective measure near watercourses.
- The GCR crosses four rivers hydrologically connected to highly sensitive EU-Designated sites.
- Research and EPA findings show widespread silt-fence failures.
- HDD poses risks of frac-outs, groundwater contamination and habitat disturbance.
- No ground investigations were carried out along the GCR, increasing HDD uncertainty.
- The Applicant's mitigation measures are vague and insufficient.
- Local wells and the public water supply are vulnerable to proposed GCR works.
- The Scart Mountain GCR and wind farm form one project, requiring full cumulative assessment.

SILT FENCING

In the Applicant's Planning Statement, Section 2.4 Cable Works, it states:
The 110kV underground cable required to facilitate the grid connection will be laid beneath the ground surface and/or public road using the following methodology: The area where excavations are planned will be the subject of a confirmatory survey prior to the commencement of works, with a cable locating tool and all existing underground services will be identified.[…] Silt fences will be installed alongside the road/works areas as required near streams.

And in Appendix 2.5: Grid Connection Grid Connection Construction Methodology, Section 8.12 Replacement of Existing Culverts
7. The road edge adjacent to the watercourse will be lined with sandbags and silt fences (multiple fences recommended) as appropriate to prevent runoff from the trenching works reaching the stream. The design of these multiple features shall also allow for the safe removal of accumulated silt away from the channel, particularly through staged removal of the most contaminated upper fence before the lower ones, and the removal of the final fence only when it is clear of any silt.

A silt fence is a temporary sediment control device used on a construction site to protect water quality in nearby streams, rivers, lakes and seas from sediment (loose soil) runoff. However their effectiveness in controlling sediment can be limited, and in practice, failures occur through poor installation, overtopping, undercutting, scour around the ends (gaps caused by water washing away the soil at the sides of the silt fence where it meets the ground), fabric and structural collapse, and/or inadequate maintenance.

Even when constructed from '*woven, high tensile strength heavy porous filter fabric*' (as the Applicant claims will be used), silt fencing has been observed to have high failure rates. Its limitations are well-documented and it is only designed to intercept shallow sheet-flow. Silt fencing may form part of ancillary surface-runoff management, but it cannot be relied upon as a sediment-control measure and to prevent drilling-fluid releases to a watercourse. Because of these limitations, best practice and regulatory guidance in Ireland – including Inland Fisheries Ireland's Guidelines on Protection of Fisheries During Construction Works (2016) and the Office of Public Works Environmental Guidance (2019) – emphasises that silt fencing should be one element within a wider sediment-control system and not the sole protective measure where a river or stream is at risk. Irish regulatory guidance consistently

emphasises that construction methods must prevent sediment from reaching watercourses, not simply attempt to intercept it at the boundary.

There are a number of risks associated with Silt Fencing as a Sediment Control Measure:

1. **Improper Installation**: If not trenched and secured correctly, water can flow underneath or around the fence, reducing effectiveness. Posts may be spaced too far apart or not driven deep enough, causing the fence to collapse under pressure.
2. **Failure Under Heavy Flow**: Designed for low-velocity sheet flow, silt fences can fail under concentrated or high-velocity runoff.
3. **Maintenance Requirements**: Regular sediment removal is necessary; otherwise fences can collapse or overflow.
4. **Limited Lifespan**: Fabric deterioration, UV exposure, or physical damage (i.e. from wind, animal or construction activity) can reduce effectiveness.
5. **Potential for Secondary Erosion**: Improper placement may cause water to form a pond behind the fence, leading to soil saturation and increased erosion risk.
6. **Environmental Impact**: If not removed after use, degraded fencing materials can contribute to plastic pollution.
7. **Regulatory Non-Compliance**: Poor installation or maintenance may result in violation of environmental regulations

In addition to the above risks, there are several problems associated with cleaning out silt fences. Once the fabric is clogged with sediment, it can no longer drain slowly and function as originally designed. The result is normally a low volume sediment basin because the cleaning process doesn't unclog the fabric. The soil is normally very wet behind a silt fence, inhibiting the use of equipment needed to move it.

IMPACT OF FAULTY SILT FENCING FROM CONSTRUCTION SITES ENTERING NEARBY WATER BODIES

Below is a list of some of the negative effects caused by the failure of silt fencing:

- **Sediment Pollution:** Excess sediment can cloud the water, reducing light penetration and affecting aquatic plant growth, which in turn impacts invertebrates and bird feeding.
- **Habitat Degradation**: Mudflats and saltmarshes may become smothered, altering the physical structure and reducing their suitability for foraging birds.
- **Disturbance to species**: Increased turbidity and habitat alteration can reduce prey availability for waders and waterfowl, potentially displacing them from key feeding areas.
- **Nutrient loading**: Sediment may carry nutrients or contaminants that lead to eutrophication, affecting the ecological balance of the SPA.

Studies show that there is no certainty that silt fencing measures can, and will, work.

Excessive sedimentation derived from anthropogenic activities is a main factor in habitat and biodiversity loss in freshwater ecosystems. To prevent offsite movement of soil particles, many environmental regulatory agencies mandate the use of perimeter silt fences. However, research regarding the efficiency of these devices in applied settings is lacking, and fences are often ineffective due to poor installation and maintenance.
[Source: *Journal of Environmental Management: On the apparent failure of silt fences to protect freshwater ecosystems from sedimentation. A call for improvements in science, technology, training and compliance monitoring,* by S.J. Cooke, J.M. Chapman, J.C. Vermaire] (See **Appendix: Silt Fencing Paper Canada**)

Most construction sites today do have silt fences. But many do not work effectively because they are not well designed, installed, or maintained.
[Source: EPA document on Silt Fencing (See **Appendix: Silt Fences EPA**)

At present, silt fence is the most widely used BMP [Best Management Practice], but unfortunately, the instances of failure are widespread
[Source: *On and Off Site Sediment Control Using Silt Fence*, by Stevens et al.)

HORIZONTAL DIRECTIONAL DRILLING

In the EIAR Appendix 2.5:Grid Connection Construction Methodology, Section 8.10, Horizontal Directional Drilling (HDD) is described as follows:
Horizontal Direction Drilling (HDD) is a method of drilling under obstacles such as bridges, railways or watercourses in order to install cable ducts under the obstacle. This method is employed where installing the ducts using standard installation methods is not possible. There are several bridges and culverts on both UGC route options which will require HDD due to there being insufficient cover and depth in the bridge to cross within the bridge deck.

As per the Applicant's EIAR Chapter 2: Description of Project, Section 2.8.5.2 Stream Crossing, *The proposed grid connection contains four stream/river crossings.*
A specialised directional drill machine will be anchored to the ground and will drill at a suitable shallow angle to allow it to achieve the required depth for the bore. If ground conditions are unfavourable, the drilling process will need to be repeated using progressively larger drill heads until the required size is achieved. The drilling process involves pumping a drilling fluid through the drill head which is inert, natural and biodegradable (e.g. Clear Bore).

And in the Applicant's Planning Statement, Section 2.6 Environmental Assessment, it states:
With respect to the proposed development (i.e. grid connection), horizontal directional drilling will be necessary when installing the cable across watercourses. No instream works are proposed for any natural watercourse. All watercourses flow into the Blackwater River (Cork / Waterford) SAC. The grid connection works are also hydrologically linked to the Dungarvan Harbour SPA.

As also covered in our **Chapter 4: Colligan River & Finisk River Crossings**, HDD can cause significant environmental and technical issues, including inadvertent returns (frac-outs), groundwater contamination, borehole instability, and high costs if not properly managed.

Potential Environmental Issues caused by HDD:

- **Inadvertent Returns (Frac-Outs):** Drilling fluid (usually bentonite-based) can escape through fractures in the subsurface and surface in unintended areas, including wetlands, rivers or protected habitats. This can smother vegetation and aquatic life.
- **Groundwater Contamination:** If drilling intersects aquifers or poorly sealed boreholes, it can introduce contaminants or allow cross-contamination between water-bearing layers.
- **Habitat Disruption:** Even though HDD is considered less invasive than open-cut. trenching, it can still disturb sensitive ecosystems (in this case, Dungarvan Harbour SPA for example) if not carefully planned.

Technical and Operational Challenges

- **Borehole Instability:** Unstable soils or incorrect drilling parameters can lead to bore collapse, requiring re-drilling.

- **Steering and Alignment Issues:** Maintaining the correct bore path is difficult in heterogeneous geology, increasing the risk of deviation or failed installations.
- **Tool Wear and Damage:** HDD equipment is subject to high wear, especially in rocky or abrasive soils.

HDD across watercourses hydrologically connected, and near, to an EU-Designated Site (in this case, Blackwater River SAC and Dungarvan Harbour SPA) poses environmental risks, particularly if drilling fluid escapes or if subsurface conditions are poorly understood. This can lead to groundwater contamination. We draw to the Commission's attention that NO ground investigations were carried out along the proposed GCR and the Applicant even admits themselves that these still need to be carried out. Therefore, the Commission does not have full details upon which to make a properly informed decision.

Even though HDD avoids surface trenching, the entry and exit pits, fluid containment areas and access routes can disturb SPA habitats. Noise and vibration from drilling may also affect bird behaviour, especially during breeding or wintering seasons.

In the Applicant's NIS, Section 4.1.2.1 Habitats Degradation due to Water Quality Impacts, it states:
Horizontal directional drilling (HDD) will be required when installing the grid connection cable across the watercourses. Where HDD is required under watercourses, ***there is a risk of structural fracturing or collapse of rivers/streams.*** *Furthermore, during trenchless construction there is the* ***potential for the frac out drilling lubricant (e.g. bentonite).*** *This* ***is, in effect, very fine suspended solids which can lead to water quality impacts and habitat degradation downstream.*** *Horizontal directional drilling will be employed at six watercourse crossings along the proposed GCR. All of the proposed HDD sites are either within or hydrologically connected to a European site, a summary of these crossings is outlined in Table 4-1 below.* [highlighted for emphasis]

Table 4-1: Locations of Proposed HDD

WFD River Waterbody	WFD Code	EPA Name	EPA Code	Links to European Designated Sites
Finisk_020	IE_SW_18F020300	Finisk River	18F02	0 m – within the Blackwater River (Cork/Waterford) SAC
Finisk_020	IE_SW_18F020300	Scart 18 Stream	18S06	950 m upstream of Blackwater River (Cork/Waterford) SAC
Finisk_030	IE_SW_18F020500	Boherawillin Stream	18B35	7.5 km upstream of Blackwater River (Cork/Waterford) SAC
Finisk_030	IE_SW_18F020500	Moneygorm East Stream	18M05	7.5 km upstream of Blackwater River (Cork/Waterford) SAC
Finisk_030	IE_SW_18F020500	Ballykerin Middle Stream	18B32	2.6 km upstream of Blackwater River (Cork/Waterford) SAC
Colligan_040	IE_SE_17C010300	River Colligan	17C01	4 km upstream of Dungarvan Harbour SPA

The four (not six as stated above) watercourses along the GCR are: Finisk River, Scart 18 Stream, Ballykerin Middle Stream and Colligan River.

CONNECTIVITY TO EU-DESIGNATED SITES

All four watercourses that the proposed Scart Mountain GCR will cross are hydrologically connected to EU-Designated Sites protected under the Birds and Habitats Directives: Dungarvan Harbour SPA (Special Protection Area, site code 004032) and the Blackwater River SAC (Special Area of Conservation, site code 002170). They are naturally free of fine sediment deposits, making them highly susceptible to sediment pollution from construction

activities. In addition to all the aforementioned pollution risks above, others include concrete, hydrocarbons and drilling lubricants, caused by the proposed HDD works.

Section 3 of the GCR *follows the L-5065 local road from the junction of the R-671 in the townland of Scart (Hely) to the T-junction in Lisroe. Features: One major watercourse, the Finisk River, is encountered on this section of the grid connection route and will be undercrossed by means of horizonal directional drilling (HDD) under the Modelligo Bridge and Finisk River.*



Figure 2.4: Route Section 3 Location Map

The Finisk River is a tributary of the Blackwater River SAC, designated as a Natura 2000 site under the EU Habitats Directive (92/43/EEC), forming part of the EU-wide network of protected areas. The SAC was selected for a suite of Annex I habitats such as estuaries, tidal mudflats and sandflats, Atlantic and Mediterranean salt meadows, floating river vegetation, old oak woodlands and priority alluvial forests, and for Annex II species including freshwater pearl mussel, white-clawed crayfish, sea, brook and river lamprey, twaite shad, Atlantic salmon and otter.

Section 6 of the GCR *follows an existing access track to the launch area for a HDD undercrossing of the Colligan River. The reception area for this HDD will be situated in private lands on the eastern bank of this river to allow a drilled undercrossing of the river. […] Features: One major watercourse, the Colligan River, is encountered on this section of the grid connection route and will be undercrossed by means of horizonal directional drilling (HDD).*

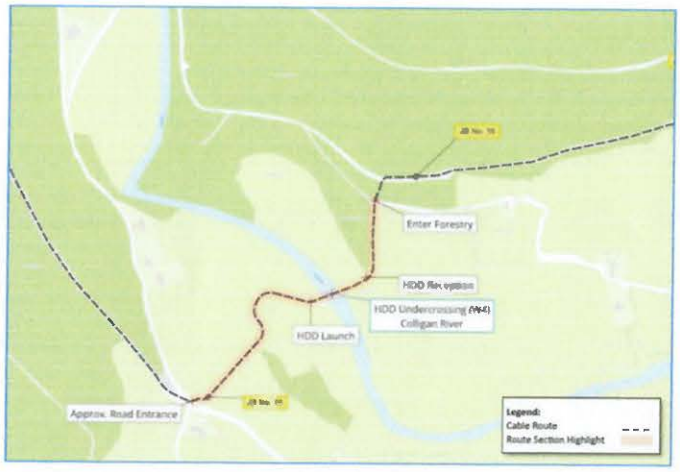


Figure 2.7: Route Section 6 Location Map

The Colligan River flows directly into the Dungarvan Harbour SPA, which is approximately 4.7km downstream. Dungarvan Harbour SPA is part of the Natura 2000 network designated under the EU Birds Directive for the protection of important bird populations – especially overwintering and migratory waterbirds, such as wigeon, teal, dunlin, black-tailed godwit, curlew and others that rely on intertidal mudflats, sandflats and saltmarsh habitats.

The proposed GCR (e.g. underground cable) is hydrologically connected to the SPA – meaning drainage or surface water from the construction area can reach the harbour – resulting in potential indirect impacts on the SPA's habitats and bird species. **Faulty silt fencing could lead to sediment runoff, which could threaten the protected bird species and sensitive wetland habitats of the nearby Dungarvan Harbour SPA.** This can degrade water quality, disrupt feeding grounds and reduce biodiversity.

The Commission must be **satisfied beyond any scientific doubt** that no pollution would reach rivers designated as high class rivers in which the proposed GCR works are hydrologically linked to/flow directly into EU-Designated sites.

CUMULATIVE ASSESSMENT

In the Applicant's Planning Statement, it states:
The proposed development provides for a 110kV grid connection which will export electricity generated on the proposed Scart Mountain Wind Farm site via an underground cable to the existing Dungarvan 110kV substation. The proposed Scart Mountain Wind Farm is the subject of a separate SID application, submitted to ACP on 19th December 2024 (Ref. 321522). Together the proposed development and the Scart Mountain Wind Farm proposal form a ***single project*** *for the purposes of EIA.*

To ensure the power generated by the proposed Scart Mountain Wind Farm feeds into the national grid, a physical connection is required between the proposed wind farm substation and the existing Dungarvan 110kV/202kV GIS substation. The proposed development provides for a tail-fed connection to the existing 110kV substation via approximately 15.5km of underground cable.

As the Applicant has stated that the proposed GCR and proposed wind farm (case ref. 321522, as yet undecided) form a single project, it is submitted that the Commission must take into consideration **all** qualifying features of interest for the overall project, not just those relating to this – the GCR – Application.

In this instance therefore, the Qualifying Features of Interest that have been identified as occurring within the Zone of Influence of the proposed developments are:

- Blackwater River SAC [Site Code 002170]: Distance 0km (overlap with the proposed project site); Hydrologically connected to the GCR]
- Blackwater Callows SPA [004094]: Distance 5.2km south west of site
- Dungarvan Harbour SPA [004032]: Distance 13km south east of site; Hydrologically connected to the GCR
- Blackwater Estuary SPA [004028]: Distance 16km south of site.

The Applicant's NIS, Table 5-1 (below) details the Qualifying Interests for each one:

Table 5-1: Identification of European sites within the Zone of Influence of the Proposed Project

Designated Site	QIs/ SCIs	Connectivity	Within Zone of Influence Y/N
Blackwater River (Cork/Waterford) SAC (002170) **Distance:** 0 km (overlaps with the proposed project site)	• [1029] Freshwater Pearl Mussel (*Margaritifera margaritifera)* • [1092] White-clawed Crayfish (*Austropotamobius pallipes)* • [1095] Sea Lamprey (*Petromyzon marinus)* • [1096] Brook *Lamprey (Lampetra planeri)* • [1099] River *Lamprey (Lampetra fluviatilis)* • [1103] Twaite *Shad (Alosa fallax)* • [1106] Atlantic *Salmon (Salmo salar)* (only in fresh water) • [1130] Estuaries • [1140] Mudflats and sandflats not covered by seawater at low tide • [1220] Perennial vegetation of stony banks • [1310] *Salicornia* and other annuals colonizing mud and sand • [1330] Atlantic salt meadows *(Glauco-Puccinellietalia maritimae)* • [1355] Otter *(Lutra lutra)* • [1410] Mediterranean salt meadows *(Juncetalia maritimi)* • [1421] Killarney Fern (*Trichomanes speciosum)* • [3260] Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation • [91A0] Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles • [91E0] *Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)* • [9130] **Taxus baccata* woods of the British Isles	**Physical:** The proposed project overlaps with the boundary of this SAC, and as such physical connectivity exists between the proposed project site and this SAC. Works associated with the bridge installation will occur within the boundary of this SAC, therefore there is potential for direct impacts. **Hydrological:** This SAC is hydrologically connected to the proposed project. In the absence of mitigation, the proposed project has the potential to result in a degradation of water quality of these hydrologically connected rivers during the construction and decommissioning phases of the proposed project. The SAC is designated for qualifying interests which are sensitive to changes in water quality. **Ecological:** the proposed project site occurs within the foraging/commuting range of qualifying interests (Atlantic salmon, otter and lamprey species [refer to Section 4.1.3]).	Yes

Designated Site	QIs/ SCIs	Connectivity	Within Zone of Influence Y/N
Blackwater Callows SPA (004094) **Distance:** The SPA is located 5.2km south-west	• [A038] Whooper Swan (*Cygnus cygnus*) • [A050] Wigeon (*Anas Penelope*) • [A052] Teal (*Anas crecca*) • [A156] Black-tailed Godwit (*Limosa limosa*)	**Physical:** Considering the distance between this SPA and the proposed project site (ca. 5.2km) there is no potential for direct impacts as the site occurs outside the ZoI for impacts associated with habitat loss and the generation of dust. There is no physical pathway for effects. **Hydrological:** Both this SPA and the proposed project occur within the same surface water catchment (Blackwater [Munster]). There is, however, no downstream connectivity between the proposed project and this SPA. There is no hydrological pathway for effect. **Ecological:** The proposed project site does not contain suitable habitat to support the designated SCI species. Furthermore, none of the SCI species (with the exception of whooper swan) were recorded utilising or flying over the proposed project site during bird surveys (refer to Section 4.1.2).	No

Designated Site	QIs/ SCIs	Connectivity	Within Zone of Influence Y/N
		Whooper swan were recorded very infrequently and were not recorded flying within the potential collision height of the proposed wind farm. No source-pathway-receptor link exists between the proposed project site and this SPA.	
Dungarvan Harbour SPA (004032) **Distance:** The SAC is located 13km south-east	• [A005] Great Crested Grebe (*Podiceps cristatus*) (wintering) • [A046] Light-bellied Brent Goose (*Branta bernicla hrota*) (wintering) • [A048] Shelduck (*Tadorna tadorna*) (wintering) • [A069] Red-breasted Merganser (*Mergus serrator*) (wintering) • [A130] Oystercatcher (*Haematopus ostralegus*) (wintering) • [A140] Golden Plover (*Pluvialis apricaria*) (wintering) • [A141] Grey Plover (*Pluvialis squatarola*) (wintering) • [A142] Lapwing (*Vanellus vanellus*) (wintering) • [A143] Knot (*Calidris canutus*) (wintering) • [A149] Dunlin (*Calidris alpina*) (wintering) • [A156] Black-tailed Godwit (*Limosa limosa*) (wintering) • [A157] Bar-tailed Godwit (*Limosa lapponica*) (wintering) • [A160] Curlew (*Numenius arquata*) (wintering) • [A162] Redshank (*Tringa tetanus*) (wintering) • [A169] Turnstone (*Arenaria interpres*) • [A999] Wetlands	**Physical:** Considering the distance between this SPA and the proposed project site (ca. 13km) there is no potential for direct impacts, as the site occurs outside the ZoI for impacts associated with habitat loss and the generation of dust. There is no physical pathway for effects. **Hydrological:** - This SPA is hydrologically connected to the proposed project site via the grid connection works which cross the Colligan River (Colligan_040). Horizontal Directional Drilling (HDD) will be used to install the cable under the Colligan River	Yes

Designated Site	QIs/ SCIs	Connectivity	Within Zone of Influence Y/N
		which has the potential to result in water quality impacts in the event that frac out occurs (i.e. release of drilling fluid). There is therefore potential for water quality impacts on this SPA. This SPA is designated for wintering bird species which may be indirectly impacted by a degradation of water quality. **Ecological:** The proposed project site does not contain suitable habitat to support the SCI species of this SPA. Furthermore, none of the SCI species (with the exception of golden plover, lapwing and curlew) were recorded utilising or flying over the proposed project site during bird surveys (refer to Section 4.1.2). The population of golden plover using the proposed project site are not connected with the population designated within the Dungarvan Harbour SPA (refer to Section 4.1.2). Additionally, the recordings of	

Designated Site	QIs/ SCIs	Connectivity	Within Zone of Influence Y/N
		which has the potential to result in water quality impacts in the event that frac out occurs (i.e. release of drilling fluid). There is therefore potential for water quality impacts on this SPA. This SPA is designated for wintering bird species which may be indirectly impacted by a degradation of water quality. **Ecological:** The proposed project site does not contain suitable habitat to support the SCI species of this SPA. Furthermore, none of the SCI species (with the exception of golden plover, lapwing and curlew) were recorded utilising or flying over the proposed project site during bird surveys (refer to Section 4.1.2). The population of golden plover using the proposed project site are not connected with the population designated within the Dungarvan Harbour SPA (refer to Section 4.1.2). Additionally, the recordings of	

Designated Site	QIs/ SCIs	Connectivity	Within Zone of Influence Y/N
		lapwing and curlew were infrequent and were not recorded flying within the potential collision height of the proposed wind farm.	
Blackwater Estuary SPA (004028) **Distance:** The SPA is located 16km south	• [A050] Wigeon (*Anas penelope*)(wintering) • [A140] Golden Plover (*Pluvialis apricaria*) (wintering) • [A142] Lapwing (*Vanellus vanellus*) (wintering) • [A149] Dunlin (*Calidris alpina*)(wintering) • [A156] Black-tailed Godwit (*Limosa limosa*)(wintering) • [A157] Bar-tailed Godwit (*Limosa lapponica*) (wintering) • [A160] Curlew (*Numenius arquata*) (wintering) • [A162] Redshank (*Tringa totanus*) (wintering)	**Physical:** Considering the distance between this SPA and the proposed project site (ca. 16km) there is no potential for direct impacts. There is no physical connectivity between this SPA and the proposed project site. **Hydrological:** This SPA is hydrologically connected to the proposed project via the Blackwater River (hydrological route ca. 30km). There is therefore potential for water quality impacts on this SPA. This SPA is designated for wintering bird species which may be indirectly impacted by a degradation of water quality. **Ecological:** The proposed project site does not contain suitable habitat to support the SCI species of this SPA. Furthermore, none	Yes

Designated Site	QIs/ SCIs	Connectivity	Within Zone of Influence Y/N
		of the SCI species were recorded utilising or flying over the proposed project site during bird surveys, with the exception of lapwing and curlew (refer to Section 4.1.2). The recordings of lapwing and curlew however were infrequent and were not recorded flying within the potential collision height of the proposed wind farm.	

PUBLIC WATER SUPPLY

As shown in the Applicant's Appendix 2-5: Grid Connection Construction Methodology, the map below displays the location of the proposed GCR in relation to the proposed location of the Scart Mountain Wind Farm (case ref: 321522), to which this GCR Application is linked.

2.1 Grid Route Overall Location

The overall location of the grid connection route, the Scart Mountain Wind Farm boundary and Dungarvan 110 kV Substation are shown in Figure 2.1 below.

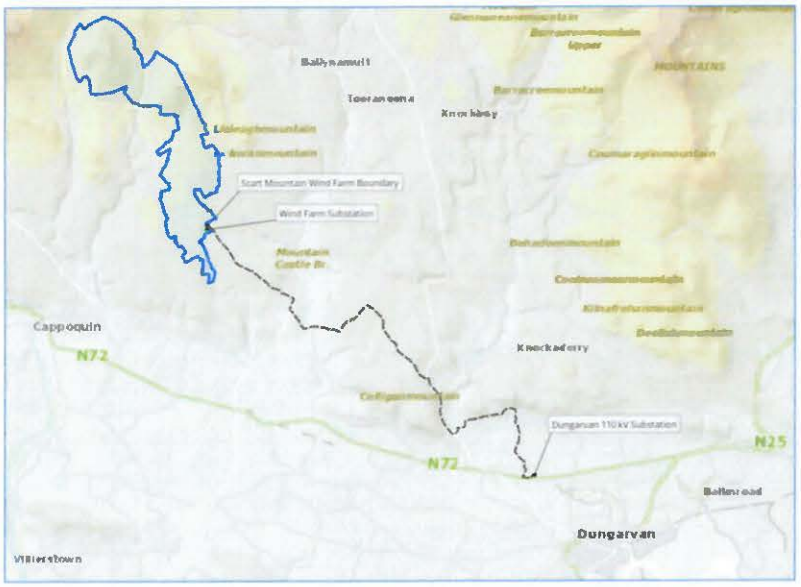


Figure 2.1: Map indicating overall location of Scart Mountain Wind Farm and Grid Connection Route

We draw to the Board's attention that the residences around the proposed wind farm site overall rely on groundwater for their water supply – either in the form of private wells or a local Groundwater Borehole. The Groundwater Borehole is located in Section 1 of the proposed GCR. See below for details:

2.3 Section-by-Section Summary

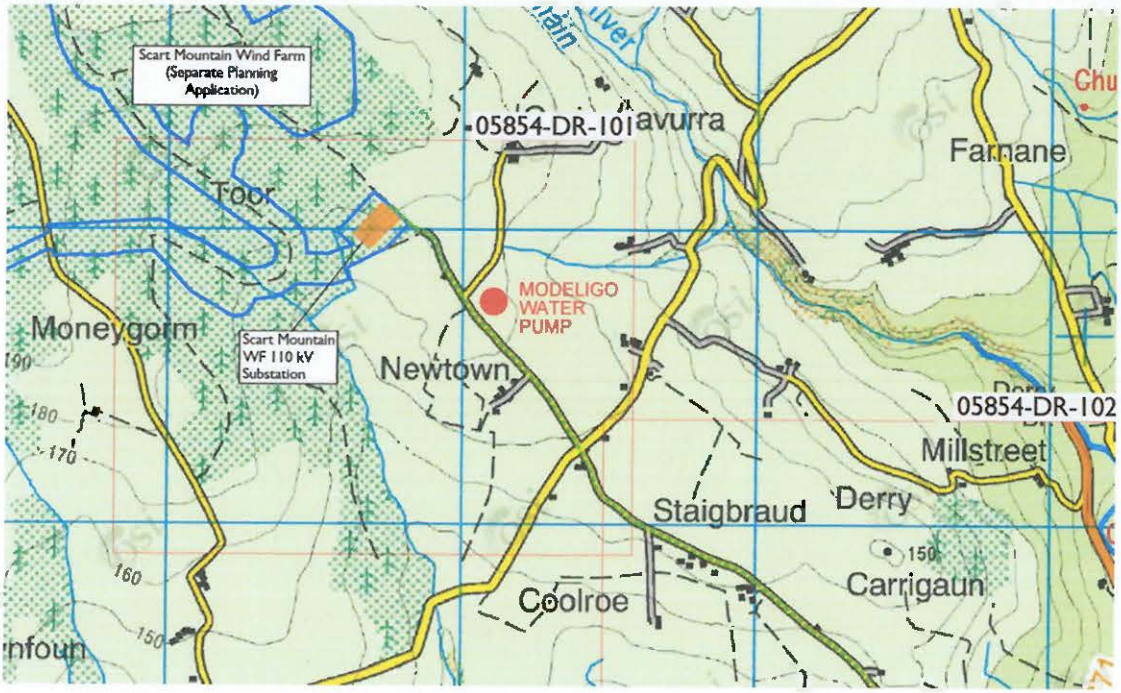
As an aid to understanding, the grid route has been broken into nine shorter sections as shown Table 2.2 below. Each of these route sections is described in further detail in the Sections 2.3.1 to 2.3.8 below.

Ref	Section Description	Route Length
Section 1	Wind Farm Substation joining to L-5056 from Newtown to Scart (Hely) junction with R-671	3.2 km
Section 2	Short section of R-671 from junctions of L-5056 and L-1032	0.3 km
Section 3	L-1032 and L-5056 through Modelligo to junction with L-5067 in Lisroe	2.8 km
Section 4	L-5056 from Lisroe to junction with R-672 at Colliganmountain	2.8 km
Section 5	R-672 from Colliganmountain to junction with L-5103	1.9 km
Section 6	From L-5103 junction entering Coillte lands to undercross Colligan River into private lands	0.6 km
Section 7	Coillte lands in Inchindrislawood to entrance on L-3003	1.2 km
Section 8	From Coillte entrance on L-3003, continuing on L-7001 to Killadangan and joining short section of N72 to entrance of Dungarvan 110 kV Substation	2.7 km
Total		**15.5 km**

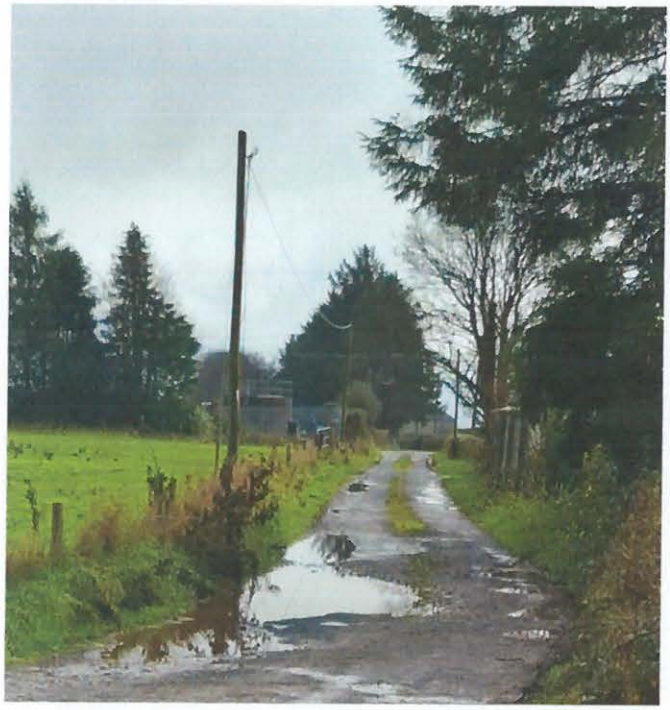
Table 2.2: Grid Connection Route Section Summary

This Uisce Eireann asset is the Modeligo Public Water Supply (PWS) station. It is located approx. 200-300m from the proposed Scart Mountain Wind Farm substation and directly adjacent to the GCR, which is proposed to run alongside it.





Source: Applicant's map showing proposed GCR (marked in green dotted line) with Modeligo PWS added by us in red



Above: Photograph, taken by member of Knockmealdown Protection Group at the start of the GCR, showing the roadway from the proposed Scart Mountain wind farm / substation area, the PWS station (far left) and how close the GCR would be to it.

As described by Uisce Eireann in their Observation for the Scart Mountain Wind Farm (dated 26 February 2025, We ask the Commission to refer to the full letter from that case/attached in our **Appendix: Scart Mountain Wind Farm Observations and Scoping Responses**), this PWS serves a population of 192 (as at February 2025), and this includes residential homes, 13 commercial customers and the National Modeligo School. There are also many

residents in the locality and vicinity of the two proposed developments who have their own private well and groundwater boreholes, both of which are vulnerable to surface-level disturbance and pollutants.

Construction of the proposed Scart Mountain Wind Farm and Scart Mountain GCR, especially in a sensitive area, can pose a high risk of water contamination and it is submitted that that the mitigation measures in place for silt fencing are not sufficient to protect the community's water supplies.

While silt fencing is a standard erosion control measure, it may not be sufficient in areas with high water table levels or permeable soils. The community's concern that these measures are inadequate is supported by environmental best practices and guidelines (such as those mentioned above), which recommend more robust protections in sensitive zones.

INADEQUATE MITIGATION MEASURES

In the Applicant's NIS, Section 6.2.1.2.3 Horizontal Drilling Measures, the following is a mitigation measure which will be implemented during HDD works:

The Contractor will prescribe silt fencing around the reception pits if deemed necessary.

The Applicant must be more specific by clarifying WHO determines necessity and UNDER WHAT CONDITIONS? The vague concept of '*if deemed necessary*' is completely unacceptable.

Pollution runoff into rivers can be detrimental and result in the water contamination of extremely sensitive high-status Blue Dot rivers. Even small amounts of suspended sediments can reduce oxygen levels, smother spawning grounds and aquatic habitats, and disrupt ecosystems and biodiversity.

Compliance with water quality regulations, such as the EU Water Framework Directive (WFD) is essential to mitigate these impacts. Zero tolerance for pollution is required due to the sensitivity of nearby rivers, and a strict multi-layer environmental protection strategy must be implemented. A contractor must be proactive, take caution and ensure silt fencing is erected – this should be a standard part of placing control measures in place, to protect water quality and surrounding ecosystems.

Any exceedance of turbidity or sediment discharge would constitute a breach in compliance. The Applicant's mitigation measure does not demonstrate sufficient proactive measures. The measures outlined in the Application to deal with the protection of the aquatic environments rely heavily on the use of silt fencing. Yet the Applicant has failed to include details such as inspection frequency, and what performance triggers and independent verification will be required during the construction phase.

Therefore the Commission cannot be **satisfied beyond any reasonable or scientific doubt** that silt fencing is a suitable mitigation measure to avoid pollution to the vast, sensitive and EU-protected ecosystem that surrounds the proposed Scart Mountain Wind Farm and associated GCR.

CONCLUSION

With all four GCR water crossings directly connected to an EU-Designated site (namely Blackwater River SAC or Dungarvan Harbour SPA), even minor sediment or drilling-fluid releases could cause serious ecological harm and breach EU environmental protections. The Applicant's reliance on silt fencing is fundamentally inadequate, given its well-documented failure rates and its unsuitability as a sole protective measure near sensitive watercourses. If silt fences are not properly constructed, maintained or monitored, it can result in uncontrolled sediment runoff, leading to habitat degradation, water pollution and potential breaches of environmental regulations.

HDD adds further risk – particularly as no ground investigations have been carried out – leaving the potential for frac-outs, groundwater contamination and habitat disturbance unresolved.

The Applicant's mitigation is vague, lacks enforceable standards and provides no certainty that pollution will be prevented.

In such a high-sensitivity environment, the Commission **cannot be satisfied beyond scientific doubt** that adverse effects on the water quality of the streams, rivers, EU-Designated sites and the local residents' water supplies will be avoided, and it is submitted that the precautionary principle would be to refuse the Application.

We refer the Board to EUR-Lex - 62021CJ0444 - EN - EUR-Lex (europa.eu) – Judgement of the Court of 29 June 2023 (European Commission Vs Ireland) – **Failure of a Member State to fulfil obligations – Environment – Directive 92/43/EEC – Conservation of natural habitats and of wild fauna and flora – Special areas of conservation – Atlantic biogeographical region – Article 4(4) and Article 6(1) – Failure to designate special areas of conservation and to set conservation objectives – Absence or insufficiency of conservation measures.**

Case C-444/21.
Under Article 6 of the EU Habitats Directive 92/43/EEC
Member States shall take appropriate steps to avoid, in the special areas of conservation, the deterioration of natural habitats and the habitats of species as well as disturbance of the species for which the areas have been designated, in so far as such disturbance could be significant in relation to the objectives of this Directive.

APPENDIX:

SILT FENCING PAPER CANADA

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Review

On the apparent failure of silt fences to protect freshwater ecosystems from sedimentation: A call for improvements in science, technology, training and compliance monitoring

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ABSTRACT

Excessive sedimentation derived from anthropogenic activities is a main factor in habitat and biodiversity loss in freshwater ecosystems. To prevent offsite movement of soil particles, many environmental regulatory agencies mandate the use of perimeter silt fences. However, research regarding the efficiency of these devices in applied settings is lacking, and fences are often ineffective due to poor installation and maintenance. Here, we provide an overview of the current state of research regarding silt fences, address the current culture surrounding silt fence installation and maintenance, and provide several recommendations for improving the knowledge base related to silt fence effectiveness. It is clear that there is a need for integrated long-term (i.e., extending from prior to fence installation to well after fence removal) multi-disciplinary research with appropriate controls that evaluates the effectiveness of silt control fences. Through laboratory experiments, *in silico* modelling and field studies there are many factors that can be experimentally manipulated such as soil types (and sediment feed rate), precipitation regimes (and flow rate), season, slope, level of site disturbance, fence installation method, type of fence material, depth of toe, type and spacing of support structures, time since installation, level of inspection and maintenance, among others, that all require systematic evaluation. Doing so will inform the practice, as well as identify specific technical research needs, related to silt fence design and use. Moreover, what constitutes "proper" installation and maintenance is unclear, especially given regional- and site-level variation in precipitation, slope, and soil characteristics. Educating and empowering construction crews to be proactive in maintenance of silt fencing is needed given an apparent lack of compliance monitoring by regulatory agencies and the realities that the damage is almost instantaneous when silt fences fail. Our goal is not to dismiss silt fences as a potentially useful tool. Instead, we question the way they are currently being used and call for better science to determine what factors (in terms of fence design, installation and site-characteristics) influence effectiveness as well as better training for those that install, maintain and inspect such devices. We also encourage efforts to "look beyond the fence" to consider how silt fences can be combined with other sediment control strategies as part of an integrated sediment control program.

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1. Context

As a result of human activities freshwater biodiversity around the globe is in crisis (Dudgeon et al., 2006; Strayer and Dudgeon, 2010). Although there are many factors that contribute to the degradation of freshwater ecosystems, landscape alteration is regarded as one of the most insidious (Allan, 2004; Dudgeon et al., 2006). Human-driven landscape alterations (e.g., development, agriculture, mining) leads to dramatic changes in hydrology, water quality, and habitat configuration even when activities occur in the terrestrial realm away from water sources (Schlosser, 1991; DeFries and Eshleman, 2004; Allan, 2004). Changes to physicochemical characteristics of the environment (such as water temperature, flows, silt, and nutrients) alter biotic elements, including population abundance and community structure in aquatic systems (Paul and Meyer, 2001; Allan, 2004; Dudgeon et al., 2006). Of particular concern is the introduction of fine sediment from terrestrial sources that run off into lotic and lentic systems and have the potential to cause direct and indirect negative effects on aquatic biodiversity.

In aquatic systems, excessive sedimentation – herein inclusive of suspended sediment, siltation, and turbidity - has been named the most detrimental form of aquatic habitat degradation and its effects on aquatic wildlife is the subject of numerous comprehensive reviews (e.g. Newcombe and Macdonald, 1991; Waters, 1995; Henley et al., 2000; Robertson et al., 2006; Kemp et al., 2011). Land-use alterations change natural sedimentation processes, increasing fine sediment suspension and deposition (Waters, 1995), and the effects on aquatic ecosystems are extensively documented and generally undisputed. Increased inorganic sediment loading changes the physical habitat of aquatic ecosystems by altering water pH (Lemly, 1982), water clarity, and decreasing oxygen flow through substrate by in-filling of interstitial space between larger substrate materials (Beschta and Jackson, 1979). Such changes to the abiotic aspects of aquatic ecosystems have great implication for the biotic: suspended sediment decreases photosynthetic activity by blocking light (Newcombe and Macdonald, 1991; Madsen et al., 2001), limiting primary production, and can limit feeding at higher trophic levels (Zamor and Grossman, 2007), increase foraging demands (Gregory and Northcote, 1993; Utne-Palm, 2004), physically harm sensitive oxygen exchange tissue (Redding et al., 1987; Lake and Hinch, 1999) and alter filter feeding behaviour (Rundle and Hellenthal, 2000) in aquatic organisms, potentially increasing metabolic demands (du Preez et al., 1996). Once settled, deposited sediments can cause substrate to be unsuitable for spawning (Chapman, 1988), directly smother eggs (Greig et al., 2007), prevent emergence of fry (Jennings et al., 2010), and bury food sources for invertebrate species (Suren, 2005; Kent and Stelzer, 2008).

The amount of sediment transport increases dramatically during construction compared to pre- and post-construction levels (Cleveland and Fashokun, 2006). To minimize the movement of sediment off site, regulatory agencies require the use of sediment mitigation techniques during construction activities (Kerr, 1995; Harbor, 1999). Although there are a variety of sediment control measures and tools, silt fences are among the most commonly used. These geotextile systems consist of semi-permeable fabrics and/or composites that filter sediment. Silt fences are widely used because of their low cost, versatile application, and ease of installation and removal (Robichaud et al., 2001). Fences can also be easily customized in design and installation to best suit the conditions of the site, such as changes in type and placement of support stakes and type of geotextile used (Kouwen, 1990; USEPA, 2012). For any sediment control devices deployed, proper design, installation, and maintenance is key to their efficiency (Kouwen, 1990; Barrett et al., 1998; Gogo-Abide and Chopra, 2013).

Here we argue that silt control fences, despite being widely adopted, have failed to prevent silt from entering aquatic ecosystems. We submit that the science behind silt control fences is limited and that there are few rigorous assessments to identify the extent to which such controls actually reduce aquatic sediment mobilization. We also discuss the role of improper use and maintenance of silt control fences and limited compliance monitoring on silt mobilization. Given the manifold negative effects of silt on aquatic systems and our ability to pinpoint the source (i.e., largely point source – or at least identifiable), it would seem that we should be better able to address this pressing issue contributing to the degradation of aquatic ecosystems around the globe. To that end, we identify a number of improvements needed to advance the science, technology and practice of silt control.

2. The science of silt control

As new materials and designs emerge, studies on the performance efficiencies of silt fence installation design and fabrics are crucial. Generally, laboratory testing consists of a flume in which a portion of geotextile is drawn across tightly and secured (e.g. Barrett et al., 1998; Keener et al., 2007) and samples are collected pre- and post-material to assess efficiency of sediment concentration removal and changes in turbidity. Flow through-rate – the amount of time for sediment-laden water to pass through the material – is also measured: prolonged retention leaves silt fences vulnerable to failure due to overtopping, undermining or sediment diversion (Harbor, 1999; Keener et al., 2007). Under laboratory conditions, studies often report high removal efficacies compared to field studies (Crebbin, 1988; Kouwen, 1990; Chapman et al., 2014). For example, Barrett et al. (1998) found that flow through was two orders of magnitude less than values reported by manufacturers due to clogging of pores in the materials. The way geotextiles are installed in test flumes prevents any overtopping or undermining of the material, meaning that any efficiency results are only applicable when fences are perfectly installed and maintained. Indeed discrepancies between laboratory and field tests have been indicated by paired study designs (Barrett et al., 1998).

More testing of silt fence sedimentation rates in field settings is vital to assess realized efficiencies of this widely applied mitigation

device. In applied settings, a number of contributing factors (soil type, particle size, precipitation, slope, vegetation type, etc.) results in data gathered at a particular site that must be extrapolated to other locations (Strecker et al., 2001). Further, studies may not report data vital for interpretation such as rainfall (Barrett et al., 1998) or have controls (Horner et al., 1990). Both sedimentation rates and silt fence integrity are directly affected by soil consistency (Sansone and Koerner, 1992), precipitation rates (Gogo-Abite and Chopra, 2013), UV exposure (Suits and Hsuan, 2003), and other environmental qualities that vary regionally and seasonally (Harbor, 1999; USEPA, 2012). Consequently, long-term field studies (i.e., prior to fence installation to long-after fence removal) of installed fences are critical. Further, inconsistent reporting of variables leaves interpretation difficult; studies may report changes in total suspended solids, turbidity, or total mass of sediments using a variety of measurement techniques. Overall, while perhaps present within industry, systematic testing of sediment fences in applied field studies has not been made available through peer review.

3. The practice of silt control

Sustainable development is the stated goal of many development projects and the construction phase is one of the most important phases to target to reduce human impacts and work towards sustainability (Hostetler, 2010). *In silico*, laboratory, and controlled field tests of silt fences may clearly demonstrate the ability of these materials to reduce sediment input into aquatic systems. In practice, however, scaling up from the computer or lab bench to large-scale, onsite applications of technology are rarely straight forward and few studies exist on the efficacy of silt fencing in real-world applications (Chapman et al., 2014). The goal of silt fencing is to limit erosion and prevent fine-sediment on human-disturbed land (e.g. construction sites) from entering lakes and rivers, until the land is re-vegetated and naturally stabilised. In order for sediment fencing to work there must be sufficient fencing, constructed of appropriate material, and properly installed. The United States Environmental Protection Agency lays out five criteria for effective silt fencing installation including: 1) proper placement of the fencing based on site contours; 2) sufficient amount of fencing without long runs that may cause excessive water pooling and overflow; 3) use of a heavy porous fabric; 4) metal posts driven to at least 0.6 m depth and spaced at appropriate intervals to support the fabric; and 5) tight soil compaction on both sides of the fence (USEPA, 2012). Although the majority of construction sites today employ some form of sediment fencing, at many sites the fencing is not effective due to improper design installation, or maintenance (USEPA, 2012).

Unfortunately, it does not take long when visiting most construction sites to note multiple failure points in silt fence installation and maintenance. Typical problems observed with silt fence installations include tearing, broken or bent support poles, insufficient fencing, uncompacted soil near the base, material piled on or against fencing, and vandalism (Fig. 1). These failures in the silt retention strategy likely reflect a lack of training on the importance, maintenance, and upkeep of silt fencing, and a lack of resources dedicated to the proper installation and continued maintenance of the fencing. It often appears that regular inspection and maintenance of silt fencing is not a high priority. This is most evident at sites where active construction has ceased but the ground remains susceptible to erosion and perimeter controls such as silt fencing are still required to prevent off-site movement of sediment and consequent damage to aquatic ecosystems. All too often it would appear that the practice of silt fencing is to "set it and forget it". In order to limit the impact of human activities on aquatic ecosystems and make best use of the time and money invested into erosion control by industry it is important that we have effective sediment control based on sound scientific research. Silt fencing needs to be more than window dressing.

4. Opportunities for improvement

To address what we regard as long-standing and persistent failure of sediment fences to control sediment inputs in freshwater ecosystems, we outline opportunities for improvement related to the science and practice of sediment control with a focus on sediment fences.

4.1. Generate credible science

As noted above, there is relatively little research that has been published on the science of silt fences and the work that has been done suffers from a number of issues. There is a dire need for credible science (Kaufman, 2000). We don't presume that we can identify all the necessary opportunities, but we do identify a number of priority questions and approaches. For example, a key research priority is to determine the factors that influence the ability of silt fences to effectively trap silt while enabling filtered water to pass. That research priority is superficially simple yet there are so many factors that can be manipulated such as soil types (and sediment feed rate), precipitation regimes (and flow rate), season, slope, level of site disturbance, fence installation method, type of fence material, depth of toe, type and spacing of support structures, time since installation, level of inspection and maintenance, among others. Also important is research on different strategies for removing fences (when their use is no longer required) and the sediment that they have captured and remediating the site (i.e., does one simply yank the fence and drive away?). From a conceptual perspective, there is a need for research that spans the laboratory (Barrett et al., 1998; Zech et al., 2009), field (both real construction sites and test plots; Faucette et al., 2005; Zech et al., 2009; Gogo-Abite and Champa, 2013) and *in silico* (modelling; Britton et al., 2001) realms to provide a comprehensive understanding.

Moreover, engineers, soil scientists, geographers, and biologists need to collaborate to conduct holistic, integrated research with a variety of relevant endpoints. When studies occur in the field they should extend beyond being observational where researchers simply travel from site to site to examine silt fence performance. Instead, experiments should be designed making use of a before-after-control-impact approach with adequate replication (see Conquest, 2000). Variables such as soil conditions, installation methods, fence materials, among others, should be systematically manipulated (or selected) to design experiments with the ability to identify causal relationships. Indeed, much of the existing literature is based on correlations (e.g., Paterson, 1994). We also call for researchers around the globe to collaborate to evaluate regional differences in silt fence performance. We recognize that the characteristics of a given stream and landscape as well as its biota will dictate the level of silt control needed. Clearly not all silt fence materials are created equal so replication in the face of different soil characteristics and water flows seems prudent. The advent of various sensors, automated water samplers and digital cameras (video or still) provide great opportunities to document fence performance through time and thus across various precipitation events, seasons (including winter) and time since fence installation. To improve understanding of maintenance regimes and the culture surrounding sediment control within industry, there is a need for social science studies directed towards inspectors and those that install silt fences. Use of non-obtrusive cameras (Struthers et al. in press; notwithstanding privacy issues) could provide fascinating



Fig. 1. Common problems with silt fence installation and maintenance observed in Ottawa, Ontario, Canada. All of these problems can lead to unnecessary silt deposition into aquatic ecosystems. a) Fencing that has fallen over with broken wooden support poles, b) Sediment piled upon and over silt fencing, c) Wooden support poles removed causing fence to collapse, d) Insufficient fencing, e and f) Loose and ripped fencing.

insight into silt fence monitoring and maintenance.

4.2. Train, educate, and empower site crews

As noted above, silt fences often fail entirely due to improper installation or maintenance. There are clearly a number of opportunities for improvement in this regard. For example, there is a need for the development of training courses for developers and contractors (i.e., those that hold the shovels) to learn about proper installation and maintenance. There are training courses available but they tend to be focused on environmental consultant and compliance monitoring staff (e.g., Florida Stormwater, Erosion, and Sediment Control Inspector Training and Certification Program; http://www.dep.state.fl.us/water/nonpoint/erosion.htm) rather than crews that are on-site daily and would be doing the physical installation and maintenance. It can be effective to show examples (with photographs) of both proper installation as well as failed examples with reasons for their failures rather than only showing technical engineering diagrams or line drawings. Video footage showing silt fence performance during precipitation events could also help site crews to understand the forces that act on the silt fences. Given differences in soil/site conditions, slope and precipitation among sites and regions, generic training materials should be coupled with regionally-relevant content. We found some

examples of "guidelines" or "best management practices" developed by natural resource management agencies but they tended to be written as legal edicts rather than providing meaningful "how to" advice (e.g., Manitoba, https://www.gov.mb.ca/mit/mateng/apl/152_1.pdf; Bellevue, Washington, http://www.ci.bellevue.wa.us/pdf/Development%20Services/CG_DevStds2010_BMPC233.pdf). There is also an attempt to generate a global "standard" for silt fence installation (see http://www.astm.org/Standards/D6462.htm) but it lacks regional context. We did identify some progressive training courses (e.g., Nova Scotia Transport Ministry; http://novascotia.ca/tran/works/enviroservices/ESCCourseMaterial/2_ESC%20Principles%202013.pdf) where there was emphasis not only on silt control but on minimizing erosion. Included in training should be educational materials that emphasize the negative consequences of silt on aquatic systems in an attempt to empower site crews to actively monitor silt fences and fix them when needed – a concept known to change learner behaviour (Hungerford and Volk, 1990; Steg and Vlek, 2009). Such empowerment should lead to more consistent silt fence function rather than only fixing fences when problems are identified during compliance monitoring (if such monitoring occurs).

4.3. Conduct meaningful compliance monitoring

In contemporary society where regulations and policy are enacted to protect the environment, compliance monitoring is essential (Shimshack and Ward, 2008; Gray and Shimshack, 2011). There is little research or information on the extent to which compliance monitoring related to silt control occurs. Burby and Paterson (1993) revealed that in one study developers failed to install 27% of the control measures specified in the approved plans while in a another (Loew et al., 2004) approved silt fences at construction sites were commonly missing or installed improperly. Clearly compliance monitoring is needed for silt fences. Moreover, if compliance monitoring is to occur it is worthwhile to do so during precipitation events to determine if the silt fences are performing as intended. Compliance monitoring does not necessarily have to be punitive. Rather, it should be viewed as an opportunity for inspectors to educate site staff and empower them to conduct their own monitoring. Indeed, in the long-term it would be desirable if such compliance monitoring efforts were somewhat redundant with monitoring conducted by trained and empowered on-site workers that deal with the installation and management of the silt fences.

4.4. Build the evidence base

There is a growing movement towards evidence-based conservation and environmental management (Sutherland et al., 2004). Rather than relying on "gut feelings" or "experience" to determine the best conservation intervention (which is common in environmental management; Pullin et al., 2004), an evidence-based approach relies on rigorous evaluation of diverse evidence sources and synthesis (in the form of a systematic review; Pullin and Stewart, 2006) to determine the best evidence-based course of action. From meta-analyses it is clear that keeping sediment out of aquatic systems should be a priority (e.g., Chapman et al., 2014). However, the evidence-base supporting the best means of achieving that target is limited. Silt fences remain a core (if not the primary) tool in silt control despite the fact that scientific evaluations of their effectiveness or the factors that influence effectiveness are limited. There is a paucity of peer reviewed literature on the topic – so much so that a recent meta-analysis (i.e., Chapman et al., 2014) was unable to amass sufficient data from the literature to evaluate effectiveness of silt fences. There is a need to publish research in credible and accessible outlets rather than obscure technical reports that are difficult to obtain and are not subject to peer review. We also suspect that practitioners serve as a rich source of knowledge if their experiences and perspectives could be extracted and synthesized. Social science studies could be used to identify research priorities (e.g., Brown et al., 2010) for silt controls as well as identifying aspects of silt fences that are regarded as particularly effective, which would help address the science-policy gap related to sediment and erosion control (Kaufman, 2000). There is also room for case reports from practitioners that summarize successes and failures. In this context, failures are particularly important as there is likely a "file drawer" effect (Rosenthal, 1979) whereby there is a tendency to not publish failures which could leave the impression that silt fences are more effective than they are. Perhaps the paucity of peer reviewed literature on silt fences (whether success story or failures) is a reflection of the broad failure of silt fences? We submit at this point the evidence-base is sufficiently shallow to know whether silt fences are of any benefit in real world applications. We hope that this paper will stimulate research (with appropriate controls and replication) that will enable proper meta-analysis in the context of a systematic review in the coming years.

4.5. Beyond the fence

Here we have focused on silt fences given that they are arguably the most common approach to sediment control, which is not surprising given that they are a relatively simple and inexpensive technology. Nonetheless, they represent just one of the possible sediment mitigation tools available. There is relatively little work on the comparative effectiveness of different sediment mitigation strategies so it is not possible to provide specific direction here other than to note the need for comparative studies. There are a growing range of materials (i.e., geotextiles) that can be used for fencing that have been tested (e.g., Barrett et al., 1998; Risse et al., 2008; Gogo-Abite and Chopra, 2013), however, equally important may be new means of installation that will require less maintenance. There would also seem to be a need for more direct interaction between practitioners that install and maintain silt fences and those that design such tools. It is unclear the extent to which the various industry partners seek input from practitioners to refine and enhance the effectiveness of sediment controls. It is difficult to know exactly where the industry stands in terms of new innovations but a search of patents reveals developments related to installation (Whitener, 2000; Wheeler et al., 2000; Vreeland, 2004). We also encourage efforts to develop more combined approaches that use multiple strategies simultaneously to minimize sediment mobilization. Some of the other strategies that appear to be equally "simple" in design and low in cost are compost filter berms (Tyler, 2001) and erosion control rolls (Allard, 2003). What is clear is that current fences, partly due to improper installation and insufficient maintenance, do not appear to be overly effective at preventing sediment from entering freshwater systems so the status quo must change. Looking "beyond the fence" would seem prudent should the challenges identified here not be surmountable without combining tools.

5. Conclusion

In the face of development activities, regulatory bodies have enacted policies (see Mertes, 1989; Alsharif, 2010) in an attempt to reduce the input of sediment into aquatic systems given that it has been long (see Ellis, 1936) and widely accepted that such inputs are deleterious to environmental quality and aquatic biodiversity (e.g., Ryan, 1991; Wood and Armitage, 1997; Bilotta and Brazier, 2008;

Chapman et al., 2014). Accompanying such policies is a suite of tools (or best practices) that are available to practitioners known as silt or sediment controls. By far the most common and visible is the silt fence (Kouwen, 1990). One doesn't have to venture far in developed countries to see them deployed adjacent to most construction activities that have the potential to mobilize sediment. Although presumably used with good intentions, there is surprisingly little research that evaluates the effectiveness of silt fences and the factors that modulate success when properly installed and maintained. What constitutes "proper" installation and maintenance is unclear, especially given regional- and site-level variation in precipitation, slope, soil characteristics, etc. We presented a candid critique of silt fences. Our goal was not to dismiss silt fences as a potentially useful tool. Instead, we question how they are being used and call for better science as well as better training for those that install, maintain and inspect such devices, as well as more rigorous compliance monitoring. From our perspective, the jury is still out regarding the effectiveness of silt fences with many opportunities (as we outlined here) to improve the science and practice of sediment control via silt fences. Quite simply, with insufficient literature/data to conduct a systematic review and meta-analysis on the utility of silt fences for protecting aquatic ecosystems from sedimentation, their widespread use is not consistent with an evidence-based approach to environmental management (Sutherland et al., 2004).

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APPENDIX:

SILT FENCES EPA

EPA United States Environmental Protection Agency

Stormwater Best Management Practice

Silt Fences

NPDES Permits for Clean Water

Minimum Measure

Construction Site Stormwater Runoff Control

Subcategory

Sediment Control

Purpose and Description



Figure 1. *Silt fence retaining sediment*

The purpose of a silt fence is to retain the soil on disturbed land (Figure 1), ·ch as a construction site, until the activities disturbing the land are sufficiently completed to allow revegetation and permanent soil stabilization to begin. Keeping the soil on a construction site, rather than letting it be washed off into natural water bodies (e.g., streams, rivers, ponds, lakes, estuaries) prevents the degradation of aquatic habitats and siltation of harbor channels. And not letting soil wash off onto roads, which readily transport it to storm sewers, avoids having sewers clogged with sediment. The cost of installing silt fences on a watershed's construction sites is considerably less than the costs associated with losing aquatic species, dredging navigation channels, and cleaning sediment out of municipal storm sewers.

silt fence is a temporary sediment barrier made of porous fabric. It's held up by wooden or metal posts driven into the ground, so it's inexpensive and relatively easy to remove. The fabric ponds sediment-laden stormwater runoff, causing sediment to be retained by the settling processes. A single 100 foot (ft) run of silt fence may hold 50 tons of sediment in place. Most construction sites today do have silt fences. But many do not work effectively because they are not well designed, installed, or maintained. The focus of this fact sheet is—how to make silt fences work.

Design

The three principal aspects of silt fence design are: proper placement of fencing, adequate amount of fencing, and appropriate materials.

Proper Placement of Fencing

Placement is important because where a fence starts, runs, and ends is critical to its effectiveness. Improper placement can make the fence a complete waste of money. Analyze the construction site's contours to determine the proper placement. Segment the site into manageable sediment storage areas for using multiple silt fence runs. The drainage area above any fence should usually not exceed a quarter of an acre. Water flowing over the top of a fence during a normal rainfall indicates the drainage area is too large. An equation for calculating the maximum drainage area length above a silt fence, measured perpendicular to the fence, is given in Fifield, 2011. Avoid long runs of silt fence because they concentrate the water in a small area where it will easily overflow the fence. The lowest point of the fence in Figure 4 is indicated by a red arrow. Water is directed to this low point by both long runs of fence on either side of the arrow. Most of the water overflows the fence at this low point and little sediment is trapped for such a long fence.



Figure 2. *Create manageable sediment storage areas*



Figure 3. *Water should not flow over the filter fabric during a normal rainfall*



Figure 4. *Avoid long runs of silt fence*

Use J-hooks as shown in Figures 5 and 6, which have ends turning up the slope to break up long fence runs and provide multiple storage areas that work like mini-retention areas. If the fence doesn't create a ponding condition, it will not work well. The silt fence in Figure 7 doesn't pond water or retain sediment. Stormwater will run around the fence carrying sediment to the street, which will transport the water and its sediment load to the storm sewer inlet.



Figure 5. *Use J-hook fences to break up long fence runs*

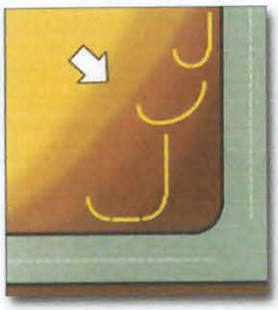


Figure 6. *J-hook silt fences provide multiple storage areas*



Figure 7. *This silt fence doesn't work*

Water flowing around the ends of a silt fence will cause additional erosion and defeat its purpose. The bottom of each end of the fence should be higher than the top of the middle of the fence (Figure 8). This insures that during an unusually heavy rain, water will flow over the top rather than around either end of the fence. Only fine suspended material will spill over the top, which is not as harmful as having erosion at the ends. When there is a long steep slope, install one fence near the head of the slope to reduce the volume and velocity of water flowing down the slope, and another fence 6–10 ft from the toe of the slope to create a sediment storage area near the bottom. A common misconception is that you only have to worry about water running off steep slopes. However, steep slopes may have a relatively small water collection area. The total drainage area



Figure 8. *Proper installation, bottom of both ends are above the top of the middle*



Figure 9. *Poor installation, water can flow around the ends causing additional erosion*

of a gentle slope, if large (Figure 10), can be more important than its slope in determining sediment loss. A silt fence should not be placed in a channel with continuous flow (channels in Figures 8 and 9 don't have a continuous flow), nor across a narrow or steep-sided channel. But when necessary a silt fence can be placed parallel to the channel to retain sediment before it enters the watercourse.



Figure 10. *Gentle slopes may require a silt fence*

Paved streets are major conduits of stormwater and silt, and they drain to storm sewer inlets. The best solution is to retain as much sediment as possible before it reaches paved surfaces. Install a silt fence at the inlet side of a storm sewer or culvert, rather than at the discharge where there is greater velocity and less storage area. Streets cut in the grade, but not yet paved, are also prime erosion conduits. If the streets are not going to be paved right away, they need a containment barrier such as a silt fence. Finally as a construction site's dynamics change, the silt fence layout should be adjusted when necessary to maintain its effectiveness.

Designers and contractors should also consider diverting sediment-laden runoff water to a sediment detention pond. If the site can provide a large enough area, this is usually the most effective and economical best management practice for retaining sediments. Silt fences are needed when there is insufficient space for a detention pond or when roads and other structures are in the way.

Adequate Amount of Fencing

The amount of fencing means the total linear length of the silt fencing runs on the construction site. A reasonable rule-of-thumb for the proper amount of silt fence is—100 ft of silt fence per 10,000 square foot (sq ft) of disturbed area. Soil type, slope, slope length, rainfall, and site configuration are all important elements in determining the adequate silt fence protection for a site, and to what extent it fits the 100 ft per 10,000 sq ft rule-of-thumb. If the amount of fencing provides the volume of runoff storage needed, then over-flowing the silt fence runs will be minimized. This is the basic test; if fences are over-flowing after a moderate rainfall event, the amount of fencing probably needs to be increased to avoid undercutting, washouts, and fence failures.

Appropriate Materials

There are different types of porous fabrics available, e.g., woven, non-woven, mono-filament, but all types tend to clog rapidly and don't provide lasting filtration. The support posts and installation method are more important than the fabric type for overall sediment retention. However, a lightweight fabric tends to tear where it is attached to the posts. Posts must hold the fabric up and support the horizontal load of retained water and sediment. Hardwood posts (2" x 2") are potentially strong enough to support the loads, but are difficult to drive into the ground more than 6–8". To hold 2 ft of sediment and water, the posts should be driven 2 ft into the ground. Steel posts are best because they can be driven into compacted soil to a depth of 2 ft. The support posts should be spaced 3–4 ft apart where water may run over the top of the fence, 5 ft in most other areas, and 6–7 ft where there isn't a considerable horizontal load. Improper post depth and spacing is often the cause of sagging fabric and falling posts. Some authorities believe a more robust wire or chain link supported silt fence is needed withstand heavy rain events. However, this may double the cost of a silt fence installation and entails disposing of more material in a landfill when the fence is removed. Installing silt fencing having five interacting features: (1) proper placement based on the site's contours, (2) adequate amount of fencing without long runs, (3) heavy porous filter fabric, (4) metal posts with proper depth and spacing, and (5) tight soil compaction on both sides of the silt fence will usually obviate the need for wire or chain link reinforced fencing. Prefabricated silt fences, e.g., fabric attached to wooden posts in a 100 ft package, doesn't provide for posting after the ground is compacted or ow variable post spacing.



Figure 11. *Chain link supported silt fence*

Silt Fence Installation

Two commonly used approaches for installing silt fences are the static slicing method and the trenching method.

Static Slicing Method

The static slicing machine pulls a narrow blade through the ground to create a slit 12" deep, and simultaneously inserts the silt fence fabric into this slit behind the blade. The blade is designed to slightly disrupt soil upward next to the slit and to minimize horizontal compaction, thereby creating an optimum condition for compacting the soil vertically on both sides of the fabric. Compaction is achieved by rolling a tractor wheel along both sides of the slit in the ground 2 to 4 times to achieve nearly the same or greater compaction as the original undisturbed soil. This vertical compaction reduces the air spaces between soil particles, which minimizes infiltration. Without this compaction infiltration can saturate the soil, and water may find a pathway under the fence. When a silt fence is holding back several tons of accumulated water and sediment, it needs to be supported by posts that are driven 2 ft into well-compacted soil. Driving in the posts and attaching the fabric to them completes the installation.



Figure 12. *Static slicing machine*



Figure 13. *Tractor wheel compacting the soil*

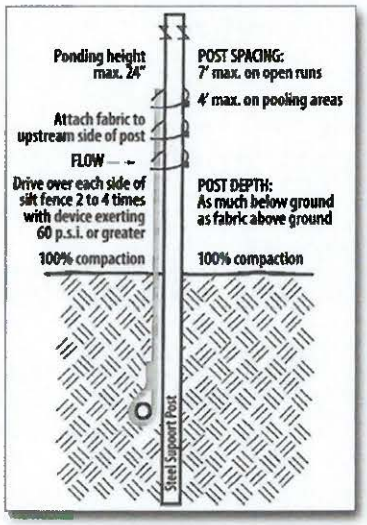


Figure 14. *Silt fence installation using the static slicing method*

Trenching Method

Trenching machines have been used for over twenty-five years to dig a trench for burying part of the filter fabric underground. Usually the trench is about 6" wide with a 6" excavation. Its walls are often more curved than vertical, so they don't provide as much support for the posts and fabric. Turning the trencher is necessary to maneuver around obstacles, follow terrain contours or property lines, and install upturns or J-hooks. But trenchers



Figure 15. *Trenchers make a wider excavation at turns*



Figure 16. *Poor compaction has resulted in infiltration and water flowing under this silt fence causing retained sediment washout*

can't turn without making a wider excavation, and this results in poorer soil compaction, which allows infiltration along the underground portion of the fence. This infiltration leads to water seeking pathways under the fence, which causes subsequent soil erosion and retained sediment washout under the fence. The white line on the fence in Figure 16 and red arrow both mark the previous sediment level before the washout. Post setting and fabric installation often precede compaction, which make effective compaction more difficult to achieve. EPA supported independent technology evaluation (ASCE 2001), which compared three progressively better variations of the trenching method with the static slicing method. The static slicing method performed better than the two lower performance levels of the trenching method, and was as good or better than the trenching method's highest performance level. The best trenching method typically required nearly triple the time and effort to achieve results comparable to the static slicing method.

Proper Attachment

Regardless of the installation method, proper attachment of the fabric to the posts is critical to combining the strength of the fabric and support posts into a unified structure. It must be able to support 24" of sediment and water. For steel posts use three plastic ties per post (50 lb test strength), located in the top 8" of the fabric, with each tie hung on a post nipple, placed diagonally to attach as many vertical and horizontal threads as possible. For wooden posts use several staples per post, with a od lath to overlay the fabric.

Perimeter Silt Fences

When silt fences are placed around the perimeter of a stock pile or a construction site, the conventional silt fence design and materials discussed previously may not be sufficient.

Stock pile example. A stock pile of dirt and large rocks is shown in Figures 17 and 18 with a silt fence protecting a portion of its perimeter. Rocks that roll down the pile would likely damage a conventional silt fence. The bottom of the porous fabric is held firmly against both the ground and base of precast concrete, highway, barriers by light-colored stones. An alternative installation would be having the concrete barriers rest directly on the bottom edge of the filter fabric, which would extend under the barriers about 10", so the barriers' weight will press the fabric against the ground to prevent washout. Water passing through the silt fence (red arrow in Figure 18) flows to a storm sewer culvert inlet, which is surrounded by a fabric silt fence (yellow arrows in Figures 17 and 18) that reduces the runoff's velocity and allows settling before the water is discharged to a creek.



Figure 17. *Back of silt fence on part of the stock pile's perimeter*



Figure 18. *Front of silt fence on part of stock pile's perimeter*

Bridge abutment example. During the construction of a bridge over a river between two lakes, an excavation on the river bank was needed to pour footings for the bridge abutment. The silt fence along the excavation's perimeter, composed of concrete highway barriers with orange filter fabric, was designed to prevent stormwater from washing excavated spoil into the river and to fend off the river during high flows. A portion of the orange filter fabric that has blown away from the concrete barriers shows the need to overlap and reinforce the joints where two sections of filter fabric are attached.



Figure 19. *Silt fence for bridge abutment excavation*

Highway example. Because of the proximity of a construction site to a highway, a concrete barrier was required by Minnesota's DOT to protect the highway and an underground fiber optic cable next to the highway from construction activities. The concrete barrier was used to support a silt fence along the perimeter of a large amount of dirt that was stock piled before being used for fill at a different location.



Figure 20. *Silt fence protecting a highway and underground fiber optics cable*



Figure 21. *Silt fence protecting a lake shore*

Lake shore example. The lake's shoreline is being restored with plant plugs and seeded with native plant species. A plywood, perimeter, silt fence is used to trap sediment from a construction site on the right-side of the picture, protect the lake shore from boat-wake erosion, and to prevent geese from eating the seeds and young plants. This fencing will be removed when 70% vegetative cover is achieved.

Inspection and Maintenance



Figure 22. *A silt fence full of sediment that needs maintenance*

Silt fences should be inspected routinely and after runoff events to determine whether they need maintenance because they are full (Figure 22) or damaged by construction equipment. The ASTM silt fence specification (ASTM 2003) recommends removing sediment deposits from behind the fence when they reach half the height of the fence or installing a second fence. However, there are several problems associated with cleaning out silt fences. Once the fabric is clogged with sediment, it can no longer drain slowly and function as originally designed. The result is normally a low volume sediment basin because the cleaning process doesn't unclog the fabric. The soil is normally very wet behind a silt fence, inhibiting the use of equipment needed to move it. A back hoe is commonly used, but, if the sediment is removed, what is to be done with it during construction? Another solution is to leave the sediment in place where it is stable and build a new silt fence above or below it to collect additional sediment as shown in Figure 23. The proper maintenance may be site specific, e.g. small construction sites might not have sufficient space for another silt fence. Adequate access to the sediment control devices should be provided so inspections and maintenance can be performed.



Figure 23. *New silt fence below the old fence*

Permanent Soil Stabilization

When the land disturbing activities are sufficiently completed to allow permanent soil stabilization on the site, the silt fences and sediment basins are removed. The fabric and damaged posts go to the landfill. Steel posts and some of the wooden posts can be reused. Then the sediment is spread over the site to provide fertile soil, and the area can be seeded and mulched to support revegetation.

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Photograph Credits

Figures 1–10, 12–16, 22, 23. *Thomas Carpenter, CPESC, Carpenter Erosion Control*

Figure 11. *Pete Schumann, Fairfax County, Virginia, Department of Public Works and Environmental Services*

Figure 17–21. *Dwayne Stenlund, CPESC, Minnesota Department of Transportation*

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FAILURE TO ADDRESS MODELIGO PWS

In their EIAR the Applicant has failed to mention – and therefore to address – the Modeligo Public Water Supply (PWS) station, which is located within Section 1 of their Route:

Appendix 2-5: Grid Connection Construction Methodology
Section 1: Wind Farm Substation joining to L-5056 from Newtown to Scart (Hely) junction with R-671

2.3.1 Route Section 1 Summary (Chainage 0 m to 3,200 m)
This grid connection route begins within the proposed Scart Mountain Wind Farm 110 kV Substation and exits under the fence following an existing Coillte forestry track to join the L-5056 local road. The grid connection route follows the L-5056 from Newtown to the R-671 junction in Scart (Hely).

Features:

- *No watercourses are encountered on this section.*
- *The route crosses through the zone of notification for National Monuments Service (NMS) Sites and Monument Record (SMR) number WA022-011----. Please refer to the archaeological assessments which accompany this report for full details.*
- *Joint Bay 01 (JB-01) will be located approx. at chainage mark 640 m on this section. It is proposed that this Joint Bay will be installed within the L-5056 local road.*
- *Joint Bay 02 (JB-02) will be located approx. at chainage mark 1400 m on this section. It is proposed that this Joint Bay will be installed within the L-5056 local road.*
- *Joint Bay 03 (JB-03) will be located approx. at chainage mark 2170 m on this section. It is proposed that this Joint Bay will be installed within the L-5056 local road.*
- *Joint Bay 04 (JB-05) will be located approx. at chainage mark 2900 m on this section. It is proposed that this Joint Bay will be installed within the L-5056 local road.*

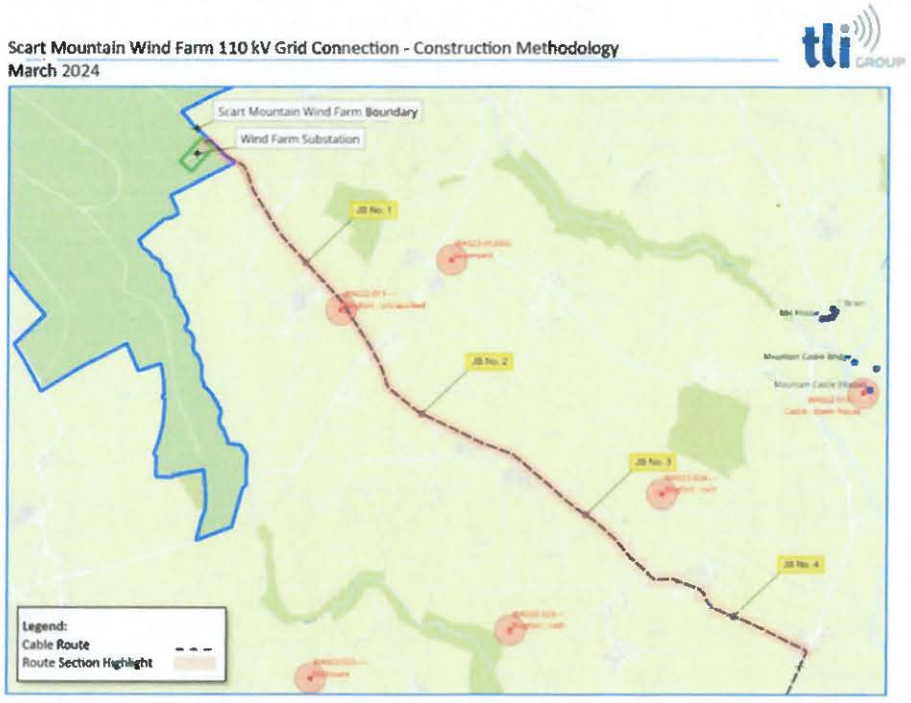


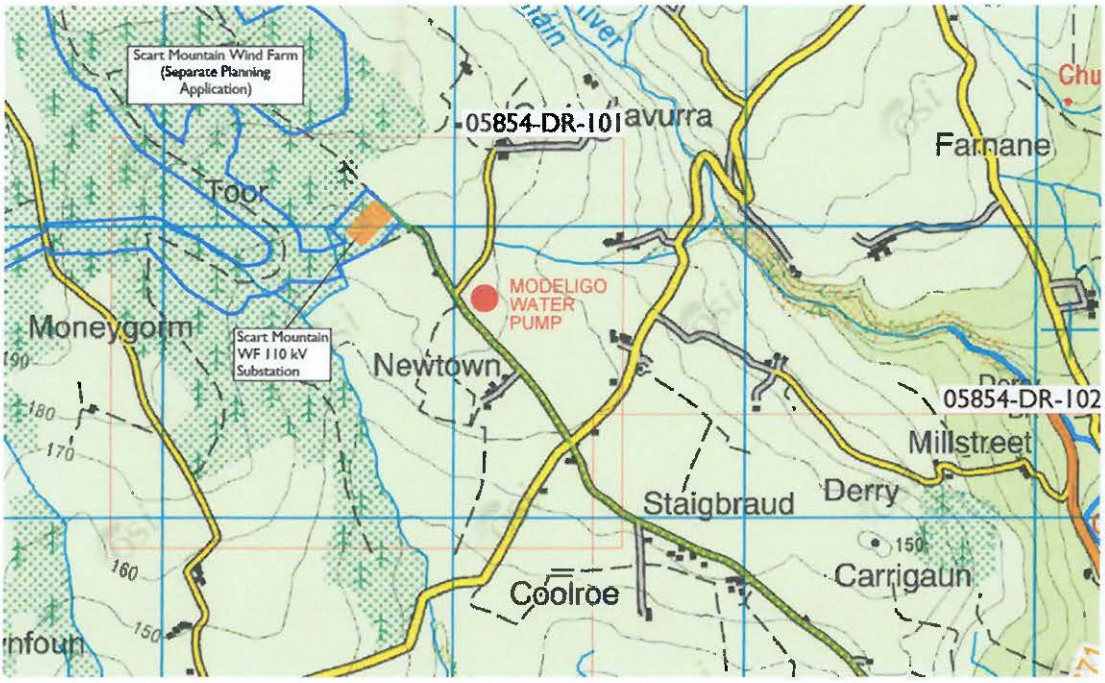
Figure 2.2: Route Section 1 Location Map

Source: Appendix 2-5: Grid Connection Construction Methodology

As the Applicant has chosen a map that does not include the Modeligo Water Station in it, we submit a screenshot from Google Maps showing its location on the proposed GCR.



And added the Modeligo PWS onto the Applicant's own map of the proposed Grid Connection Route:



We also draw to the Commission's attention that the Applicant has ignored – and therefore failed to address – the points raised in Uisce Eireann's Response to EIA Scoping Request (dated 30 January 2023) – some of which are added here:

Where the development proposal has the potential to impact an Uisce Éireann Drinking Water Source(s), the applicant shall provide details of measures to be taken to ensure that there will be no negative impact to Uisce Éireann's Drinking Water Source(s) during the construction and operational phases of the development. Hydrological / hydrogeological pathways between the applicant's site and receiving waters should be identified as part of the report.

Mitigations should be proposed for any potential negative impacts on any water source(s) which may be in proximity and included in the environmental management plan and incident response.

Any and all potential impacts on the nearby reservoir as public water supply water source(s) are assessed, including any impact on hydrogeology and any groundwater/ surface water interactions

Any physical impact on Uisce Éireann assets – reservoir, drinking water source, treatment works, pipes, pumping stations, discharges outfalls etc. including any relocation of assets.

When considering a development proposal, the applicant is advised to determine the location of public water services assets, possible connection points from the applicant's site / lands to the public network and any drinking water abstraction catchments to ensure these are included and fully assessed in any pre-planning proposals. Details, where known, can be obtained by emailing an Ordnance Survey map identifying the proposed location of the applicant's intended development to datarequests@water.ie

And Uisce Eireann's requests made in their Observation dated 28 February 2025 on the proposed Scart Mountain Wind Farm (case ref: 321522), which this grid connection application is linked to (we refer the Commission to see the full letter in the Scart Mountain Wind Farm documentation and our **Appendix: Scart Mountain Wind Farm Observations and Scoping Responses**):

The applicant submits that a separate application to obtain permission for the development of associated transmission infrastructure which consists of a 110kV grid connection to facilitate the export of power from the wind farm will be submitted to An Bord Pleanala.

It is noted that the proposed cabling infrastructure will likely interact with existing Uisce Eireann assets that are located within the road reserves. The applicant is required to identify, survey and map the exact location of Uisce Eireann assets relative to their proposed works to allow Uisce Eireann to determine protection measures and/or if diversions are required. The applicant must submit details to Uisce Eireann for assessment of feasibility and have written confirmation from Uisce Eireann prior to the lodgement of the future planning application.

Impact to Public Water Supply
Uisce Eireann applies a precautionary approach to development proposals of this nature and / or any development proposals that may impact public drinking water sources. Protection of drinking water sources from the potential adverse impacts of new development is a priority for Uisce Eireann.

Regarding groundwater sources, there are several groundwater abstractions / Zones of Contribution located in close proximity to this windfarm development which include:
• Modeligo PWS (serves population 192): Proposed substation to the south of the proposed development is located within the Zone of Contribution (ZOC) for the Modeligo PWS, located approx. 400m from the borehole supply.
[…]
• Ballinamuck Water Supply (Dungarvan PWS - serves a population of 12,034): Grid connection route - traverse the ZOC for Ballinamuck Water Supply (Dungarvan PWS)

A review of Chapter 9 Hydrology & Hydrogeology of the EIAR submitted has identified four of the public water drinking supplies in the vicinity of the proposed windfarm. ***The EIAR however does not consider the potential effects of the proposed development on the groundwater quality of the Modeligo PWS or the Bawnfoun / Moores Well PWS. The development is within the ZOCs for these supplies and should be considered in the EIAR****. The potential risk to these supplies would be very low, however* ***the pre-mitigation effects to ground water quality should be considered.***

Uisce Eireann requests that the following information is submitted:
1. The Modeligo Public Water Supply (PWS) and the Bawnfoun / Moores Well PWS should be identified and assessed within the EIAR, in Section 9.4.4 Potential Significant Effects and the potential pre-mitigation effects to groundwater quality should be outlined within the report.
[highlighted for emphasis]

Surely it is not possible that – with the above, and in combination with two Observations provided against the proposed Scart Mountain Wind Farm (see below) – the Applicant has 'overlooked' this important water supply source. Therefore, why have they ignored it? And why have they ignored the requests made by Uisce Eireann?

Modeligo Community Development Group: *…200 public water supplied customers, from the Modeligo and surrounding area, will be negatively affected, from Uisce Eireann's groundwater source pump, which is positioned just 700 metres from one of the 15 proposed wind turbines surrounding it.*

Modeligo National School: *(i)We are concerned about the possible effects that digging and excavation will have on our water supply. The local County Council water supply comes from a borehole well situated 270 metres from the entrance to the wind farm site at Newtown. Ground water from Scartmountain supplies the well, which then supplies 188 customers and 13 commercial customers, of which our school is one.*

The Applicant's failure to address the following requests from Uisce Eireann is a serious omission and presents large lacunae in the GCR Application.

- *required to identify, survey and map the exact location of Uisce Eireann assets relative to their proposed works to allow Uisce Eireann to determine protection measures and/or if diversions are required.*
- *must submit details to Uisce Eireann for assessment of feasibility and have written confirmation from Uisce Eireann prior to the lodgement of the future planning application.*
- *must […] have written confirmation from Uisce Eireann prior to the lodgement of the future planning application.*
- *the pre-mitigation effects to ground water quality should be considered.*

- *Uisce Eireann requests that the following information is submitted: The Modeligo Public Water Supply (PWS) and the Bawnfoun / Moores Well PWS should be identified and assessed within the EIAR, in Section 9.4.4 Potential Significant Effects and the potential pre-mitigation effects to groundwater quality should be outlined within the report.*

Although we do not believe it is right, fair or just that the Applicant should be allowed to provide additional information after the submission of their planning application (this should have been done pre-submission, and also does not afford the public to comment on it afterwards), we respectfully ask the Commission to ensure that this is addressed with Uisce Eireann before a decision is made.

TRAFFIC

KEY POINT SUMMARY

The information given in the Applicant's EIAR Chapter 16: Traffic & Transportation is lacking in many areas, particularly, though not limited to, the following points:

- The crossing of the protected waterways (Finisk River, Bailykerin Middle Stream, Scart Stream & Colligan River) cannot guarantee that there will be no adverse effects to the Blackwater SAC and Dungarvan Harbour SPA;
- The drawings provided of the proposed Grid Connection Route (GCR) are incomplete/incorrect, and don't give definitive locations of the Colligan River crossing, or consent to use private land;
- Threat to Modeligo Water Supply;
- Protected Structures and Heritage Sites on the GCR have not been properly assessed, only listed;
- Local Roads do not have the capacity to cope with the works involved;
- Road Safety, particularly for school children in Modeligo;
- No Diversion Routes/Options, or temporary speed limits, so delays can't be assessed
- No traffic surveys were carried out, therefore there are no figures of existing traffic or speed assessments for the GCR;
- The Cumulative Effect of other projects has incorrectly been dismissed;
- Flood Risk.

RIVER CROSSINGS

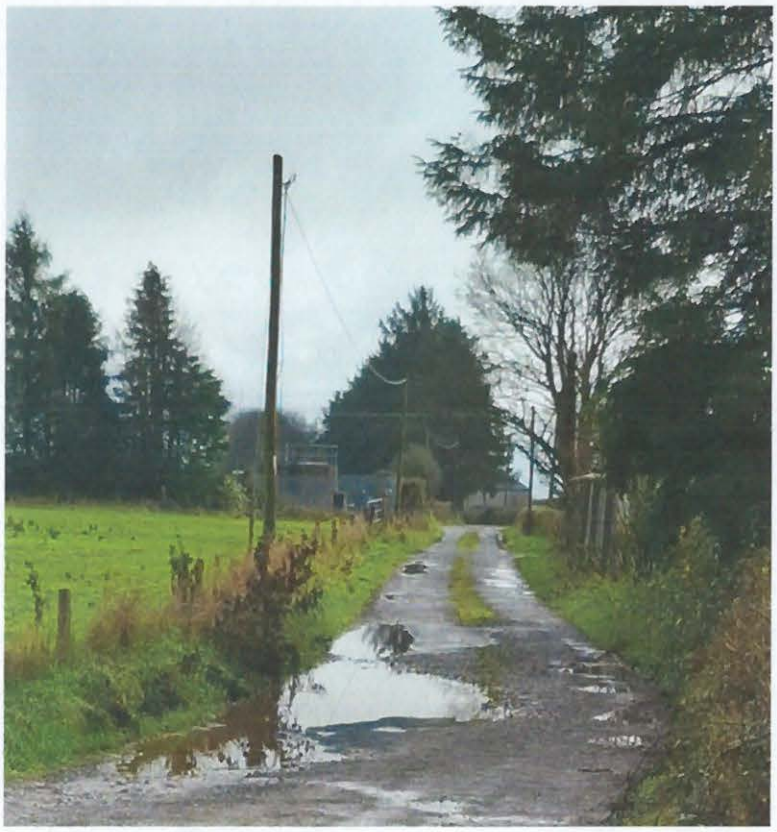
The fact that the Applicant's environmental assessment for the Scart Mountain GCR is insufficient, particularly regarding Horizontal Directional Drilling (HDD) at the Colligan River and Finisk River, is fully assessed in our **Chapter 4: Colligan River & Finisk River Crossings** within this Observation.

Essential ground, habitat and species investigations were not carried out, and the Applicant admits these will only occur later (should permission be granted), leaving significant scientific uncertainty.

MODELIGO PUBLIC WATER SUPPLY STATION

The Applicant's EIAR fails to mention or address the Modeligo Public Water Supply (PWS) station, which is located within Section 1 of their proposed GCR: – Wind farm substation joining to L-5056 (EIAR Appendix 2-5: Grid Connection Construction Methodology).

The photograph below (taken by a member of the Knockmealdown Protection Group) shows the roadway from the proposed Scart Mountain Wind Farm site at the start of the GCR from the substation; it shows the PWS station and how close the GCR would be. (What is also worthy of note is that this photograph was taken two days after rainfall, in November 2025.)



The failure to address the Modeligo PWS is addressed in full detail in this Observation, under its own chapter, **Chapter 6: Modeligo PWS**.

As described by Uisce Eireann in their Observation for the Scart Mountain Wind Farm (dated 28 February 2025; We ask the Commission to refer to the full letter from that case/attached in our **Appendix: Scart Mountain Wind Farm Observations and Scoping Responses**), this PWS serves a population of 192 (as at February 2025), and this includes residential homes, farms, 13 commercial customers and the National Modeligo School. There are also many residents in the locality and vicinity of the two proposed developments who have their own private well and groundwater boreholes, both of which are vulnerable to surface-level disturbance and pollutants.

Uisce Eireann's Response to the Applicant's EIA Scoping Request (dated 30 January 2023) has not been addressed, along with requests made in their Observation dated 28 February 2025 on the Scart Mountain Wind Farm (case ref: 321522) (See Appendix: Scart Mountain Wind Farm Observations and Scoping Responses).

We respectfully request that the Commission investigate this matter fully.

CUMULATIVE EFFECT OF OTHER PROJECTS HAS INCORRECTLY BEEN DISMISSED

With regards to the Applicant's Chapter 6: Traffic & Transportation, Section 16.6 Cumulative Effects, 16.6.1: Construction Phase – Cumulative Developments, the following developments are listed in the EIAR, as possible causes of cumulative effects:

- *ABP Ref. 300004-17: 10-year permission for construction of Solar PV Energy development, Ballyard, Ballyhane, Clashnaganeen Cappoquin, substation, transformer, solar panels and all associated infrastructure and site works. Permission originally refused by Waterford City & County Council – due to concerns with Traffic, ABP permission granted on 19/02/2019.*
- *ABP Ref. 303576-19: 10-year permission for proposed Solar Farm inclusive of a single electrical control building, up to eight no. inverter units, a temporary construction area and ancillary facilities at Poulbautia, Cappoquin County Waterford. Permission granted on 28/05/2019.*
- *ABP Ref. 301926-18: 19 No. Dwellings (Completion of 7 and permission for 12 more), Railway Gardens, Townparks East, Lismore. Permission granted on 22/10/2018.*
- *ABP Ref. 311670-21: 10 km underground grid connection infrastructure on N72 road to connect Solar Farm to ESB Substation. A Natura Impact Statement has been prepared in respect of the application. Permission granted on 09/01/2023.*
- *ABP Ref. 310782-21: 218 no. residential units (176 no. houses, 42 no. apartments), creche and associated site works in Duckspool, Dungarvan, Co. Waterford Permission granted on 26/10/2021.*
- *ABP Ref. 309412-21: Amendments to Knocknamona Wind farm previously authorised under ABP Ref No. PL93.244006. The application is accompanied by an EIAR and AA Reporting. Revised EIAR and NIS received with appeal. Previous Planning Application Ref. 14600109 to erect 12 no. wind turbines, overall height of up to 126.6 metres, 1 no. meteorological mast up to 80 metres in height with wind measuring equipment attached, access roads, electrical substation compound, equipment and control building and ancillary site works. Permission granted on 28/09/2022.*
- *ABP Ref. 317265-23: Construction of Dyrick Hill Wind farm comprising 12 no. wind turbines and related works. This is directly adjacent to our proposed wind farm site. The application has been recently refused, although the possibility of a judicial review is still open, so it has therefore been still considered in this EIAR.*
- *ABP Ref. 318446: The proposed development area of the ten turbine Coumnagappul Wind Farm is located 16 km North of Dungarvan and 4 km North of Kilbrien Village in County Waterford. A decision is still due for this application.*
- *The review of the cumulative developments indicates that these projects will not overlap their construction haul routes and timelines with the proposed project. In addition, the operational phase of developments such as solar farms, wind farms, and grid connection do not generate a significant increase in traffic volumes once they are operational. Therefore, the cumulative effect will be not significant/slight negative at junction N72/L1027, as assessed on the TTA report*

In addition to the fact that some of the information provided above is out of date (e.g. Coumnagappul Wind Farm) – and therefore incorrect – the Application is also lacking in information with regards to planning applications that have been lodged since the submission of the Scart Mountain Wind Farm (and therefore the initial submission of this EIAR) in December 2024.

Planning has been sought for further wind farm developments in the area:

- **Moanbrack Energy**: no. 2 turbines in Ring adjoining the two already operational there;
- **Slievegrine Windfarm**: no. 24 turbines 5km southwest of Dungarvan (please see our Chapter 9: Waterford City & County Council Development Plan 2022-2028 Wind Energy Strategy Zoning for details on this).

There are also other planning applications in the local area that were not considered in the EIAR for their cumulative effects:

- ABP Ref: 318545 Live Case, Knocknamona;
- ABP Ref: 318602 Live Case, Knocknamona;
- ABP Ref: 313939 Live Case, Cappagh Quarry;
- ABP Ref: 246902 Drumroe, permission granted;
- ABP Ref: 321557 Live Pre-Application Drumroe East, lodged 20-12-24 Amarenco Solar Modelligo Ltd.;
- WCCC Ref: 2460589 Solar Farm, Kiladangan, Dungarvan;

These planned developments would have an immediate impact on the N72 and the local roads in the area. There are several other developments that are nearby, which would also have a cumulative effect on the wider road network.

It is highly likely that these developments would overlap, bearing in mind when permission was granted for the solar farms (10-year permission granted in 2019) and the fact that these, along with the other wind farm projects, if granted, would all wish to proceed as soon as possible in order to try to meet the 2030 Climate Action targets, together with the housing projects needed to meet targets that would also all want to proceed as soon as possible.

The EIAR states that there will be no cumulative effect as different haul routes would be used – yet it does not mention GCRs. It is submitted that all these developments would impact on the N72, both for haul routes and grid connection. Though the final section of the haul route would utilise different local roads, the N72 would be affected by all of the projects, as would the R671 and R672, also for the GCRs, which would converge in several places for these developments, particularly Scart Mountain Wind Farm, Dyrick Hill Wind Farm and Coumnagappul Wind Farm, should they (eventually) be granted permission.

The lack of planned diversion routes for road closures also means that, with the developments being in such close proximity to each other, the same local roads could be intended as diversions for more than one development, and selected diversion routes may not be available, if work is ongoing with another development.

DELAYS HAVEN'T BEEN PROPERLY ASSESSED, AS TEMPORARY SPEED LIMITS AND PROPOSED DIVERSIONS ARE NOT KNOWN

With reference to Chapter 16: Traffic & Transportation, Section 16.3 Potential Effects we draw the Commission's attention to:

Traffic Delays: Temporary speed limits and diversions, for the haul route and Grid Connection Route, have not yet been decided, **therefore it is impossible to predict the potential traffic delays.**

Appendix 2.4: Traffic Management Plan, Section 4.5.6 Road Closure (page 19) states:

'A temporary road closure of local roads and a temporary lane closure of regional and national roads will be required to facilitate the laying of the cables. Figure 4.1 indicates the proposed GCR.'

Diversions will be put in place, when it is necessary for roads to be closed to facilitate the GCR construction. However, no proposed diversion routes have been suggested and therefore the effects on roads therefore cannot be assessed.

The majority of the GCR is on local roads, which are totally unsuitable. No mention has been made of the gradient of these roads, some of which are quite steep. Much of the route is only a single-track width, which would result in road closures, as there would not be room to pass ongoing works. The Applicant states that '*typically the UGC will be installed in 150 metre sections*', but they have failed to state how much of the road will be closed at a time and where machinery will be kept along these narrow roads ('within the construction site' says nothing as it does not give any indication of how much more this construction site will have to be extended by width- or length-wise to accommodate the machinery). Being such a rural area, the road network is sparse, meaning there is very little scope for diversions. And any detour routes that are put into effect would be long and inconvenient for the road users.

Closing the roads would prevent access to people's homes and farmers access to their lands and livestock, particularly in the area from the substation to Modeligo, where there is no alternative road to use. Emergency service vehicles would have difficulty accessing properties.

LACK OF SURVEYS, DETAILING AND FAILURE TO ADDRESS NEGATIVE EFFECTS ON TRAFFIC

Appendix 2.4: Traffic Management Plan, Section 3.4.1 Grid Connection (page 12) states:

'The grid connection cabling works will impact the road network over a typically temporary duration and for a short length, according to the construction method. The progress of the grid connection cabling is approximately 250 metres per week, with no more than 100 metres of trench open at any one time. The cabling works will require a temporary road closure of local roads and a temporary lane closure of regional and national roads for trenched crossings (L5056, R671, L1032, L5056, L5099, R672, L5103, L3003, L7001, and N72). This will result in disruption and moderate negative effects for local road users. However, diversions will be provided, and local access maintained.'

The GCR is likely to have a huge negative effect on traffic, together with the cumulative effect of the other developments listed above.

The local road network, regional roads R671 & R672 and N72 will all be negatively affected.

- No traffic studies have been carried out on the regional or local roads which would be affected by the GCR works.
- No diversion routes have been detailed.
- No temporary stop/go systems have been detailed
- No temporary speed restrictions have been detailed.

It is therefore impossible to assess the disruption and delays which would be caused by these works.

It is proposed that 13.3km of the 15.5km GCR is on the public road network – this is by far ideal. As evidenced in the EIA Scoping Responses and Observations against the Dyrick Hill Wind Farm and Scart Mountain Wind Farm by the Department of Transport and TII (see our

Appendix: Scart Mountain Wind Farm Observations and Scoping Responses), the road authorities prefer not to have the GCR on busy public roads, as installation causes a negative effect on traffic and also any repairs, maintenance or problems result in having to open up the public roads again.

The remaining 2.2km of the proposed GCR, which is on private land, is impossible to assess, as the details submitted show different river crossing points and are misleading in their description (please see out **Chapter 4; Colligan River and Finisk River Crossings** for full details).

There is no evidence that the Applicant has permission to use the private land when leaving the R672. The Folio number WD26367F on the first letter of consent, relates to a property in Waterford city, not to this land. The letters of consent only confirm that the landowners do not object to the submission of the planning application; they explicitly state that they are not legally binding agreements and do not provide consent for the works. Again, this is addressed in more detail under our **Chapter 14: No Evidence of Legal Consent or Interest in Land**.

EFFECTS ON SCHOOL CHILDREN NOT ADDRESSED

EIAR Chapter 16, Section16.4.1.1. Traffic Management Plan (TMP) incorporates the following mitigation:

HGV movements will be restricted during peak road network hours (including school hours) from 8.30 – 9.30 and 16.30 – 17.30 Monday to Friday;

HGV movements will be directed away from sensitive areas (i.e. schools, urban centres)

We draw the Commission's attention to the proximity of the GCR to Modeligo School on the R671. This is a primary school, and the children start school after 8.30 and finish school earlier than 16.30 – infants leave at 14.00, seniors at 15.00. Road safety is of serious concern in the area of the school, together with traffic delays and congestion.

This road (along with many others on the proposed GCR) is also a school bus route, where secondary children wait roadside to be collected in the mornings, and are dropped off at the end of their school day. No mention has been made of this or any mitigation measures considered. We ask the Commission: Where are these school children expected to wait when the road is closed in front of their home, and how is their safety guaranteed with regard to having to walk alongside / cross the open excavated works?

FLOOD RISK ON GCR

In answer to Section 8 of the SID Application Form, the Applicant answers **NO** to the question: *Has the site in question ever, to your knowledge, been flooded?*

This is incorrect and misleading.

The Applicant's Appendix 9-3 Flood Risk Assessment states:

Three additional watercourses flow through the proposed Grid Connection Route (GCR): the Finisk River, Ballykerin Stream, and the Colligan River. The Finisk and Ballykerin streams flow towards the Blackwater River before draining into Caliso Bay, Co. Waterford. The Colligan River drains into Dungarvan Harbour.

Appendix 9-3 Flood Risk Assessment, 3.2 OPW Preliminary Flood Risk Assessment (PFRA) Study, 3.2.1 National Indicative Fluvial Mapping (NIFM) states:

Grid Connection Route (GCR)
***Four areas along the GCR are liable to fluvial flooding** (see insets in Figure 3-4).*
The proposed GCR is not identified as being risk of groundwater of coastal flooding.
The GCR is not expected to be at risk of pluvial flooding due to its route being located along a route of an existing road, which are expected to be raised above the surrounding lands with no localised depressions along them. The landscaping and topography of the existing roads will provide safe exceedance flow paths and prevent surface water ponding to minimise residual risks associated with an extreme flood event.

Yet Figure 3.4 shows otherwise. This means that there are in fact flood risk concerns on the wind farm site (see inset in Figure 3-3), and on points of the GCR.

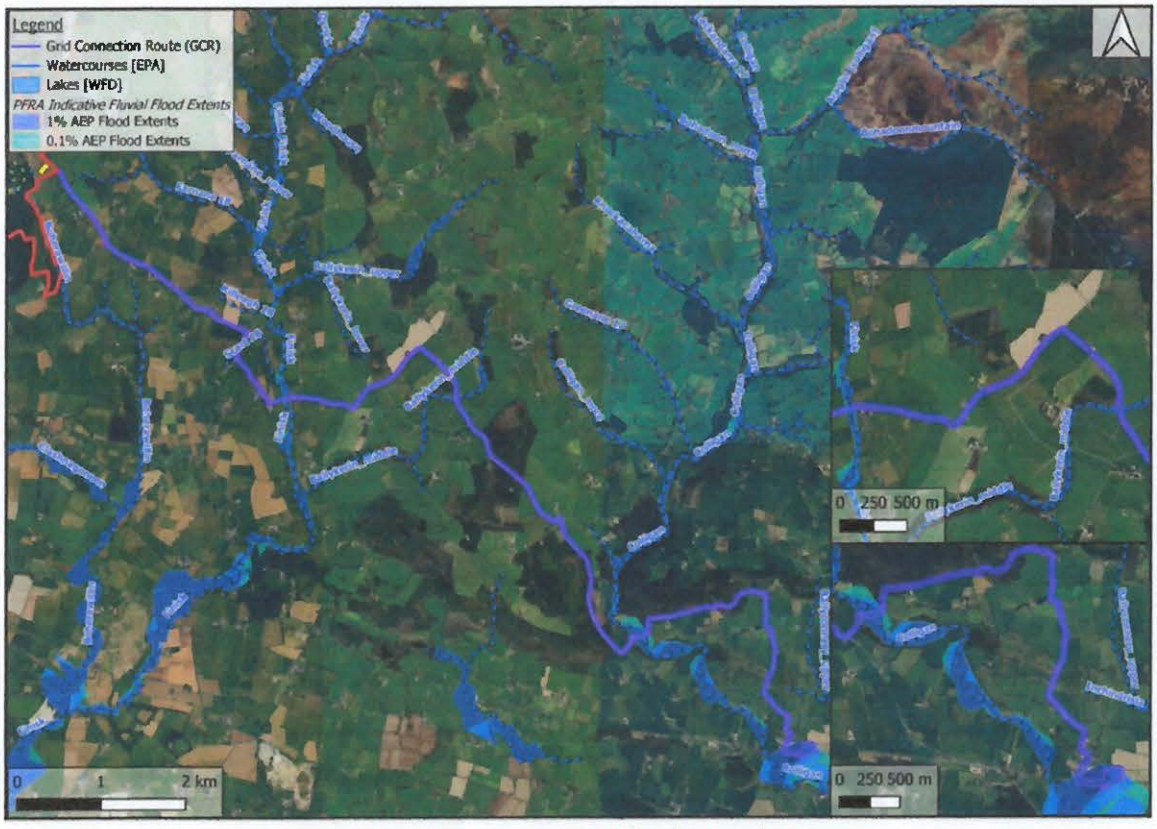


Figure 3-4 PFRA Indicative Flood Mapping – GCR

Furthermore, on page 16, the Applicant states:
Grid Connection Route (GCR)
The Colligan River and Finisk River were both modelled as part of the NIFM study. Figure 3-8 provides an overview of the 1 in 100-year and 1 in 1,000-year indicative fluvial flood mapping for the Proposed GCR, with Figure 3-9 showing the same with climate change

included. The mapping shows two locations along the proposed GCR that are at risk of fluvial flooding.



Figure 3-8 NIFM Current Flood Extents - GCR



Figure 3-9 NIFM MRFS Flood Extents - GCR

Figure 3-8 NIFM shows the two locations along the proposed GCR that are at risk of flooding – both of which are the locations for proposed Horizontal Drilling (HDD) works under rivers that are hydrologically connected to EU-Designated sites of the Blackwater SAC and the Dungarvan Harbour SPA.

1. The area at Modeligo bridge (Finisk River) is an area known to flood. On the section of road from the Modeligo Community Centre to Modeligo Bridge, **there are six storm drains** to take water off the road (which shows the extent of flooding experienced on the road here) and into the river via a culvert, which hasn't been mentioned in the river crossing.

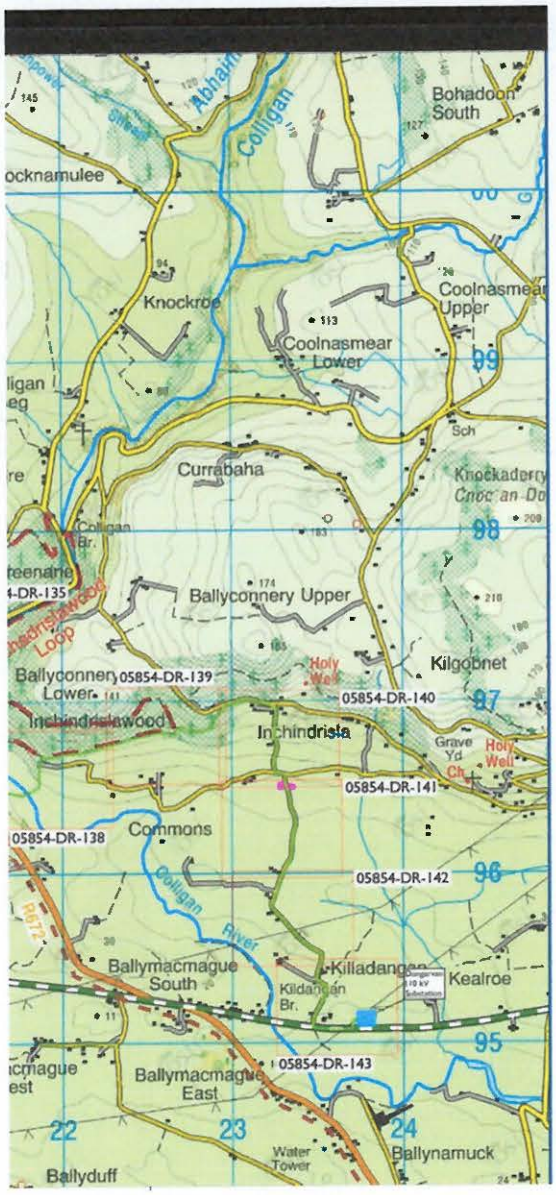
2. The Colligan River on 2.2 Grid Route Summary – 2.3.6 Route Section 6 Summary, is of particular concern. This section is at risk of flooding. Part of this section of the GCR is within private lands, though the exact location of the intended crossing point is not specified, as the route is not clear from the information provided.

There are no details of the condition or existence of a roadway for access to this section, which would be required for construction traffic and also maintained for future inspection, maintenance and any necessary repairs.

The final section of the GCR, on the L3003 and L7001, before joining the N72, also floods periodically. (Flood ID-3812, as mentioned in Section 3. Initial Flood Risk Assessment, 3.1 Past Flood Events).

This photograph, taken by a member of the Knockmealdown Protection Group two days after rain on 15 November 2025, shows the extent of flooding at Inchindrisla, on the L7001, shown in section 05854-DR-140 on Sheet 2 of 2, Overall Site Location Map. Position of where the photograph was taken is highlighted in pink on the GCR map below.





INADEQUATE TRAFFIC MANAGEMENT PLAN FOR GCR

The Applicant's TMP is woefully lacking when it comes to the GCR. In its 36 pages, there are 10 mentions of the GCR. Of those, the majority pertain to the GCR description: its location, what its purpose is and so on. The only mentions of any value are:

3.4.1 GRID CONNECTION: The grid connection cabling works will impact the road network over a typically temporary duration and for a short length, according to the construction method. The progress of the grid connection cabling is approximately 250 metres per week, with no more than 100 metres of trench open at any one time. The cabling works will require a temporary road closure of local roads and a temporary lane closure of regional and national roads for trenched crossings (L5056, R671, L1032, L5056, L5099, R672, L5103, L3003, L7001, and N72). This will result in disruption and moderate negative effects for local road users. However, diversions will be provided, and local access maintained.

And

4.5 SITE-SPECIFIC TEMPORARY TRAFFIC MEASURES: During proposed GCR works on local roads, a diversion route for traffic will be implemented, which shall be approved by the Road Authority following consultation with the Road Authority, An Garda Síochána and other emergency services.
Where roadworks impede dwelling access onto the road network, the residents shall be instructed on how to egress the property.
Where reasonably practicable, consideration will be given to the possibility of removing the traffic management measures in order to deal with:

- *Particularly high traffic volumes due to sporting or other events,*
- *Adverse weather conditions,*
- *Emergency access, or*
- *Times when work is not in progress.*

If the night-time or weekend Temporary Traffic Management (TTM) measures vary from the daytime plan, a separate TTM will be prepared to be approved by the Roads Authority.
On completion of the works, the traffic management measures are to be removed when the road is safe and free from obstructions, all reinstatement of road surfacing is completed, and all permanent signs, road markings, and other items are in place.

This is as much effort the Applicant has made in preparing a TMP for the proposed GCR, which the Commission is expected to use when considering a decision. In addition to not addressing the safety of children, the Applicant also does not consider the safety of road users after daytime hours.
If the night-time or weekend Temporary Traffic Management (TTM) measures vary from the daytime plan, a separate TTM will be prepared to be approved by the Roads Authority. Is simply not enough.

HEDGEROWS

In addition to lack of ecological surveys and investigations carried out along the GCR (we refer the Commission to our **Chapter 1. Biodiversity, Chapter 2: Ornithology, Chapter 3: Hydrology** and **Chapter 4: Colligan River and Finisk River Crossings** for full details), we also ask that the Commission investigate the total amount of hedgerow that may be lost, due to the associated road works and excavations.

Under the Waterford City and County Development Plan 2022-2028, Hedgerow Protection in Road Access Development (Section 8.9), specific measures protect hedgerows, **recognising their ecological and landscape importance**. Key provisions are: Minimising Removal; Replacement Requirements; Connectivity Maintenance. These measures aim to ensure that development projects consider and mitigate their impact on hedgerows, **preserving their role in biodiversity** and the rural character of Waterford.
Hedgerows are also protected under several laws aimed at conserving biodiversity, preventing habitat destruction and maintaining landscape features. The main legal protections include:

Wildlife Act 1976 (as amended by the Wildlife (Amendment) Act 2000)
Section 40: Prohibits the cutting, burning or destruction of hedgerows during the bird nesting season (1st March to 31st August).

European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477/2011)
Implements the EU Habitats and Birds Directives.
Protects species that depend on hedgerows as habitats.
Restrictions on activities that could harm protected species.

Environmental Impact Assessment (Agriculture) Regulations (S.I. 456/2011)
Landowners must seek approval before removing a hedgerow over 500 metres in length or if the removal affects an area of over 0.5 hectares. Designed to prevent large-scale habitat loss.

Certain hedgerows are also protected under Special Areas of Conservation in designated SAC sites.
We also draw to the Board's attention that any removal of hedgerow for the proposed GCR is in complete contradiction to their Biodiversity Management Plan measures which they claim is in some ways a positive contribution to biodiversity.

CONCLUSION

The Applicant's Traffic and Transportation assessment for the propsoed GCR is fundamentally inadequate and fails to provide the level of detail required for an informed planning decision. Critical omissions include the absence of traffic surveys, defined diversion routes and speed restrictions, and failure to assess risks to sensitive receptors such as the Modeligo Public Water Supply and local schoolchildren. This creates unacceptable uncertainty. The Applicant has also incorrectly dismissed the cumulative impacts of multiple concurrent developments on the regional and local road network, and has ignored the concerns of TII and the Department of Transport. Additional concerns, including flood risk along the GCR, unverified private land access and potential biodiversity loss, further demonstrate that the proposed works have not been properly assessed or mitigated for.

We refer the Commission to the following in the Applicant's Appendix 2.5: Grid Construction Methodology:

The exact location of the UGC within the curtilage of the existing roads, access tracks and private lands may be subject to minor modification following confirmatory site investigations to be undertaken prior to construction.

This should have been done prior to Application submnission. This is a clear admission by the Applicant that – apart from having the desire to develop a GCR, and having drawn out a conceptual route based on no surveys – they have no concrete and defnitive findings upon which they expect the Commission to make a decision – be it the location of underground services, the stability of grounds, field surveys for wildlife, birds and flora, traffic load and much more.

Given these substantial deficiencies and the significant risk of adverse impacts on road safety, community access, environmental protection and public services, we ask that the Commission give due consideration to all of these concerns when making their own assessment of the GCR, and realise that permission cannot reasonably be granted.

CUTURAL HERITAGE

It is proposed to supply the power from the Scart Mountain Wind Farm to the electricity network via 110kV underground cables (approximately 15.5 km cable length of which approximately 13.3 km is within the public road corridor) to the existing Dungarvan 110kV substation in the townland of Killadangan, Co. Waterford. The proposed project also comprises facilitating works on the public road network and at private properties to accommodate the delivery of turbine components.

The proposed Scart Mountain Wind Farm and its associated 110kV underground Grid Connection Route (GCR) present unacceptable and irreversible risks to the archaeological, architectural, cultural and environmental heritage of this region. The Application fails to meet the standards expected for developments of this scale, particularly where protected heritage assets and community amenities are concerned.

Based on information contained in the Heritage Chapter of the Applicant's Non-Technical Summary and the associated Site Location Maps, significant omissions, inaccuracies and unacceptable risks are evident. This development must not be granted permission.

DIRECT THREAT TO PROTECTED ARCHAEOLOGICAL MONUMENTS

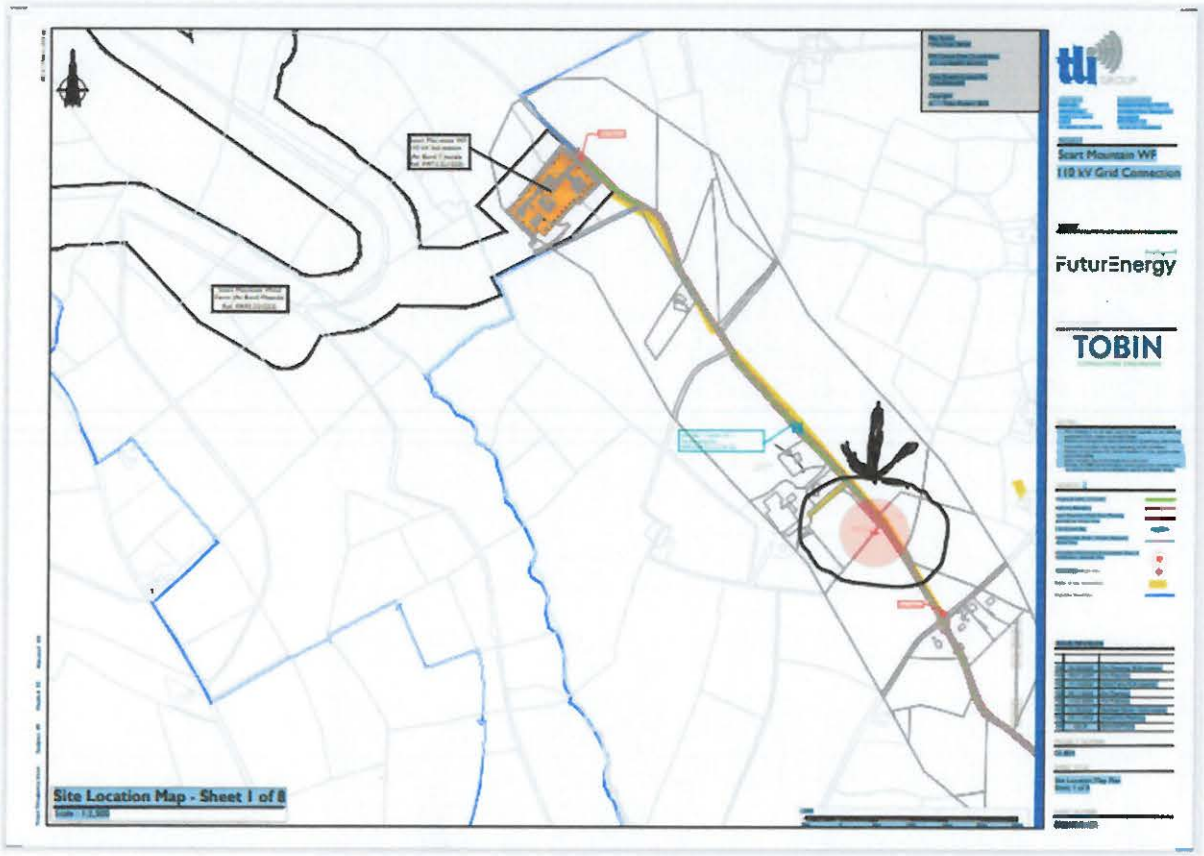
- **WA022-011 – Ringfort (Newtown)**
- **WA022-026001 – Church**
- **WA022-026002 – Graveyard**

WA022-011 Ringfort (Newtown) [05854-DR-101 Site Location Map Sheet 1 of 8]
(Latitude and Longitude: 52.164819, -7.777440)

The site of the ringfort is on the roadway; although not visible, this would be directly disturbed by the proposed GCR. Disturbing this monument would constitute a permanent loss of a nationally recognised archaeological site.

In accordance with the Historic Environment Viewer from the National Monument Service provided by the Department of Housing, Local Government and Heritage: This Ringfort is clearly marked as an embanked enclosure with an external diameter of 40m which is slightly truncated by a NW-SE road bank at NE on the 1840 ed. of the OS 6-inch map. Situated in pasture on an E-facing slope, it is not visible at ground level.

The above description is derived from the published *Archaeological Inventory of County Waterford* (Dublin: Stationery Office, 1999).



Source: Applicant's 05854-DR-101 Site Location Map Sheet 1 of 8, with Ring Fort location highlighted by us for added clarity

The Applicant's Non-Technical Summary Chapter 15 (page 45) states that:

The construction of the proposed GCR will involve the excavation of a trench through the zone of notification for three recorded monuments: AH1 (ringfort) and AH2 and AH3 (church and graveyard). Whilst the construction of the road through these areas is likely to have impacted on the potential archaeological resource, it remains possible that excavation activities ***may permanently, directly and negatively impact on buried associated archaeological remains.*** [highlighted for emphasis]

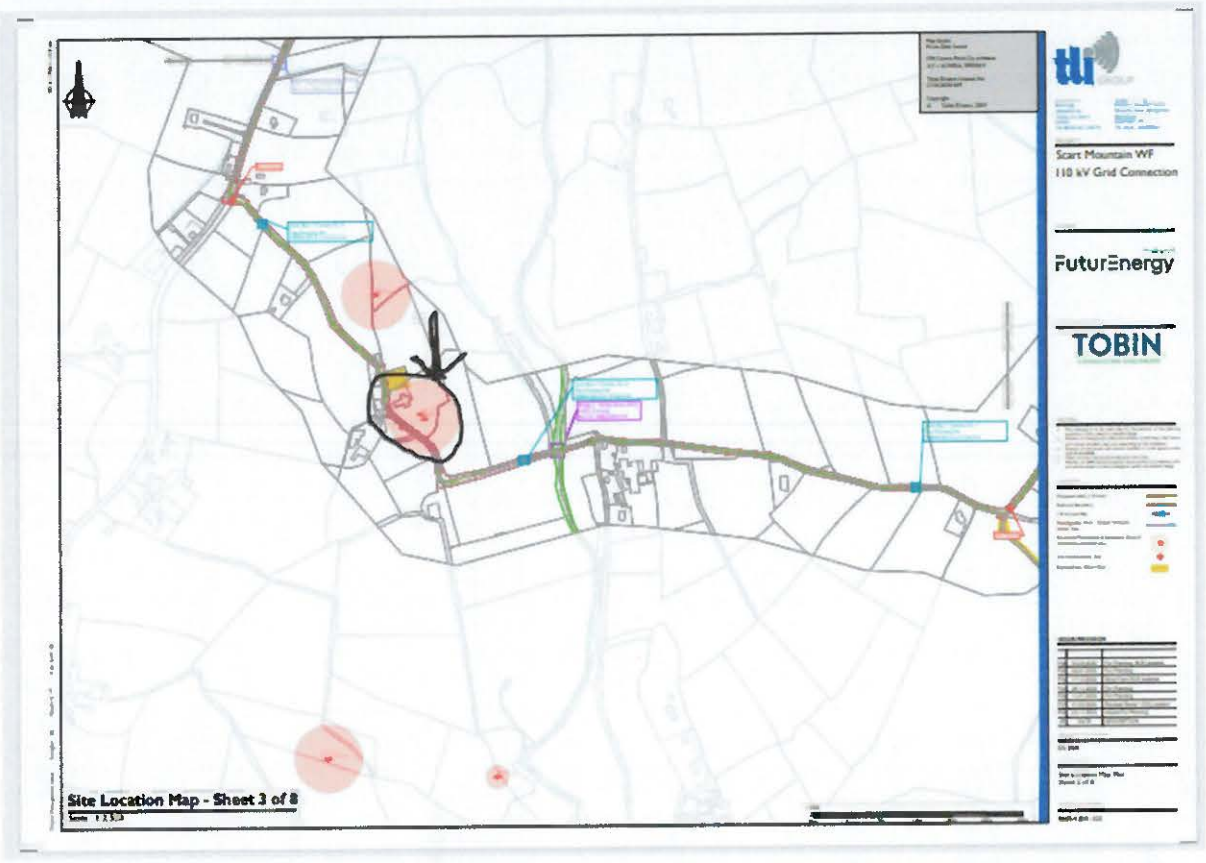
This is unacceptable.

WA022-026001 Church & WA022-026002 Graveyard [05854-DR-103 Site Location Map Sheet 3 of 8]

The proposed GCR traverses through the Church and Graveyard's zone of notification.

Running a trench through or near a historic graveyard is ethically indefensible. No mitigation measure can justify disruption of burial grounds or the final resting places of our ancestors.

The Applicant's assertion that archaeological monitoring is sufficient fails to demonstrate respect or legal compliance where human remains may be present.



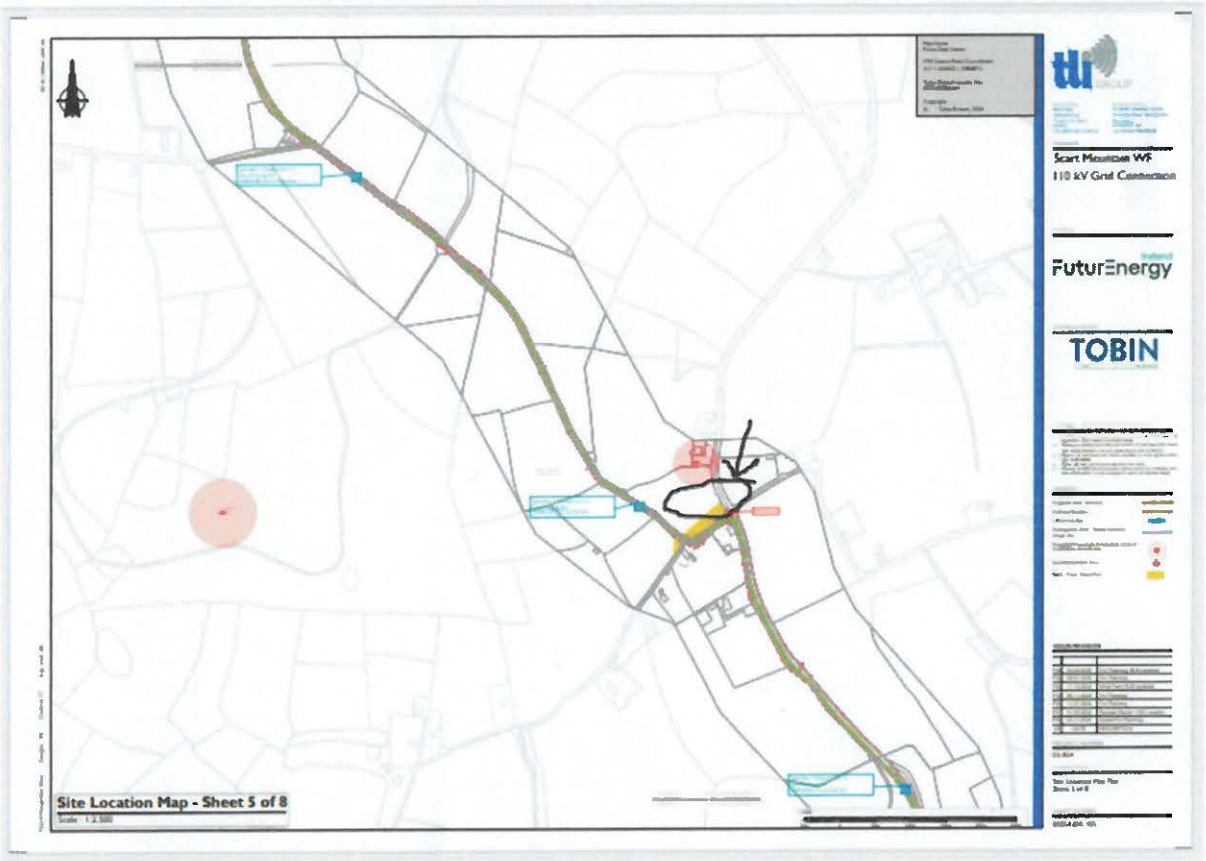
Source: Applicant's 5854-DR-103 Site Location Map Sheet 3 of 8, with Church and Graveyard location highlighted by us for added clarity

WA022-056 Colligan More Children's Burial Ground [05854-DR-105 Site Location Map Sheet 5 of 8]
(Latitude and Longitude: 52.133774, -7.697608)

WA022-056 Colligan More Children's Burial Ground is marked as a small oval enclosure (dimensions. c. 30m East-West; c. 15m North-South). Situated in pasture on an E-facing slope, it is not visible at ground level. **This is only 50m from the proposed GCR.**

What is even more concerning is that a historic church located south of this burial ground, directly on or parallel to the proposed GCR, has been completely omitted from the mapping.





Source: Applicant's 05854-DR-105 Site Location Map Sheet 5 of 8, with Church location highlighted by us for added clarity

Such omissions demonstrate a serious flaw in the heritage impact assessment and present an unacceptable risk to sacred ground.

COMMUNITY IMPACT:
UNACCEPTABLE ROAD CLOSURE ON A STRATEGIC REGIONAL ROUTE

It is at this point where the proposed GCR meets the R672, the regionally important thoroughfare connecting Dungarvan with Clonmel. Chapter 19, page 46 refers to the '*required Road Closure*' – this would negatively impact the local population because it is the only regional road, and the local road network is too narrow for the volume of traffic. A diversion route would add time and undue distress for many road users.

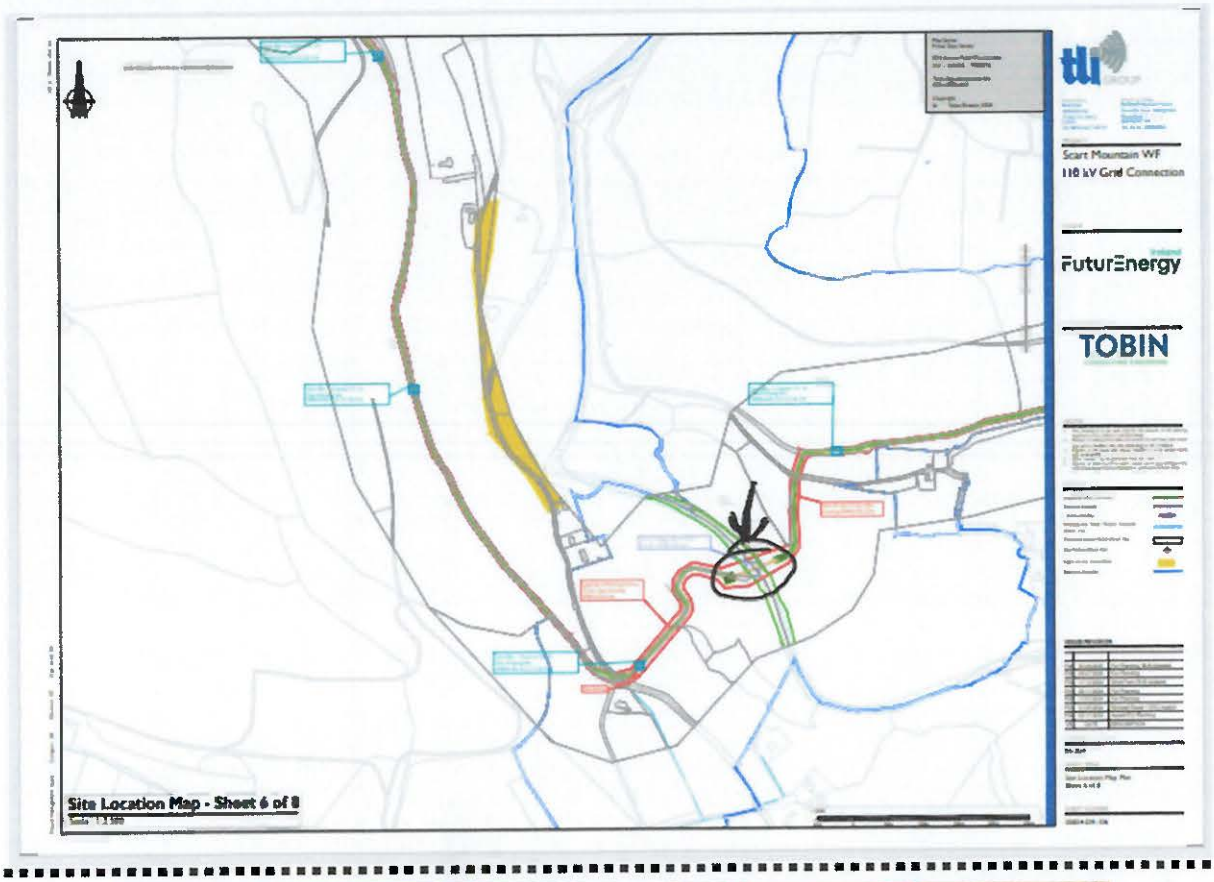
ENVIRONMENTAL AND RECREATIONAL IMPACTS AT COLLIGAN WOOD

05854-DR-106 Site Location Map Sheet 6 of 8

The lower right quadrant is Colligan Wood, this is the point where the proposed GCR leaves the R672 to cross the Colligan River. Colligan Wood is a treasured local amenity, heavily used by locals and hikers alike. Visit Waterford, Dungarvan Tourism, AllTrails, Coillte, Discover Ireland are just a few of the bodies that promote the beauty and activities of Colligan Wood and Inchindrislawood.

https://visitwaterford.com/activities/colligan-woods-walk
https://www.alltrails.com/trail/ireland/county-waterford/colligan-woods
https://www.coillte.ie/site/colligan-wood
https://www.discoverireland.ie/waterford/colligan-wood-inchidrisla-loop

The GCR proposes to cross the Colligan River using HDD. The Weir and Ford are missing from the Applicant's map. There is a real risk that underwater HDD will destabilise the riverbank. The proposed GCR then goes into the lower edge of Inchindrislawood where new access tracks will have to be laid.


Scart Mountain WF
110 kV Grid Connection
FuturEnergy
TOBIN
Site Location Map - Sheet 6 of 8



INSUFFICIENT MITIGATION MEASURES

The Applicant repeatedly asserts that archaeological monitoring is a suitable mitigation measure. **This is incorrect.** Monitoring cannot prevent damage – only record it after it has already occurred.

For example: EIAR Chapter 15: Archaeological, Architectural and Cultural Heritage, Section 15.4.9 Field Inspection

Though a list of protected structures and heritage sites has been included, there are no mitigation measures or details of how damage to any important site will be averted. For example, the GCR passes Modeligo Church and Graveyard, and the field inspection report states:

The Graveyard (AH2) is separated from the roadway by a stone wall.
This graveyard is immediately northeast of the grid connection route.

Unless the foundations of this stone wall are deeper than the trench for the cables, or indeed the graves in the graveyard, the stone wall will do little to protect them.

The presence of an archaeologist does not justify:

- Disturbance to human burials/remains
- Destruction of medieval or early medieval monuments
- Risk to identified and unidentified archaeological features
- Damage to structures of architectural or civil engineering significance

Any development requiring excavation through protected zones of notification is incompatible with best practice and with the legal duty to protect heritage.

CONCLUSION: PLANNING PERMISSION MUST BE REFUSED

The proposed Scart Mountain GCR is fundamentally flawed due to:

1. **Direct threat to recorded monuments – including burial grounds.**
2. **Omission and misrepresentation of significant heritage features.**
3. **Unacceptable impacts on the R672 regional route.**
4. **Threats to Colligan Wood, the Weir, and riverbank integrity.**
5. **Incomplete, inaccurate and insufficient heritage assessment and mapping.**
6. **Mitigation measures that do not and cannot protect what would be lost.**

Approval of this Application would result in **permanent, irreversible and culturally devastating impacts.** For these reasons, An Coimisiún Pleanála has a clear obligation to **refuse permission.**

Maps used in this chapter were accessed on https://osi.maps.arcgic.com/; they are MapGenie 6 inch First Edition Colour

Heritage sites were accessed on Historic Environment Viewer; from the National Monument Service provided by the Department of Housing, Local Government and Heritage.

[https://heritagedata.maps.arcgis.com/apps/webappviewer/index.html?id=0c9eb9575b544081b0d296436d8f60f8]

WATERFORD CITY & COUNTY COUNCIL DEVELOPMENT PLAN 2022-2028 WIND ENERGY STRATEGY ZONING PROVIDES AMPLE OPPORTUNITY FOR WIND ENERGY DEVELOPMENT IN SUITABLE AREAS

This chapter details why the proposed Scart Mountain project – Grid Connection Route (GCR) and associated wind farm – conflicts with the Waterford City & County Development Plan 2022–2028 (WCCDP). The Applicant incorrectly claims that local wind energy zoning is contrary to national and EU renewable energy policies. In reality, the WCCDP remains the statutory planning framework, prepared in accordance with environmental and legislative requirements and approved by the Office of the Planning Regulator.

Analysis shows that the current WCCDP **expanded Preferred areas for wind energy development** while maintaining sensible protections in Exclusion Zones based on landscape sensitivity, environmental constraints and community considerations. Claims that Waterford has 'almost no developable area' are unsubstantiated and disproven by the existence of large active proposals within zones designated as appropriate for wind development.

The Applicant appears to ignore these suitable areas in favour of locating on Coillte-owned land within an Exclusion Zone – an area known to encompass protected habitats, sensitive landscapes and significant environmental constraints.

KEY SUMMARY POINTS

- The Applicant's claim that the Waterford City and County Development Plan 2022-2028 (WCCDP) Wind Exclusion Zoning contradicts national/EU policy is incorrect and legally unfounded.
- The WCCDP is legally valid and remains fully in force.
- Exclusion zones were established using robust environmental and planning criteria.
- Waterford still has ample suitable areas for wind development.
- Preferred zoning actually increased significantly in the current plan.
- Claims of 'no developable land' are misleading and disproven by existing proposals.
- The Applicant chose an exclusion zone for opportunisitic convenience, not policy alignment.
- The proposed site is environmentally sensitive and unsuitable for wind development.

In the Conclusion of their EIAR Chapter 4, the Applicant states:
'The proposed project fits with the overall strategic aim of the Waterford City and County Development Plan by facilitating the development of a diverse energy portfolio by the sustainable harnessing of the potential of renewable energy. Although the proposed wind farm is located within lands zoned for 'exclusion' of wind farm development. This is contrary to international and national policy and legislation as the adopted wind energy strategy within the CDP was prepared before the adoption of Ireland's new legally binding sectoral

emissions ceilings which were approved by Government in July 2022. It was also in advance of the publication of the Climate Action Plan (CAP) 2023 and 2024, which includes further increased targets for onshore wind deployment in Ireland, and RED III. Therefore, the strategy does not locate sufficient viable land for wind farm development which is further reduced due to accommodate existing environmental constraints such as dispersed dwellings and settlements across rural areas. Based on a mapping analysis presented in the Planning Statement attached with this submission <<Note: there is no mapping analysis in the Planning Statement attached with the Grid Connection application>> *it is contended that the 2022 County Development plan is demonstrably less ambitious for onshore wind energy than its predecessor, at a time when national policy is calling for onshore wind capacity to more than double, and European policy is calling for accelerated mass adoption of renewable energy in response to the twin climate and energy cost / energy security crises. A logical response to national and EU policy (even in advance of the publication of our sectoral emissions ceilings and CAP 24 onshore wind targets) would be to increase the viable areas for onshore wind development in Waterford, but at an absolute minimum, it should have preserved pre-existing ambitions evident from the wind designations maps associated with the previous CDP. This did not occur, and the subject site changed from 'Open to Consideration' to 'No go/ Exclusion area'.*

The assertion that locating a wind farm within lands zoned for the exclusion of wind energy development is '*contrary to international and national policy and legislation*' is fundamentally flawed and misleading.

1. The Waterford City and County Development Plan 2022-2028 (WCCDP) is the democratically adopted statutory planning framework for the area. The Wind Energy Strategy contained within it was prepared in accordance with an SEA, numerous Acts, Policies, Directives and Guidelines (see 1.4 Environmental Assessment and Climate Change, Waterford City and County Development Plan 2022-2028 Vol 1, page 9 for an example), and was approved by the Office of the Planning Regulator (see Appendix). As such, the WCCDP carries full statutory effect until formally reviewed or amended through the proper planning process. National or sectoral policy updates, including emissions ceilings or Climate Action Plan targets, do not automatically override or nullify adopted local Development Plan policies.

2. While subsequent documents such as the Climate Action Plan 2023, 2024 & 2025, the Sectoral Emissions Ceilings (2022), and RED III do indeed set more ambitious renewable energy targets, they do not confer development rights on specific sites, nor do they negate the spatial planning decisions already made at local level. The role of national policy is to guide overall renewable energy expansion within the framework of sustainable planning principles, not to disregard established environmental, landscape, or community protections embedded in local plans.

3. The designation of Wind Exclusion Zones in the WCCDP was based on comprehensive landscape sensitivity assessments, environmental constraints (including proximity to designated habitats, heritage assets and residential amenity), and consultation with statutory bodies. These remain valid planning considerations under both national and EU law. Ignoring them on the basis of later-adopted policy targets undermines the integrity of the plan-led system and contradict the principle of proper planning and sustainable development.

In summary, while national climate targets require an accelerated rollout of renewable energy infrastructure, this must occur within the bounds of existing statutory planning frameworks and in a manner that respects environmental, social and landscape considerations. Therefore, the proposed Scart Mountin project's location within an area

expressly zoned for exclusion from wind farm development remains incompatible with the current WCCDP and cannot be justified by reference to later policy developments.

COMPARISON OF WIND ENERGY STRATEGY: WATERFORD CITY & COUNTY COUNCIL DEVELOPMENT PLANS 2011-2017 AND 2022-2028

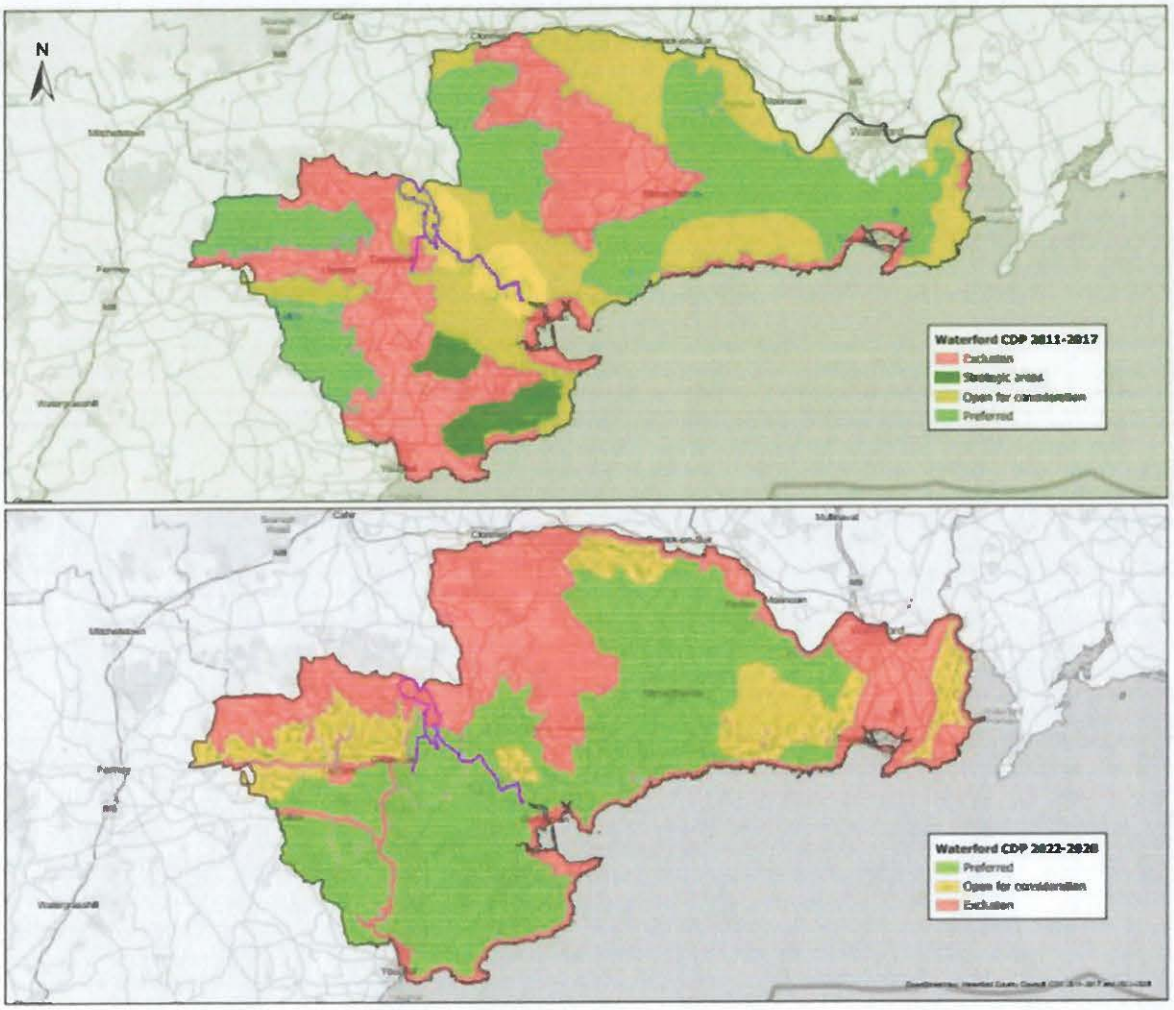
In Section 2. Introduction (page 2) of their Planning Statement, the Applicant refers to – and asks the Commission to consider – their Planning Statement submitted with the proposed Scart Mountain Wind Farm application (case no.: 321522) that was submitted in December 2024:

It is also noted that a comprehensive Planning Statement has been submitted with the Scart Mountain Wind Farm application (Ref 321522-24). Whilst acknowledging that each application must be judged on its own merits, we note that the subject proposed development and the proposed wind farm development form a single project. As such, the Commission is requested to have regard to the legal and policy imperatives supporting the Wind Farm development when considering the grid connection proposed development.

With this in mind, we draw the following to the Commission's attention:

In the Planning Statement for the proposed Scart Mountain Wind Farm Application (case no.: 321522), the Applicant lays out a map showing the zoning from Waterford's previous County Development Plan (2011-2017) and the current one **in their attempt to discredit the current wind energy strategy zoning** of the Waterford County Development Plan 2022-2028. The maps are however somewhat confusing to look at due to the different colours used and therefore do not give an easy overview.

With that in mind, we have recreated the maps, using the same colours for each zone for the Commission's ease. We have also analysed the areas and provide the percentages of Waterford that each Development Plan dedicated to the zones.



Above: Comparison of Waterford City & County Development Plan 2011-2017 (top) and 2022-2028 (bottom) Wind Energy Strategies

The zone colours on the 2011-2017 have been adapted to match/align with 2022-2028 zone colours for clarity. Darker green areas were 'Strategic Areas' and have therefore been given a green hue to align with Preferred perspective.

Below is a table showing percentages of each zone in the Waterford City & County Development Plan 2011-2017 (top) and 2022-2028 (bottom) Wind Energy Strategies

WIND ZONE AREA CLASSFICATION	WCCDP 2011-2017	WCCDP 2022-2028
PREFERRED	34.37%	55.71%
STRATEGIC AREA (AKA PREFERRED)	5.23%	
OPEN FOR CONSIDERATION	29.71%	12.67%
EXCLUSION	30.69%	31.63%

As the Commission will see, in the 2022-2028 Development Plan:

- There was an increase of 21.34% in areas Preferred for Wind Energy
- There was a decrease of 17.04% in areas Open for Consideration
- There was an increase of 0.94% in Exclusion zones

As is clearly evident: Preferred areas increased substantially.

AMPLE OPPORTUNITY FOR WIND ENERGY DEVELOPMENT IN SUITABLE AREAS

In a pre-application consultation held between the Applicant and the Commission on 22 May 2024 (case ref: ABP-319601-24), it is noted that:

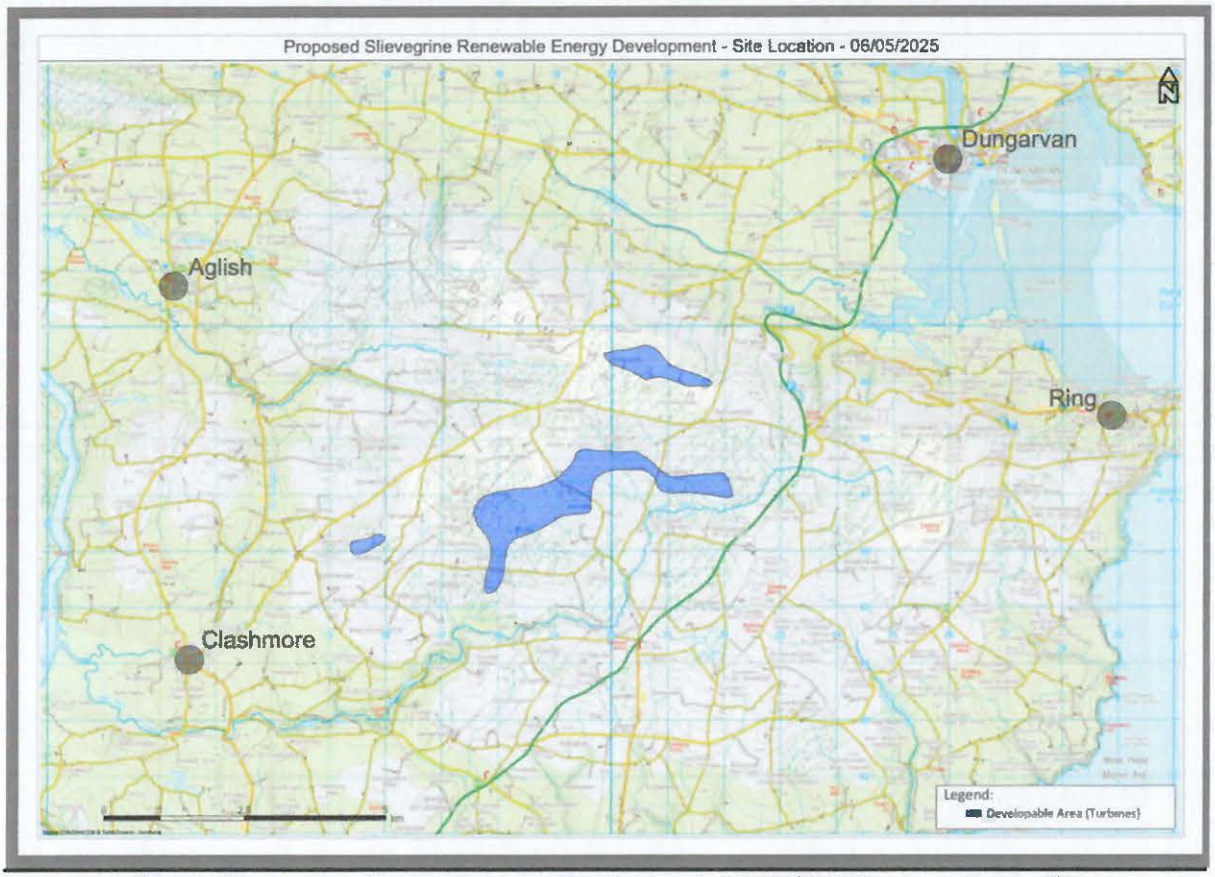
'A constraints analysis map of the new wind energy designations was presented with a residential buffer applied (recommended 4-times tip height) ***which leaves almost no developable area for wind energy development in the county.'***
(highlighted for emphasis)

The Applicant's claim that the WCCDP zoning has rendered the county effectively without suitable areas has effectively been proven invalid.
We draw the Commission's attention to a live case that is currently in SID pre-application consultation between the Commission and Slievegrine Ltd for a proposed 24-turbine wind farm at a capacity of 100 MW, in an area zoned as 'Preferred' in the WCCDP. This proposal is for a project nearly twice the twice as the proposed Scart Mountain one.

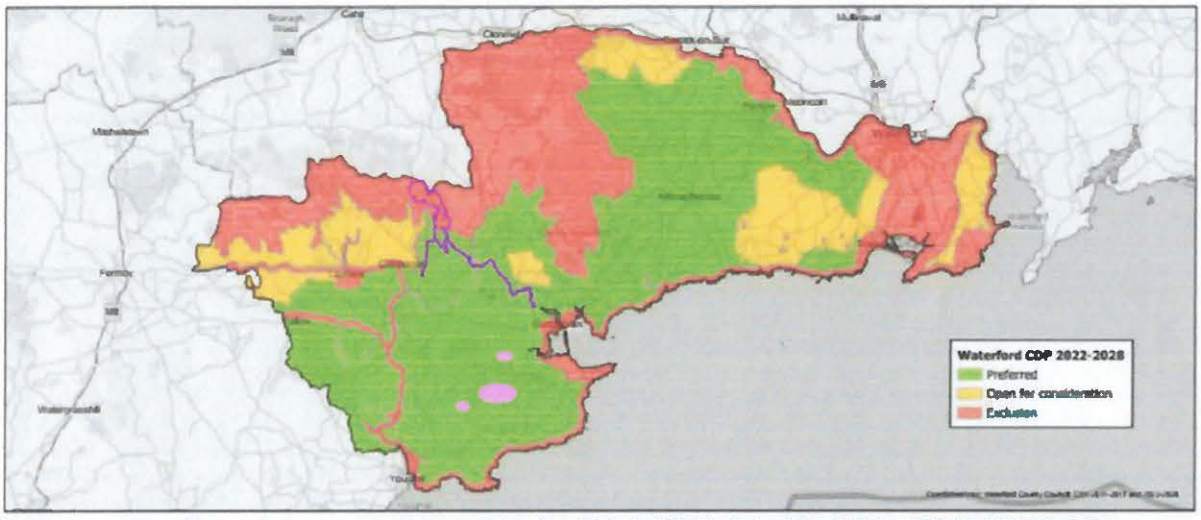
'We, Slievegrine Ltd, are exploring the potential of a renewable energy development in your area, which we have identified as having potential for a development of approximately 24 no. wind turbines [..] The proposal will consist of 3 no. clusters of wind turbines, with one cluster located at Drum Hills and adjacent townlands, the second cluster located at Carronadavderg and adjacent townlands, and the third cluster located at Cloghraun and adjacent townlands.'
Source: https://slievegrineinfo.com/about-the-project/

And this is with *'a minimum setback distance of 4 times turbine ground to blade tip height, 740m (185m x 4), to all third-party properties'* and a possible reduced setback distance for involved properties, *'subject to a minimum setback distance of 500m from any relevant property.'*
Source: Q3: https://slievegrineinfo.com/frequently-asked-questions/

Below is a map showing the proposed site location, and then a map of the current County Development Plan showing its location against the current wind energy strategy zoning (shown in lilac circles). As the Commission will clearly see, the Applicant's (for the Scart Mountain project) claims that there is *'almost no developable area for wind energy development in the county'* is incorrect and misleading to the Commission – given the amount of Preferred and Open for Consideration zoning there is within the County, and the fact that plans are in place for a 24-turbine wind farm, thus proving there is ample space for wind energy development WITHIN Preferred and Open for Consideration areas.



[source: https://slievegrineinfo.com/wp-content/uploads/2025/04/Site-Location.pdf]



[source: https://storymaps.arcgis.com/stories/39cb4846c01e40f7b94ed562b9077bfe]

In an opportunistic manner, the Applicant for the Scart Mountain project has ignored the Preferred and Open for Consideration zoning as the site location for their proposed wind farm is within land owned by Coiltte (a co-owner of FuturEnergy), which makes it a convenient and financially lucrative option for them. If the Applicant was indeed concerned with meeting Ireland's targets within the timelines, they would not waste everyone's time and efforts by attempting to place their wind farm within a zone that has been clearly allocated as

a NO-GO / Wind Exclusion Zone within the WCCDP, and an area that is environmentally sensitive due to it encompassing protected and endangered habitats, waterways, birds and wildlife (a fact that the Applicant themselves have stated to the Commission in their Observation against the proposed Dyrick Hill Wind Farm application – case 317265 – See our **Appendix: Futurenergy / Dyrick Hill Wind Farm Observation**)

THE WATERFORD CITY & COUNTY COUNCIL DEVELOPMENT PLAN 2022-2028

The provisions of the Waterford City & County Council Development Plan 2022-2028 (WCCDP) applicable to the overall proposed Scart Mountain Wind Farm and Grid Connection project are set out below. Some of these provisions are also relevant to matters considered later in this Observation (e.g. issues such as biodiversity considered as part of EIA).

Role of the WCCDP

Section 37G(2)(a)(ii) and (c) PDA 2000 require that the Commission considers the effect on the environment and the Development Plan but in contrast to the position in respect of all other development, by s37G(6), the Commission may grant permission for SID even if the proposed development contravenes materially the Development Plan relating to the area it which it is proposed to situate the development.

Notwithstanding the above, it is submitted that the WCCDP is a solemn binding contract between the people of County Waterford and the planning authority, in this case the Commission. It is submitted that its provisions should be departed from under s37G(6) PDA 2000 only where appropriate and in wholly exceptional circumstances. In this case, breach of the WCCDP would not be appropriate and the proposal to build a wind farm on the proposed site and a connecting Grid Connection gives rise to no such exceptional circumstances. If the Commission does decide to depart from the provisions of the WCCDP, very clear and precise reasons should be given. (See *Attorney General (McGarry) v Sligo County Council* [1991] 1 IR 99, *Byrne v Fingal County Council* [2001] 4 R 565 and *Brophy v ABP* [2015] IEHC 433).

In particular, in *Brophy*, Baker J said that 'the consideration of a development permission in each case is specific to, and intended to be specific to, an individual location and in respect of which it is to be assumed that the individual local authority adopting a plan has a particular and specialist knowledge.' (para 35)

Renewable Energy Strategy and the Wind Energy Exclusion Zone

The Renewable Energy Strategy, 2016-30 is at Appendix 7 of the WCCDP.

The proposed site of the proposed Scart Mountain Wind Farm, which this Grid Connection will serve, is located within an area excluded from wind energy development by the Renewable Energy Strategy (see map in Appendix 2 of the Renewable Energy Strategy at p85).

The exclusion area is acknowledged by the Applicant in their EIAR. The part of Waterford's wind energy exclusion zone in which the proposed site is located is adjacent to an area in Co Tipperary directly to the north which is also excluded from wind energy development by the Tipperary Development Plan.

Policy Objective UTL 13 of Chapter 6, Section 6.9 of the WCCDP makes clear that proposed wind energy developments must be consistent with the Waterford Renewable Energy Strategy (and, therefore the exclusion zone) and the WCCDP's other policies.

The Council will only support renewable energy developments in line with policy objective UTL 13 of the WCCDP (Development Plan, Vol 2, Development Management Standards, Section 5.25, p45).

The Renewable Energy Strategy 'considers the strategic planning factors contributing towards the deployment of such renewable energy.' (Renewable Energy Strategy, Introduction, p2). 'Strategic Planning Considerations' include 'the natural environment; landscape...cultural heritage; socio-economic impacts; the better integration of spatial planning and energy planning.' (Section 13, p73) 'Appropriate consideration of landscape capacity to accommodate renewable energy developments shall be carried out in the assessment of any proposal.' (Section 13.2, p73)

The proposed Scart Mountain Wind Farm and Grid Connection developments are in material contravention of the Renewable Energy Strategy of the WCCDP.

Biodiversity and Environment

Chapter 9 of the WCCDP deals with Climate Action, Biodiversity and the Environment. It is a Strategic Objective to '*Integrate climate change and adaptation considerations into land-use policy objectives and decision-making processes...*' **It is not the policy of the WCCDP that 'Climate change' factors and 'climate change' development proposals should be given paramount consideration and override all others**. It is the policy of the WCCDP that climate change factors should be **'integrated'** into land-use policy objectives and decision-making. (See also the reference in Waterford's Renewable Energy Strategy to the 'better integration of spatial planning and energy planning' (p73 and see Section 13.4, p76). The arguments in favour of renewable energy development comprise merely one group of objectives to be considered together with competing objectives such as protection of the landscape, biodiversity and water quality.

It is a Strategic Objective to '*protect, manage, and enhance the natural heritage, biodiversity, landscape and environment of Waterford City and County in recognition of its importance as a non-renewable resource, providing a unique identity and character for the City and County as a natural resource asset.*'

'*Maintenance and enhancement of our biodiversity is a key requirement for policy makers and the wider community. Waterford City & County Council are committed to identifying the City & County's ecological infrastructure [and] maintaining the favourable conservation status of protected areas...*' (Chapter 9, Section 9.6 Biodiversity)

Biodiversity Policy Objective BD 01 states that '*We will protect and conserve all sites designated or proposed for designation as sites of nature conservation value (Natura 2000 Network, Ramsar Sites, NHAs, pNHAs, Sites of Local Biodiversity Interest, Geological Heritage Sites, TPOs) and protect ecological corridors and networks that connect areas of high conservation value such as woodlands, hedgerows, earth banks and wetlands.*'

And Policy Objective ENV 01: Regulatory Framework and Decision Making states:

'Through implementation of the Development Plan we will cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management, including compliance

with EU Directives – including the Habitats Directive (92/43/EEC, as amended), the Water Framework Directive (2000/60/EC), the Birds Directive (2009/147/EC), the Environmental Impact Assessment Directive (2011/92/EU, as amended by 2014/52/EC) and the Strategic Environmental Assessment Directive (2001/42/EC) – and relevant transposing Regulations.'

The proposed Scart Mountain Wind Farm and Grid Connection developments are in material contravention of the above Biodiversity and Environment provisions of the WCCDP.

CONCLUSION

The WCCDP provides ample, environmentally appropriate areas for wind-energy development in full compliance with statutory and policy requirements.

With the exception of no.1 of its no. 15 turbines, the proposed Scart Mountain Wind Farm lies entirely within a clearly designated **Wind Exclusion Zone.** Furthermore, the Scart Mountain Grid Connection Route crosses a designated Wind Exclusion Zone, which the Applicant has failed to include in their Planning Application Form or mention/address in their EIAR (see our Failure to Provide Required Zoning Information chapter for full details), thus also making it incompatible with the statutory WCCDP and contravening Irish planning law.

The Applicant's assertions of insufficient zoning and policy conflict are misleading and legally unfounded. National climate targets do not override established local planning policy, nor do they justify development in unsuitable areas or trump biodiveristy. Ample capacity exists within the county's Preferred and Open for Consideration zones to contribute to renewable energy goals in a sustainable, plan-led manner.

We ask the Commission to have serious regard to these above-mentioned points when considering their decision and to refuse permission based on them.

APPENDIX:

OFFICE OF PLANNING REGULATOR REPORT

https://www.opr.ie/new-waterford-county-development-plan-a-clear-roadmap-for-sustainable-growth/

New Waterford County Development Plan
a Clear Roadmap for Sustainable Growth

The measures contained in the Waterford City and County Development Plan 2022-2028 will help the county continue to grow and become an even more attractive, prosperous, resilient and sustainable place, the Office of the Planning Regulator (OPR) has said.

In the plan adoption letter, the OPR has commended the local authority's ambitious targets to grow Waterford City as a Regional City of Scale, by accommodating an additional population of 50%-60% by 2040 while at the same time, bringing vibrancy to Waterford's towns and villages
The Regulator also praised the council for its clear commitment to supporting national renewable energy targets under the Climate Action Plan 2021.

This is the first time that a development plan prepared by Waterford City and County Council has been assessed by the OPR

Established on foot of the Mahon Tribunal Report, the OPR provides independent oversight of the planning system. One way the OPR does this is to independently assess the various stages of local authority plans to ensure they properly apply important national and regional government policies.

Commenting on the new Waterford City and County Development Plan, Planning Regulator, Niall Cussen said,

"Waterford City and County Council has set clear development objectives for the city and county which focuses on sustainable social, environmental, and economic growth well into the future, with an emphasis on bringing vibrancy and resilience to the county's villages and towns.

We are particularly impressed with the manner in which the plan outlines a coherent strategy for the delivery of key national planning objectives including the promotion of compact growth1 and town and village centre regeneration.

For example, in places such as Shandon and Kilrush in Dungarvan the council has prioritised new development on sites located close to the centre. This reduces the need for people to travel and means that walking and cycling are viable options.

The plan also contains a robust renewable energy strategy, which provides for measurable renewable energy targets, demonstrates the local authority's clear commitment to supporting national renewable energy targets under the Climate Action Plan 2021.

We are also satisfied with the manner in which the vast majority of our recommendations and observations were addressed at draft plan and material alterations stages. In some cases, while our recommendations were not fully implemented, we felt that the local authority provided good rationale for their decisions."

In total, the OPR made 13 recommendations and nine observations on its submission at Draft Waterford City and County Development Plan stage, and four recommendations in its submission at the Material Alternations stage to the Draft Waterford City and County Development Plan.

Recommendations are made on matters considered to constitute a potential material breach of legislative or policy requirements and which may affect the co-ordination of national, regional and local planning requirements. Observations are advisory and generally issue on discretionary or more minor matters.

Planning Regulator, Niall Cussen added:

"County development plans are hugely important documents. These plans set out a vision for the future development of local areas. They decide how the provision of the homes we need will be co-ordinated with wider employment opportunities, retail activity and community facilities.

By also properly co-ordinating national, regional and local considerations in making its development plan, the members of Waterford City and County Council have taken important steps to help ensure that Waterford City and the county's towns, villages and wider rural communities develop sustainably and are vibrant places to live and work.

I would like to put on record my sincere thanks to both the executive staff and the members of Waterford City and County Council for their engagement and hard work over long hours in preparing their development plan and at a demanding time, which included work through the pandemic."

1. Targeting a greater proportion of future development within and close to the existing 'footprint' of built-up areas to make best use of resources and infrastructure.

REBUTTAL OF THE APPLICANT'S LEGAL AND POLICY ARGUMENTS

KEY POINT SUMMARY

- Climate and biodiversity obligations are coequal; one does not override the other.
- The Applicant misrepresents law and policy, overstating climate obligations while downplaying biodiversity duties.
- EU Biodiversity Strategy and Nature Restoration Regulation are ignored despite being binding.
- CALCDA Section 15 does not mandate prioritising renewables over environmental protection.
- CAP24/25 do not grant automatic approval for renewables or bypass ecological safeguards.
- The proposed Scart Mountain project sits in a Wind Exclusion Zone (Waterford City & County Council Development Plan 2022-2028).
- EIAR/NIS lack definitive, precise assessment required by EU law.
- Biodiversity impacts are under-evaluated and mitigation measures are vague and unproven.
- Local and EU planning law requires protecting ecosystems; the overall proposed Scart Mountain project – GCR and associated wind farm – risks serious and irreversible deterioration.

INTRODUCTION

Climate and biodiversity are intrinsically linked and inseparable. Renewable energy tackles the cause of climate change. But a zero-carbon world would still face ecological collapse if biodiversity were lost. Biodiversity tackles the consequences and stabilises the planet. Biodiversity is the planet's life-support system. Destroying it weakens Earth's ability to heal itself, even if emissions fall. Climate mitigation and biodiversity protection must work hand in hand, not compete for policy or investment priority.

The Applicant seems to set renewable energy goals against biodiversity conservation. Prioritising one over the other. This position is scientifically and legally flawed. Biodiversity and climate change commitments have equal standing. Any 'solutions' that pit one against the other are unsustainable and catastrophically flawed.

This Chapter provides a rebuttal of the Applicant's legal and policy arguments as laid out in the Planning Statement and EIAR Chapter 4: Planning Policy and Development Context for the proposed Scart Mountain Grid Connection (and, in the case of EIAR Chapter 4, also in the case of the proposed Scart Mountain Wind Farm).

PLEASE NOTE

In the Introduction of the Planning Statement, the Applicant writes:
It is also noted that a comprehensive Planning Statement has been submitted with the Scart Mountain Wind Farm application (Ref 321522-24). Whilst acknowledging that each application must be judged on its own merits, we note that the subject proposed development and the proposed wind farm development form a single project. As such, the Board is requested to have regard to the legal and policy imperatives supporting the Wind Farm development when considering the grid connection proposed development.

1. As the Commission has been asked by the Applicant to consider the two Applications (case ref: Scart Mountain Wind Farm, 321522, currently awaiting decision; and this Application, case ref: 323791) as one overall project, and given the fact that, with the exception of the Planning Statement, all documentation submitted in this Application is exactly the same as documentation submitted for case ref. 321522, the Commission may find an overlap and/or reference to case 321522. We would like to take this opportunity to point out that any reference to case 321522 is merely used to support / highlight / emphasise points made here for this Observation and not intended to be used for consideration for case ref 321522 as we know that Observations can no longer be submitted / considered for that. We do, however, refer to the project as a whole (Scart Mountain Wind Farm and Grid Connection) in many instances – as does the Applicant in their documentation and Applications – because in reality, that is what we are dealing with irrespective of the fact that two separate applications have been submitted. One development cannot function without the other, and so both must be argued against and considered when making a decision.

2. *'As such, the Board is requested to have regard to the legal and policy imperatives supporting the Wind Farm development when considering the grid connection proposed development.'* We understand that the Commission is fully aware of, and well versed in, local, national and international law and Ireland's obligations in all of the above (as well as any other regulations and plans – whether mentioned in this Chapter or not), but we trust that the Commission will carry out due diligence in researching and liaising with legal experts on Ireland's obligations in BOTH climate and biodiversity issues. And not to take what the Applicant has written as definitive fact (as will be demonstrated in this chapter).

3. **Caveat:** We are by no means experts in the legal field, but having read the one-sided (and at times incorrect and/or incomplete) information provided by the Applicant, we feel it important to highlight the points below to ensure a fully-rounded picture is provided, as the Application focuses heavily (if not solely) on renewable energy climate goals and the Commission's (misleadingly worded/suggested) 'legal duty' and obligations therein.

LEGAL AND POLICY FRAMEWORK OMITTED OR INADEQUATELY / INCORRECTLY ADDRESSED BY THE APPLICANT

The Applicant's Planning Statement and EIAR Chapter 4: Planning Policy and Development Context fail to adequately and/or properly address, and/or misinterpret, and/or conflict with – and in certain instances completely ignore – the following:

- The Climate and Biodiversity Emergency
- EU Biodiversity Strategy for 2030 (a core part of European Green Deal)
- The Nature Restoration Regulation (EU) 2024/1991 (a core part of the EU Biodiversity Strategy & European Green Deal)
- The Climate Action and Low Carbon Development Act (CALCDA)
- The Climate Action Plan 2025 (and 2024)
- REPowerEU Plan (2022) and Council Regulation (EU) 2022/2577
- The National Planning Framework (Revised 2025)
- The Regional Spatial and Economic Strategy (RSES) for the Southern Region
- The Waterford City and County Development Plan 2022–2028 (WCCDP)

Furthermore, the Application fails to adequately address any of Ireland's legally binding obligations regarding biodiversity. Collectively, these failures establish that the Applications (as they are to be considered as one project) are inconsistent with EU, Irish and local law.

1. IRELAND'S CLIMATE AND BIODIVERSITY EMERGENCY

On 9 May 2019, the Dáil Éireann declared a Climate and Biodiversity Emergency in Ireland, recognising the urgent need for immediate, transformative action to address climate change and ecological decline. While non-statutory, it established the overarching policy imperative for all sectors of government and society to accelerate the transition to a *low-carbon, climate-resilient, **and biodiversity-rich** future* [highlighted for emphasis]. With this wording, it has brought the term 'biodiversity' into mainstream political discourse, and **recognises biodiversity loss as a crisis of equal urgency to climate change**. This means that **biodiversity loss and ecosystem decline are coequal emergencies with climate change**. The declaration set the tone for subsequent national climate legislation and action plans and remains a critical contextual benchmark for all strategic infrastructure proposals, particularly those that assert alignment with Ireland's national climate objectives. It is one of the most fundamental legal, policy and environmental considerations.

While the Applicant discusses national climate legislation and policy in their Planning Statement and EIAR Chapter 4, **it fails to acknowledge or reference the Climate and Biodiversity Emergency in its full context** – as it merely focuses on, and only mentions, the 'climate' side of things. This is a significant and intentional omission as the 2019 declaration represents a foundational policy statement by the State. By neglecting to reference or address this declaration, the Applicant presents an incomplete policy context and undermines the Planning Statement's claim of full compliance with national climate policy. It overlooks the broader political framework within which all public bodies

and developers are expected to operate – one that explicitly links **climate mitigation with biodiversity protection**. The Applicant has failed to demonstrate how the proposed Scart Mountain development contributes not only to Ireland's decarbonisation targets but also to the restoration and protection of biodiversity in accordance with the 2019 declaration (the Applicant's Biodiversity Management Plan, for example, is fundamentally flawed, conceptual rather than practicable, with no guarantees, set plans, agreements in place or precedented evidence of success rates for their proposed 'ideas').

See: Dáil Éireann, May 2019 – https://www.oireachtas.ie/en/debates/debate/dail/2019-05-09/32/

2. EU BIODIVERSITY STRATEGY FOR 2030

The EU Biodiversity Strategy for 2030 is the EU's plan to halt and reverse biodiversity loss by 2030, as part of the European Green Deal. It aims to protect 30% of Europe's land and sea; enlarge existing Natura 2000 areas, with strict protection for areas of very high biodiversity and climate value; and – with the launch of the EU Nature Restoration Regulation – restore degraded ecosystems through binding targets (see below). Each EU Member, including Ireland, must contribute through national biodiversity plans, habitat protection, and regular reporting to meet these EU-wide goals.

Yet, in its two-page section about the European Green Deal in EIAR Chapter 4, the Applicant completely fails to mention this. The EU states that this is a '*core part of the European Green Deal*'.

Source: https://environment.ec.europa.eu/strategy/biodiversity-strategy-2030en

3. EU NATURE RESTORATION LAW (NATURE RESTORATION REGULATION; EU 2024/1991))

The Nature Restoration Regulation (NRR) is part of the above-mentioned EU Biodiversity Strategy for 2030 / European Green Deal, and yet another legal policy that the Applicant has failed to include or refer to in their Application. It was entered into force on 18 August 2024 (four months before the Applicant submitted their EIAR to the Commission for Scart Mountain Wind Farm – therefore entirely applicable to the development.) Via binding targets, it requires all Member States to restore at least 20% of degraded land and sea ecosystems by 2030 and all ecosystems by 2050. Ireland is legally bound to these obligations.

Together, the Climate and Biodiversity Emergency (a non-statutory declaration) and the NRR (a binding EU regulation) reflect political and legal commitments for Ireland to **decarbonise while simultaneously protecting and restoring nature**. Therefore, any

Application for a renewable-energy development must be assessed with this dual emergency in mind, and not simply as a means to meet renewable-energy targets.

The plans for the proposed Scart Mountain Wind Farm and Grid Connection propose to destroy and displace protected and threatened habitats, wildlife, birds and waterways. The Applicant's desire to position a wind farm in land that is financially free to them but in a completely unsuitable location – namely in a Wind Exclusion Zone (an area deemed unsuitable for wind development) in the Waterford City & County Development Plan 2022-2028, and in an area that is home to protected species, habitats and waters – does not override these aspects, regardless of how many times the Applicant attempts to play the 'climate emergency' card.

4. CLIMATE ACTION AND LOW CARBON DEVELOPMENT ACT (CALCDA): SECTION 15 DOES NOT REQUIRE PRIORITISING RENEWABLE ENERGY OVER BIODIVERSITY OBLIGATIONS

In Section 3.1 of its Planning Statement, the Applicant argues that An Coimisiún Pleanála, as a *'relevant body'* under the Climate Action and Low Carbon Development Act (CALCDA), has a **duty to prioritise renewable-energy projects:**
Having regard to the far-reaching obligations of Section 15, ACP has a duty to prioritise renewable energy projects (including necessary grid connection proposals).

EIAR Chapter 4 also states:
The Planning Statement attached with this planning application further discusses ***the obligations of the consenting authority introduced by the Article 15 of the amendment act*** [highlighted for emphasis].

Both documents rely on Section 15 of the Act and present it as requiring the Commission to advance renewable-energy infrastructure as a matter of obligation. The Planning Statement even states that this duty applies 'particularly given that the Climate Action Plan's binding target of 9 GW of onshore wind by 2030 is widely acknowledged to be in jeopardy'.

This interpretation is incorrect in law and inconsistent with the Act's actual wording.

Section 15 sets a duty of consistency – not supremacy: Section 15 (1) requires that *'a relevant body shall,* ***in so far as practicable****,* [highlighted for emphasis] *perform its functions in a manner consistent with'* the most recent climate-action plan, long-term strategy and adaptation frameworks. The phrase ***'in so far as practicable'*** clearly qualifies the duty. It means public bodies must act consistently with climate policy ***where possible***, but **not at the expense of other legal obligations**. The section establishes a standard of **consistency**, not a hierarchy that elevates climate measures above biodiversity, heritage or environmental-protection law.

Both the Planning Statement and EIAR Chapter 4 omit this nuance and instead treat Section 15 as a command to prioritise renewables. This is a misleading: Section 15 does not authorise any public authority to disregard other statutory duties or environmental constraints. The Commission must, in fact, perform its functions **consistently with both climate and environmental obligations** and interpret Section 15 **in full harmony** with Ireland's wider and other legal and binding obligations, including:

- the **Habitats Directive (92/43/EEC)**,
- the **Birds Directive (2009/147/EC)**,
- the **EU Nature Restoration Regulation (EU 2024/1991)**

Ireland's planning and environmental law is designed to integrate – not rank – these obligations. **Climate action, renewable-energy policy and biodiversity protection must all be pursued together.**

It is therefore **incorrect** for the Applicant to suggest that the Commission is legally required to prioritise or approve renewable-energy projects.

To conclude: Section 15 does not authorise An Coimisiún Pleanála to place renewable-energy targets above biodiversity protection. Instead, it requires a **balanced, lawful approach** that integrates both. Both EIAR Chapter 4 and the Planning Statement fail to reflect this balance, presenting climate objectives as overriding. The correct interpretation – supported by legislation and case law – is that **climate and biodiversity obligations carry equal legal weight**, and decisions must advance both in tandem.

5. THE CLIMATE ACTION PLAN 2025 (AND 2024) DO NOT OVERRIDE BIODIVERSITY OR RESTORATION OBLIGATIONS

While the Applicant relies on CAP24 (EIAR Chapter 4) and CAP25 (Planning Statement) to emphasise faster renewable-energy delivery, it is important to remember that these are **just one tool** within Ireland's wider climate-governance framework, and do not provide blanket justification for renewable-energy projects to automatically take precedence over biodiversity habitat or restoration protection and obligations.

CAP25 is a **statutory climate plan under the CALCDA** that guides decision-making, but it remains a **policy instrument and does not displace EU environmental law** (including the Habitats and Birds Directives) or the binding **Nature Restoration Regulation (EU 2024/1991)**. Nor does it override **Ireland's 2019 Climate and Biodiversity Emergency** declaration. Ireland has **parallel, binding obligations**: to decarbonise **and** to protect and restore nature. The National Planning Framework also embeds biodiversity protection (e.g., NPO 60).

Regardless of the fact that CAP25 urges 'turbocharging delivery' of renewables, this renewable-energy urgency does not create a presumption in favour of projects that would damage ecosystem condition or undermine restoration pathways; projects must still pass the applicable environmental tests and demonstrate compatibility with restoration outcomes. Decision-makers must act consistently with all applicable

obligations (including the NRR, Ireland's dual emergency declarations, ecosystem restoration and so on) and ensure that they are a central part of the decision.

The Environment Protection Agency has projected that Ireland may achieve only a 23% reduction in greenhouse gas emissions by 2030, compared to its ambitious 51% reduction target. This shortfall reinforces the need to integrate biodiversity and restoration, since long-term climate resilience depends on healthy ecosystems. Renewable-energy expansion cannot be treated as an exception to environmental law; decisions must follow the mitigation hierarchy – **avoid, minimise, restore** – and ensure that biodiversity loss is addressed.

Therefore, the Commission must assess full ecological and cumulative impacts (habitat fragmentation, species protection, restoration compatibility, etc.) and apply the mitigation hierarchy. Where legal tests – for example under Article 6(3) – cannot be satisfied (i.e., adverse effects on a European site cannot be definitively excluded based on objective scientific information), **permission must be refused**; CAP24/CAP25 cannot override those requirements. The Applicant's policy case in EIAR Chapter 4 and the Planning Statement does not change this legal position, nor does it convert national targets (e.g., 9 GW by 2030) into a presumption of approval for any particular site.

If a proposed project shows that it could or would significantly degrade habitats or hinder restoration targets – as, according to the Applications submitted, the Scart Mountain Wind Farm and Grid Connection as an overall project clearly could / would – the Commission is legally obliged, and within its rights, to refuse consent.

Furthermore, the Applicant's wording in their Planning Statement when they write: *The statutory Climate Action Plan 2025 (CAP25) is the third update of Ireland's implementing tool by which Ireland will achieve its legally binding national climate objective via carbon budgets and sectoral emissions ceilings* is somewhat misleading. The Climate Action Plan is **not itself the tool by which Ireland will achieve** its national climate objective; rather, it is a **policy framework** setting out measures intended to support that goal. Achievement depends on implementation across sectors within the limits of carbon budgets and emissions ceilings, not on the Plan alone. The phrasing therefore **overstates the Plan's direct role** and **implies a certainty of outcome** that is not warranted.

6. THE CLIMATE ACTION PLAN 2025 (AND 2024) DO NOT OVERRIDE AN COIMISUN PLEANALA'S LEGAL OBLIGATIONS.

We are aware that the Climate Action Plan 2025 (CAP25) as a national law is of consequence. We are also aware that EU law relating to planning matters is also – and still – of consequence.

The Applicant states that:
With particular respect to ACP's obligations under CALCDA, it is noted that ACP is a "relevant body" under that act and as such must: "in so far as practicable, perform its functions in a manner consistent with" inter alia "the furtherance of the national climate

objective" and "the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State" (CALCDA s.15). This is a legal obligation.

An Coimisiún Pleanala of course has other legal obligations and must stay true to its Mission Statement:
To play our part as an independent national body in an impartial, efficient and open manner, to ensure that physical development and major infrastructure projects in Ireland respect the principles of sustainable development, including the protection of the environment.

Specifically, to the '*protection of the environment*' part, we refer to the CJEU. The test for Appropriate Assessment is set out by the Court of Justice of the European Union in Case 258/11 at 44.

'So far as concerns the assessment carried out under Article 6(3) of the Habitats Directive, it should be pointed out that it 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 works proposed on the protected site concerned.'

It is our submission that it is not possible for An Coimisiún Pleanála to grant permission for the Scart Mountain GCR development as the EIAR, NIS and the mitigation measures proposed are neither complete, precise or definitive.

We refer to our Chapter 12: Comments on Applicant's EIAR Schedule of Mitigations Chapter.There, we have added comments in red into the schedule of mitigation measures prepared by TOBIN Consulting Engineers for FutureEnergy.

7. REPOWEREU PLAN (2022) AND COUNCIL REGULATION (EU) 2022/2577.

EIAR Chapter 4 invokes the REPowerEU Plan (2022) and Council Regulation (EU) 2022/2577 and its acceleration measures (including the rebuttable presumption of overriding public interest) as an advantage to the proposed project (*'This regulation indicates the international support for the proposed project…'*).

While the REPowerEU Plan (2022) and Council Regulation (EU) 2022/2577 were adopted to accelerate renewable-energy deployment in response to the energy crisis and reduce dependency on Russian fossil fuels, the Regulation was a temporary emergency measure and is no longer in force in its original form. However, certain key provisions were extended and remained in force until 30 June 2025, but these have also now expired or been superseded. The measure operated alongside, and did not displace, existing environmental and biodiversity protections under EU or Irish law. Even during its operation, the 'overriding public interest' presumption for renewable projects was rebuttable and did not apply where major adverse environmental effects could not be mitigated or compensated (something the Applicant is unable to guarantee and fails to adequately address). Accordingly, reliance on REPowerEU does not remove this overall project's obligations under the Habitats and Birds Directives, the EIA Directive (subject only to the limited, conditional derogations set out in the Regulation), and

Ireland's Planning and Development Acts, nor does it diminish the duty to protect biodiversity and landscape integrity in the assessment of this application.

8. THE NATIONAL PLANNING FRAMEWORK (REVISED 2025) AND SOUTHERN RSES REQUIRE RENEWABLE-ENERGY DEVELOPMENT TO RESPECT BIODIVERSITY, NATURE AND ECOSYSTEM PROTECTION

Both the Planning Statement and EIAR Chapter 4 rely on the Ireland 2040 – National Planning Framework (Revised 2025; NPF) and the Regional Spatial and Economic Strategy (RSES) for the Southern Region to justify the (overall) Scart Mountain proposal.

National Planning Framework (Revised 2025)

While both documents accurately cite the NPF's climate-and-energy provisions, they skim over its biodiversity obligations, treating them superficially by merely quoting them but not integrating them into the reasoning. The result is an incomplete and unbalanced policy interpretation, one that highlights renewable-energy urgency but underplays legally co-equal biodiversity and restoration duties.

The Applicant's EIAR Chapter 4 features Table 4-1: National Strategic Outcomes, which correctly lists **NPO 59**, calling for the *'enhancement of the conservation status and improved management of protected areas and species'* and for the *'integration of policies and objectives for the protection and restoration of biodiversity in statutory development plans.'*

However, there is **no analysis or discussion** of how those requirements apply to the Scart Mountain project (or to the Applicant's own Biodiversity Management Plan). The document merely quotes the objective but does not expand further or link it to the project's ecological implications or to the Wind Exclusion Zone designation under the Waterford City and County Development Plan 2022-2028.

In contrast, the Planning Statement references only the NPF's low-carbon and grid-development objectives and omits any reference to NPO 59 or NPO 60.
NPO 59: *Enhance the conservation status and improve the management of protected areas and protected species by: Implementing relevant EU Directives to protect Ireland's environment and wildlife; Integrating policies and objectives for the protection and restoration of biodiversity in statutory development plans; Developing and utilizing licensing and consent systems to facilitate sustainable activities within Natura 2000 sites; continued research, survey programs and monitoring of habitats and species.*

NPO 60: *Conserve and enhance the rich qualities of natural and cultural heritage of Ireland in a manner appropriate to their significance.*

The NPF further commits Ireland to *'managing future growth within environmental limits and ensuring the health of ecosystems as the foundation of economic and social resilience.'* (DHLGH – NPF Update 2025 Overview.)

Taken together, these provisions mean that renewable-energy development must **work with nature, not against it**, and that environmental capacity is a limiting condition, not an optional add-on.

Furthermore, in their Planning Statement and EIAR Chapter 4, the Applicant states:
'The revised NPF amends the previous National Strategic Outcome 8 to reflect updated legally binding renewable energy and greenhouse gas emissions targets set out under CAP 24.'
This is misleading, and therefore another case in point where, through full liaison with legal experts and due diligence, the Commission must be aware of and have regard to actual policy wording and Ireland's legal obligations in full context concerning climate-, renewable energy- and biodiversity-obligations, and not take the Applicant's words in their Planning Statement and EIAR Chapter 4 as definitive fact.

The actual Revised NPF (First Revision, April 2025) wording is as such:

NSO 8 – Transition to a Carbon Neutral and Climate Resilient Society
"To achieve a carbon-neutral, climate-resilient society by 2050, the Framework will promote measures that:
- *Deliver on Ireland's legally binding greenhouse gas reduction targets,*
- *Maximise the deployment of renewable energy,*
- *Support energy efficiency and the circular economy, and*
- *Strengthen adaptation and resilience across all sectors."*

(Source: *National Planning Framework – First Revision*, April 2025, p. 142)

As the Commission will see, the new NSO 8 wording states: '*Deliver on Ireland's legally binding greenhouse gas reduction targets*' (one point) AND '*Maximise the deployment of renewable energy*' (another point). NOT *'reflect updated legally binding renewable energy targets'*. There is no mention of '*legally binding*' when referring to renewable energy.

The Applicant then goes on to state:
'Additionally, Chapter 9.2 of the revised NPF sets out Regional Renewable Electricity Capacity Allocations as set out in Figure 3-1 below. The proposed development is located in the Southern region for which 978MW has been identified as an additional renewable power capacity allocation, which in the year 2030, would amount to ca. 23% of the total national share.
Notably these national objectives are legal obligations under CALCDA.'
[highlighted for emphasis]

The assertion that the regional renewable electricity capacity allocations set out in Chapter 9.2 of the revised NPF constitute *legal obligations* under the Climate Action and Low Carbon Development Act 2015 (as amended) (CALCDA) is **incorrect and misleading**. Chapter 9.2 of the revised NPF introduces ***indicative*** regional renewable electricity capacity allocations intended to inform and guide the preparation of Regional Spatial and Economic Strategies (RSESs) and local development plans, and to support delivery of national renewable energy targets.

'In order to facilitate the accelerated roll-out and implementation of renewable electricity infrastructure for onshore wind and solar generation development, this Framework ***indicates a range of regional renewable electricity capacity allocations****. These allocations are to be integrated into the Regional Spatial and Economic Strategies and the associated Regional Renewable Energy Strategies and, in addition, are to be translated to county-level targets that will inform city and county development plans.'*
(page 135)

While Section 15 of CALCDA requires relevant bodies to perform their functions '**in so far as practicable**' in a manner consistent with approved Climate Action Plans, the National Long-Term Climate Action Strategy and the National Climate Objective, this statutory duty does **not** confer binding legal effect on the specific capacity allocations within the NPF. These allocations are **policy guidance tools**, not statutory obligations or enforceable quotas under CALCDA.

Regional Spatial and Economic Strategy (Southern Region)
Both documents quote RPO 99 of the Southern RSES:

'It is an objective to support the sustainable development of renewable wind energy (on shore and offshore) at appropriate locations and related grid infrastructure in the Region in compliance with national Wind Energy Guidelines.'

While the quotation is accurate, the interpretation is not. The key qualifier – '***at appropriate locations***' – is not analysed. In the context of the Regional Spatial and Economic Strategy (RSES) for the Southern Region, '*appropriate locations*' are sites that avoid environmentally sensitive areas such as designated habitats, ecological corridors and protected sites. As stated in the Southern RSES (2020): *'The RSES takes a progressive approach to conserving and enhancing the natural and built heritage and the natural resources of wildlife and landscape. Our most valued assets must be protected from overuse and pollution. Equally, it is important to care for the general countryside, coastline and urban environment. A ready supply of development land at appropriate locations throughout the Region will ease the pressure on vulnerable assets while encouraging economic progress.'*

The Applicant treats RPO 99 as a blanket endorsement rather than a **conditional support** that depends on environmental suitability. Furthermore, the Applicant's Biodiversity Management Plan remains conceptual and lacks the measurable safeguards needed to meet the RSES' sustainability test.

Alignment with the Nature Restoration Regulation (EU 2024/1991)
As mentioned above, neither the Planning Statement nor EIAR Chapter 4 refer to the EU Nature Restoration Regulation (2024/1991), which entered into force on 18 August 2024 and now legally binds Ireland to restore at least 20% of degraded land and sea by 2030 and all degraded ecosystems by 2050, while preventing deterioration of restored habitats.

Consequently, the NPF's and RSES's renewable-energy objectives must now be interpreted through the lens of these binding restoration duties.

Projects that would cause further degradation or hinder restoration targets cannot be considered consistent with national or EU policy, regardless of their climate benefits.

Legal Duties under Planning Law

Section 10(2)(c) of the Planning and Development Act 2000 (as amended) requires that development plans and decisions include objectives for *'the conservation and protection of the environment including, in particular, archaeological and natural heritage and the conservation and protection of European sites, and any other sites which may be prescribed for the purposes of this paragraph.'*

A project cannot be justified simply because it advances renewable-energy targets if it undermines biodiversity or restoration objectives. Where environmental legal tests – such as those under Article 6(3) of the Habitats Directive – cannot be definitively satisfied, consent cannot lawfully be granted, regardless of alignment with climate or energy policy.

In Conclusion: The Applicant's EIAR Chapter 4 and Planning Statement correctly quote the NPF and RSES but **fail to apply their biodiversity and restoration obligations to the actual site**.

Both frameworks require that renewable-energy developments:

- occur only at **environmentally suitable** locations;
- **maintain or enhance biodiversity** and ecosystem health; and
- comply with **EU restoration obligations** and Irish environmental law.

Therefore, any reading of the NPF or RSES that treats renewable-energy delivery as trumping biodiversity, nature or restoration duties is **legally and policy-wise unsound**.

An Coimisiún Pleanála must ensure that its assessment of the Scart Mountain Grid Connection (and also its role in the overall Scart Mountain project) reflects the **integrated nature of Ireland's dual obligations** – achieving decarbonisation and ecological restoration together, and not one at the expense of the other.

9. WATERFORD CITY AND COUNTY DEVELOPMENT PLAN 2022–2028

The Waterford City and County Development Plan (2022–2028) (WCCDP) governs all land use and infrastructure development in the county.

Policies UTL 13 and UTL 19 require renewable energy and grid projects to minimise environmental impacts and demonstrate biodiversity protection.
In Section 3.4 of the Applicant's Planning Statement, it states
'Policy UTL 19 - Underground Cables, requires that proposals demonstrate that environmental impacts are minimised. In this regard ACP are referred to the accompanying EIAR and NIS which demonstrate that no unacceptable adverse environmental impacts will arise from the proposed development.'

With regards to the Applicant's statement '*which demonstrate that no unacceptable adverse environmental impacts will arise from the proposed development*': We refer the Commission to the Observations submitted for the Scart Mountain Wind Farm (case ref: 321522) – in particular (but not limited to) those of the Knockmealdown Protection Group which includes reports from experts Dr Patrick Moran (ecology), Dr Pamela Bartley (hydrology) and Jack O'Sullivan (environmental scientist); Professor Mike Gormally; the NPWS; An Taisce; Transport Infrastructure Ireland (who have included a whole section pertaining to the Grid Connection already); and more. Due to the size of the documents and the fact that there are 48 Observations in total, it would be impossible, and unrealistic for the Commission to expect us to include them all as an Appendix with this Observation, which is why we refer you to the original submissions. We acknowledge they are Observations for the Scart Mountain Wind Farm, but they include details and relevance to the Grid Connection route too. And – as stated by the Applicant – the wind farm and grid connection are a 'single project', so the points made in those Observations apply to this proposed Grid Connection development too. made And as the Commission will see from those Observations, the EIAR and NIS do NOT '*demonstrate that no unacceptable adverse environmental impacts will arise from the proposed development*'. Far from it.

The WCCDP Wind Energy Strategy identifies three zoning categories: Preferred Areas, Open for Consideration Areas and Wind Exclusion Zones, where large-scale wind farms are unsuitable due to landscape, ecological and heritage sensitivity.

Below is a map provided by the Applicant in their EIAR Chapter 4 of (half of) the project's location in regard to the WCCDP Wind Energy Strategy zoning. As is shown, the proposed Scart Mountain Wind Farm (one half of the overall project) lies within a Wind Exclusion Zone, overlapping habitats hydrologically connected to the Blackwater River (Cork/Waterford) SAC. What is not shown is the Grid Connection route, which also overlaps a Wind Exclusion Zone, as it crosses a watercourse hydrologically connected to the Dungarvan Harbour SPA – both of which lie under the EU Habitats and Birds Directives. This lack of including the Grid Connection route in the map is a serious omission in itself as Chapter 4 forms part of the main EIAR submitted for the Grid Connection Application.

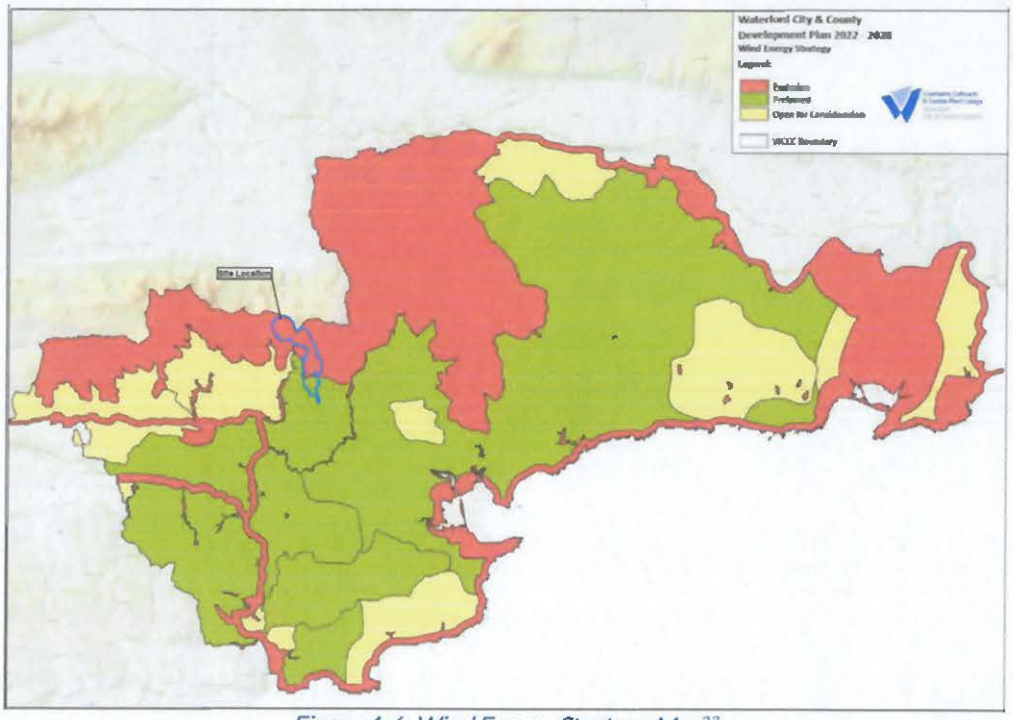
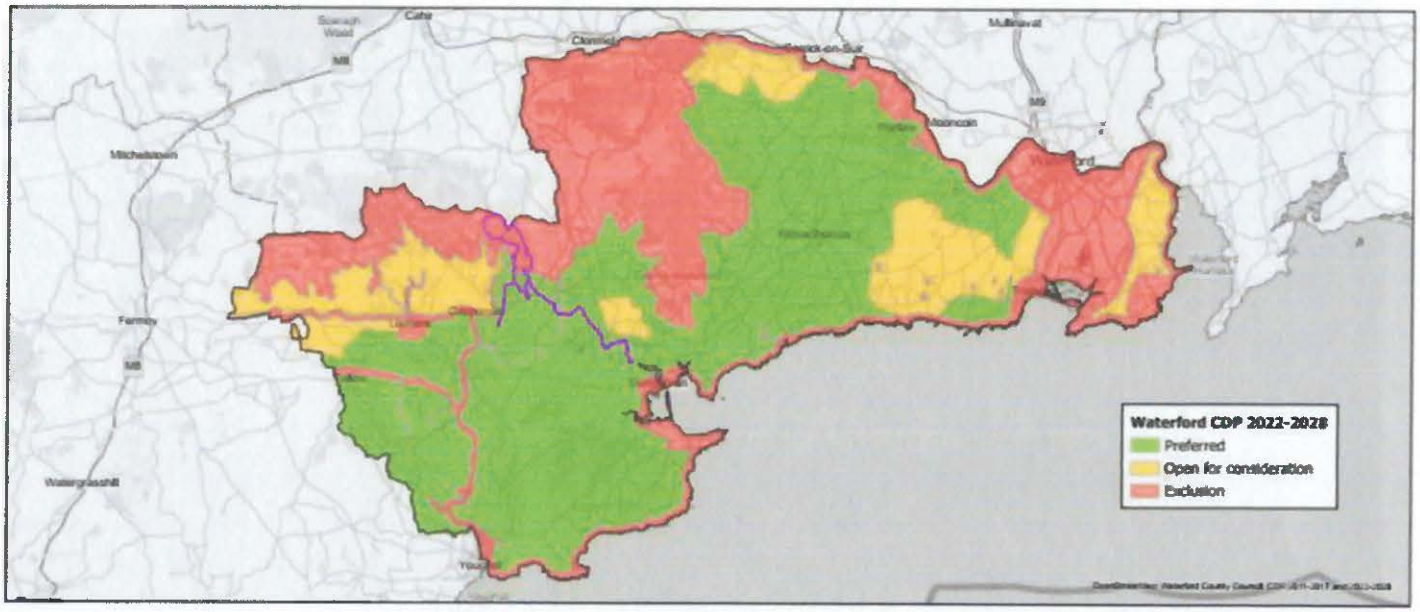


Figure 4-6: Wind Energy Strategy Map[23]

Source: EIAR Chapter 4: Planning Policy and Development Context

For the Commission's behalf, we have created a map that shows the project in its entirety: wind farm site, TDR and Grid Connection Route so that the Commission may have a full proper overview of the entire project as well as just the Grid Connection route itself (which this Observation pertains to). Please note that this is a rough map merely for overview purposes.



If the Applicant were serious about assisting Ireland in meeting its climate and renewable-energy obligations, it would have selected a site within a Preferred or Open for Consideration area – locations pre-assessed as capable of accommodating turbines without compromising biodiversity or landscape integrity. Developing in a Wind Exclusion Zone not only risks delays and possible refusal for a number of (environmental) reasons, it also violates the precautionary principle and risks non-compliance with Article 6(3) of the Habitats Directive, the Birds Directive, and Article 4 of the Nature Restoration Regulation, which prohibits further deterioration of protected habitats and waterways (we refer the Commission to the Observation submitted for Scart Mountain Wind Farm, case 321522, by the Department of Housing, Local Government and Heritage – Nature Conservation section).

In the Conclusion of their EIAR Chapter 4, the Applicant states:
'The proposed project fits with the overall strategic aim of the Waterford City and County Development Plan by facilitating the development of a diverse energy portfolio by the sustainable harnessing of the potential of renewable energy. Although the proposed wind farm is located within lands zoned for 'exclusion' of wind farm development. This is contrary to international and national policy and legislation as the adopted wind energy strategy within the CDP was prepared before the adoption of Ireland's new legally binding sectoral emissions ceilings which were approved by Government in July 2022. It was also in advance of the publication of the Climate Action Plan (CAP) 2023 and 2024, which includes further increased targets for onshore wind deployment in Ireland, and RED III. Therefore, the strategy does not locate sufficient viable land for wind farm development which is further reduced due to accommodate existing environmental constraints such as dispersed dwellings and settlements across rural areas. Based on a mapping analysis presented in the Planning Statement attached with this submission <<Note: there is no mapping analysis in the Planning Statement attached with the Grid Connection application>> *it is contended that the 2022 County Development plan is demonstrably less ambitious for onshore wind energy than its predecessor, at a time when national policy is calling for onshore wind capacity to more than double, and European policy is calling for accelerated mass adoption of renewable energy in response to the twin climate and energy cost / energy security crises. A logical response to national and EU policy (even in advance of the publication of our sectoral emissions ceilings and CAP 24 onshore wind targets) would be to increase the viable areas for onshore wind development in Waterford, but at an absolute minimum, it should have preserved pre-existing ambitions evident from the wind designations maps associated with the previous CDP. This did not occur, and the subject site changed from 'Open to Consideration' to 'No go/ Exclusion area'.*

The assertion that the lands zoned for the exclusion of wind energy development is '*contrary to international and national policy and legislation*' is fundamentally flawed and misleading.

Firstly, the WCCDP is the democratically adopted statutory planning framework for the area. The Wind Energy Strategy contained within it was prepared in accordance with an SEA, numerous Acts, Policies, Directives and Guidelines (see 1.4 Environmental Assessment and Climate Change, Waterford City and County Development Plan 2022-2028 Vol 1, page 9 for an example), and was approved by the Office of the Planning Regulator (see Appendix in our **Chapter 9: Waterford City & County Council**

Development Plan 2022-2028 Wind Energy Strategy Zoning). As such, the WCCDP carries full statutory effect until formally reviewed or amended through the proper planning process. National or sectoral policy updates, including emissions ceilings or Climate Action Plan targets, do not automatically override or nullify adopted local development plan policies.

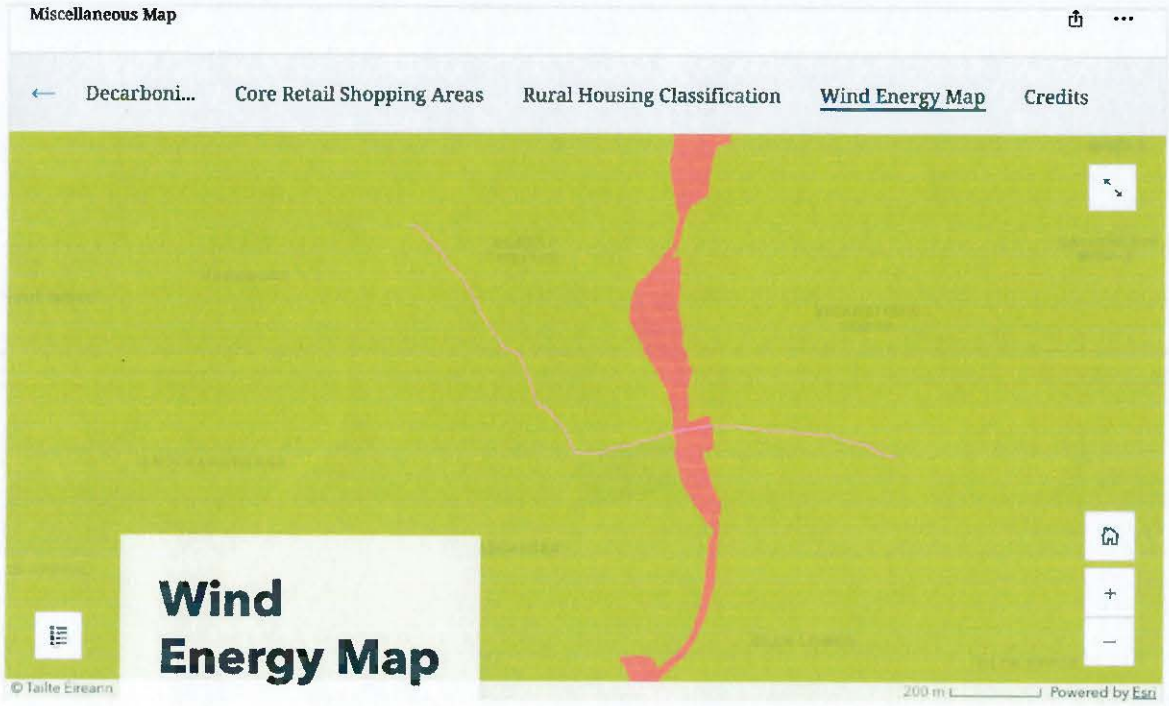
Secondly, while subsequent documents such as the Climate Action Plan 2023, 2024 & 2025, the Sectoral Emissions Ceilings (2022), and RED III do indeed set more ambitious renewable energy targets, they do not confer development rights on specific sites, nor do they negate the spatial planning decisions already made at local level. The role of national policy is to guide overall renewable energy expansion within the framework of sustainable planning principles, not to disregard established environmental, landscape, or community protections embedded in local plans.

And finally, the designation of Wind Exclusion Zones in the WCCDP was based on comprehensive landscape sensitivity assessments, environmental constraints (including proximity to designated habitats, heritage assets and residential amenity), and consultation with statutory bodies. These remain valid planning considerations under both national and EU law. Ignoring them on the basis of later-adopted policy targets would undermine the integrity of the plan-led system and contradict the principle of proper planning and sustainable development.

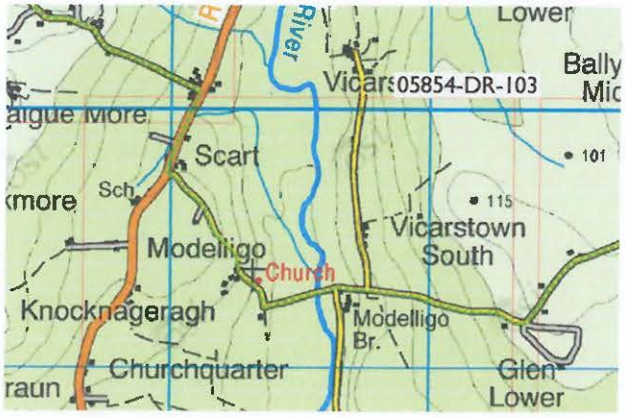
In summary, while national climate targets require an accelerated rollout of renewable energy infrastructure, this must occur within the bounds of existing statutory planning frameworks and in a manner that respects environmental, social and landscape considerations. Therefore, the proposal's location within an area expressly zoned for exclusion from wind farm development remains incompatible with the current Waterford Development Plan and cannot be justified by reference to later policy developments.

Failure to mention Wind Exclusion Zone designation in SIDS Application Form

In the Application Form, Page 4, 'Site Zoning in Current Development Plan for the area', the Applicant has failed to include / declare that part of the cable route is located within a Wind Exclusion Zone – an area designated unsuitable for wind farm development – of which this project is part of. As the Applicant failed to include the Grid Connection route in Figure 4-6 above, and it is not so clear in the reproduction we have created for the Commission above, below is a zoomed-in extract from the Wind Energy Map showing the precise location of where the Grid Connection crosses a Wind Exclusion Zone.



Above: Extract from WCCDP Wind Energy Map depicting Wind Exclusion Zone (red) and proposed Grid Connection route (purple line) crossing it. Purple line follows the road route provided by the Applicant in *Appendix 1-1 – Planning Drawings: Overall Site Location Map Sheet 1 of 2 05854-DR-100A* (extract below)



In Section 3.4 of their Planning Statement, the Applicant manages to summarise all of WCC's **key strategic aims and policy codes** relating to **climate change into one meaningless sentence:**

The CDP also sets out key strategic aims over the lifetime of the plan of which the below are of relevance to the proposed development:

- *Take on the urgent challenges of climate change.*

Again, the wording used by the Applicant implies that *'Take on the urgent challenges of climate change'* is a key strategic aim within the WCCDP that is of relevance to the proposed development. This – again – is misleading and far too oversimplifying. Furthermore, the Applicant completely omits to mention all the key strategic aims pertaining to biodiversity, which are ALSO of great relevance to the proposed development due to the development's impact on the environment. Therefore, we refer the Commission to Chapter 9 of the WCCDP Volume 1 Written Statement for a full overview of the biodiversity-related ones too for consideration. We also refer the Commission to some more information regarding the Policies, included at the end of this Chapter.
https://consult.waterfordcouncil.ie/sites/default/files/Waterford%20City%20and%20County%20Development%20Plan%202022-2028%20Vol%201.pdf

Strategic Aim:
Protect, restore, and enhance biodiversity, ecosystems, and ecological connectivity across Waterford to support resilience, wellbeing, and environmental quality.

CONCLUSION

There is no disputing the importance of combating climate change, but renewable energy is not the only requirement in environment protection. Biodiversity; water conservation and safety; preservation of rare, threatened and protected wildlife and flora and the areas they rely on; and ground stability are all just as important to safeguard. But under the guise of helping to combat the effects of climate change, the Applicant is placing all these things under risk with its proposed plans.

Irish law requires that planning decisions consider environmental obligations, including those under the Habitats Directive, Birds Directive etc, and case law. Therefore, biodiversity impacts must be fully and adequately assessed as part of all project Applications. And so, we ask the Commission to take into serious regard and consideration that this proposed loss/destruction of environmentally sensitive biodiversity cannot be trumped by the need for wind energy – which, as is explained in our **Chapter 11: Critical Constraints Within Ireland** – is currently unsustainable anyway.

Renewable energy <u>does not, and must not</u>, trump biodiversity, nature, wildlife and the environment. Ireland's legislative and policy framework, dual emergency and binding obligations requires the integration – not prioritisation – of renewable energy and biodiversity obligations. Section 15 of the Climate Action and Low Carbon Development Act (2015, as amended) requires public bodies to act consistently with both climate objectives and environmental law. Under the WCCDP, the NPF and EU law, An Coimisiún Pleanála must ensure that all these considerations are given equal weight.

Renewable Energy Does Not Automatically Override Biodiversity

The Applicant incorrectly assumes renewable-energy projects automatically merit consent due to climate urgency. This is legally and scientifically flawed given the biodiversity context of Ireland's declared Climate **AND BIODIVERSITY** Emergency and the binding EU NRR obligations.

All Angles Must Be Considered: Climate and Biodiversity

Planning law and policy require integration of climate and biodiversity considerations. Trade-offs between climate gains and biodiversity losses must be transparently evaluated, not ignored.

Specific Deficiencies in the Planning Statement & EIAR Chapter 4

The Planning Statement and EIAR Chapter 4 lack detailed biodiversity criteria, fail to assess alignment with Ireland's forthcoming National Restoration Plan, and provides only generic mitigation measures rather than site-specific proposals.

Implications for Decision-Making

The Commission must treat biodiversity obligations as equally important to climate obligations, requiring full compliance with EU and Irish environmental law, and ensuring biodiversity net gain or equivalent outcomes.

And finally: despite the amount of terminology such as 'legally binding', 'legal obligations', 'legal requirement', 'duty' and so on that the Applicant has thrown into the Application, we ask the Commission to have due regard to the fact that these claims may not be definitive fact, and to carry out due diligence and full research into what IS and what IS NOT a legal obligation / legally binding and what is merely guidance. Furthermore, we ask the Commission to be mindful of the wording used as it has in some cases – from our research – demonstrated to be misleading (but as already stated: we are not legal experts and we do not have the funds to engage a legal expert for this process, so this must be checked by someone of the legal profession for the Commission).

We therefore ask that the Commission refuse permission for the Application – and thus also not enabling its associated Scart Mountain Wind Farm as, ultimately and according to the Applicant, this is one project – due to the lacunae in the Application and failure to specifically address – and provide comprehensive, concrete and evidenced mitigations for – the biodiversity side. The project is (i) incompatible with Ireland's restoration and biodiversity obligations, (ii) it does not comply with the spatial zoning under the WCCDP (or the zoning under the Tipperary County Development Plan), and (iii) as discussed in another chapter, due to the fact that – until it has been fully upgraded – the national grid is unable to absorb all output generated by currently operating wind farms without curtailment, there is no guarantee (in fact, it is highly unlikely) that this proposed project will help Ireland achieve its ambitious climate goals in the manner that the Applicant suggests (i.e. by contributing 2%).

We end by reminding the Commission:

The Applicant's assertion that the implementation of renewable energy trumps biodiversity is divisive and scientifically inaccurate. **Renewable energy tackles the cause of climate change.** But a zero-carbon world would still face ecological collapse if biodiversity is lost. **Biodiversity tackles the consequences and stabilises the planet.** Biodiversity is the planet's *life-support system*. Destroying it weakens Earth's ability to heal itself even if emissions fall. **Climate mitigation and biodiversity protection must work hand in hand**, not compete for policy or investment priority.

in their Planning Statement for the Scart Mountain Wind Farm submitted in December 2024, the Applicant goes to great effort and length to attempt to discredit the Waterford City & County Council Development Plan (2022-2028) in the hope that they can convince the Commission not to take it into serious consideration when making its decision.

However, in the Planning Statement for this Grid Connection Route (GCR), the Applicant has changed their tune as they do not make any attempts whatsoever to discredit it. In fact, instead of casting doubt on it, they place reliance on certain policies and objectives within it as an argument FOR the Commission to take it into consideration:

3.4 WATERFORD CITY & COUNTY DEVELOPMENT PLAN
The statutory Development Plan pertaining to the subject site is the Waterford City and County Development Plan 2022 – 2028. It came into effect on July 19th 2022 and replaced the 2013-2019 extended County Development Plan (CDP). The CDP sets out the Council's strategic land use objectives and policies up to 2028.

The vision for County Waterford in the lifetime of the CDP is:
'By 2028, Waterford City and County will have continued to grow and will be evolving to become an even more attractive, prosperous, resilient, and sustainable place, anchored by Waterford City and Metropolitan area as the Regional Capital, a University and Learning City, and an economic driver for the region. It will be the best City and County in which to live, learn, visit and do business.'

The CDP also sets out key strategic aims over the lifetime of the plan of which the below are of relevance to the proposed development:
- *Take on the urgent challenges of climate change.*

Section 11.0 Zoning and Land Use of the CDP sets forward the landscape designations of the county, and suitable land uses. Provision of utilities (which includes grid connections) is necessary across all land uses and zonings. This is recognised in the Development Plan whereby "utility" is open for consideration for all use types.

Policy UTL13 has a stated objective of supporting renewable energy projects in order to, inter alia, reduce dependence on fossil fuels (with corresponding environmental, social, and economic benefits for the City and County). This policy explicitly recognises the need for supporting "onshore cable routing to substations" and confirms support for onshore grid connections.

Policy UTL 19 - Underground Cables, requires that proposals demonstrate that environmental impacts are minimised. In this regard ACP are referred to the accompanying EIAR and NIS which demonstrate that no unacceptable adverse environmental impacts will arise from the proposed development.
[...]

The proposed development will facilitate Waterford City and County Council in fulfilling many of their obligations and targets with respect to renewable energy delivery.
(Planning Statement, Section 3: Policy and Legislative Context)

As the Applicant has brought these policies into the Planning Statement, we wish to draw the following to the Commission's attention:

POLICY UTL 13

Policy UTL13 has a stated objective of supporting renewable energy projects in order to, inter alia, reduce dependence on fossil fuels (with corresponding environmental, social, and economic benefits for the City and County). This policy explicitly recognises the need for supporting "onshore cable routing to substations" and confirms support for onshore grid connections. (Planning Statement, Section 3: Policy and Legislative Context)

While we understand that each project application is considered individually, we would like to highlight the Commission's refusal for the Dyrick Hill Wind Farm (case ref: 321522):

Having regard to Policy Objective UTL 13 of the Waterford City and County Development Plan 2022-2028, which seeks to facilitate and encourage proposals for renewable energy generation '... developed fully in accordance with the Waterford Renewable Energy Strategy (RES), the wind energy designation map (Appendix 2 of the RES), the Waterford Landscape and Seascape Character Assessment (LSCA) undertaken to inform this Development Plan and the National Wind Energy Guidelines, or any subsequent update/review of these', and given the proposed development site falls within an area identified as 'Exclusion Zone' on the RES Wind Energy Strategy Maps for new wind energy developments, it is considered that, notwithstanding broad policy support for the development of wind energy in the county area, by reference to European, national, regional and local policy, the specific policy context as set out in the Waterford City and County Development Plan 2022-2028 has equally provided for defined locations where wind energy projects may variously be supported, deemed open for consideration or excluded. The proposed development is in an identified exclusion zone for wind energy. In this context, it is considered that the proposed development would materially contravene Policy Objective UTL 13 of the Waterford City and County Council Development Plan 2022-2028.

Furthermore, having regard to the totality of the documentation on file, including submissions received, the Board determined that no evidence has been provided which would support a material contravention of the Waterford City and County Development Plan 2022-2028 in this case. In reaching this conclusion, the Board considered relevant renewable energy policy in the statutory development plan, and in applicable European, national and regional policy and guidance, and determined that a refusal of permission in this case, would not militate against the wider ability for planning consent to be secured for wind energy proposals in County Waterford, subject to the principles of proper planning and sustainable development and consistent with applicable development plan policy and objectives, and accounting for European, national and regional policy and guidance, including consistency with the national Climate Action Plan. In this regard it is considered that the proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.

This decision was based on the findings and recommendations of the Inspector, as shown in the following extracts of the Inspector's Report:

11.4.3 The support for wind energy development is evident within the regional and local level policy context (see Section 5 of this report above). Policy Objective UTL 13 of the Waterford City and County Development Plan 2022-2028 seeks to promote and

facilitate a culture of adopting energy efficiency/ renewable energy technologies and energy conservation and seek to reduce dependency on fossil fuels. UTL 13 furthermore seeks to facilitate and encourage, proposals for renewable energy generation, transmission and distribution developed fully in accordance with the Waterford Renewable Energy Strategy (RES), the wind energy designation map (Appendix 2 of the RES), the Waterford Landscape and Seascape Character Assessment undertaken to inform this Development Plan, and the National Wind Energy Guidelines, or any subsequent update/ review of these. I note as per the wind energy designation map of the Waterford Renewable Energy Strategy (Appendix 7 of the operative development plan), that the site is located in an area identified as an 'exclusion zone' or a 'no go' area for new wind energy developments, therefore the proposal is not acceptable in principle at this location and would materially contravene policy objective UTL 13 of the operative development plan as it would not be in accordance with the Waterford Renewable Energy Strategy (RES).

11.4.6 Having regard to the wording of policy objective UTL 13, which indicates renewable energy is to be '…developed fully in accordance with the Waterford Renewable Energy Strategy (RES), the wind energy designation map (Appendix 2 of the RES), the Waterford Landscape and Seascape Character Assessment (LSCA) undertaken to inform this Development Plan…', and where the development falls within an area identified as 'Exclusion Zone' on the RES Wind Energy Strategy Maps, and where a significant portion of the site is within a Most Sensitive area on the LSCA, I am of the view that to permit this development would be a material contravention of this policy objective. I consider that the proposed development should be refused on this basis.

11.4.8 In conclusion, the proposed windfarm would be compatible with European, National and regional planning and renewable energy policy, as set out in Section 5 of this report and it would contribute to the achievement of European and national renewable energy targets. However, having regard to policy objective UTL 13, I am not satisfied that the principle of the proposed development is acceptable on these lands, which are designated an 'exclusion zone' or a 'no go area' for new wind energy developments. The proposed development in my view materially contravenes Policy Objective UTL 13 in that the proposal is not in accordance with the Waterford Renewable Energy Strategy and the wind energy designation map (Appendix 2 of the RES). Furthermore the site being elevated is within a 'Most Sensitive' character area, a designation which informed the RES wind energy map, and as detailed in my assessment in Section 12.14 of this report, I consider the proposed development would be contrary to policy objective L O2. Overall, therefore, the proposed development be contrary to the proper planning and sustainable development of the area and I recommend that planning permission be refused.

14.0 ***Recommendation***

I recommend that permission is refused for the reasons and considerations set out hereunder.

15.0 ***Reasons and Considerations***

1. *Having regard to Policy Objective UTL 13, which seeks to facilitate and encourage proposals for renewable energy generation '…developed fully in accordance with the Waterford Renewable Energy Strategy (RES), the wind energy designation map (Appendix 2 of the RES), the Waterford Landscape and Seascape Character Assessment (LSCA) undertaken to inform this Development Plan and the National Wind Energy Guidelines, or any subsequent update/ review of these', and given the proposed development falls within an area identified as 'Exclusion Zone' on the RES Wind Energy Strategy Maps for new wind energy developments, the proposed development would*

materially contravene Policy Objective UTL 13 of the Waterford City and County Development Plan 2022-2028.
Accordingly the Board was not satisfied that, notwithstanding the benefits of renewable energy proposals and the policy support otherwise, that the proposed development would in this instance be plan led as it would not be in accordance with the stated policy objective of the statutory development plan for the subject site. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.

POLICY UTL 19

Policy UTL 19 - Underground Cables, ***requires that proposals demonstrate that environmental impacts are minimised. In this regard ACP are referred to the accompanying EIAR and NIS which demonstrate that no unacceptable adverse environmental impacts will arise from the proposed development.*** [highlighted for emphasis] (Planning Statement, Section 3: Policy and Legislative Context)

As has been presented to the Commission throughout this Observation, the GCR Application indisputably fails to '*demonstrate that environmental impacts are minimised*' and the statement the Applicant makes regarding the '*accompanying EIAR and NIS which demonstrate that no unacceptable adverse environmental impacts will arise from the proposed development*' is incorrect. The absence of any proper assessments, field surveys, site and ground investigations, final GCR design details, ambiguous route options or adequate and suitable mitigation measures in the accompanying EIAR and NIS means that the topic of environmental impacts has not been assessed or addressed at all. There has been no '*examination analysis, evaluation findings, conclusions and a final determination*' and the EIAR and NIS do not ***'contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt'.***

CRITICAL CONSTRAINTS WITHIN IRELAND

KEY POINT SUMMARY

1. The Scart Mountain project does not demonstrate biodiversity net gain or alignment with restoration obligations.
2. The project's benefits are overstated, risks are underplayed, and environmental/planning conflicts remain significant.
3. The Applicant's output and contribution claims are unrealistically based on theoretical maximums.
4. Ireland's grid is already constrained, causing significant curtailment of existing wind farms.
5. Adding a new wind farm in a constrained region risks more wasted renewable energy.
6. Project timelines make meaningful contribution to 2030 targets highly unlikely.
7. Claim of being 'shovel ready' is misleading due to numerous unresolved requirements.
8. Proposed site lies in a Wind Exclusion Zone and a biodiverse, protected area.
9. No evidence the Scart Mountain GCR project is crucial for meeting national renewable targets.
10. Existing and planned wind capacity could meet targets if grid upgrades occurred first.

THE APPLICANT'S CLAIMED CONTRIBUTION OF THE SCART MOUNTAIN PROJECT MUST BE ASSESSED AGAINST NATIONAL GRID, REALISTIC OUTPUT EFFICIENCY, PLANNING & NATURE-RESTORATION REALITIES

The purpose of this Chapter is to ensure that the Commission assesses this Grid Connection Application, **with full consideration of grid realities, realistic operational output, actual timeframes, and environmental objectives.**

In their Planning Statement, Conclusion, the Applicant states:
'The proposed Scart Mountain wind farm which the proposed grid connection development will facilitate has the potential to produce up to between 262,143 and 331,128 MWh (Megawatt hours) of electricity per year. The electricity produced by the proposed development will be sufficient to supply the equivalent of between 45,598 and 65,661 Irish households with electricity per year.
[...]
The Scart Mountain Wind Farm project (of which the subject proposal is a fundamental component) has the potential to contribute approximately 2% of the total additional onshore wind capacity required nationally by 2030, which we believe to be a strong consideration for the Board when determining the proposed development. Furthermore, the addition of between 85.5–108 MW of installed wind energy capacity from the proposed development will improve our security of supply and reduce our reliance on energy imports.

This is a flawed, misleading and unrealistic claim, and emphasises the fact that the Application is not practicable. While the figures stated in the Applicant's Planning Statement, Conclusion may be attractive, the realisation of these figures cannot be assumed without qualification. Several important caveats must be highlighted:

1. The theoretical output of a wind farm versus the actual output of the wind farm
2. Grid capacity and connection constraints
3. Feasibility relative to national target timing
4. Environmental and biodiversity context

THE THEORETICAL OUTPUT OF A WIND FARM VERSUS ITS ACTUAL OUTPUT

In their *2024 Energy in Ireland* report, Sustainable Energy Authority of Ireland gives the following Capacity Factor averages for land-based turbines in Ireland over the past 10 years:

$$\text{CF (capacity factor)} = \frac{\text{Actual energy output over a period}}{\text{Maximum possible energy output if running at full capacity}}$$

Capacity factor [%]	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Wind (based on average in-year installed capacity)	29.1%	28.4%	32.2%	27.2%	28.2%	28.7%	29.8%	31.8%	26.2%	29.3%	29.2%

Source: https://www.seai.ie/sites/default/files/publications/energy-in-ireland-2024.pdf

The average of all 10 years is 29.1%.
If we consider 29.1% to the Applicant's claims, we get a more realistic sense of the development's potential.

'produce up to between 262,143 and 331,128 MWh (Megawatt hours) of electricity per year.'
Becomes: 57,409 to 96,358 MWh (Megawatt hours)

'sufficient to supply the equivalent of between 45,598 and 65,661 Irish households.'
Becomes: 16,706 and 19,107 Irish households

The figure of a **2%** contribution *of 'the total additional onshore wind capacity required nationally by 2030'* quoted by the Applicant in their Planning Statement is based on the proposed Scart Mountain Wind Farm running at optimum output, with all 15 turbines working on a continual basis. The reality is that it will only contribute 0.58%

It is well-documented that the wind farms currently in operation in Ireland are prevented from functioning at, or near, their optimal output levels due to several material operational and system-level constraints. These include, but are not limited to:

1. **System Curtailment:** EirGrid limits total non-synchronous penetration (SNSP) to maintain grid stability. This results in a deliberate reduction of wind generation as wind farms are instructed to reduce the amount of power they produce or shut down entirely, even when conditions are optimal. When this so-called 'dispatch down' occurs, the wind energy that is curtailed is 'lost' and cannot be used. And in many cases, this lost renewable energy is replaced by fossil fuel generation. Therefore, given the existing dispatch-down levels, it is highly likely that the proposed Scart Mountain Wind Farm and Grid Connection development would add to curtailment without corresponding grid upgrades.

2. **Infrastructure Limitations and Network Constraints:** Transmission bottlenecks in certain regions restrict export capacity; Limited grid reinforcement and ongoing maintenance outages intensify local dispatch-down occurrences.
3. **High-Wind Cut-Outs:** Turbines automatically shut down during storm events above ~25 m/s to prevent mechanical damage. Operators may pre-emptively reduce output during severe weather alerts.
4. **Voltage and Reactive Power Constraints:** Local voltage management issues occasionally require curtailment to maintain grid quality.
5. **Market and Operational Dispatch Factors:** Under the balancing market, wind farms may sometimes be instructed to reduce or curtail their output, to maintain system stability and minimise costs,
6. **Limited Interconnection and Storage Capacity:** Insufficient export or storage facilities mean surplus wind cannot always be utilised when demand is low.
7. **Maintenance:** Routine and reactive maintenance reduces turbine availability.

Collectively, these factors contribute to significant system inefficiencies and lost renewable energy production. They have direct implications for the efficiency, necessity and environmental justification of further wind capacity – particularly in regions where network constraints and system curtailment are already pronounced. Projects that produce large volumes of curtailed energy do not materially contribute to decarbonisation goals.

FURTHER MEASURES THAT WILL REDUCE ACTUAL OUTPUT & HINDER THE APPLICANT'S CLAIMED 2% CONTRIBUTION

In EIAR Chapter 6: Biodiversity, Section 6.8.2 Operational Phase Mitigation Measures, the Applicant states:

This section refers to ongoing mitigation once turbines are operational. Various measures will be implemented which lower the risk of bat fatalities throughout the lifespan of the wind farm. Two further methods are proven to reduce bat fatalities […] curtailment (keeping turbines turned off when conditions are good for bat activity). All turbines in the proposed wind farm will be feathered, while ***turbines 9, 10, 11, 12, 13 and 14, deemed high risk during the entire bat active season will be curtailed from April to September inclusive and turbines 1, 2, 4, 6, 7 and 8 will be curtailed from July to September.*** [highlighted for emphasis]

By this admission:

- Six of the 15 turbines will not be operating at full capacity for a period of six months each year.
- The other six turbines will not be operating at full capacity for a period of three months each year.

This means:

- TWELVE of the turbines will not be operating at full capacity for three months of the year (curtailed by the Applicant themselves).

Therefore, by developing in an ecologically unsound area, the potential of the development is limited in that 12 of the 15 turbines cannot operate fully for three months of the year, and six of the 15 turbines cannot operate fully for six months of the year.

With this in mind, we refer the Commission to the figures provided in the section above:
'produce up to between 262,143 and 331,128 MWh (Megawatt hours) of electricity per year.'
Becomes: 57,409 to 96,358 MWh (Megawatt hours)

'sufficient to supply the equivalent of between 45,598 and 65,661 Irish households.'
Becomes: 16,706 and 19,107 Irish households

*The figure of a **2%** contribution of the total additional onshore wind capacity required nationally by 2030 quoted by the Applicant in their Planning Statement is based on the proposed Scart Mountain Wind Farm running at optimum output, with all 15 turbines working on a continual basis. The reality is that it will only contribute 0.58%*

With the curtailment measures stated by the Applicant, these figures actually become a lot lower.

The Applicant of Scart Mountain Wind Farm is putting opportunism over practicality – the proposed location for the wind farm is an unsuitable site.

UNSUBSTANTIATED CLAIMS MADE BY THE APPLICANT

In the Executive Summary of their Planning Statement, the Applicant claims:
*'The proposed development will facilitate the construction and operation of the Scart Mountain Wind Farm, which is **a crucial piece of strategic infrastructure necessary to achieve Ireland's national renewable energy targets**.'* [highlighted for emphasis]

We ask the Commission, where is the PROOF that this individual piece of proposed infrastructure is CRUCIAL to achieve Ireland's national renewable targets? It may barely make a dent in the annual electricity demands of a data centre....

It is submitted that ONLY a centralised plan, considering all relevant planning ingredients, could achieve – on paper at least – the meeting of renewable targets. The fallacy here is that in the absence of such a CENTRAL MASTER PLAN, various developers apply the highest wind speed areas – which by definition will always be upland and in the most scenic areas – so yield is maximised.

EVIDENCE OF SUB-OPTIMAL PERFORMANCE OF IRELAND'S WIND FARMS

Ireland's national electricity grid is already operating near its technical limits: the critical transmission and connection constraints within it are even preventing current renewable-energy projects from operating efficiently. More and more Irish wind farms are frequently forced to turn off because the country's electricity grid is increasingly constrained. Below is a list of just a few examples of reports and evidence supporting this.

Climate Change Advisory Council
In their *Annual Review 2025*, the Climate Change Advisory Council states that, although wind penetration is rising, *'insufficient investment in the electricity grid means that some of the renewable energy we currently generate cannot be used'.*
Source: https://www.climatecouncil.ie/councilpublications/annualreviewandreport/CCAC-AR2025-Electricity-FINAL.pdf

EirGrid

1. EirGrid's *Annual Renewable Curtailment and Constraint Report (2024)* shows that '*the total dispatch-down energy from wind generation in Ireland was 1,266 GWh. This is equivalent to 10.1% of total available wind energy in Ireland.*' The system can currently only accommodate a maximum of 75% of electricity from renewable sources at any one time ('System Non-Synchronous Penetration' limit), and plans are in place to raise that to 80%. This means that, during high-wind conditions, renewable generation must still be curtailed.
   Source: https://cms.eirgrid.ie/sites/default/files/publications/Annual-Renewable-Constraint-and-Curtailment-Report-2024-V1.0.pdf

2. According to EirGrid's *ECP Constraints Reports*, the development pipeline for wind in Ireland faces connection risk and curtailment risk: grid-connection studies show that future wind and solar projects may face network congestion, curtailment and constraint under the Enduring Connection Policy (ECP) framework.
   Source: https://www.eirgrid.ie/industry/customer-information/ecp-constraint-forecast-reports

3. Below is an extract taken from EirGrid's Renewable Energy Dispatch Down (Constraint & Curtailment) Summary Reports showing data for 2023 to 2025 in the Republic of Ireland:

Historical Wind Dispatch Down (Constraint and Curtailment) Percentages for Ireland

	2023	2024	2025
Month	**IE**	**IE**	**IE**
Jan	9,9%	6,2%	4,6%
Feb	4,9%	6,9%	5,9%
Mar	6,1%	6,3%	6,0%
Qtr1	7,1%	6,5%	5,5%
Apr	6,0%	14,5%	10,1%
May	2,9%	4,2%	13,9%
Jun	3,3%	10,1%	15,4%
Qtr2	4,4%	10,7%	13,2%
Jul	11,5%	6,6%	8,3%
Aug	7,7%	22,5%	17,5%
Sep	11,1%	10,1%	18,6%
Qtr3	10,1%	14,8%	15,5%
Oct	8,9%	11,2%	
Nov	10,0%	8,6%	
Dec	15,2%	10,9%	
Qtr4	12,1%	10,4%	
Year Total DD	**8,9%**	**10,1%**	**10,7%**
Constraints	4,2%	5,1%	5,8%
Curtailments	4,7%	5,0%	4,9%
Wind Installed Capacity (MW)	4.731	4.934	
Wind Generation (GWh)	11.422	11.145	
Wind Capacity Factors	28%	26%	
SNSP Limit	75%	75%	75%

Source: https://www.eirgrid.ie/grid/system-and-renewable-data-reports#Renewable%20Dispatch-Down%20Reports

As can be seen:

- In 2023, **8.9% of available wind energy was subject to dispatch down**, equating to over **1,100 GWh** of lost renewable wind generation
- In 2024 **10.1% of available wind energy was subject to dispatch down**
- In 2025 (Jan to Sep) **10.7% of available wind energy was subject to dispatch down**

These figures represent renewable energy that could not be delivered to the grid due to system or network limitations, not due to a lack of wind resource.

Both the Climate Change Advisory Council and EirGrid's Generation Capacity Statement 2025–2034 confirm transmission bottlenecks in the south-east region, including Waterford and Cork, with connection queues exceeding 1 GW. This is a result of the region's limited grid capacity struggling to handle the large volume of renewable energy projects seeking connection. The Climate Change Advisory Council's reports emphasise that grid infrastructure needs to be upgraded to accommodate the planned renewable energy growth and meet climate targets. Therefore granting permission to a wind farm and associated grid connection in an area that is recognised as being problematic is futile in present circumstances, particularly when considering the adverse effects the proposed development would have on the biodiversity of the area and the fact that it contravenes the County Development plan on several levels.

Wind Energy Ireland (WEI)

Even WEI – the main representative body for the wind energy industry in Ireland and who advocates hard for its development – acknowledges and highlights the inefficiency of currently operational wind farms due to the problems they face regarding dispatch down, curtailment and the constraints of the national grid. A few examples include:

- A report in April 2025 detailing that, in Q1 2025, wind supplied 38% of national electricity but approximately 350 GWh was curtailed.
  Source: https://windenergyireland.com/latest-news/7852-wind-farms-provided-38-per-cent-of-ireland-s-electricity-in-first-three-months-of-2025).
- WEI's declaration on their 'Build our Grid' website (the campaign run by WEI) that there is no point in building new wind farms as long as there are grid constraints.
- Source: https://buildourgrid.ie/2024/08/do-constraints-affect-new-wind-farms/
- A report in November 2024 stating that, although wind farms had generated nearly a third of Ireland's electricity over the first 10 months of the year, the increasing amount of wasted energy is a growing challenge, with record levels of constraints on the electricity grid restricting the amount of power Irish wind farms are allowed to provide and that the amount of electricity produced by wind is expected to fall in 2024 compared to 2023 due to wind energy being lost because the electricity grid being unable to carry it.
  Source: https://windenergyireland.com/blog/buid-our-grid-a-reinforced-grid-more-available-clean-electricity-0-0-0-0#:~:text=Wind%20farms%20provided%2032%20per,first%20ten%20months%20of%202024

'Over the first nine months of the year (2024), 14 per cent of wind energy production was lost because of challenges with the transmission network. […]
While our wind farms performed well last month, this year is on track to be the worst on record for the amount of wind energy wasted.'
Justin Moran, director of external affairs at WEI, November 2024

'[2024 was] *the worst year on record for the amount of wind power lost due to challenges with electricity grid capacity. Every time a wind turbine is shut down because the grid can't take the electricity, it means higher bills and more carbon emissions.'*
Noel Cunniffe, CEO of Wind Energy Ireland, January 2025

The above-mentioned figures and examples demonstrate that Ireland's 9 GW 2030 onshore wind target is not achievable without first modernising and reinforcing the grid infrastructure. This is a fundamental issue that must first be addressed so that current operational renewable-energy developments, ones that are in construction, and/or proposals that have been approved by the Commission but not yet developed, are able to be accommodated with their output before new projects are approved.

With this in mind, the proposed Scart Mountain project (wind farm and GCR Applications) should not be granted (nor should any other wind farm projects for that matter) until the national grid is modernised and upgraded to absorb renewable capacity efficiently. Proceeding otherwise is a futile exercise and risks inefficiency, curtailment and legal breaches of Ireland's national and EU obligations, and climate and environmental commitments, under (inter alia) CALCDA and the NRR.

FEASIBILITY RELATIVE TO NATIONAL TARGET TIMING

Given that the proposed Scart Mountain Wind Farm (case 321522) and this Grid Connection are still with An Coimisiún Pleanála awaiting decisions on both Applications, with no decisions evident to be made before Q1 2026 at the very earliest, achieving operational status in time to contribute approximately 2% to Ireland's national renewable energy target by 2030 presents significant feasibility challenges and appears highly unlikely.

Typically, projects of this type and scale require several years (more than four) to realise, when you consider the following steps:

- The timing required for the Commission's decisions
- Potential judicial reviews
- Securing financing
- Turbine procurement (bear in mind that, for the Scart Mountain project, the Applicant doesn't even know yet which turbine it would be using, so this will also delay matters)
- Construction
- Connection

Plus, in this project's case as stated in the EIAR:

- The need to still finalise the actual GCR design, and all outstanding plans and agreements with relevant parties (e.g. Waterford Council, TII, Biodiversity Management Plan Agreements with landowners etc),
- Gaining all necessary licences and finalising surveys before any activity starts (e.g. Forestry, pre-construction otter survey), and possibly during construction if and when necessary (unexpected discoveries related to heritage, biodiversity etc).

The project would need to progress rapidly and without any delays to be operational before 2030, which is four years away. Proceeding on the assumption that this project will deliver such a contribution in such a tight timeframe with so many unfinished plans is, in fact, an overstatement and overemphasises the project's strategic value.

In their Planning Statement accompanying the Wind Farm Application (case ref: 321522), which is connected to this Application and therefore can be referred to for context, the Applicant claims that the project is 'shovel ready', and places emphasise on this in connection to the Commission's '*obligations under the Climate Act 2015*'.

We ask the Commission not to be fooled with the terminology used nor to feel coerced by such a correlation. Instead, we ask the Commission to recognise that 'shovel ready' creates a false sense of readiness and completeness, ignoring the proper complex process of assessment of the Application, pretending that all requirements are met. Which – in the case of both Applications submitted for this overall project – they are not, and which the Applicant has failed to finalise or address fully before submitting either Application to the Commission.

Furthermore, stating that the project is 'shovel ready' also ignores the well-known grid constraints detailed above, and it is far from certain that enough capacity is available through the ESB networks to connect the project.

ENVIRONMENTAL AND BIODIVERSITY CONTEXT

The Applicant emphasises supply-side benefits (households served, fossil-fuel displacement, etc) but does not demonstrate how the project aligns with ecosystem-restoration obligations under Ireland's NRR obligations and the biodiversity aspect of Ireland's Climate and Biodiversity Emergency. Given these two, the Commission must ensure that any claim about contribution to climate goals is balanced with ensuring biodiversity/net-gain/restoration outcomes.

As already argued, it is incredibly evident that Ireland's onshore target of 9 GW by 2030 is unlikely to be met without grid upgrades. Therefore, no new large-scale wind farm permissions should be granted until the grid is modernised to absorb renewable capacity efficiently. And, when considering this point, it is crucial to bear in mind that this is even-more applicable when it comes to Applications for wind farms that are proposed to be situated in completely unsuitable locations. A project such as Scart Mountain – proposed to be located in a Wind Exclusion Zone (as designated in the Waterford City & County Development Plan 2022-2028), and an area that is rich in biodiversity and home to protected and threatened habitats, wildlife, birds and other species as well as protected watercourses – significantly impairs habitat or ecosystem integrity, despite its renewable-energy benefits, and would not comply with the policy context or Ireland's legal obligations – on a national and EU level – towards protecting biodiversity.

'Without careful planning and management, renewable power infrastructure's expanding footprint could, itself, drive declines in biodiversity. This, in turn, could undermine ecosystems' resilience to climate change, their capacity to sequester carbon and their contribution to societal adaptation.'
The Organisation for Economic Co-operation and Development (OECD)

CONCLUSION

The Planning Statement claims that the proposed Scart Mountain development (wind farm and grid connection) will deliver between 262,143 and 331,128 MWh per annum, equating to supply for 45,598-65,661 households and contributing approx. 2% to Ireland's onshore wind capacity requirement by 2030. While the claimed contribution of the overall project may constitute a consideration for the Commission, the argument in favour of the proposal must be rigorously supported as these figures cannot be assumed without qualification, and – at present – can only be accepted as indicative, *not* guaranteed.

The available data demonstrates that a significant amount of Ireland's installed wind capacity is currently operating sub-optimally due to systemic grid and operational constraints. Before approving this Grid Connection – one that is proposed to be located in a region officially recognised as being negatively affected by these constraints – the Commission must have:

- A comprehensive assessment of local and regional curtailment levels,
- Confirmation of planned grid reinforcements or interconnector capacity that would mitigate further dispatch-down,
- Clear evidence that there will be no material planning or environmental delay,
- Evidence-based assurance (and not pie-in-the-sky headline figures) that the proposed Scart Mountain Wind Farm and Grid Connection project will deliver net-effective renewable generation, rather than contributing to existing inefficiencies.
- Full ecological compatibility with legally binding biodiversity- and ecosystem-restoration obligations under (among others) the NRR and Ireland's declaration of a Climate and Biodiversity Emergency before considering its determination.

All of the risks mentioned in this Chapter reduce the certainty of delivering the claimed MW/h output, the corresponding household-equivalent supply and the claimed contribution of 2%. The Commission cannot therefore rely on headline capacity/household-equivalent figures as currently provided by the Applicant.

As FuturEnergy is a commercial operator in a competitive market, it cannot guarantee that it will get (nor can it be seen to get) preferential treatment to access the grid. And this access cannot happen until constraints are resolved.

Furthermore, Ireland's planning and environmental framework mandates the integration – **not** prioritisation – of climate and biodiversity objectives. The Commission must not be coerced by the Applicant's consistent claims that renewable energy projects must be given precedence because of the regulations they list and quote in their Planning Statement and EIAR Chapter 4. It is the Commission's responsibility to address and keep in mind ALL of Ireland's legislations and legal obligations when considering its decision, and thus ensure compliance with both climate **and** nature obligations. We refer the Commission to our **Chapter 10: Rebuttal of Legal and Policy Arguments** for further details.

The Scart Mountain project (of which this Grid Connection Application/Development is half) should be refused on the following grounds:

- Certain regions of the Irish transmission system are operating near capacity and face higher curtailment risk until reinforcements are completed. Waterford has been officially recognised by the CCAC and EirGrid to be one of those regions.
- The project must demonstrate compliance with NRR habitat-protection requirements.
- The project does not comply with the zoning of the WCCDP (Wind Exclusion Zone, Landscape Assessment, etc). (And those of TCDP)
- Biodiversity net gain and ecosystem restoration are not demonstrably achieved.

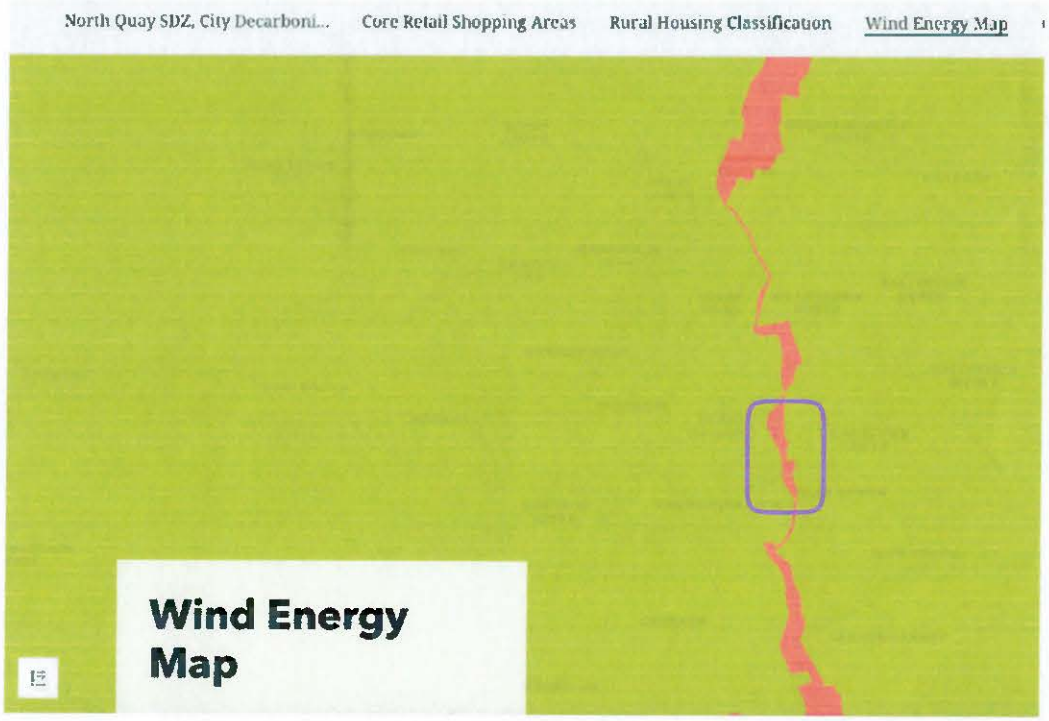
With so many wind farms already in operation in Ireland – not to mention all those that have been approved and are being developed/ready to be developed as well as those existing ones that are reaching the end of their operational life and can easily be upgraded – and so much wind energy being 'dispatch downed', there is absolutely no call for the development of MORE onshore wind farms – particularly in areas that are so clearly unsuitable for wind farm development.

FAILURE TO PROVIDE REQUIRED ZONING INFORMATION

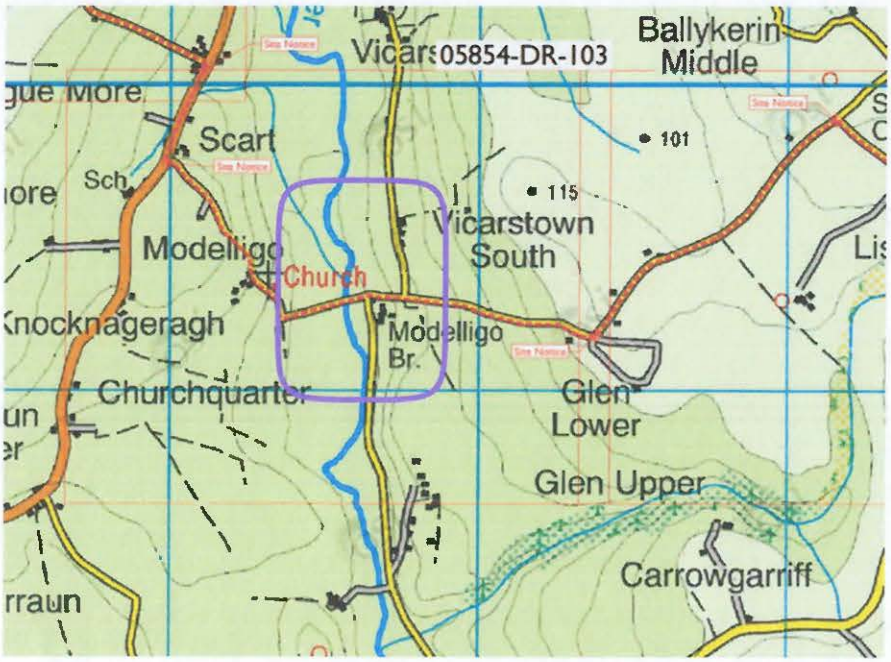
In the SID Planning Application Form, Section 6: Site, the Applicant has provided the following information:

Site zoning in current Development Plan for the area:
Cable route is located within rural lands that are not zoned for a specific development. *A portion of the grid route is located within the grounds of the existing 110kV Dungarvan substation. the lands are zoned 'TU - Provide for transport and utilities infrastructure' and 'SI - Provide for specialised industrial development' according to the Waterford City and County Development Plan 2022-2028.* [highlighted for emphasis]

This is incorrect. As the Commission will see in the Wind Energy Map of the Waterford City & County Council Development Plan 2022-2028 (WCCDP), the proposed HDD crossing over the Finisk River lies directly within an area designated as a Wind Exclusion Zone in the WCCDP. And while this specific Application does not include any turbines, it is still a wind energy development and part of the overall wind farm development/application (as the Applicant themselves clearly state).



Source: Extract from WCCDP Wind Energy Map, with purple circle added by us to show location of proposed GCR HDD crossing over Finisk River



Source: Extract from Applicant's 05854-DR-100A Overall Site Location Map Sheet 1 of 2 (115000), with purple circle added by us to show location of proposed GCR HDD crossing over Finisk River (red dotted line) for comparison with Wind Energy Map above.

It is submitted that, under Irish planning law, a Strategic Infrastructure Development (SID) application to An Coimisiún Pleanála must include sufficient information to allow the Commission to assess the proposed development's compliance with the current Development Plan for the area. Section 6 of the SID Application Form specifically requires the Applicant to identify the site zoning objective as set out in that Plan.

In this instance, the Applicant has failed to provide the required zoning information. This omission constitutes a material deficiency in the Application. The zoning designation is a mandatory consideration under section 37L(2) of the Planning and Development Act 2000 (as amended), as the Commission is obliged to have regard to the provisions of the Development Plan when determining the application.

Under Article 213 of the Planning and Development Regulations 2001 (as amended), the Commission must be satisfied that a SID Application contains all required information before it can be validated. In the absence of clear zoning details, the Commission cannot properly determine whether the proposed development accords with, or materially contravenes, the Development Plan.

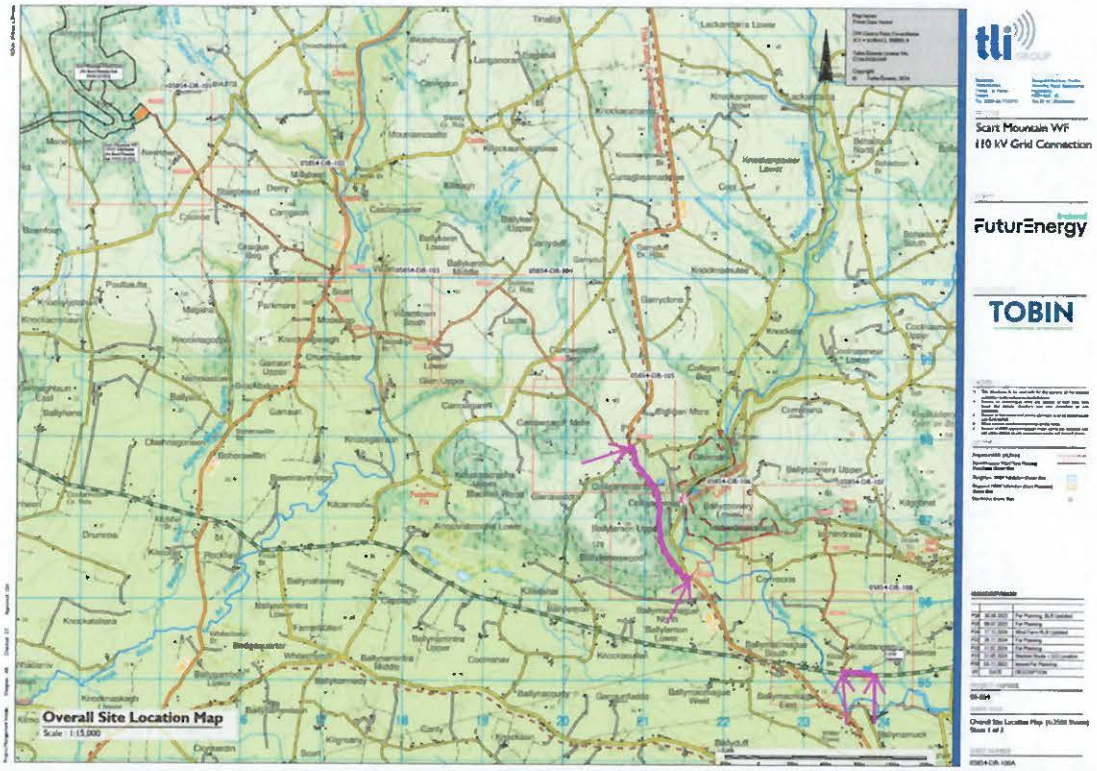
If the Commission were to proceed to determine the Application without adequate information on zoning, any resulting decision would be procedurally flawed and potentially vulnerable to Judicial Review, as it would not be evident that the proposal's compliance with the Development Plan had been properly assessed.

FAILURE TO MENTION PLANNING APPEALS

Additionally, on Page 9 of the Planning Application Form, the Applicant states **NO** to the question: *Is the site of the proposal subject to a current appeal to An Coimisiún Pleanála in respect of a similar development?*

While not subject to a current appeal **to** An Coimisiún Pleanála in respect of a similar development, two parts of the site (see purple parts of maps below) are subject to current Judicial Reviews **between** An Coimisiún Pleanála and EMPower, the developer of the proposed Dyrick Hill Wind Farm (case ref: 317265) and proposed Coumnagappul Wind Farm (case ref: 318446), both of which were refused by the Commission.

Therefore, there are live appeals taking place.



Therefore, it is submitted that the omission of the Wind Zoning and the misleading statement regarding live appeals renders the Application incomplete, incorrect and potentially invalid.

OWNERSHIP OF THE SITE: NO EVIDENCE OF LEGAL CONSENT OR INTEREST IN LAND

This chapter highlights the Applicant's lack of demonstrable legal interest, contractual authority, or valid landowner consent required to undertake the proposed Grid Connection Route (GCR). The evidence submitted with the Application – including the letters of consent – fails to establish lawful authority to use the lands in question and is limited only to non-binding statements permitting the submission of a planning application. Ambiguities in the Application regarding the proposed HDD crossing of the Colligan River further undermine the clarity and validity of the Application.

KEY SUMMARY POINTS

- **Absence of legal interest:** The Applicant has not demonstrated ownership, leasehold, wayleave, or any other enforceable right over the lands required for the Grid Connection Route. The Application merely indicates "Other" in response to the legal interest question, offering insufficient detail.

- **Letters of consent are non-binding and inadequate:** The letters submitted do not confer legal rights for land **use**. Instead, they only confirm that the landowners do not object to the submission of the planning application. They explicitly state they are not legally binding agreements and do not provide consent for the works.

- **Letter 1 is factually incorrect and irrelevant:** The referenced folio (WD26367F) corresponds to a property in Waterford City, not the location of the proposed GCR route. Additionally, the letter refers to the "Development" (wind farm), not the Grid Connection Route, which is a separate application.

- **Letter 2 (Coillte) expressly denies being legally binding:** Coillte explicitly states the letter does not constitute a memorandum under Section 51 of the Land and Conveyancing Law Reform Act 2009, reinforcing that no legal rights or land-use permissions are granted.

- **No contractual agreements submitted:** The Application contains no evidence of contracts, licences, or formal landowner agreements, all of which are required to demonstrate lawful authority for works.

- **Ambiguity regarding HDD crossing location:** The Application provides inconsistent or contradictory descriptions of the HDD crossing of the Colligan River, resulting in uncertainty about the actual lands involved and whether any valid consents have been obtained for them.

- **Unresolved issues with land folio under easement application:** A nearby folio (WD15727F) shows an application pending for an easement or right of way, indicating further uncertainty around potential land usage and location of HDD crossing.

Without clear, legally enforceable authority over the lands, the Applicant lacks the necessary legal capacity to undertake or even apply for the proposed GCR works. Permission for the Application should be refused.

SUBMITTED LETTERS OF CONSENT ARE NOT LEGAL CONTRACTS CONFIRMING CONSENT OF LAND USE

Question 7 of the Application Form enquires as to the Applicant's legal interest in the Site. The Applicant has not indicated that it has a legal or beneficial interest in the Site but has indicated 'Other'. The Applicant states that '*The cable route will be constructed primarily within public roads within the jurisdiction of Waterford City and County Council* ***with a 2.2km long section within privately owned lands****. Where the development occurs in third party lands,* ***the applicant has obtained Letters of Consent****. Refer to* ***Addendum 2*** *of this application form.*' [highlighted for emphasis]

...the applicant has obtained Letters of Consent. This statement is misleading. With their structure of the wording and sentences, the Applicant attempts to present to eth commission tat the letters in Addendum 2 are letters of consent for development in third-party lands. The letters in Addendum 2 are **not letters of consent** – they are letters of not objecting to including the land in a planning application.

Additionally, in the Pre-Application Consultation meeting held between the Commission and the Applicant on 12 September 2023, it is recorded that '*The prospective applicant confirmed they will require* ***consent from 3 private landowners having regard to the 3km of road that is off road***'. (Record of Meeting ABP- 317824-23).

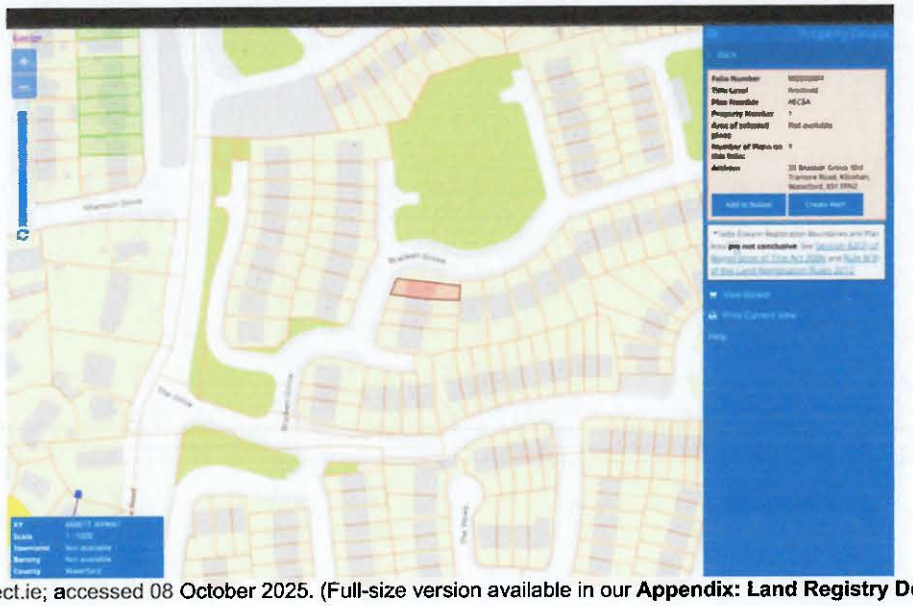
The Application only provides permission from one private landowner and Coillte (co-owner of FuturEnergy). Therefore, it is submitted that there is a discrepancy between what the Commission was provided for the SID determination (and based their decision on) and what has been submitted for the actual Application.

It is also submitted that the Applicant has not demonstrated they have sufficient legal, beneficial or any other interest in the Site in order to make this Application.

In Addendum 2: 'Letters of Consent', we have letters from Stephen Power (hereafter called 'Letter 1') and Coillte (hereafter called 'Letter 2').

LETTER 1: MR STEPHEN POWER

In Letter 1, it states '*I confirm that I am the registered owner of all of the property comprised in Folio WD26367F* ***("the Property").***'
As the Commission will see when accessing this Folio number via landdirect.ie (screenshot below), Folio WD26367F is in fact an address in Waterford City, and nowhere near the vicinity of the proposed Grid Connection route.



Source: landdirect.ie; accessed 08 October 2025. (Full-size version available in our **Appendix: Land Registry Details**)

Furthermore, the letter of consent states '*I refer to the **proposed development of a wind farm ("the Development")*** [highlighted for emphasis], and NOT a Grid Connection Route, to which this specific Application and permission pertain specifically. We remind the Commission that the WIND FARM (ergo "the Development" that this letter refers to) is a separate entity. There is nothing in this letter that states 'and associated works'.

Further on in the letter, it states: '*I hereby consent to the inclusion of the Property in all planning applications relating to **the Development** that may be submitted by Futurenergy Scart Mountain DAC (or any associated company).*

It is submitted that the letter expressly states that ***"I hereby consent to the inclusion of the Property in all planning applications'***. It does not state that Mr Power gives consent for the use of his land; it does not confer any right, interest or consent to **use** the land. It merely indicates that Mr Power does not object to the making of a planning application and cannot be relied upon as evidence of lawful authority to carry out the proposed works. Therefore, the letter cannot constitute a legally binding agreement or document evidencing any contract, licence or consent relating to the use of the land for the proposed GCR (especially when also combined with the fact that the letter pertains to the Development/Wind Farm).

It is submitted that the Commission should have been provided with documentary proof of landowner consent of USE in accordance with planning requirements before being able to determine a decision.

LETTER 2: COILLTE

The above also applies for Letter 2, from Coillte, which states:

*We wish to advise that we have **no objection in principle to the submission of a planning application** which solely relates to the proposal to locate a section of the grid delivery route on the Property in the manner illustrated in the Map attached hereto*

[...]

Please note that this letter is not and shall not constitute a note or memorandum in writing for the purposes of Section 51 of the Land and Conveyancing Law Reform Act, 2009. [highlighted for emphasis]

Once again, the phrases highlighted in bold confirm that the letter does not create or evidence any legally binding agreement or grant of rights regarding the use of the lands concerned.

Acknowledging that there is '*no objection in principle*' simply indicates tolerance for the submission of an application.

Furthermore, the statement that *'this letter is not and shall not constitute a note or memorandum in writing for the purposes of Section 51 of the Land and Conveyancing Law Reform Act 2009'* means the document is **not legally binding** and does **not confer any right, interest or consent to use the land**. It merely indicates that Coillte does not object to the submission of a planning application and therefore cannot be relied upon as evidence of lawful authority to carry out the proposed works.

We also take the opportunity to draw to the Commission's attention a disclaimer provided by Ms Molloy (the signatory of this letter of consent) in another such letter of consent for the Coom Green Energy Park. Ms Molloy has been Energy Team Leader at Coillte since 2020 – the date of the letter from which this extract is taken:
*Please note that **I have no authority to bind Coillte and no binding agreement shall exist or be deemed to exist until such a time as a formal contract has been agreed between all parties**, executed and exchanged and all sums due there-under paid in full.*
[highlighted for emphasis]
Source: Addendum 2: Letters of Consent for Coom Green Energy Park; dated 1December 2020; submitted by Fehily Timoney on behalf of Coom Green Energy Park Ltd

We merely include it so as to support our point that the letter of consent provided by the Applicant for the Scart Mountain GCR is NOT a legally binding agreement and therefore cannot be taken as definitive regarding consent for land **use**. This can only be proved by showing the legal contracts between both parties – documentation, and therefore confirmation, of which is missing from this Application.

Finally, the letter states:
We refer to the proposal by Futurenergy Scart Mountain DAC to locate a section of the grid delivery route on the Property as part of the Scart Mountain Wind Farm. […] hereby furnish this letter for the purposes of consent only to the submission of this application by Futurenergy Scart Mountain DAC and for no other purpose.'

We refer the Commission to our **Chapter 16: Project Splitting** and submit that – should the Commission decide to grant permission for this proposed GCR development – they do so with the condition that the GCR can only be used in conjunction with the Scart Mountain Wind Farm (case 321522), and no other development that may be proposed in the future. To do so – or to include it in another possible Application in the future – will be a violation of the (apparent) terms agreed upon above, and what has been permitted by the Commission.

AMBIGUITY AS TO THE HDD CROSSING LOCATION AT THE COLLIGAN RIVER

We start by drawing the Commission's attention our section entitled **Two Proposed HDD Crossing Locations at the Colligan River** in our **Chapter 4: Colligan River & Finisk River Crossings**, a summary of which is included here):

HDD Description 1: the HDD crossing is proposed to be about 250 metres along the L-5103 local road after its junction with the R-672. And the route enters **Coillte lands** to under cross the Colligan River by means of HDD. (see orange line in map below.)

HDD Description 2: the HDD crossing is proposed to be at the junction of the R-672 with the L-5103. And **the route enters private lands to achieve a crossing of the Colligan River.** From the R672, the route follows an existing access track to the launch area for a HDD undercrossing of the Colligan River. (see purple line in map below.)

HDD Description 3: the description here is very vague and confusing. '*From L-5103 junction entering* ***Coillte lands***' gives two possible impressions

1. that immediately at junction L-5103, the route enters Coillte lands. Yet as can be seen on the map below, Coillte does not own lands here; it is private land. And there is no Coillte land between the R-672/L-5103 junction and the Colligan River here.
2. That at some point from L5103 (it could be much further down from junction R672), the route enters Coillte land. But then we have '*to undercross Colligan River into private lands*', and there are no private lands directly on the opposite banks of the Colligan River in this instance.

For illustrative purposes, we have provided a map showing the location of both HDD crossings as can be ascertained from the Applicant's documentation and descriptions. Unfortunately, due to the ambiguity of Description 3, we have not included that in the map, but the Commission will clearly see that there is no Coiltte land at the said R672/L5103 junction, nor are there any private lands on the banks directly opposite any Coiltte land.



Source: landdirect.ie; accessed 08 November 2025. (Full-size version available in our **Appendix: Maps**)

[Disclaimer: The orange line depicting Description 1 is not meant to be an exact accurate depiction as it has been drafted to the closest point of Coillte land from the L-5103/ R-672 junction and it is not stated in the text above exactly how far within Coillte land option 1 travels before crossing into private lands, but it gives an overview of the difference in habitat and location.]

In the instance of HDD Option 2 (the orange line), there is no 'letter of consent' from Coillte that pertains to this section of land. The letter provided in the Application pertains to Inchindrislawood forestry.

PENDING APPLICATION ON NEARBY LAND LODGED BY COILLTE

One other point of note: the land directly above the orange line that crosses the river is Folio WD15727F. Upon research on landdirect.ie of this Folio, it shows that there is an Application Pending on it since 2023 for 'Easement or profit a prendre by prescription (Section 49A)' that has been applied for by Coillte (co-owner of FuturEnergy).

Landdirect.ie Pending Applications Report

Search Criteria

Folio	WD15727F
Date	08/11/2025

Applications Pending

Application Number	Date Lodged	Application Types	Application Status	Applicant	Lodged By	Reference	Associated Folios
D2023LR011506P	23/01/2023 00:00:00	Easement or profit a prendre by prescription (Section 49A)	For Further Attention	COILLTE CUIDEACHTA GHNÍOMHAÍOCHTA AINMNITHE	COILLTE	2030463-4/1185	WD15727F, WD5708

Having looked up the meaning of 'Easement or profit a prendre by prescription (Section 49A)' in a folio application, we are informed that an easement is a private right held by one landowner over the property of an adjoining landowner, and that typical easements include a right of way to pass over another's land, a right to support or light, or **wayleaves for the passing of service utilities such as pipes and cables** through the neighbouring land. Sources: https://www.lexology.com and https://www.arthurcox.com

Which begs the question: Is this possibly pertaining to another route option for the GCR?

(We refer the Commission to the section entitled **Ambiguity Regarding Number of GCR Options and Final GCR Route** in our **Chapter 4: Colligan River & Finisk River Crossings**.)

CONCLUSION

As the Commission will see in all the points made above, there is:

1. A distinct ambiguity as to where exactly the proposed HDD crossing (and therefore which lands are involved) will take place, thus leaving the Commission with an unknown when it comes to trying to determine a decision.

2. A distinct lack of evidence provided of any contractual agreement between the landowners and the Applicant for consent of land **use**. Merely no obligation to the land being included in the planning Application.

3. One letter does not refer to the Grid Connection Route, but to the Wind Farm development, which – as the Applicant themselves even continually point out – is a separate development.

In the absence of a valid legal interest, such as ownership, leasehold, wayleave or statutory consent, the Applicant has no lawful entitlement to undertake works on or across any of the lands. Any reliance on non-binding correspondence is therefore **insufficient** to demonstrate control or consent for the proposed route. The Commission needs to have been provided with documentary proof of landowner consent in accordance with planning and environmental requirements before determining the Application.

As a result, we ask the Commission to refuse permission.

FAILURE TO ADDRESS THE CUMULATIVE EFFECTS OF THE PROPOSED GCR DEVELOPMENT WITH (AT LEAST) TWO OTHER PROPOSED WIND FARM PROJECTS

INTRODUCTION

There is a distinct – and concerning – lack in the Application of any mention with regards to the GCRs of two other proposed wind farm developments: Dyrck Hill Wind Farm (case ref: 317265) and Coumnagappul Wind Farm (case ref: 318446).

The Applicant has entirely failed to address:

- the cumulative impacts associated with the multiple HDD river crossings also proposed to be carried out under the Colligan River and Finisk River systems in both of the above developments.
- the fact that the Scart Mountain GCR physically overlaps/runs the same roads as the two aforementioned developments in two places.

While these Applications (both of which had the GCR included within the actual application, and not submitted as a separate one) have been refused permission by the Commission, as they are currently at Judicial Review, they MUST still be considered.

This absence of cumulative effect is a serious omission.

INADEQUATE ASSESSMENT OF THE CUMULATIVE EFFECTS

In their EIAR Chapter 6: Biodiversity, 6.10.1 Projects, the Applicant relies solely on documentation provided by another wind farm developer (EMPower) when considering cumulative impacts between its own development and the two other proposed developments as opposed to doing any research of their own, and that, as a result of this:
'no significant cumulative impacts are expected to occur'.

Firstly, we ask the Commission to consider the Applicant's choice to use the term '*significant*' in both instances. What does the Applicant actually mean with 'significant'. By dictionary definition standards, 'a significant amount or effect is large enough to be important or affect a situation to a noticeable degree'. Does this therefore mean that the Applicant is expecting the Commission to view any 'lesser' effect to be permissible? An effect is an effect – be it 'significant' or 'minor' – and, if the Applicant believes that an impact is expected to occur – as their wording does not say '*Therefore, no cumulative impacts are expected to occur*', they should have included what these potential 'lesser' cumulative impacts are. The use of 'significant' here is entirely subjective and purely based on reliance of other (unreliable, as referenced below and in other chapters within this Observation) documentation as opposed to the Applicant's own research and surveys.

It is also submitted that there is no guarantee that the information contained in these other EIARs is accurate, correct or up to date, and it can also be heavily biased towards the positive perspective for a developer (with lacuna, misleading information and clever / strategic wording). As has been demonstrated throughout this Observation in the case of the Scart Mountain GCR Application.

The Applicant's EIAR Chapter 6: Biodiversity, Section 6.5.1.7 Review of Previous Ecological Assessments states:
A review of previous ecological assessments which were carried out in proximity to the proposed project was undertaken and are summarised below. The closest development to the proposed project is Dyrick Hill Wind Farm, the main findings in relation to ecology are outlined hereunder.

And the EIAR Chapter 7: Ornithology, Section 7.4.2.5 Cumulative impacts states:
'The only potential impact that requires cumulative assessment is the collision risk.'

The Dyrick Hill Wind Farm (Doherty Environmental Consultants (DEC), 2023) ecological assessment cannot be relied upon as a trustworthy source due to the vast number of errors, inconsistencies and cut-and-paste mistakes within the EIAR (even the names of roads, areas, SACs etc were incorrect and referenced places in other counties of Ireland). They had also completely omitted any mention of, or reference to, the Scart Mountain project when talking about cumulative effects, even though – while still in Pe-Application Consultation – sufficient details of the Scart Mountain project were already available in the public domain. Therefore, the Commission cannot place any confidence in the information provided within that EIAR upon which this Scart Mountain GCR Application relies here.

These issues have been addressed in several chapters throughout this Observation with regard to the cumulative effects and potential negative impacts on Biodiversity, Ornithology, Hydrology, EU-Designated sites and so on. We therefore ask the Commission to have this in regard while reading everything.

Given the above, it is submitted that the Commission should ensure that any biodiversity assessments supporting this Application are based on **comprehensive, up-to-date field data**, and not solely on secondary sources and desktop review studies. Where such field data is absent or insufficiently detailed, the Application should be deemed **deficient in its assessment of biodiversity and impacts**.

HDD CROSSINGS

We draw to the Commission's attention that the Applicant fails to address, and therefore assess, the cumulative impacts associated with the multiple HDD river crossings also proposed to be carried out under the Colligan River and Finisk River systems that are associated with the proposed Dyrick Hill Wind Farm (case ref: 317265) and the Coumnagappul Wind Farm (case ref: 318446).

While these Applications (both of which had the GCR included within the actual application, and not submitted as a separate one) have been refused permission by the Commission, as they are currently at Judicial Review, they MUST still be considered.

This absence of assessment, cumulative effects and therefore mitigation measures is a serious omission. The Applicant has not employed survey methodology that meet the requirement of the EIAR. And therefore, the Applicant fails to remove all scientific doubt regarding potential adverse impacts on EU-protected waterways, EU-Designated sites and the species therein.

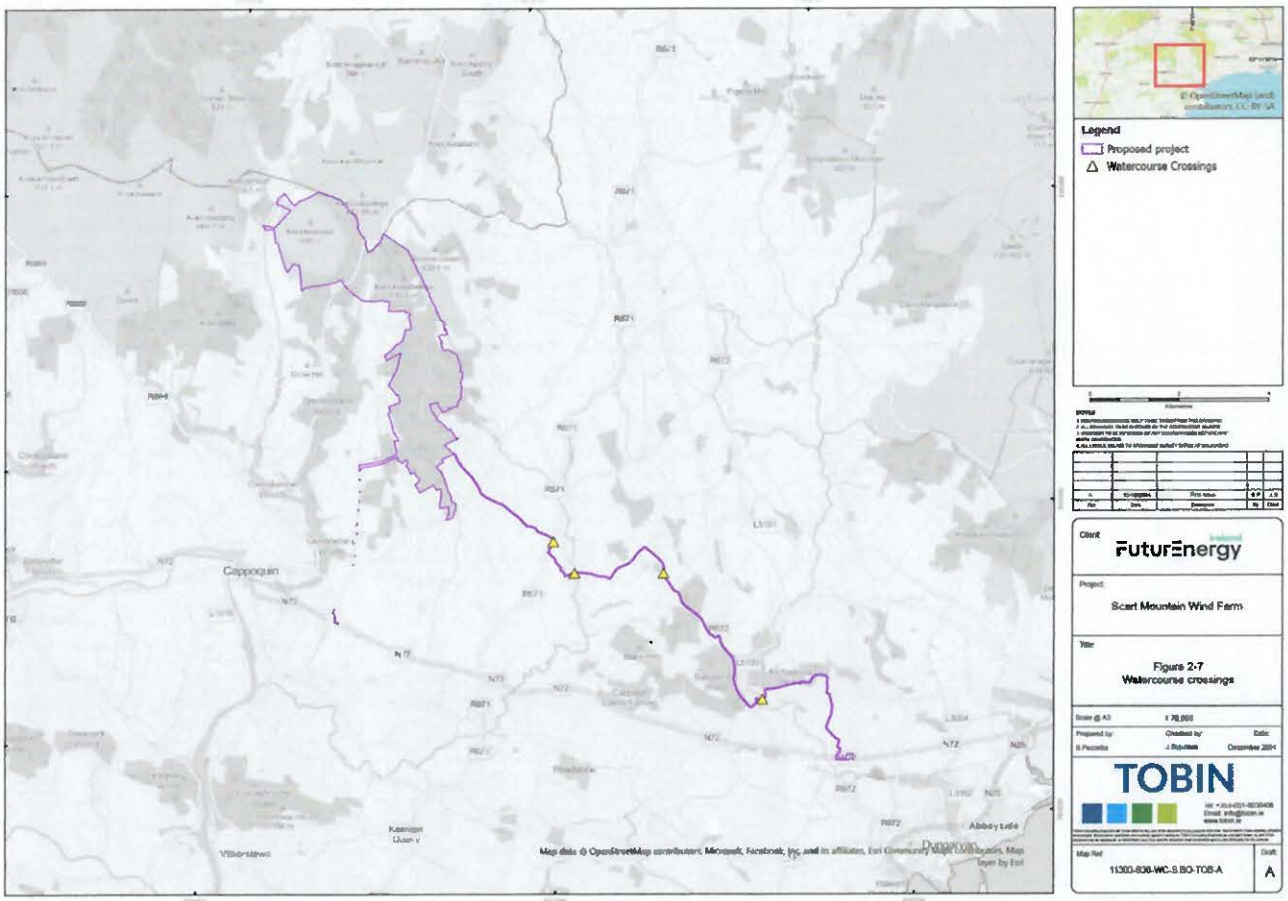
As stated in the EIAR Chapter 9: Hydrology, Section: Proposed GCR and works areas on the proposed TDR:

A total of four watercourse crossings are required along the proposed GCR, namely;

- *Scart 18 Stream;*
- *Finisk River;*
- *Ballykerrin Middle stream; and*
- *Colligan River*

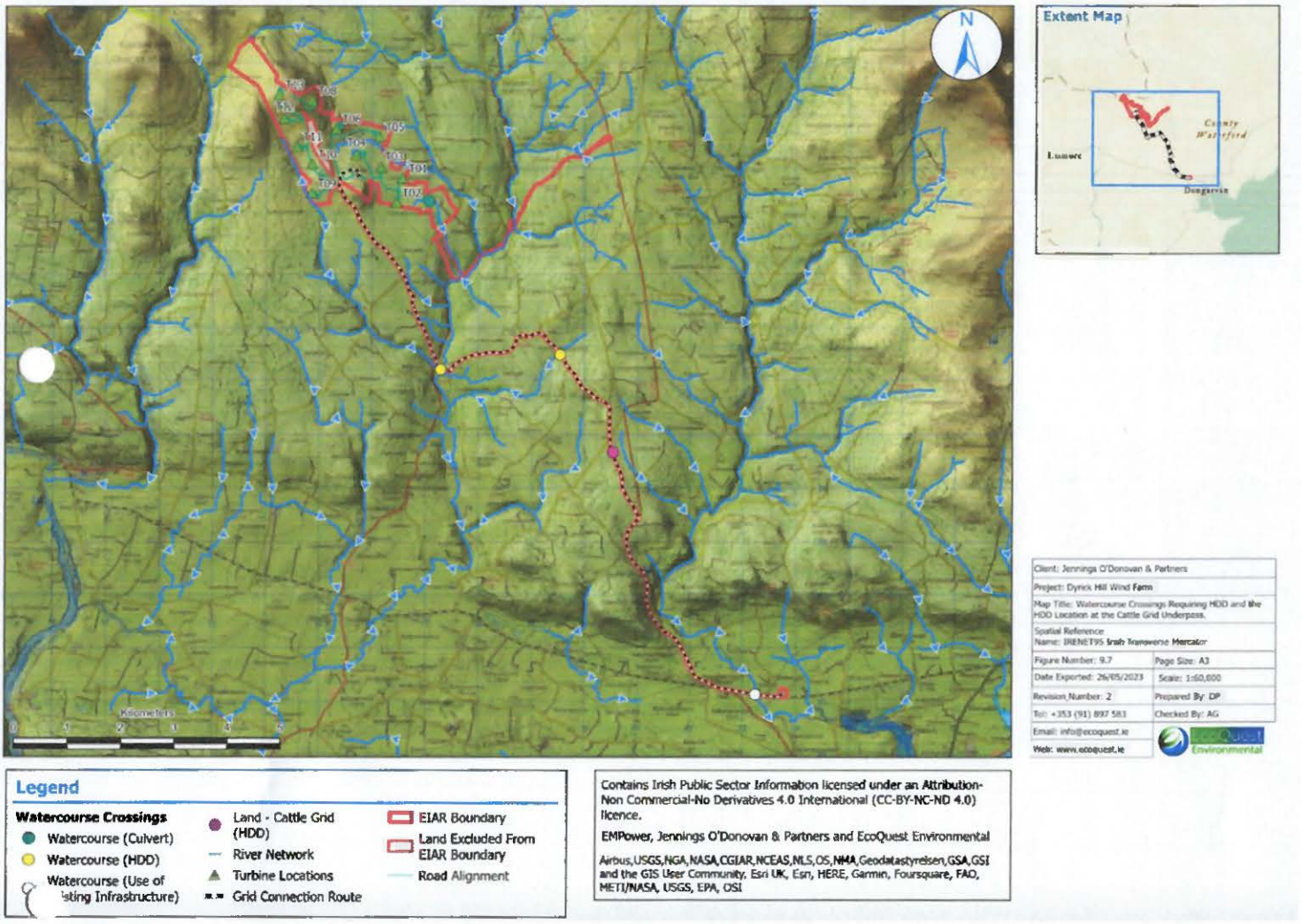
Execution of a horizontal directional drill (HDD) will be used to install the proposed GCR cable under each watercourse

This is illustrated in the Applicant's Figure 2-7: Watercourse Crossings (below):



We draw to the Commission's attention the watercourse crossings for the proposed Dyrick Hill Wind Farm GCR and proposed Coumnagappul Wind Farm GCR:

Dyrick Hill Wind Farm GCR:



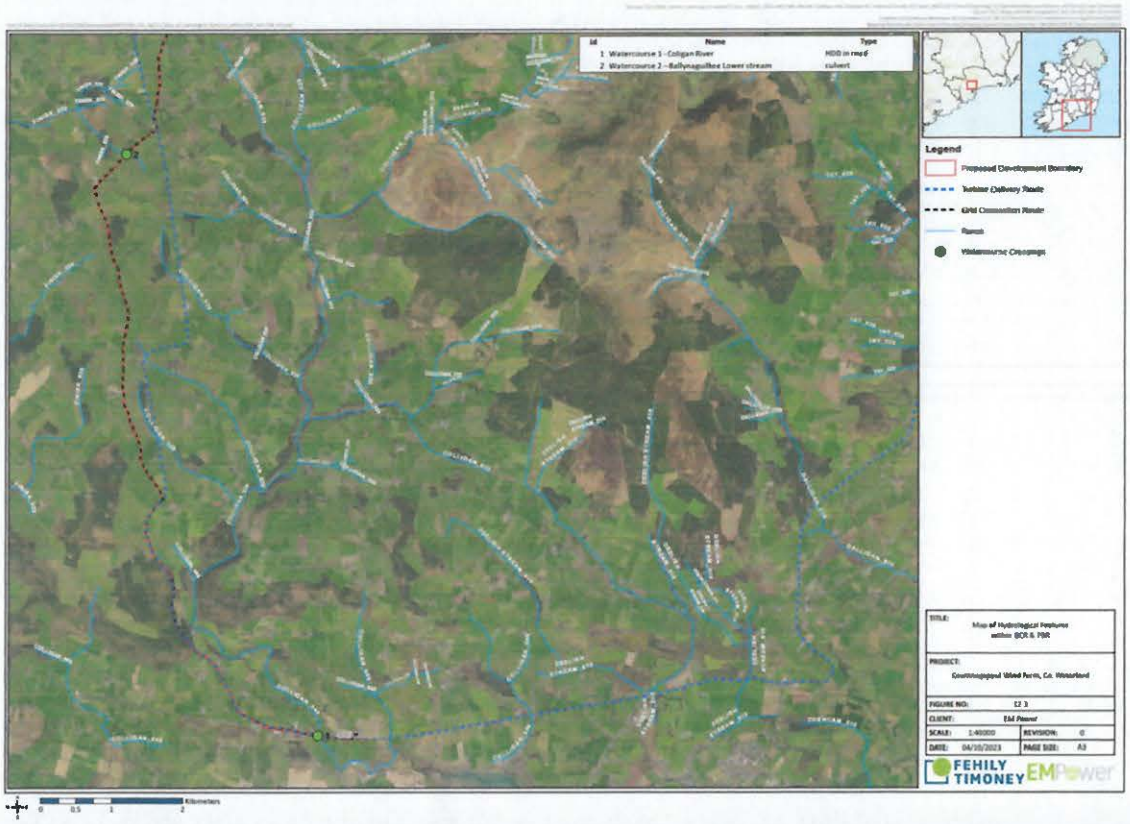
Source: Dyrick Hill Wind Farm EIAR Figure 9.7: Watercourse crossing requiring HDD and the HDD Location Cattle Grid Underpass

Table 4-1: Locations of Proposed HDD

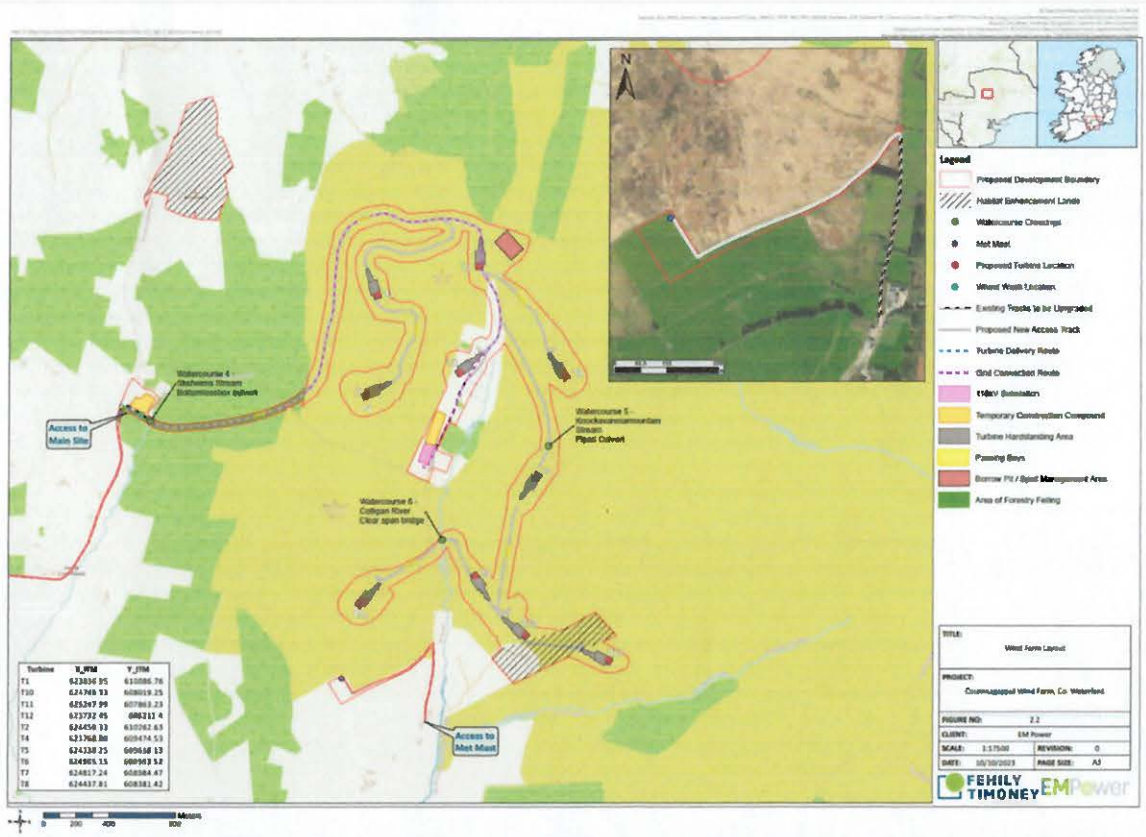
WFD River Waterbody	WFD Code	EPA Name	EPA Code	Links to European Designated Sites
Finisk_020	IE_SW_18F020300	Finisk River	18F02	0 m - within the Blackwater River (Cork/Waterford) SAC
Finisk_020	IE_SW_18F020300	Scart 18 Stream	18S06	950 m upstream of Blackwater River (Cork/Waterford) SAC
Finisk_030	IE_SW_18F020500	Boherawillin Stream	18B35	7.5 km upstream of Blackwater River (Cork/Waterford) SAC
Finisk_030	IE_SW_18F020500	Moneygorm East Stream	18M05	7.5 km upstream of Blackwater River (Cork/Waterford) SAC
Finisk_030	IE_SW_18F020500	Ballykerin Middle Stream	18B32	2.6 km upstream of Blackwater River (Cork/Waterford) SAC
Colligan_040	IE_SE_17C010300	River Colligan	17C01	4 km upstream of Dungarvan Harbour SPA

Source: Dyrick Hill Wind Farm EIAR Table 4.1: Locations of Proposed HDD

Coumnagappul Wind Farm GCR:



Source: Coumnagappul EIAR: Map of Hydrological Features within GCR & TDR. Missing Watercourse 4 (which is shown in map below) and Watercourse 3 – which is detailed in Table 12.4: River Crossings on the GCR below



Source: Coumnpaguppul Wind Farm EIAR Wind Farm Layout Figure showing Watercourse crossing 4 as detailed below

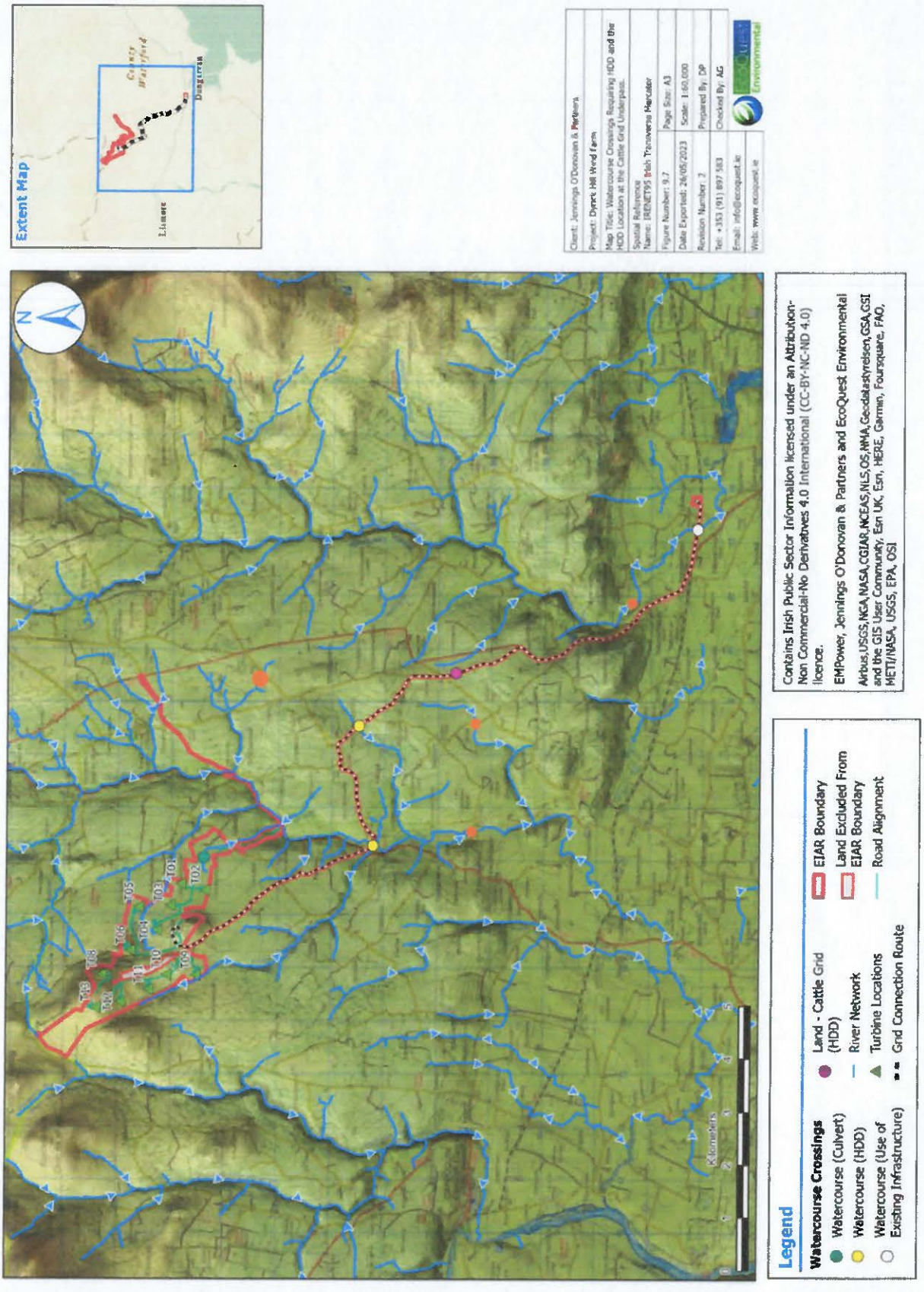
The river crossings associated with the cable route are presented in Table 12-2. Construction methodologies are provided in Chapter 2 - Development Description and Appendix 2.1 – CEMP (Appendix B thereof – Grid Connection Construction Methodology), in Volume III of this EIAR. Where required, all other minor stream or land drain crossings will be removed and reinstated in accordance with Inland Fisheries Ireland (2016) *'Guidelines on protection of fisheries during construction works in and adjacent to waters'* to allow cable construction.

Table 12-4: River Crossings on the GCR

Watercourse Name	Coordinates: ITM	Road Name	Crossing Type
Watercourse 1 - Coligan River (COLLIGAN_040)	623170.967, 595184.165 [Cable route Chainage 550m]	N72 - Bridge Crossing (TII bridge: WD-N72-007.00)	There is insufficient cover available to allow the ducts to be installed in the bridge deck. Therefore the watercourse will be crossed by Horizontal Directional Drilling (HDD) to pass under the bridge and riverbed. Entry and exit pits will be within the N72 road corridor.
Watercourse 2 - Ballynaguilkee Lower stream (FINISK_020)	620455.928, 603348.975 [Chainage 10,550m].	L1041	Existing culverted stream. The crossing method will use a culvert undercrossing or overcrossing method which will be selected based on the cover available above the culvert. Culvert crossings have been designed in line with ESB specifications. Where it is not possible to cross under an existing culvert while maintaining the culvert in place, the culvert may be replaced. All reinstatement works will be carried out to the required Waterford City & County Councils specification and in line with the 'Guidelines for Managing Openings in Public Roads – 2017'.
Watercourse 3 - Unnamed tributary of the Skeheens Stream (COLLIGAN_010)	621231.261, 608261.270 [Cable route Chainage 15,500m]	Unnamed road at a staggered crossroads (Bryan's Crossroads)	The cable will exit the public road and enter privately owned lands which are in agricultural use. Here the cable will cross the stream utilising an Horizontal Directional Drilling (HDD stream undercrossing). Entry and exit pits will be within the adjacent agricultural lands.
Watercourse 4 - Skeheens Stream (COLLIGAN_010))	622466.431, 609322.014 [Cable route Chainage 17,950m]	On the access road within the Wind Farm Site.	The crossing is an existing river ford (shallow point where a river or stream may be crossed by wading, or inside a vehicle getting its wheels wet) on the existing forestry track. The river bed has been modified and raised to allow this crossing. This crossing will be upgraded as part of the Project by replacement with an open-bottomed culvert. The cable ducting will be installed above the culvert.

Source: Coumnagappul Wind Farm EIAR Table 12.4: River Crossings on the GCR

And now, as the Applicant has completely ignored this in their Application and failed to provide the Commission with such crucial information, we have compiled all the information provided in the three maps and tables, and overlaid all the proposed HDD crossings onto one map for the Commission's ease of reference:



Source: Dyrick Hill Wind Farm EIAR Figure 9.7: Watercourse crossing requiring HDD and the HDD Location Cattle Grid Underpass, with amendments (inclusion of orange dots) by us. (With regard to Coumnagappul, two of the watercrossings are out of the map's range, but the table included above lists their locations for the Commission's reference). As the Commission will see, they are all proposed to occur either on the Colligan River or the Finisk River.

As the Commission will see:

- The yellow dots mark watercourse HDD crossings of the proposed Dyrick Hill GCR (no. 2)
- The white dot marks the watercourse HDD crossing of the proposed Dyrick Hill and Coumnagappul GCRs (no. 1)
- The orange dots along the lower half of the map mark the watercourse HDD crossings of the proposed Scart Mountain GCR (no. 3)
  (added by us using the Scart Mountain: EIAR Figure 2.7: Watercourse Crossings map)
- The orange dot in the upper half of the map marks the watercourse HDD crossing of the proposed Coumnagappul GCR (no.1)
  (added by us using the Coumnagappul EIAR: Map of Hydrological Features within GCR & TDR)

This totals **seven HDD crossings** across **two rivers of ecological importance** that are hydrologically connected to **two EU-Designated Sites:**

- Five = Finisk River that is a major tributary of the Blackwater SAC
- Two = Colligan River that feeds into the Dungarvan Harbour SPA (and at locations that are just a few kms away).

We refer the Commission to the following for full details on the protected habitats and species and the conservation objectives of these two EU-Designated sites:

- Blackwater SAC: https://www.npws.ie/protected-sites/sac/002170
- Dungarvan Harbour SPA: https://www.npws.ie/protected-sites/spa/004032

And to our **Chapter 3: Hydrology.**

We remind the Commission that the Applicant's assertion that the implementation of renewable energy trumps biodiversity is divisive and scientifically inaccurate. **Renewable energy tackles the cause of climate change.** But a zero-carbon world would still face ecological collapse if biodiversity is lost. **Biodiversity tackles the consequences and stabilises the planet.** Biodiversity is the planet's *life-support system*. Destroying it weakens Earth's ability to heal itself even if emissions fall. **Climate mitigation and biodiversity protection must work hand in hand**, not compete for policy or investment priority.

With the Applicant's failure to mention and assess the cumulative impacts associated with the other proposed wind farm developments and collective HDD river crossings, the Applicant's assessment of their baseline studies is misinformed and lacking. And, as a result, the rivers, their habitats and species therein and the species on the Blackwater SAC and Dungarvan SPA to which these rivers are hydrologically connected have not been addressed and the mitigations for any impacts are also misinformed and failing/incomplete.

GCR ROAD OVERLAPS

In addition to the watercourses, the Applicant has also completely failed to mention – and therefore assess/address – the fact that the Scart Mountain GCR overlaps / runs along the same roads in two places:

Section 5	R-672 from Colliganmountain to junction with L-5103	1.9 km
Section 8	From Coillte entrance on L-3003, continuing on L-7001 to Killadangan and joining short section of N72 to entrance of Dungarvan 110 kV Substation	2.7 km

Location 1: Route Section 5 (1.9km)

This section of the grid connection route follows the R-672 regional road from junction with the L-5065 in Colliganmountain to the junction with the L-5103 in the townland of Colliganwood where the route enters private lands. Features:
Joint Bay 13 (JB-13) will be located approx. at chainage mark 9720 m on this section. It is proposed that this Joint Bay will be installed within the R-672 regional road.
Joint Bay 14 (JB-14) will be located approx. at chainage mark 10330 m on this section. It is proposed that this Joint Bay will be installed within the R-672 regional road.
(EIAR Appendix 2.5 Grid Construction Methodology, 2.3.5 Route Section 5 Summary)

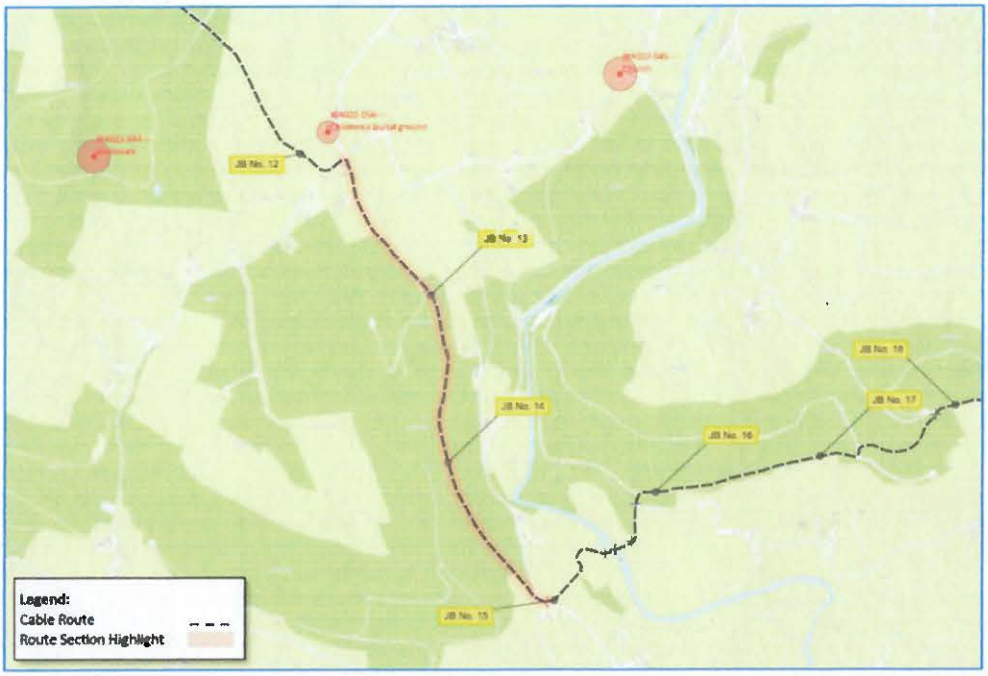


Figure 2.6: Route Section 5 Location Map

Location 2: The N72 part of Section 8, from junction with L7001 /Joint Bay 22 to the entrance of Dungarvan 110 kV Substation (approx. ¼ of a km)

[…] From here the route follows the L-7001 in a southerly direction. A short section of the N72 road is required at to arrive at the entrance of Dungarvan 110 kV Substation.
Features:
[…]
Joint Bay 22 (JB-22) will be located approx. at chainage mark 15220 m on this section. It is proposed that this Joint Bay will be installed within the L-7001 local road. (EIAR Appendix 2.5 Grid Construction Methodology, 2.3.8 Route Section 8 Summary)

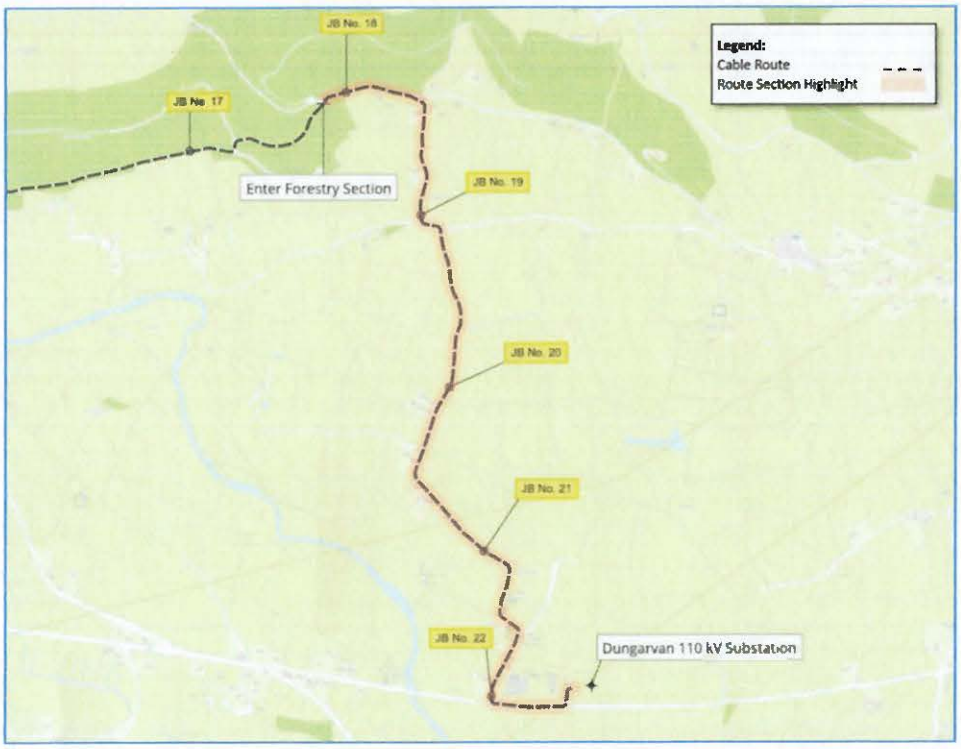


Figure 2.9: Route Section 8 Location Map

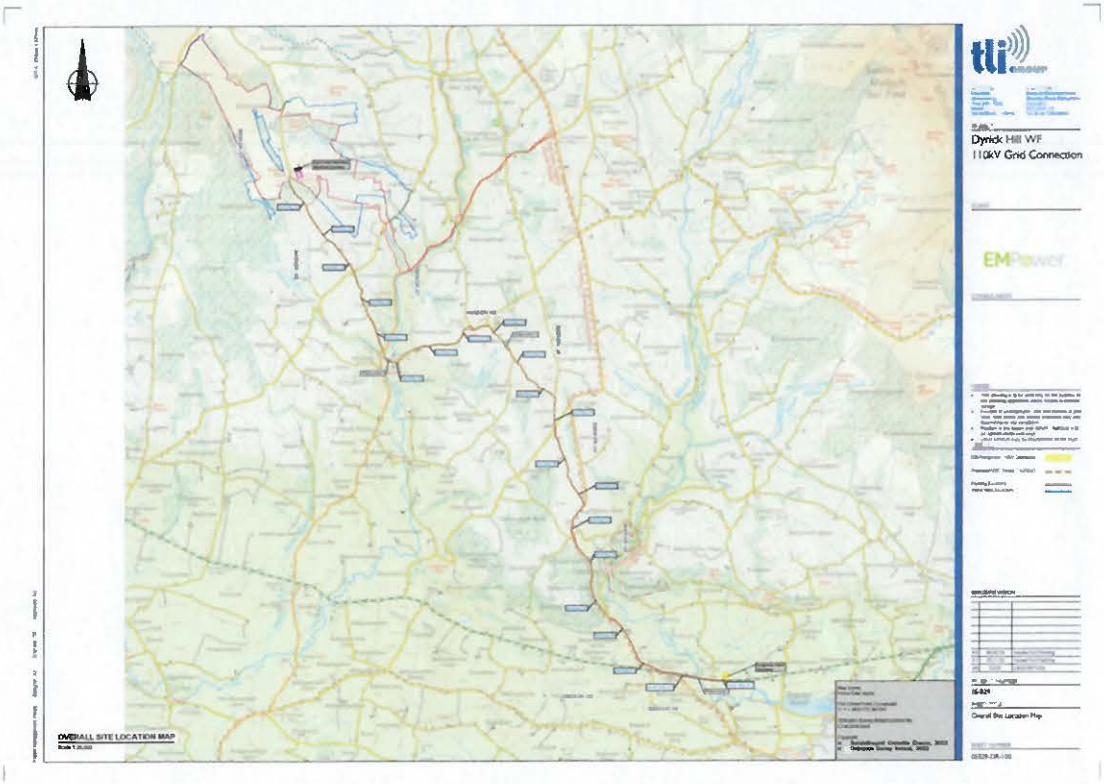
Please note: When looking at the map above, the installation's location looks very much to be situated on the corner of junction L-7001 local road and N72 road, and it is therefore submitted that, while the Applicant states '*it is proposed that this Joint Bay will be installed within the L-7001 local road*', the works on this joint bay will still cause / add to disruption on this national road, contravening the recommendation, requests and concerns raise by the Department of Transport and TII. We refer the Commission to the following:

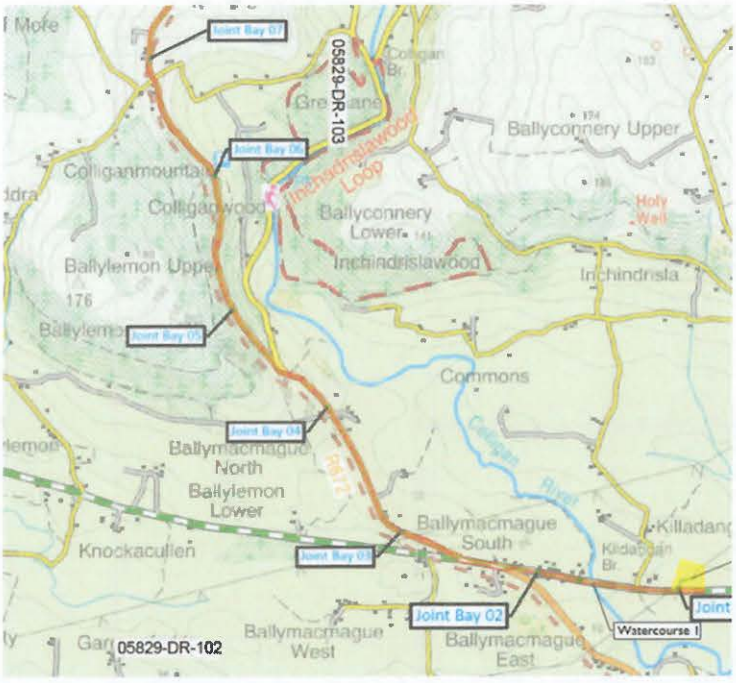
- Department of Transport Response to EIAR Scoping Request
- TII Response to EIAR Scoping Request: *The provision of cabling along the national road network represents a number of significant implications for TII and road authorities in the management and maintenance of the strategic national road network and* ***TII is of the opinion that grid connection cable routing should reflect the foregoing provisions of official policy and therefore, avoid grid connection routing proposals along national roads.*** [highlighted for emphasis]
- Observation submitted by TII for the Scart Mountain Wind Farm (case: 321522), and the section 2.3 Grid Connection Routing therein in which they arise several concerns etc

(please see our **Appendix: Scart Mountain Wind Farm Observations and Scoping Responses**)

Now we draw to the Commission's attention the GCR routes for the proposed Dyrick Hill Wind Farm GCR and proposed Coumnagappul Wind Farm GCR (full-size versions are available in our **Appendix: Maps**):

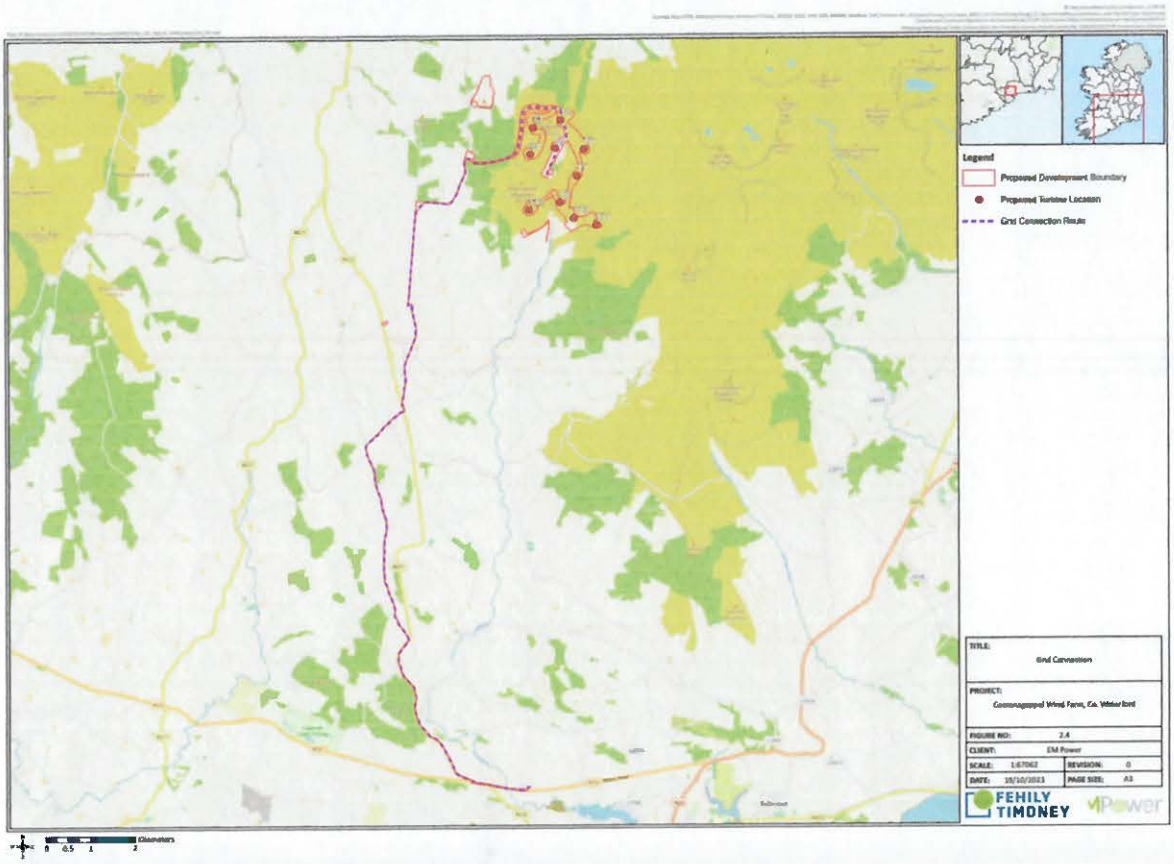
Dyrick Hill Wind Farm GCR:





Above: Extract from main map showing overlap area

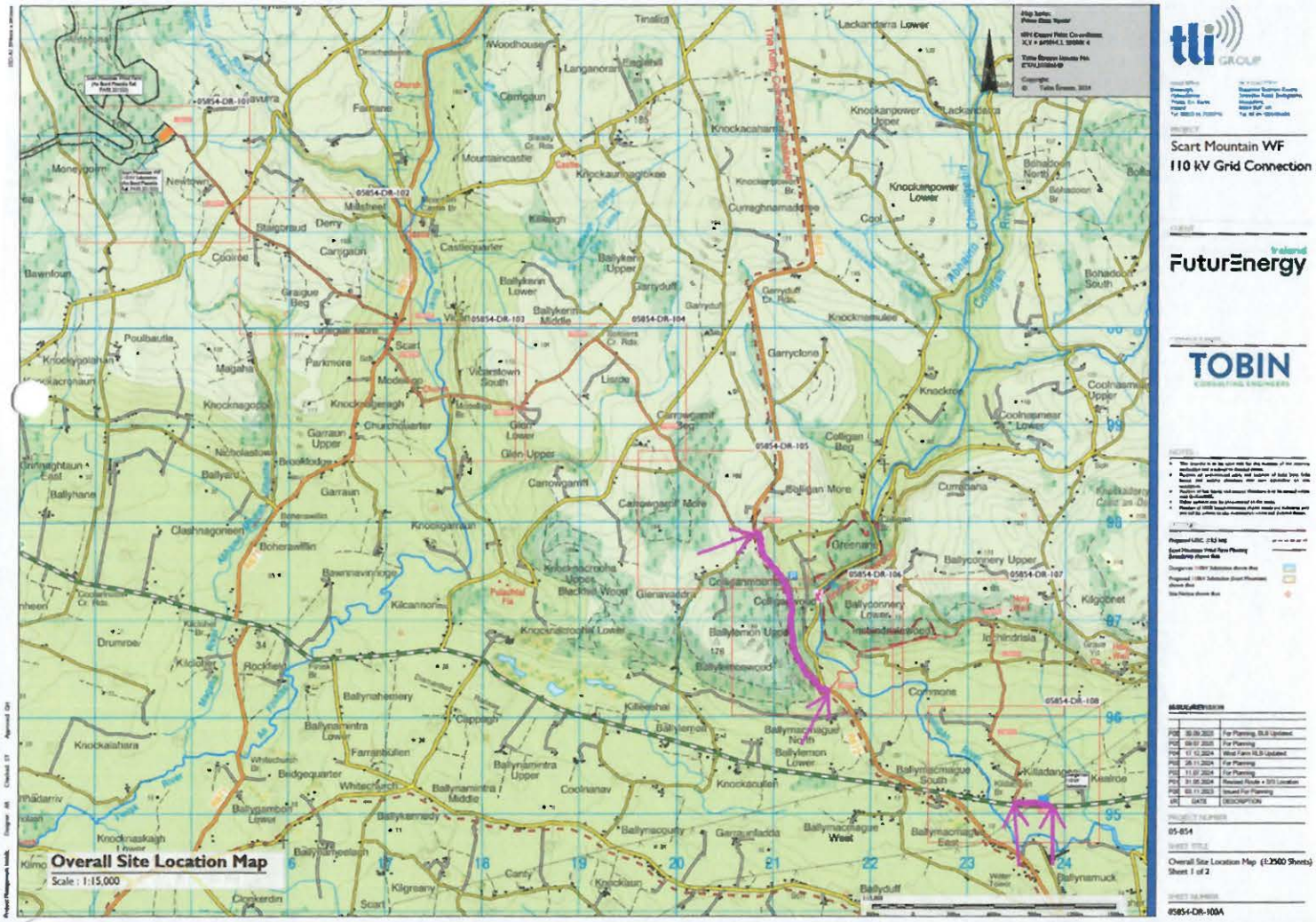
Coumnagappul Wind Farm GCR:





Above: Extract from main map showing overlap area

And again: as the Applicant has completely ignored this in their Application and failed to provide the Commission with such important information, we have compiled all the information provided in the three maps, and overlaid the overlapping routes (shown in purple) onto one map for the Commission's ease of reference:



Source: Applicant's Overall Site Location Map (1 of 2), with additions by us showing at which points the three proposed GCRs of the proposed Scart Mountain Wind Farm, Dyrick Hill Wind Farm and Coumnagappul Wind Farm physically overlap (shown in purple). (Full-size version available in **Appendix: Maps**)

While these Applications (both of which had the GCR included within the actual application, and not submitted as a separate one) have been refused permission by the Commission, as they are currently at Judicial Review, they MUST still be considered.

We draw to the Commission's attention the following which was submitted by Tii in their Observation against the proposed Scart Mountain Wind Farm (case ref: 321522), which we ask the Commission to have serious regard to:

In addition to the above, the Board will also be aware of a number of other private grid connections to the Dungarvan Substation utilising this same section of N72, national road, have been proposed, these include:

- *ABP Case ref. PA93.321522 (the current application),*
- *ABP Case ref. PA93.318446 (Coumnagappul Wind Farm),*
- *ABP Case ref. PA93.317265 (Dyrick Hill Wind Farm),*
- *ABP Case ref. PL93.311670 (Sunrise Energy Supply Limited).*

TII understands that it is not technically feasible to lay multiple electricity connections in the same section of road arising from the required separation distances. Given these 4 proposals, this is a serious concern which highlights the absence of a planled and coordinating mechanism for private grid connections and presents significant risk to the strategic national road network maintenance and operation as well as impacting project delivery of independently proposed renewable energy projects.

It is also unclear from the documentation submitted that the scheme proposer has sought to address these interactions between permitted and proposed connections on a national road or sought collaboration with others as part of preparation of the project development to address these concerns both for the maintenance and safety of the national road network but also for effective delivery of energy product projects in this area in general. TII would recommend that such issues are addressed in any subsequent application for the proposed grid connection route.
[…]
In the interest of clarification, no part of this submission shall be construed as TII giving consent to access or alter any national road infrastructure assets including drainage regimes, vehicle restraint and safety systems, ducting, HDD crossing, structures, etc.
[highlighted for emphasis]

And also the Observation submitted by TII for the proposed Dyrick Hill Wind Farm, which highlighted similar concerns (please see **Appendix: Scart Mountain Wind Farm Observations and Scoping Responses**)

REASON FOR REFUSAL OF PROPOSED COUMNAGAPPUL WIND FARM (CASE REF: 318446)

While we understand that each project application is considered individually, we would like to highlight the Commission's refusal for the Coumnagappul Wind Farm, which was also proposed to be located within the Colligan River catchment area (watercourses associated with the proposed development: Skeheens Stream (EPA waterbody: COLLIGAN_010); Knockavanniamountain Stream – tributary of the Colligan River (COLLIGAN_010); Colligan River (COLLIGAN_010) and with the development's Grid Connection route: Colligan River (COLLIGAN_040); Ballynaguilkee Lower Stream (FINISK_020); Skeheens Stream (COLLIGAN_010)).

'Having regard to the scale and extent of the proposed development, its upland location ***within the Colligan River catchment****, and the sensitivity of the receiving environment, the Board considered that the proposed development* ***would result in adverse impacts on the water environment and would not be environmentally sustainable****. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.'* [highlighted for emphasis]
Reason for refusal 2 (Coumnagappul Wind Farm Inspector's Report (ABP-318446-23, p. 284)):

The full content of the Inspector's Report, Recommendations and Board's Decision for refusal if of course easily accessible for the Commission to read themselves, but the short extract above highlights our case in point – one that the Applicant for the Scart Mountain project has failed to address in this Application due to the fact that they have submitted the exact same documentation (in October 2025) as they did for the core project in December

CONCLUSION

In accordance with Article 6(3) of the EU Habitats Directive and Regulation 42 of the Birds and Natural Habitats Regulations 2011, the Commission may only provide consent for a project) if it has made certain that it will not adversely affect the integrity of any affected Natura 2000 site, and that **no reasonable scientific doubt** remains as to the absence of such effects. Established CJEU case law (Waddenzee C-127/02; Sweetman C-258/11; Holohan C-461/17) requires that the assessment be based on **complete, precise and definitive information**, including a comprehensive evaluation of **cumulative impacts**.

The Applicant has not provided a cumulative assessment encompassing the Scart Mountain GCR together with the Dyrick Hill and Coumnagappul wind farm GCR proposals, including the seven HDD crossings affecting hydrologically connected river systems. This omission is inconsistent with the requirements of the Habitats Directive and the EIA Directive (2011/92/EU, as amended), both of which mandatorily require consideration of cumulative effects. It also undermines the ability to determine compliance with the Water Framework Directive's environmental objectives.

It is therefore submitted that the information provided does not give the Commission what it needs to make a fully informed, sound or legally secure decision.

NB: All maps and tables in this chapter are available in full-size in our **Appendix: Maps**

Project splitting or 'salami-slicing' is the attempt by a developer to deliberately frame a single project as a series of projects, each or some of which fall below the relevant threshold for EIA.
Office of the Planning Regulator Ireland

This chapter concerns this Application for the proposed Scart Mountain Grid Connection Route (GCR) submitted to An Coimisiún Pleanála on 2 October 2025 and its relationship to the Application for the proposed Scart Mountain Wind Farm (case ref: 321522) which was submitted in December 2024 and is as yet undecided.

As can be seen in their documentation, the Applicant expressly acknowledges that the two developments are 'functionally interdependent' and form 'a single project for the purposes of EIA'. The GCR exists solely to service the wind farm, and the wind farm cannot operate without it.

Letters to An Coimisiún Pleanála, Waterford City & County Council, Prescribed Bodies; Planning Application Form; Newspaper and Site Notices:
This application, and the wind farm application (ACP Ref. 321522) are functionally interdependent and constitute a single project.

Both applications are accompanied by one Environmental Impact Assessment Report (EIAR) and a Natura Impact Statement (NIS), which pertain to the overall project.

Planning Statement, Section 2: Introduction:
It is also noted that a comprehensive Planning Statement has been submitted with the Scart Mountain Wind Farm application (Ref 321522-24). Whilst acknowledging that each application must be judged on its own merits, we note that the subject proposed development and the proposed wind farm development form a single project. As such, the Board is requested to have regard to the legal and policy imperatives supporting the Wind Farm development when considering the grid connection proposed development.

Planning Statement, Section 2.1: Overview
The proposed Scart Mountain Wind Farm is the subject of a separate SID application, submitted to ACP on 19th December 2024 (Ref. 321522). Together the proposed development and the Scart Mountain Wind Farm proposal form a single project for the purposes of EIA. To ensure the power generated by the proposed Scart Mountain Wind Farm feeds into the national grid, a physical connection is required between the proposed wind farm substation and the existing Dungarvan 110kV/202kV GIS substation.

Planning Statement, Conclusion:
The Scart Mountain Wind Farm project (of which the subject proposal is a fundamental component)…

However, with all these declarations of it being one single project, we ask:
- Why have the developments been submitted to An Coimisiún Pleanála as two separate planning applications?
- Why has the Applicant submitted them ten months apart? And why submit the GCR Application without knowing the decision of the wind farm?

- Why split them as two Applications – when it is not required by legislation to split a wind farm and GCR – and run the risk of having one Application of this 'functionally interdependent single project' refused?

It is submitted therefore that the separation of these interdependent components into two applications is strongly arguable to be **unlawful project splitting** under the EIA Directive and in light of the High Court judgment in Ó Grianna & Ors v An Bord Pleanála [2014] IEHC 632.

Furthermore, the documentation submitted for the GCR is largely outdated, incomplete and not GCR-specific. The EIAR and NIS lack fundamental surveys required to support a lawful Environmental Impact Assessment (EIA) or Appropriate Assessment (AA). With the above in mind, the GCR application is fundamentally flawed, unlawful and incapable of being approved in its current form.

BACKGROUND

With the exception of the Planning Statement, the documentation – including the EIAR and NIS – accompanying the proposed Scart Mountain GCR Application are identical to that submitted for the proposed Scart Mountain Wind Farm (case ref: 321522). These documents were prepared before November 2024 and were not updated for the GCR's submission in October 2025.

The EIAR submitted includes no dedicated baseline (field) surveys or assessments – ecological, hydrological, ornithological, geotechnical or ground conditions – no cumulative impact assessment and no alternatives analysis for the proposed GCR – despite the GCR crossing or impacting highly sensitive areas. These include the Finisk River (Blackwater River SAC, 002170; which also lies in an area designated as a Wind Exclusion Zone in the Waterford City and County Council Development Plan 2022-2028), the Colligan River (draining into the Dungarvan Harbour SPA, 004032), Colligan Woods and Inchindrislawood. The Application relies solely on desktop review studies for the proposed GCR plan.

It is evidently stated and admitted by the Applicant throughout that they have not carried out any GCR-specific surveys, investigations, consultations and so on so as to be able to produce a properly and fully informed report and Application. (Examples and details to illustrate this point are added at the end of this chapter.)

This absence of required information means the EIAR does not satisfy Annex IV of the EIA Directive, the Planning and Development Act 2000, national AA guidance or EPA EIAR Guidelines (2022). The NIS is also inadequate under Article 6(3) of the Habitats Directive and fails the legal standard established in Holohan v An Bord Pleanála (C-461/17), which requires '**complete, precise and definitive findings**'.

The Applicant's Planning Statement, Section2.6 Environmental Assessment states:
The proposed development (wind farm and grid connection) "screened in" for Stage 2 Appropriate Assessment by virtue of likely significant effects on three European sites, namely the Blackwater River [Cork/Waterford] SAC, Dungarvan Harbour SPA and Blackwater Estuary SPA.

This clearly states that the entire proposed development – both the wind farm and the grid connection – was "screened in" for Stage 2 Appropriate Assessment (AA). This means the Applicant has acknowledged that *both components* have the potential to significantly affect a European Site and therefore require a full, detailed Stage 2 AA. However, despite this, the GCR has **not been adequately assessed** within their NIS. No competent authority can complete an AA where a core element of the project, explicitly screened in, has not been subject to the required level of ecological analysis, survey detail or impact evaluation.

As a result, the Stage 2 AA is **legally incomplete**, and the Commission cannot reach a positive conclusion under the Habitats Directive. The law requires 'complete, precise and definitive' scientific findings for **every** part of a project screened in for AA. Leaving the GCR unassessed creates a clear gap in the information, meaning potential effects on European Sites cannot be ruled out. The Commission cannot rely on assumptions or defer assessment to a later stage. Consequently, unless and until the Applicant provides a full and scientifically robust assessment of the entire GCR, the AA cannot be lawfully completed, and consent cannot be granted.

APPLICABLE LAW

EU and Irish law require that all components of a single project be assessed together. And while the law does not dictate that two separate applications are always unlawful, it is clear that when the grid connection is integral to the wind farm, the cumulative assessment must be done, and splitting may lead to invalidity.

For the GCR Application to be valid, the Applicant must demonstrate that it is either a separate, independent development (not part of the wind farm) or that the wind farm EIA/NIS already properly covered the GCR and that the documentation remains current and valid. As it does not show that, it is submitted that this Application is invalid (or at least vulnerable to legal challenge) on grounds of project splitting, inadequate assessment or mis-description.

1. EIA Directive Requirements

The Environmental Impact Assessment Directive (Directive 2011/92/EU as amended by 2014/52/EU) requires that projects likely to have significant environmental effects be subject to an assessment **based on current baseline information**, covering all associated works. Article 2(1) and Annex IV stipulate that project components must not be artificially separated. Case law confirms that Member States must prevent the project splitting of projects.

2. Irish Case Law – Ó Gríanna and Daly

In Ó Gríanna & Ors v An Bord Pleanála [2014] IEHC 632, the High Court held that a wind farm and its grid connection constitute a single, indivisible project for EIA purposes. The Court ruled that it is unlawful to grant permission for a wind farm in the absence of assessment of the grid connection, as the grid works are an 'integral and fundamental part' of the project. In Ó Gríanna (No. 2) [2015] IEHC 248, the Court further noted that applications lacking such information may be 'substantially incomplete'.
The assessment for the proposed Scart Mountain GCR is woefully lacking and as a result *is* substantially incomplete.

It is now well established in law that approval can only be granted for plans and projects when it has been established beyond all reasonable scientific doubt that the subject proposal will not adversely impact any Natura 2000 sites.

In Case C-258/11, Sweetman & Others v An Bord Pleanala & Others, it was held that the provisions of Articles 6(2)-(4) of the Habitats Directive must be interpreted together *'as a coherent whole in the light of the conservation objectives pursued by the directive'* and that they impose a series of specific obligations necessary to achieve and maintain favourable conservation status. A plan or project will negatively impact upon a site if it prevented the *'lasting preservation of the constitutive characteristics'* of the site for which it was designated, with reference to the site's conservation objectives. Significantly it was determined that *'authorisation for a plan or project .... may therefore be given only on condition that the competent authorities .... are certain that the plan or project will not have lasting adverse effects on the integrity of the site. That is so where **no reasonable scientific doubt remains** as to the absence of such effects.'* [highlighted for emphasis]

The competent authority must therefore refuse authorisation for any plans or projects where there is uncertainty as to whether the plan or project will have adverse effects on the integrity of the site. It was also held in paragraph 44 that:
*'So far as concerns the assessment carried out under Article 6(3) of the Habitats Directive/ it should be pointed out that it **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 works proposed on the protected site concerned (see, to this effect Case C 404/09 Commission v Spain paragraph 100 and the case-law cited).* [highlighted for emphasis]

In Kelly v An Bord Pleanala & Others, [2013 No 802 J.R.] with reference to Commission v Spain c-404/09, the High Court held in paragraph 36 that the competent authority must carry out an Appropriate Assessment for a plan or project in light of the best scientific knowledge in the field. It was also held that the competent authority must lay out the rational and reasoning which was used to arrive at the determination.

The case repeated the conclusion of the CJEU at paragraph 44 in the aforementioned Case C-258/11, namely that an AA '***cannot have lacunae and must contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt***'. Consequently, it was held that **an AA must include '*examination analysis, evaluation findings, conclusions and a final determination.*'**

The Kelly Judgement has provided a very helpful clarification of the requirements of an AA and in particular in paragraph 40, a summary of what must be delivered by the process in order to be lawfully conducted:

'(i) Must identify in the light of the best scientific knowledge in the field, all aspects of the development project which can by itself or in combination with other plans or projects, affect the European site in the light of its conservation objectives. This clearly requires both examination and analysis.

(ii) Must contain complete, precise and definitive findings and conclusions and may not have lacunae or gaps. The requirement for precise and definitive findings and

conclusions appears to require analysis, evaluation and decisions. Further, the reference to findings and conclusions in a scientific context requires both findings following analysis and conclusions following an evaluation each in the light of the best scientific knowledge in the field.

(iii) May only include a determination that the proposed development will not adversely affect the integrity of any relevant European site where upon the basis of complete, precise and definitive findings and conclusions made the Board decides that no reasonable scientific doubt remains as to the absence of the identified potential effects.'

If uncertainty exists regarding the potential impact of any proposed development full account should be taken of the precautionary principle, and the development should be refused.

In the case of this GCR, the Application is so full of lacunae, does **not** include '*examination analysis, evaluation findings, conclusions and a final determination'* and does **not** ***'contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt'***. This has been shown to the Commission throughout our Observation, and – with the above in mind – the Commission realistically cannot consider permitting it.

PROCEDURAL AND PUBLIC PARTICIPATION ISSUES

Public participation rights under the Aarhus Convention and the Planning and Development Act have been undermined by the Applicant's choice to separate the project into two applications submitted almost a year apart.

The public was – and has been – deprived of the opportunity to comment on the full environmental effects of the project in a single, transparent process. In light of this, **we ask the Commission to refer to – and take into consideration – all the Observations that were submitted against the associated proposed Scart Mountain Wind Farm (case ref. 321522)** as:

1. Many of the individuals submitting an Observation against it believed it would be applicable / considered for the whole development/ 'single project' (as claimed by the Applicant). Regardless of the one line tucked away in the Scart Mountain Wind Farm Application notices that states, '*A separate application to obtain permission for an underground 110kV grid connection to the existing 110kV Dungarvan substation to*

facilitate the export of power from the wind farm, will be submitted to An Bord Pleanála', the whole 'two applications for one project' process was not made clearly evident for the everyday public who are not learned in the planning procedure, and this one line does not suffice in informing the public that **separate** Observations would need to be made for this.

2. Anyone wishing to make an Observation against – or make any comments relating to – the proposed Scart Mountain Wind Farm application/details based on this GCR Application, cannot now do so as the deadline for it passed just over seven months before this Application was submitted. Therefore, the public have not been afforded the opportunity to comment on the 'single project' at one time.
3. Even with the submission of two Applications, they should have been done so simultaneousiy with a deadline that aligns, giving the pubiic the opportunity to cross-check and comment in the same timeframe. This was even discussed and agreed upon between the Commission and the Applicant in their Pre-Application Consultation meeting held on 12 September 2023:
   'The proposed grid route runs for approximately 16km from the proposed windfarm site to the existing Dungarvan 110kV substation with the route being mostly along local and regional roads. Approximately 3km will be off road. There are approximately 5 stream crossings, but no instream works are proposed. The proposed grid connection route will be subject to a separate planning application (the subject of a separate pre-application consultation under reg. Ref. ABP 317824). ***It is proposed to submit both applications (ie the current Windfarm Application and the grid connection application) at the same time with the Environmental Impact Assessment Report (EIAR) covering both.'*** [highlighted for emphasis] (Source: Record of Meeting ABP- 315920-23, 2nd Meeting, 12 September 2023)

   As is evident, the Applicant has failed to follow this agreement.

Correspondence from the Commission's SIDS department (February 2024) states that as an electricity generating development (wind farm) and an electricity transmitting development (GCR), the two components fall under different statutory application pathways. Yet it also confirms that nothing required the Applicant to submit them at different times. And, as other wind farm planning applications have been submitted in 2024 and 2025 (the years of the Scart Mountain Wind Farm and Scart Mountain GCR Application submissions) **as a whole** – i.e. with the wind farm and GCR combined into one application – it appears that it is not a legal requirement that these two components MUST be submitted separately.

The Applicant's decision to do so has created unnecessary fragmentation and reduced transparency.

They are 2 different types of developments that fall under different legislation.
ABP-321522-24 is a wind farm and falls under Section 37A of the Planning and Development Act 2000.
ABP-317824-23 (Pre-application stage) is an electrical substation and Grid Connection the fall under Section 182A of the Act.
The difference is one is electricity generation, the other is electricity transmission, and under the current legislation they must be applied separately.

Unfortunately, I cannot answer why the applicant didn't hand them in simultaneously. In the Board, we process them as different cases.
Source: **Appendix: SIDS E-mail**

FAILURE TO ADDRESS REQUREMENTS STIPULATED BY THE COMMISSION

In the Pre-Application Consultation Records of Meeting ABP- 317824-23 for the meeting held between the Applicant and the Commission on 12 September 2023, it states:

*The Board's representatives recommend that **the grid connection be fully assessed in the EIAR as a singular project** and in combination with the proposed windfarm.*

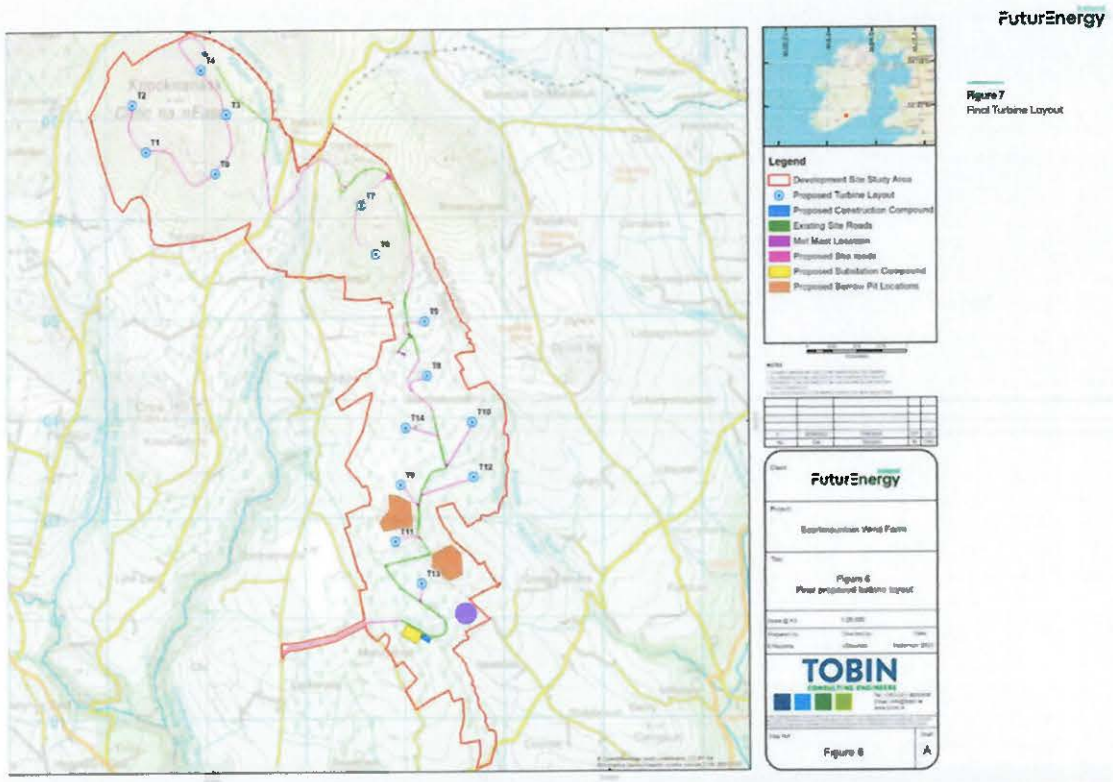
The Applicant has failed to do so and has ignored the required actions requested by the Commission. While it has been hinted at throughout the combined EIAR, it has by no means been assessed or treated as a singular project.

DELAY IN APPLICATION

The timing of the Applicant's submission of the GCR Application is put into question. if the Scart Mountain Wind Farm and the Scart Mountain GCR do constitute one project, why did the Applicant not submit the GCR Application at the same time as the wind farm Application? Why delay? Especially since the Applicant continually makes claims that the wind farm will contribute to Ireland meeting its 2030 targets and uses this argument in an attempt to pressurise the Commission to grant permission for the project. A delay of one year seems a gross contradiction to this. And why wait ten months before submitting the Application when the decision on the associated wind farm has yet not been made?

RELOCATION OF INFRASTRUCTURE

Between November 2023 – when the 'final layout design' of the wind farm site was presented to the public and published online and in the Applicant's last Newsletter – and December 2024 – when the Applicant submitted their Application for the Scart Mountain Wind Farm – the Applicant relocated the proposed substation from near the site entrance (yellow square in map below), to the south-eastern boundary adjacent to the Broemountain area (added to Applicant's map by us in purple).



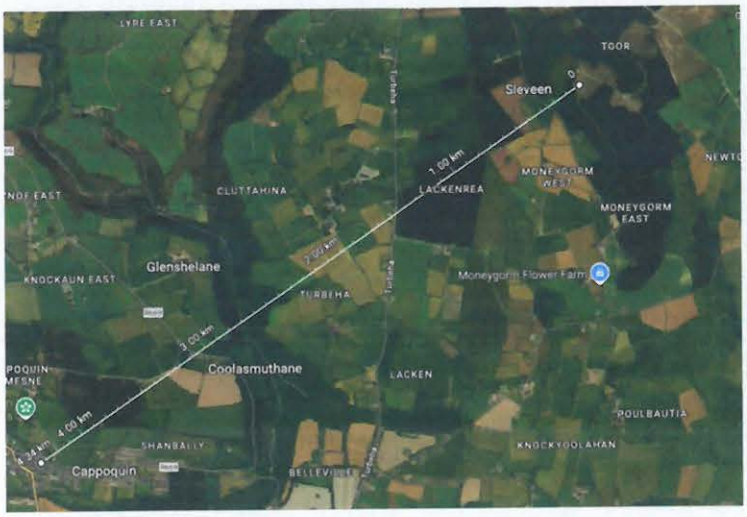
Source: Applicant's Wind Farm Site layout as presented at the Community Clinic in November 2023, published online in the Applicant's Virtual Tour, and in the last Newsletter provided. Yellow square depicts original location for the proposed substation; purple dot (added by us) depicts new location of substation in submitted Application.

In the Record of Meeting ABP-317824-23 which recorded the matters discussed in the meeting held between the Commission and the Applicant on 12 September 2023, it states:

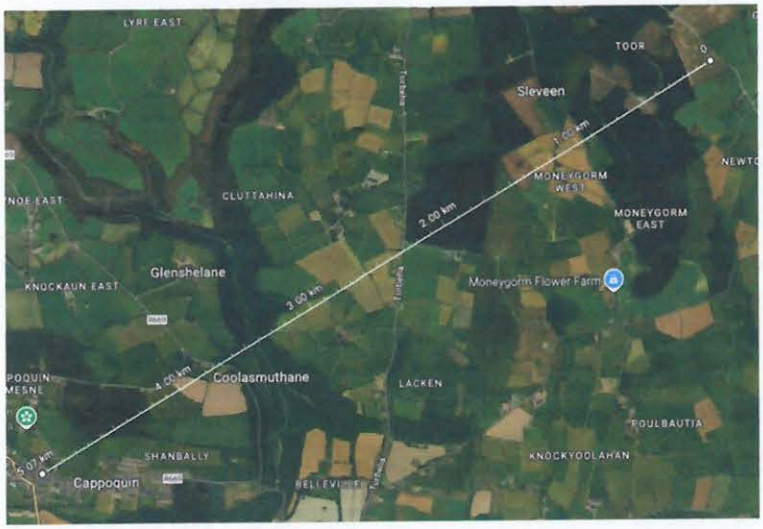
The location of the proposed grid connection starts at the proposed windfarm substation which is over 4km northeast of Cappoquin and runs to the existing Dungarvan 110kV substation. The route is approximately 16.4km long…

The maps below show the distances of the original substation and the new substation location from Cappoquin (approx. as these are based on the maps provided by the Applicant rather than coordinates which were not provided).

Cappoquin to Original Substation Location:



Cappoquin to New Substation Location:



As the Commission will see, the original location is approx. 4km away from Cappoquin, as presented to the Commission in the Meeting in September 2023, while the new location is just over 5km.
And given that the new location has moved 1km east, that would also explain the fact that the GCR length has reduced from the 16.4km stated in the Meeting to 15.5km in the planning Application.

While we understand that plans and layouts may change between a Pre-Application Consultation and the submission of an Application, it is submitted here that the change happened between presentation of FINAL layout to the public and submission of the Application to the Commission. And this material alteration was not addressed anywhere in the EIAR. It is therefore unknown – and questioned by us – whether the environmental assessment for this new location was carried out. If not, it contravenes Section 34(3) of

the Planning and Development Act and Article 5 of the EIA Directive, which require the **environmental assessment to align with the final project design**. The Commission must be provided with full evidence that the environmental assessment for this new location was carried out.

CONCLUSION

The Scart Mountain GCR Application is fundamentally flawed. Although the Applicant states that the GCR and Scart Mountain Wind Farm form one interdependent project, they have chosen to submit two separate Applications, and have chosen to submit them ten months apart, without any legal necessity. This has fragmented assessment, reduced transparency, delayed matters and undermined public participation.

Submitting the GCR Application separately also does not remove the obligation for the GCR Application to meet the statutory requirements for Environmental Impact Assessment Report, Environmental Impact Assessment and Appropriate Assessment. The works proposed under the GCR application are integral to the wider development and cannot function independently. As such, the environmental effects, ecological impacts, and cumulative interactions must be assessed in their entirety. The GCR documentation is outdated, incomplete, and lacks required surveys, cumulative assessment and site-specific analysis. It is submitted that the Stage 2 AA is incomplete and does not provide a sufficient basis for the Commission to lawfully conclude that there will be no adverse effects on the integrity of EU-Designated sites, such as the Blackwater River SPA and Dungarvan Harbour SPA. Although the Application is accompanied by an EIAR and NIS purporting to cover the overall project, it is submitted that these documents do not provide a complete or up-to-date assessment of the grid connection works. As a result, the EIA and AA obligations under planning and environmental law – including the EIA Directive, the Habitats Directive and national planning legislation – have not been properly fulfilled and met.

Given the **inadequate environmental information, procedural irregularities and clear project splitting,** it is submitted that the Application is not capable of being approved and should be refused.

Examples of how the Applicant has failed to deliver a proper, fully assessed and detailed Application

The Applicant has:

- Stated **they have two route options** (above).
  Horizontal Direction Drilling (HDD) is a method of drilling under obstacles such as bridges, railways or watercourses in order to install cable ducts under the obstacle. […] There are several bridges and culverts on ***both UGC route options*** *which will require HDD due to there being insufficient cover and depth in the bridge to cross within the bridge deck.* [highlighted for emphasis] (Appendix-2-5: Grid Connection Construction Methodology, Section 8.10 Horizontal Directional Drilling)

  Given the length of ***both route options****…* [highlighted for emphasis] (Appendix-2-5: Grid Connection Construction Methodology, Section 8.12 Replacement of Existing Culverts)

- **Failed to carry out any field surveys** for ornithology, biodiversity, wildlife, etc, and relied solely on desktop review studies that are out of date and unreliable. investigations This is contrary to lawful requirements and best practice guidelines.

- **Failed to carry out site investigations** along the entire GCR, therefore have no idea what their concept deign will come across:
  The exact location of the UGC within the curtilage of the existing roads, access tracks and private lands ***may be subject to minor modification following confirmatory site investigations to be undertaken prior to construction****.* [highlighted for emphasis] (Appendix 2-5: Grid Connection Construction Methodology, Section 2 Proposed GCR Summary)

  It will be required to carry out preliminary site investigations *along the cable route prior to construction to* ***confirm design assumptions****.* Investigations include: Trial holes along the route and at any potential joint bay positions to ascertain ground conditions and thermal resistivity of the soil. [highlighted for emphasis] (Appendix 2-5: Grid Connection Construction Methodology, Section 3 Preliminary Site Investigations)

  Detailed site investigation works will be completed at each of the HDD locations to confirm ground conditions at detailed design stage*. […] the* ***results from the borehole data will be used to design the HDD and crossing depths. A bespoke design will be prepared for each HDD crossing****. […].* ***Each individual HDD design will be subject to prior EirGrid review and approval.*** [highlighted for emphasis] (Appendix 2-5: Grid Connection Construction Methodology, Section 8.10 Horizontal Directional Drilling)

- **Failed to address cumulative impacts and effects with other proposed developments.**

- **Failed to carry out surveys regarding the existing underground services** (water, gas, electricity, telecoms, existing cables, etc), and therefore has no idea of their presence or location.
  In advance of any construction activity, the contractor ***will undertake additional surveys of the proposed route to confirm the presence or otherwise of any services****. If found to be present, the relevant service provider will be consulted with in order to determine the requirement for specific excavation or relocation methods and to schedule a suitable time to carry out works.* [highlighted for emphasis] (Appendix 2-5: Grid Connection Construction Methodology, Section 10 Relocation of Existing Services)
  Service providers should have been contacted at the very start to ascertain where they have their underground services, and therefore inform a proper design of the GCR.

- **Failed to address the recommendations/requests from the Department of Transport** (See Scoping Request Response) **and Uisce Eireann** (Modelgo WPS; See Scoping Request Response).

- **Failed to address the remarks made by TII and Uisce Eireann** in their Observations against the associated Scart Mountain Wind Farm Application (see Observations made in response to the proposed wind farm after its Application had been submitted to the Commission – case ref: 321522 included in our **Appendix: Scart Mountain Wind Farm Observations**, with highlights)

- **Provided two – possibly three – options regarding Section 6 of the proposed GCR**: where does it leave the L-5103, where does it cross the Colligan River, and where does it run from the Colligan River banks to Section 7 of the GCR (see our section on this above).

APPENDIX:

SIDS EMAIL

RE: Bord Pleanála Case reference: PA93.321522

From: SIDS (sids@pleanala.ie)

To: julia[redacted]

Date: Thursday, February 20, 2025 at 12:07 PM GMT

Hi Julia,

Unfortunately, I cannot answer why the applicant didn't hand them in simultaneously.

In the Board, we process them as different cases.

The new legislation is due to be introduced this year. I am unaware as of now if the process will change.
We can only wait until the new legislation is rolled out.

Kind regards,

[redacted]

From: Julia [redacted]
Sent: Thursday, February 20, 2025 11:10 AM
To: SIDS <sids@pleanala.ie>
Subject: Re: Bord Pleanála Case reference: PA93.321522

Caution: This is an **External Email** and may have malicious content. Please take care when clicking links or opening attachments. When in doubt, contact the ICT Helpdesk.

Hi [redacted], thanks for that, and for answering so quickly.

Yes I understand that they have to be applied for separately, but what I'm struggling to understand/grasp is why they do not have to be submitted at the same time seeing as they are 'connected' [redacted]

While the applications are separate, the project is one, so to me it seems like the Application for the Wind Farm is only 'half' an application as there is no simultaneous application for its Grid Connection being submitted at the same time? I understand it will come in to the Board. but shouldn't it be SIMULTANEOUSLY?

I'm struggling to understand the process of how the Board can look at and consider an Application when part of its development details are 'missing'. Can the Board consider approving a proposed development when they do not know the plans of how it will be connected to the grid?

I hope that makes more sense as to what my confusion is.

Thanks

Warm regards

Julia

On Thursday, February 20, 2025 at 10:05:13 AM GMT, SIDS <sids@pleanala.ie> wrote:

Hi Julia,

They are 2 different types of developments that fall under different legislation.

ABP-321522-24 is a wind farm and falls under Section 37A of the Planning and Development Act 2000.

ABP-317824-23 (Pre-application stage) is an electrical substation and Grid Connection the fall under Section 182A of the Act.

The difference is one is electricity generation, the other is electricity transmission, and under the current legislation they must be applied separately.

Hope this was helpful.

Kind regards,

[redacted]

APPLICANT'S RELIANCE ON THE WIND ENERGY DEVELOPMENT GUIDELINES

In the Applicant's Planning Statement, it states:
*The proposed development provides for a 110kV grid connection which will export electricity generated on the proposed Scart Mountain Wind Farm site via an underground cable to the existing Dungarvan 110kV substation. The proposed Scart Mountain Wind Farm is the subject of a separate SID application, submitted to ACP on 19th December 2024 (Ref. 321522). Together the proposed development and the Scart Mountain Wind Farm proposal form a **single project** for the purposes of EIA.*

One of the issues raised in the Planning Application for Scart Mountain Wind Farm (case ref: 321522) is the status of the *Wind Energy Development Guidelines for Planning Authorities* (DoEHLG, 2006), commonly referred to as the '2006 Guidelines'.

For example, Section 4.3 (pgs. 15-16) of the Applicant's EIAR Non-Technical Summary sets out in some detail the position of these Guidelines and their intended replacement:
'A review of the Wind Energy Development Guidelines 2006 began with the issuing of draft proposals in December 2013. Following consultation, a preferred draft approach was announced in 2017. Accordingly, the Minister for Housing, Planning and Local Government, Eoghan Murphy, T.D. and the Minister for Communications, Climate Action and Environment, Richard Bruton, T.D., launched a public consultation on proposed revisions to the Wind Energy Development Guidelines on Thursday 12th December 2019.
The Draft Revised Wind Energy Development Guidelines were issued for public consultation and primarily focus on addressing a number of key aspects including noise, visual amenity setback, shadow flicker, community consultation obligations, community dividend and grid connections. These revised guidelines are still under review (and have been considered within the EIAR) and until such time as the new guidelines are published, the 2006 guidelines remain the statutory policy guide in relation to all wind energy developments.'

On 25 January 2022, the status of the Wind Energy Development Guidelines were addressed in a Dáil question and answer session, when Mr Peter Burke, T.D., Minister of State at the Department of Housing, Local Government and Heritage replied to a question by Mr Denis Naughten, stating that:
'My Department is currently undertaking a focused review of the 2006 Wind Energy Development Guidelines. The review is addressing a number of key aspects including noise, setback, shadow flicker, community obligation, community dividend and grid connections. Guidance on the noise aspect is currently being finalised by my Department in conjunction with the Department of Environment, Climate and Communications (DECC), which has primary responsibility for environmental noise matters. Significant work has been undertaken on the noise elements and the two Departments recently met to discuss new developments in this regard including consideration of the impact of the revised 2030 target to generate up to 80% of our electricity from renewable sources and the need to ensure that proposals regarding the measurement and assessment of noise from wind turbines are fit for purpose. These aspects are currently being considered and further engagement between the Departments is expected imminently. Following this inter-departmental engagement, I will be in a better position to provide an update on the expected publication date of the revised Guidelines, the finalisation of which remains a priority.
It should also be noted that the review and finalisation of the Guidelines has been included as a specific action in the recently published Climate Action Plan. When finalised, the revised Guidelines will be issued under section 28 of the Planning and Development Act 2000, as amended.
Planning authorities and, where applicable, An Bord Pleanála, must have regard to guidelines issued under section 28 in the performance of their functions generally under the

Planning Acts. In the meantime, the current 2006 Wind Energy Development Guidelines remain in force.'

It is our observation that the Minister's reply ignores two problems that have a bearing on the Scart Mountain planning application, and which must be taken into account by the Commission.

Firstly, the original Wind Energy Development Guidelines, issued in 2006, have an 'official' status; they are intended to provide planning guidance to the relevant authorities, and we might add that the Government has defended them as an important policy since the time when they were issued. Therefore, there is no doubt that the 2006 Guidelines constitute a 'policy' within the meaning given in the EU Directive 2001/24/EC on the assessment of the effects of certain plans and programmes on the environment, otherwise known as the Strategic Environmental Assessment (SEA) Directive. It is also clear, and the Commission will be aware, that the 2006 Wind Energy Development Guidelines have not been subjected to an SEA, and their legality must therefore be in doubt. By allowing these Guidelines to remain in force, Ireland is in breach of the EU Strategic Environmental Directive 2001/24/EC.

Secondly, while we understand that the '2019 Draft Revised Wind Energy Development Guidelines' may have been subjected to an SEA, the Minister's reply has made it very clear that these Draft Guidelines are not yet in force, and that the 2006 Guidelines must be considered and taken into account by An Coimisiún Pleanála when assessing the planning application. It is therefore submitted that:

- When determining the current planning application the Scart Mountain Grid Connection Route (GCR) and for the Scart Mountain Wind Farm **(which together are to be considered and treated as a single project)**, the Commission should not have regard to the 2006 Wind Energy Development Guidelines, even if they remain in force simply because of a failure to bring a revised set of guidelines into force;
- The 2006 Wind Energy Development Guidelines are hopelessly out of date, given the increasing size and height of wind turbines, and their environmental impacts, together with the increasing recognition that large-scale onshore wind farms are not the optimum way to increase Ireland's share of renewable energy; and,
- Given that the 2019 Draft Revised Wind Energy Guidelines have not been formally adopted, and they do not have legal force, the Commission should not be bound by them, or use compliance with these Guidelines as a basis for granting planning permission for the proposed Scart Mountain GCR and associated Scart Mountain Wind Farm.

Requirement that the Competent Authorities of a Member State must comply with EU Legislation and Judgements of the Court of Justice of the European Union – Case C 24/19

The fact that the 2006 Wind Energy Development Guidelines are considered to be those in force (as stated by the Minister), but which have not been subjected to an SEA may appear an obscure matter, but in fact there are serious consequences for An Coimisiún Pleanála, if the 2006 Wind Energy Development Guidelines are relied upon by the Commission.

These consequences follow from the judgment in case C 24/19, in which the Court of Justice of the European Union (CJEU), responded to a request for a preliminary ruling on the interpretation of Articles 2(a) and 3(2)(a) of Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment – the Strategic Environmental Assessment (SEA) (OJ 2001 L 197, p. 30) (*Judgment of the Court (Grand Chamber), delivered 25 June 2020, in Case C-*

24/19, A and Others against Gewestelijke stedenbouwkundige ambtenaar van het departement Ruimte Vlaanderen, afdeling Oost-Vlaanderen)

The background to this important and relevant case was that, on 30 November 2016, following a procedure that began in 2011, the Flanders Department of Land Planning (Belgium) granted development consent for the installation and operation of five wind turbines. The consent was subject to compliance with certain conditions laid down by: (i) an order of the Flemish Government (the 'Order'); and (ii) a circular on the 'Assessment framework and conditions for the installation of wind turbines' (the 'Circular'). It will be immediately obvious that this 'Circular' was in some respects similar to Ireland's Wind Energy Development Guidelines. The applicants in the case, known only as 'A and Others', in their capacity as residents near the site proposed for the wind farm project, brought an action before the Council for Consent Disputes (equivalent to An Coimisiún Pleanála) seeking an annulment of the development consent. In support of their action, they submitted that the Order and the Circular, based on which the consent had been granted, infringed Article 2(a) and Article 3(2)(a) of Directive 2001/42, as neither the Order nor the Circular had been subject to Strategic Environmental Assessment, contrary to the provisions of the Directive. Against this background, the Council for Consent Disputes decided to stay the proceedings and to refer questions for a preliminary ruling to the CJEU. Essentially, the local residents in Belgium challenged a wind farm consisting of five turbines which had been permitted, based on conditions outlined in a regional government Order from 2006 and a Circular on the Assessment framework and conditions for the installation of wind turbines. They argued that the consent granted should be annulled on the basis that the Order and the Circular should have been preceded by a SEA, and were therefore in breach of Article 2(a) and Article 3(2)(a) of Directive 2001/42 on the assessment of the effects of certain plans and programs on the environment (the SEA Directive). At issue was the interpretation of the above Articles. Article 2(a) defines plans and program as: *'plans and program ... - which are subject to preparation and/or adoption by an authority at national, regional or local level or which are prepared by an authority for adoption, through a legislative procedure by Parliament or Government, and - which are required by legislative, regulatory or administrative provisions'*

Article 3(2)(a) provides that an environmental assessment shall be carried out for all plans and programmes:
*'(a) which are prepared for agriculture, forestry, fisheries, **energy**, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use and which set the framework for future development consent of projects listed in Annexes I and II to Directive 85/337/EEC'*

The CJEU had to consider whether the Order and the Circular amounted to a plan or programme, and also the implications for a development such as the proposed wind farm, in the event that the Court found that there was a violation of EU law by a Member State.

What are considered to be Plans and Programmes within the Meaning of the Directive
According to established case law (cases C-567/10, C-160/17, and C-321/18), the CJEU considered that, under Article 2(a) of the Directive, the adoption of plans or programmes (in this case the Order and the Circular) does not need to be compulsory. It is sufficient that such plans and programmes are provided for by national legislative or regulatory provisions, which determine which are the competent authorities, and what is the procedure for their adoption.

Therefore, a measure must be regarded as 'required' under Article 2(a) of the SEA Directive where the legal basis of the power to adopt the measure is found in a particular national legislative provision, even if the adoption of that measure is not mandatory. Therefore, in the case discussed, the definitions of plans and programmes covers the Order and, subject to verification by the referring court, also covers the Circular.

The CJEU therefore found that the Order and the Circular constituted plans or programmes under the SEA Directive, and it found that a SEA **SHOULD** have been carried out prior to their adoption by the Belgian government in 2006.

The Circumstance in which an SEA MUST be carried out:
Firstly, the Order and the Circular concern the energy sector, which is specifically referred to in Article 3(2)(a) of the Directive as one of the sectors for which an environmental assessment is required.

Secondly, as regards the question of whether the Order and the Circular define the framework for future development consent for projects, as set out by Article 3(2)(a) of the Directive, the CJEU stated the following: According to established case law (cases C-671/16 and C-43/18), the environmental assessment is needed if the measure *'establishes a significant body of criteria and detailed rules for the grant and implementation of one or more projects that are likely to have significant effects on the environment'*.

The Consequences of the CJEU Judgement for the Competent Authorities in a Member State:
The Court of Justice outlined the consequences for a Member State and national competent authorities (such as An Coimisiún Pleanála) of a breach of EU law in the following terms:

- Member States are *'required to eliminate the unlawful consequences'* of breaches of EU law. Competent national authorities are *'under an obligation to take all the necessary measures, within the sphere of their competence, to remedy the failure to carry out an environmental assessment'* which can involve *'adopting measures to suspend or annul that plan or program'*.
- Only the Court of Justice may, in exceptional cases, temporarily suspend the Application of EU law.

In the Belgian case, construction of the wind farm had not yet commenced. The Court of Justice stated that it was clear that the consent must therefore be annulled, as it was granted on the basis of the plan or program which *'was itself adopted in breach of the obligation to carry out an environmental assessment'*. The Court of Justice also held that where installation of a windfarm project *'has commenced, or is even completed'*, the consent granted can be annulled (paragraph 89 of the CJEU Judgment).

The Conditions Under Which an Official National Guideline which Breaches EU Law can be provisionally maintained in Force:
The Court also addressed itself to considering those circumstances in which consent granted for projects would not have to be annulled, and these were stated to be limited to the following two situations:

1. Where there is a risk that the annulment *'could create a legal vacuum that is incompatible with that Member State's obligation to adopt measures to transpose another act of EU law concerning the protection of the environment'*; (paragraph 90 of the CJEU Judgment); or,

2. If the consequences of such annulment were '*a genuine and serious threat of disruption to the electricity supply of the Member State concerned which could not be remedied by any other means or alternatives, particularly in the context of the internal market*' (paragraph 92 of the CJEU Judgment).

When considering those particular circumstances where a grant of permission or consent would not have to be annulled, the CJEU cited case C-411/17. In Case C-411/17, the Court stated that it was permissible to continue the operation of a large-scale energy plant (two nuclear reactors), where this was necessary for the security of energy supply of the Member State as a whole.

However, in its consideration of case C 24/19, the Court held that the cessation of activity of a limited number of wind turbines was not likely to have significant implications for the supply of electricity for the whole of Belgium.

It is our submission that the same criteria apply to the proposed grid connection and wind farm at Scart Mountain; if An Coimisiún Pleanála refused planning permission for the proposed wind farm and grid connection, this decision would not be likely to have significant implications for the supply of electricity for the whole of Ireland (we refer the Commission to our **Chapter 11: Critical Constraints within Ireland**).

It is therefore our concluding observation that the Commission cannot grant permission for the proposed Scart Mountain Wind Farm and associated GCR, given the Applicant's reliance on the 2006 Wind Energy Development Guidelines, and given the judgement of the CJEU case C 24/19 cited above, and the implications of that judgement.

SEA DIRECTIVE

The following section is to reiterate the fact that the 2006 Wind Energy Development Guidelines are considered to be those in force (as stated by the Minister), but which have **not been subjected to Strategic Environmental Assessment (SEA).** This may appear an obscure matter, but in fact there are serious consequences for An Coimisiún Pleanála, if the 2006 Wind Energy Development Guidelines are relied upon by the Commission.

As the Commission is aware, a plan or programme which sets the framework for future development consents must be subject to an SEA. An SEA is an environmental assessment process required under the EU Directive 2001/42/EC, also known as the Strategic Environmental Assessment Directive.

The concept of '**sets the framework**' relates to any measure which establishes, by defining rules and procedures for scrutiny applicable to the sector concerned, a significant body of criteria and detailed rules for the grant and implementation of one or more projects that are likely to have significant effects on the environment.

Guidelines must be subject to SEA if they are capable of producing compulsory legal effects for third parties, in contrast to measures which contain provisions of a purely indicative value. Guidelines adopted under section 28 of the 2000 Act are binding on planning authorities when making a development plan by virtue of Section 28(1A) and 28(1B).

'The SEA Directive's objectives are to provide a high level of protection to the environment and contribute to integrating environmental considerations into the preparation, adoption and implementation of plans and programmes to promote sustainable development. To achieve this, an environmental assessment must be carried out according to the Directive's provisions for plans and programmes identified as likely to have significant effects on the environment.'

An SEA must be carried out on all plan and programmes listed in the Directive. Energy projects being one of them.

To determine whether a plan and programme falls under the scope of the SEA Directive, all four of the following should be met:

1. Be subject to preparation and/or adoption by an authority at national, regional or local level.
2. Required by legislative, regulatory or administrative provisions.
3. Prepared by any of the sectors listed in Article 3(2)(a) of the Directive.
4. Sets the framework for future development consent of projects listed in Annex I and II to the EIA.

It is contrary to the SEA Directive to apply a plan or programme that sets the framework for development consents under the EIA Directive which was adopted in breach of the SEA Directive. The 2006 Wind Energy Guidelines were not subject to an SEA and are therefore inapplicable. The 2019 Draft Revised Wind Energy Guidelines are irrelevant as a matter of Irish law and in any event the conclusion of the SEA remains pending. Therefore, these Guidelines are also inapplicable. An SEA IS a legal requirement and must be carried out.

Senator John Cummins, in his ministerial capacity for Local Government and Planning, is currently overseeing the development of new Wind Energy Guidelines. These Guidelines are undergoing a comprehensive revision process, which is both lengthy and complex, and will ultimately be made available for public consultation.

Given the importance of ensuring that these Guidelines are robust, balanced and reflective of community and environmental considerations, it is recognised that the revision process will not be completed anytime soon. Therefore, all onshore windfarm planning and any related planning applications should be paused until the new version of the Guidelines is finalised and released. This pause would ensure consistency, fairness and clarity in the planning system, while also safeguarding communities from uncertainty during the transition period.

We refer the Commission to the Inspector's Report (page 37) for the proposed wind farm in Gougane Barra (case ref: ABP-315656-23; refused)

'I submit that perhaps it is time to give consideration over to stalling determinations on applications for wind farm development where no new guidance is in place. I submit that this would likely be the incentive to ensure an early delivery of new finalised Guidelines. Perhaps approvals for wind farm development could, thus, be determined to be premature pending the delivery of new finalised Guidelines. While there is much emphasis in public policy on promoting renewable energy and the benefits which would accrue from it, there appears to be little urgency in producing critically important up-to-date guidance which would allow for informed decision-making on the delivery of it in the right locations in a sustainable manner. I submit that this lack of up-to-date guidance is likely to continue to result in more court challenges as the Board and planning authorities are left isolated in seeking to deal with matters where the principal Guidelines are almost 20 years old, indeed archaic, when due

regard is had to how wind energy development has significantly evolved in form and scale since then.'

This Application (case ref. 323791) is in relation to a grid connection, but as the Applicant clearly states in their documentation, the windfarm and grid connection are a single project.

Based on Inspector's Report above, they have clearly highlighted their position in relation to considering applications for wind farms when there is a lack of clear guidance based on the evolving technology and scale of wind farms. We refer the following illustrative concept to the Commission for consideration:

The first iPhone was released in 2007. In the short time since then, mobile technology and social media have transformed almost every aspect of daily life – especially for young people. Facebook (2004; mobile app by 2008), YouTube (2005; mobile app in 2011) and Twitter (2006; mobile app approx. 2008) made constant online connection possible for the first time. This shift accelerated with mobile-first, visually driven platforms such as Instagram (2010), Snapchat (2011) and TikTok (2016), which introduced continuous notifications, algorithmic feeds and an 'always-on' culture. Research and studies have shown that such platforms have been strongly linked to rising anxiety, depression, cyberbullying, body-image pressure, sleep disruption, reduced attention span, FOMO, social comparison and addictive patterns of use among today's youth.

All of these extreme technological, social and behavioural changes took place **within the same timeframe that Ireland's current Wind Energy Development Guidelines (2006) have remained unchanged – almost 20 years**. In other words, the world around us has evolved at extraordinary speed, yet the Guidelines – Ireland's national planning rules that set out how onshore wind farms should be designed, assessed and approved, covering issues such as wind turbine design, scale, siting, noise, shadow flicker, visual impact and community impact – have not kept pace with advancing technology.

To illustrate the gap: It would be unthinkable to expect medical and mental-health professionals in 2025 to assess a young person's (mental) well-being using diagnostic guidance written in 2006 – before smartphones, social media apps, algorithmic feeds and online harassment were part of (everyday) life. Yet Ireland's wind energy policy asks communities, planners and regulators to rely on similarly outdated frameworks when evaluating technologies that have increasingly evolved and grown dramatically taller, more powerful and more complex. And that does not include any research regarding health aspects scientifically proven since then.

CONCLUSION

- An **SEA is a legal requirement** for any plan or programme that sets the framework for development consents in the energy sector.
- **Both the 2006 and 2019 Guidelines are inapplicable** under Irish and EU law until SEA compliance is achieved.

APPENDICES:

- **Maps**
- **Ecology Report, Dr Patrick Moran**
- **NBDC Excels**
- **Mail from Waterford City & County Council Biodiversity Department**
- **White-Tailed Eagle News Report**
- **Land Registry Details**
- **FuturEnergy / Dyrick Hill Wind Farm Observation**
- **Scart Mountain Wind Farm Observations and Scoping Responses**

CHAPTER 12: COMMENTS ON APPLICANT'S EIAR SCHEDULE OF MITIGATIONS CHAPTER

AN COIMISIÚN PLEANÁLA
LDG- 084 203 -25
ACP-
20 NOV 2025
Fee: € 50. Type: CARD
Time: 12:36 By: HAND

APPENDIX:

MAPS

Two Proposed HDD Crossings at Colligan River

Description 1: the HDD crossing is proposed to be about **250 metres along the L-5103 local road after its junction with the R-672.** And the route enters **Coillte lands** to under cross the Colligan River by means of HDD. (See orange line in map)

Description 2: the HDD crossing is proposed to be **AT** the junction of the R-672 with the L-5103. And **the route enters private lands (directly off the R-672, not 250m along the L-5103) to achieve a crossing of the Colligan River.** From the R672, the route follows an existing access track to the launch area for an HDD undercrossing of the Colligan River. (See purple line in map)


LIGANWOOD
Colling n River

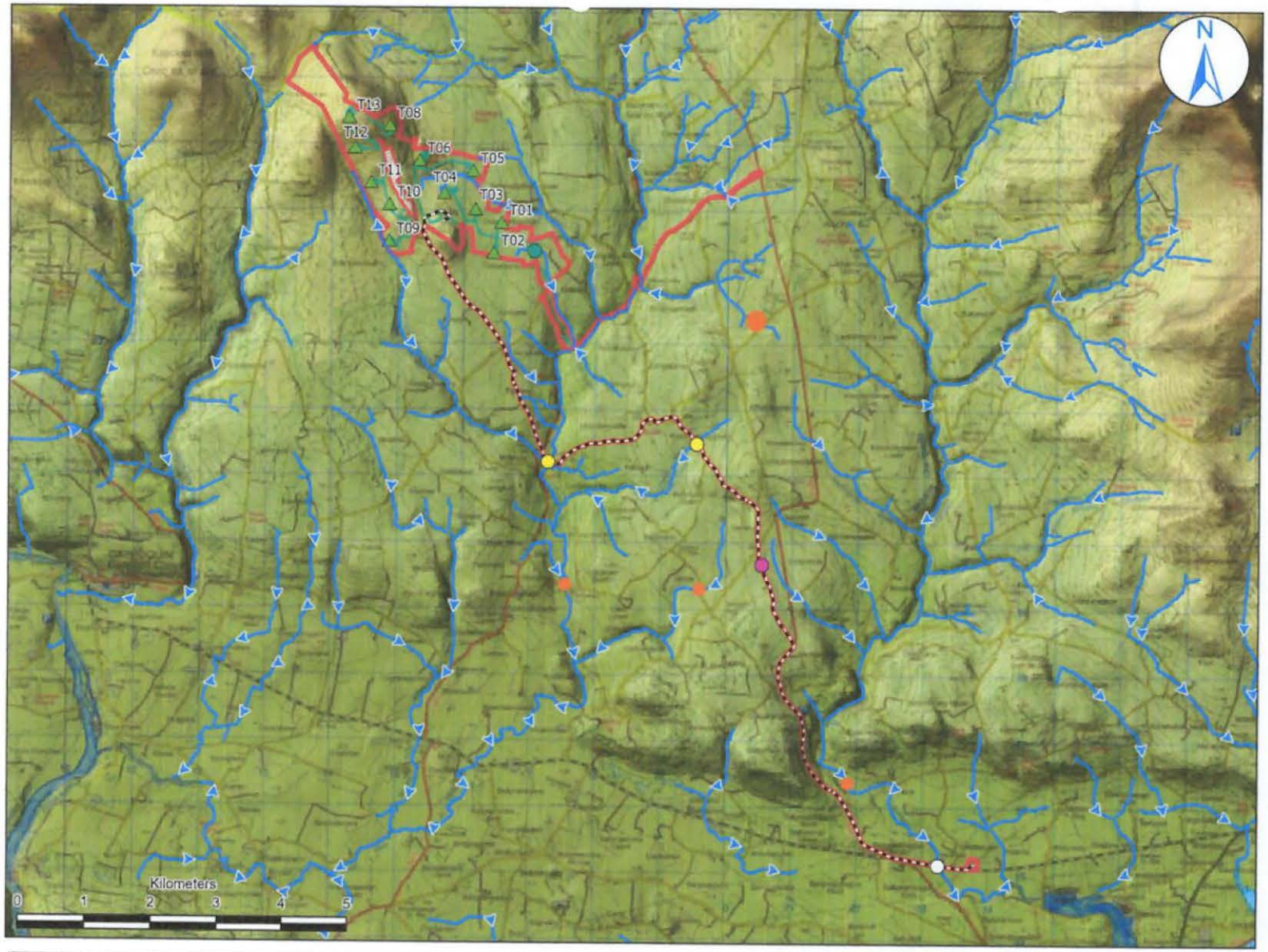
Cumulative HDD Crossings of the proposed Scart Mountain, Dyrick Hill and Coumnagappul GCRs.

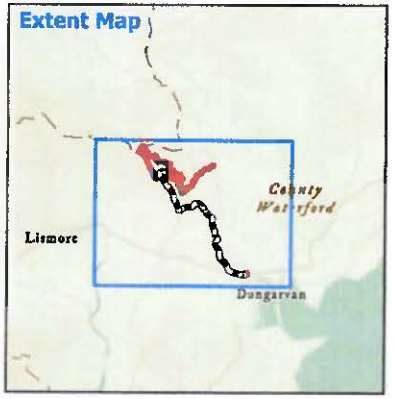
- The yellow dots mark watercourse HDD crossings of the proposed Dyrick Hill GCR (no. 2)
- The white dot marks the watercourse HDD crossing of the proposed Dyrick Hill and Coumnagappul GCRs (no. 1)
- The orange dots along the lower half of the map mark the watercourse HDD crossings of the proposed Scart Mountain GCR (no. 3)
  (added by us using the Scart Mountain: EIAR Figure 2.7: Watercourse Crossings map)
- The orange dot in the upper half of the map marks the watercourse HDD crossing of the proposed Coumnagappul GCR (no.1)
  (added by us using the Coumnagappul EIAR: Map of Hydrological Features within GCR & TDR)

This totals **seven HDD crossings** across **two rivers of ecological importance** that are hydrologically connected to **two EU-Designated Sites**:

- Five = Finisk River that is a major tributary of the Blackwater SAC
- Two = Colligan River that feeds into the Dungarvan Harbour SPA (and at locations that are just a few kms away).

Source: Dyrick Hill Wind Farm EIAR Figure 9.7: Watercourse crossing requiring HDD and the HDD Location Cattle Grid Underpass, with amendments (inclusion of orange dots) by us.





Legend

Watercourse Crossings

- Watercourse (Culvert)
- Watercourse (HDD)
- Watercourse (Use of Existing Infrastructure)
- Land - Cattle Grid (HDD)
- River Network
- Turbine Locations
- Grid Connection Route
- EIAR Boundary
- Land Excluded From EIAR Boundary
- Road Alignment

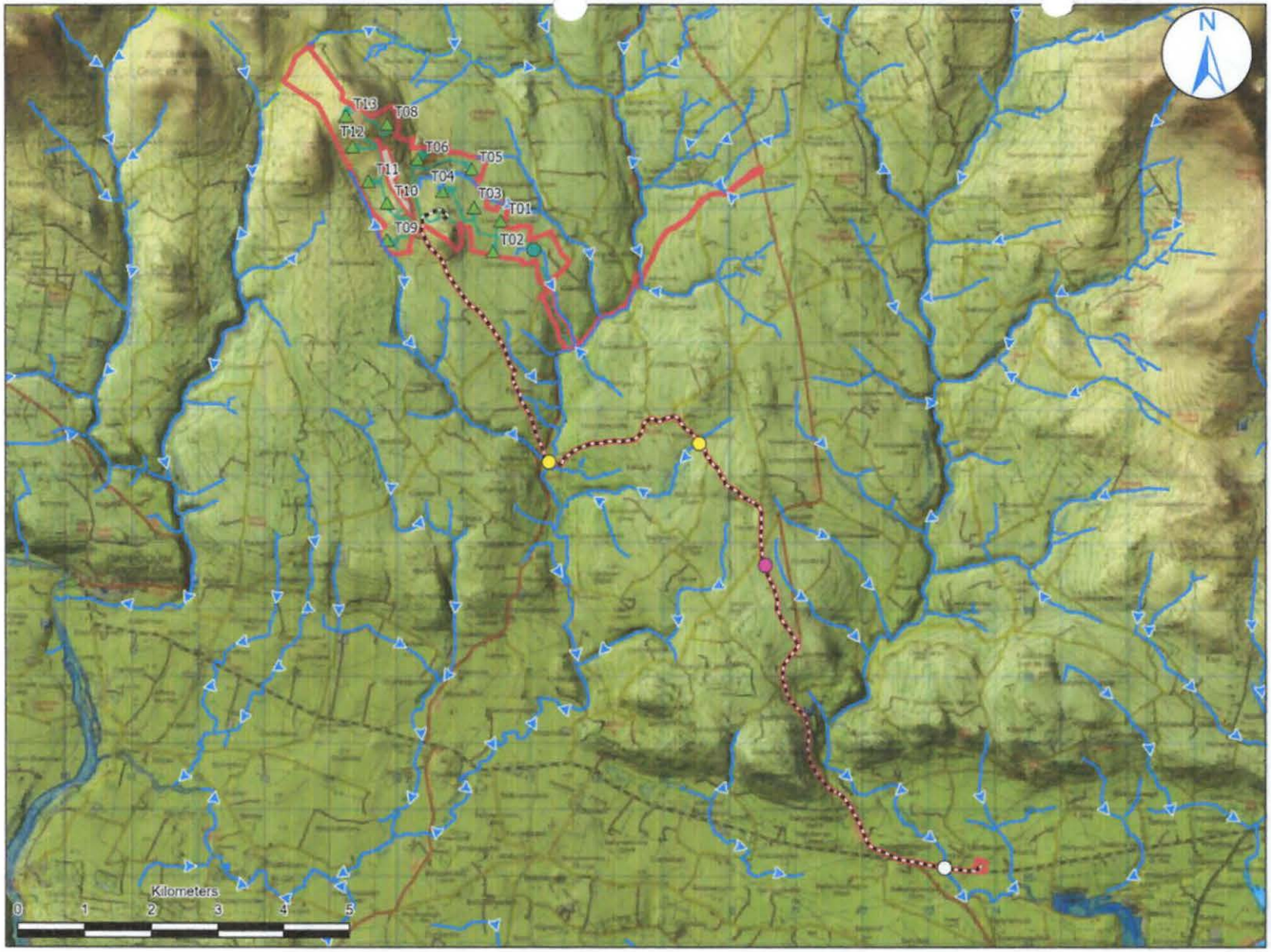
Contains Irish Public Sector Information licensed under an Attribution-Non Commercial-No Derivatives 4.0 International (CC-BY-NC-ND 4.0) licence.

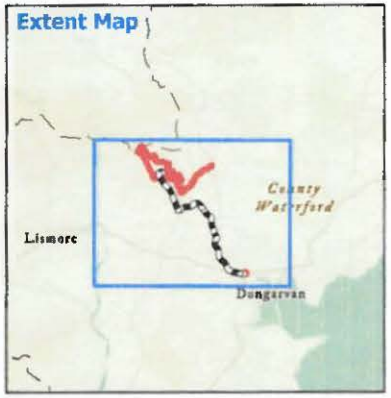
EMPower, Jennings O'Donovan & Partners and EcoQuest Environmental

Airbus,USGS,NGA,NASA,CGIAR,NCEAS,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community, Esri UK, Esri, HERE, Garmin, Foursquare, FAO, METI/NASA, USGS, EPA, OSI

Client: Jennings O'Donovan & Partners	
Project: Dyrick Hill Wind Farm	
Map Title: Watercourse Crossings Requiring HDD and the HDD Location at the Cattle Grid Underpass.	
Spatial Reference Name: IRENET95 Irish Transverse Mercator	
Figure Number: 9.7	Page Size: A3
Date Exported: 26/05/2023	Scale: 1:60,000
Revision Number: 2	Prepared By: DP
Tel: +353 (91) 897 583	Checked By: AG
Email: info@ecoquest.ie	EcoQuest Environmental
Web: www.ecoquest.ie	

Dyrick Hill Wind Farm
GCR Map





Legend

Watercourse Crossings

- Watercourse (Culvert)
- Watercourse (HDD)
- Watercourse (Use of Existing Infrastructure)
- Land - Cattle Grid (HDD)
- River Network
- Turbine Locations
- Grid Connection Route
- EIAR Boundary
- Land Excluded From EIAR Boundary
- Road Alignment

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EMPower, Jennings O'Donovan & Partners and EcoQuest Environmental

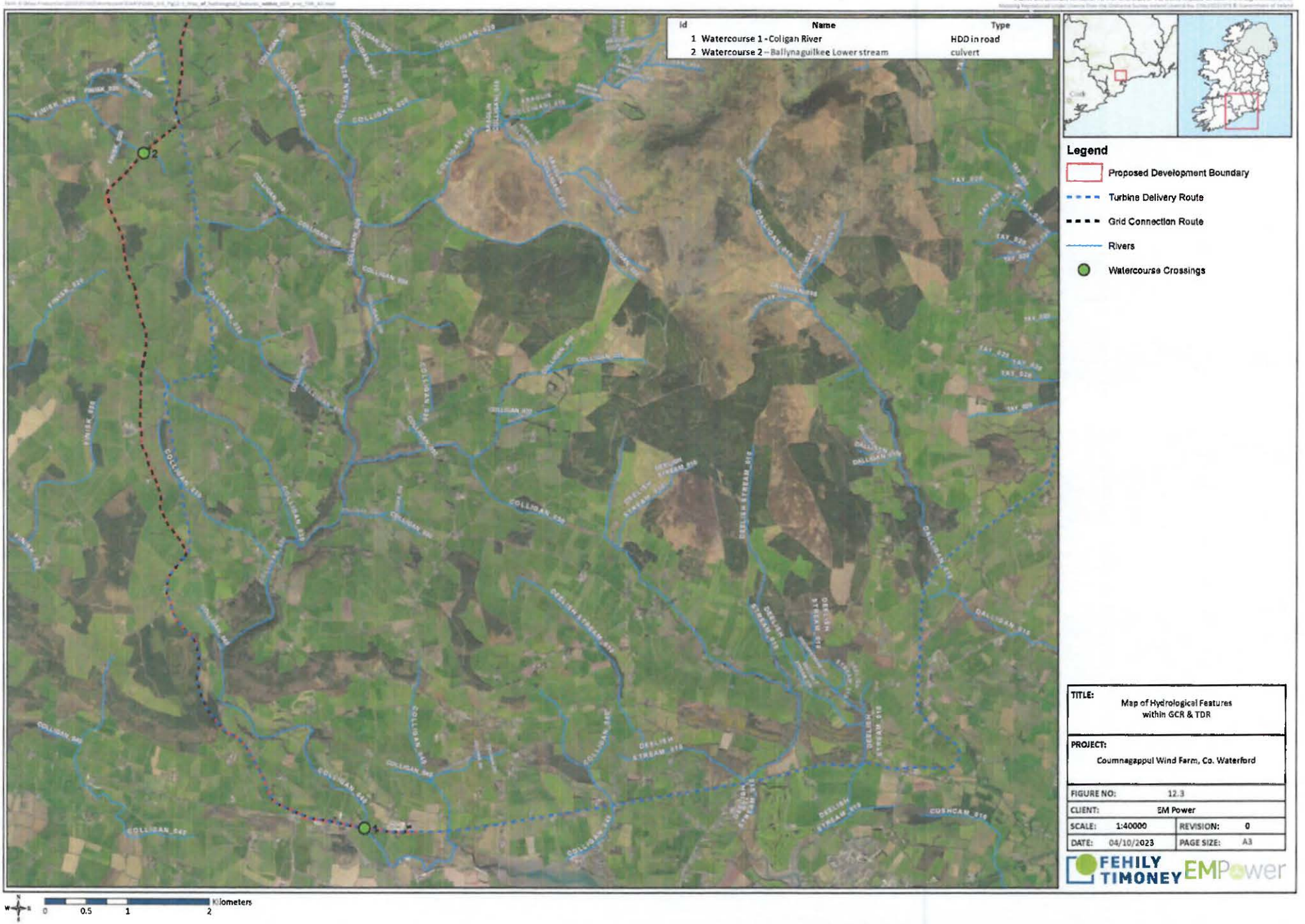
Airbus,USGS,NGA,NASA,CGIAR,NCEAS,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community, Esri UK, Esri, HERE, Garmin, Foursquare, FAO, METI/NASA, USGS, EPA, OSI

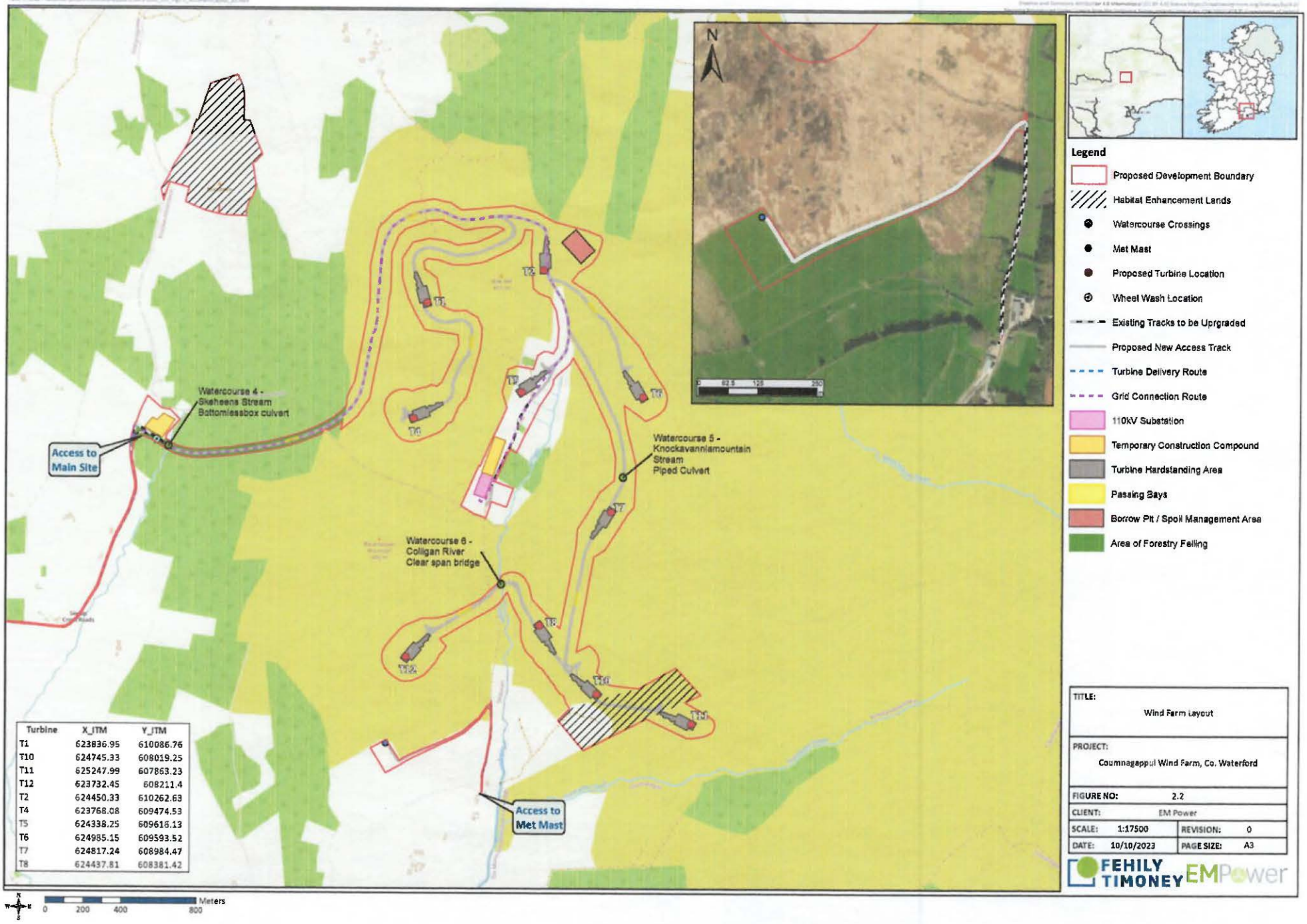
Client: Jennings O'Donovan & Partners	
Project: Dyrick Hill Wind Farm	
Map Title: Watercourse Crossings Requiring HDD and the HDD Location at the Cattle Grid Underpass.	
Spatial Reference Name: IRENET95 Irish Transverse Mercator	
Figure Number: 9.7	Page Size: A3
Date Exported: 26/05/2023	Scale: 1:60,000
Revision Number: 2	Prepared By: DP
Tel: +353 (91) 897 583	Checked By: AG
Email: info@ecoquest.ie	EcoQuest Environmental
Web: www.ecoquest.ie	

Table 9-6: Waterbodies that cross the proposed GCR and works areas along the proposed TDR

Catchment (Catchment ID)	WFD Sub-catchment (Sub-catchment ID)	River Network EPA Name (Segment Code)	River Waterbody WFD Status 2016-2021 (River Name & Code)	River Waterbody WFD Risk 2016-2021
Colligan-Mahon (17)	Colligan_SC_010 17_6	17-278	Good Colligan_040 IE_SE_17C010300	Not at Risk
Blackwater (18)	Finisk_SC_020 (18_15)	Finisk 020 (18_3223)	Moderate Finisk_020 (IE_SW_18F020300)	At Risk
Blackwater (18)	Finisk_SC_030 (18_15)	Scart 18 (18_722) Ballykerrin Middle 18-2079	High Finisk_030 (IE_SW_18F020500)	Not at Risk
Blackwater (18)	Blackwater [Munster] SC_140 (18_24)	Scartmountain (18_1351)	Moderate Glenshelane_010 (IE_SW_18G110300)	Under Review
Blackwater (18)	Finisk_SC_010 (18_15)	Lackenrea (18_1040	High Finisk_030 (IE_SW_18F020500)	Not at Risk
		Boherawillin (18_722)		
		Moneygorm East (18_783)		
		Boherawillin (18_894)		
		Toor 18 (18_2093)	High Farnane 010 (IE_SW_18F060300)	Not at Risk
		Fernane 18 (18_2189)		

Coumnagappul Wind Farm
GCR Map


Id Name Type
1 Watercourse 1 - Coligan River HDD in road
2 Watercourse 2 – Ballynaguilkee Lower stream culvert
Legend
Proposed Development Boundary
Turbine Delivery Route
Grid Connection Route
Rivers
Watercourse Crossings
TITLE: Map of Hydrological Features within GCR & TDR
PROJECT: Coumnagappul Wind Farm, Co. Waterford
FIGURE NO: 12.3
CLIENT: EM Power
SCALE: 1:40000
REVISION: 0
DATE: 04/10/2023
PAGE SIZE: A3
FEHILY TIMONEY EMPower
Kilometers
0 0.5 1 2



Turbine	X_ITM	Y_ITM
T1	623836.95	610086.76
T10	624745.33	608019.25
T11	625247.99	607863.23
T12	623732.45	608211.4
T2	624450.33	610262.63
T4	623768.08	609474.53
T5	624338.25	609616.13
T6	624985.15	609593.52
T7	624817.24	608984.47
T8	624437.81	608381.42

TITLE: Wind Farm Layout

PROJECT: Coumnagappul Wind Farm, Co. Waterford

FIGURE NO: 2.2

CLIENT: EM Power

SCALE: 1:17500 REVISION: 0

DATE: 10/10/2023 PAGE SIZE: A3

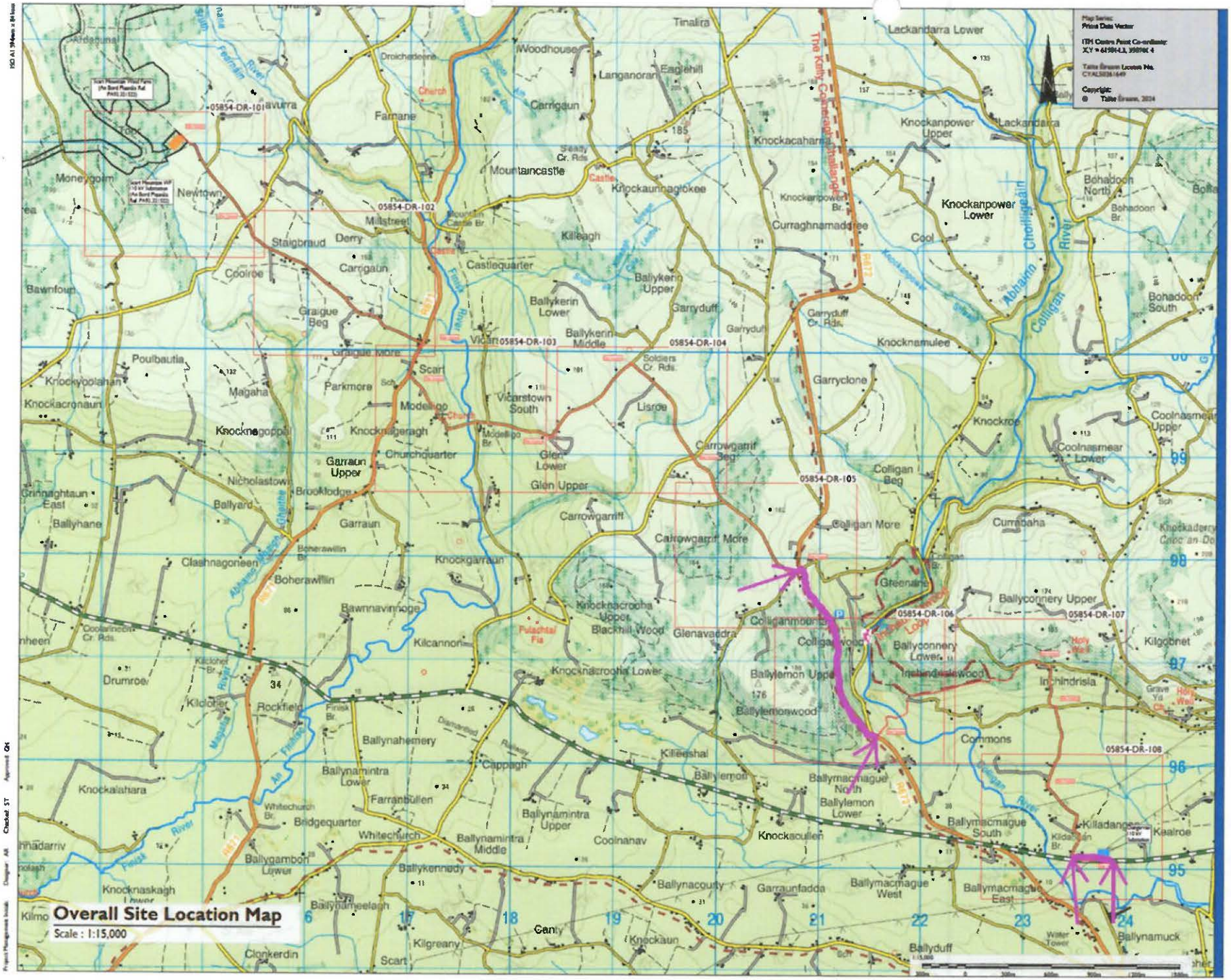
FEHILY TIMONEY EMPower

The river crossings associated with the cable route are presented in Table 12-2. Construction methodologies are provided in Chapter 2 - Development Description and Appendix 2.1 – CEMP (Appendix B thereof – Grid Connection Construction Methodology), in Volume III of this EIAR. Where required, all other minor stream or land drain crossings will be removed and reinstated in accordance with Inland Fisheries Ireland (2016) *'Guidelines on protection of fisheries during construction works in and adjacent to waters'* to allow cable construction.

Table 12-4: River Crossings on the GCR

Watercourse Name	Coordinates: ITM	Road Name	Crossing Type
Watercourse 1 - Coligan River (COLLIGAN_040)	623170.967, 595184.165 [Cable route Chainage 550m]	N72 - Bridge Crossing (TII bridge: WD-N72-007.00)	There is insufficient cover available to allow the ducts to be installed in the bridge deck. Therefore the watercourse will be crossed by Horizontal Directional Drilling (HDD) to pass under the bridge and riverbed. Entry and exit pits will be within the N72 road corridor.
Watercourse 2 - Ballynaguilkee Lower stream (FINISK_020)	620455.928, 603349.975 [Chainage 10,550m].	L1041	Existing culverted stream. The crossing method will use a culvert undercrossing or overcrossing method which will be selected based on the cover available above the culvert. Culvert crossings have been designed in line with ESB specifications. Where it is not possible to cross under an existing culvert while maintaining the culvert in place, the culvert may be replaced. All reinstatement works will be carried out to the required Waterford City & County Councils specification and in line with the 'Guidelines for Managing Openings in Public Roads – 2017'.
Watercourse 3 Unnamed tributary of the Skeheens Stream (COLLIGAN_010)	621231.261, 608261.270 [Cable route Chainage 15,500m]	Unnamed road at a staggered crossroads (Bryan's Crossroads)	The cable will exit the public road and enter privately owned lands which are in agricultural use. Here the cable will cross the stream utilising an Horizontal Directional Drilling (HDD stream undercrossing). Entry and exit pits will be within the adjacent agricultural lands.
Watercourse 4 - Skeheens Stream (COLLIGAN_010))	622466.431, 609322.014 [Cable route Chainage 17,950m]	On the access road within the Wind Farm Site.	The crossing is an existing river ford (shallow point where a river or stream may be crossed by wading, or inside a vehicle getting its wheels wet) on the existing forestry track. The river bed has been modified and raised to allow this crossing. This crossing will be upgraded as part of the Project by replacement with an open-bottomed culvert. The cable ducting will be installed above the culvert.

GCR Overlaps



tli GROUP

PROJECT

Scart Mountain WF
110 kV Grid Connection

CLIENT

Ireland
FuturEnergy

CONSULTANTS

TOBIN
CONSULTING ENGINEERS

NOTES:

- This drawing is to be used only for the purpose of the planning application and is subject to detailed design.
- Position of underground cable and location of joint bays, link boxes and cross chambers may vary depending on site conditions.
- Position of link boxes and marker chambers is to be agreed onsite with ErDistNW.
- Other services may be encountered on the route.
- Position of HDD boundary/exit/re-phase points are indicative only and will be subject to site investigation works and detailed design.

LEGEND:

- Proposed UGC (110 kV)
- Scart Mountain Wind Farm Planning Boundary shown thus
- Overground 110kV Substation (Scart Mountain) shown thus
- Proposed 110kV Substation (Scart Mountain) shown thus
- Site Notice shown thus

ISSUE/REVISION

P05	30.09.2025	For Planning, RLB Updated
P04	09.07.2025	For Planning
P03	17.12.2024	Wind Farm RLB Updated
P02	28.11.2024	For Planning
P01	11.07.2024	For Planning
P01	31.05.2024	Revised Route + S/S Location
P01	03.11.2023	Issued For Planning
I/R	DATE	DESCRIPTION

PROJECT NUMBER

05-854

SHEET TITLE

Overall Site Location Map (1:2500 Sheets)
Sheet 1 of 2

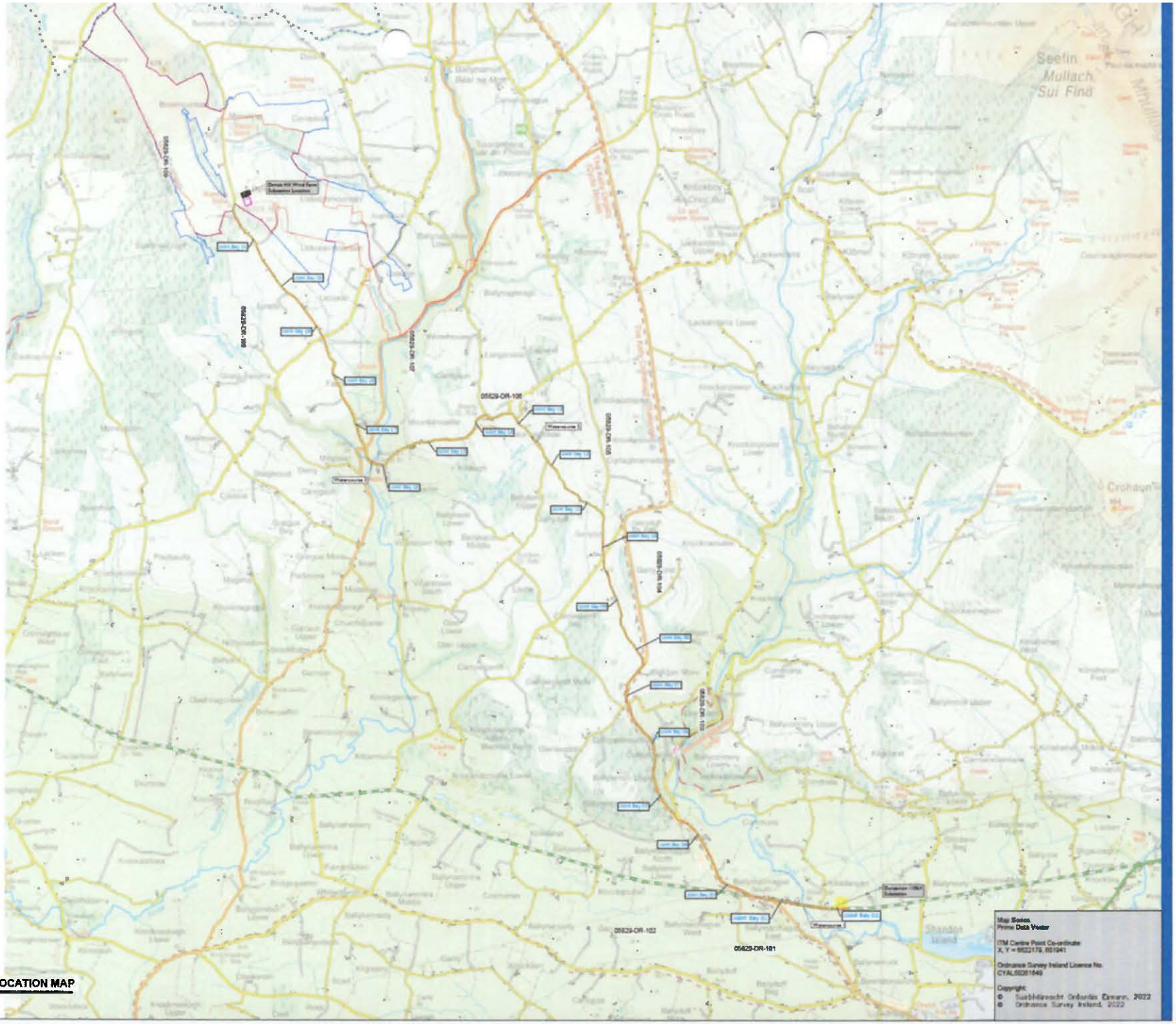
SHEET NUMBER

05854-DR-100A

Coumnagappui Wind Farm
Grid Connection Route

Extract from
Overall Site Location Map_05828-DR-100

(case ref: 318446)



OVERALL SITE LOCATION MAP
Scale 1:25,000

tli GROUP

Head Office
Beamish
Abbeydorney
Tralee, Co. Kerry
Ireland
Tel: 00353 66 7136750

Registered Office
Basepoint Business Centre
Winnall Valley Road, Basingstoke,
Hampshire,
RG24 8UP, UK
Tel: 00 44 1256 406564

PROJECT
Dyrick Hill WF
110kV Grid Connection

CLIENT
EMPower

CONSULTANTS

NOTES
- This drawing is to be used only for the purpose of the planning application and is subject to detailed design.
- Position of underground cable and location of joint bays, links boxes and comms chambers may vary depending on site conditions.
- Position of link boxes and comms chambers is to be agreed onsite with ESB.
- Other services may be encountered on the route.

LEGEND
ESB Dungarvan 110kV Substation
Proposed UGC Route (16.8Km)
Planning Boundary
Wind Farm Boundary

ISSUE/REVISION

VR	DATE	DESCRIPTION
P2	30.05.23	Issued For Planning
P1	28.11.22	Issued For Planning

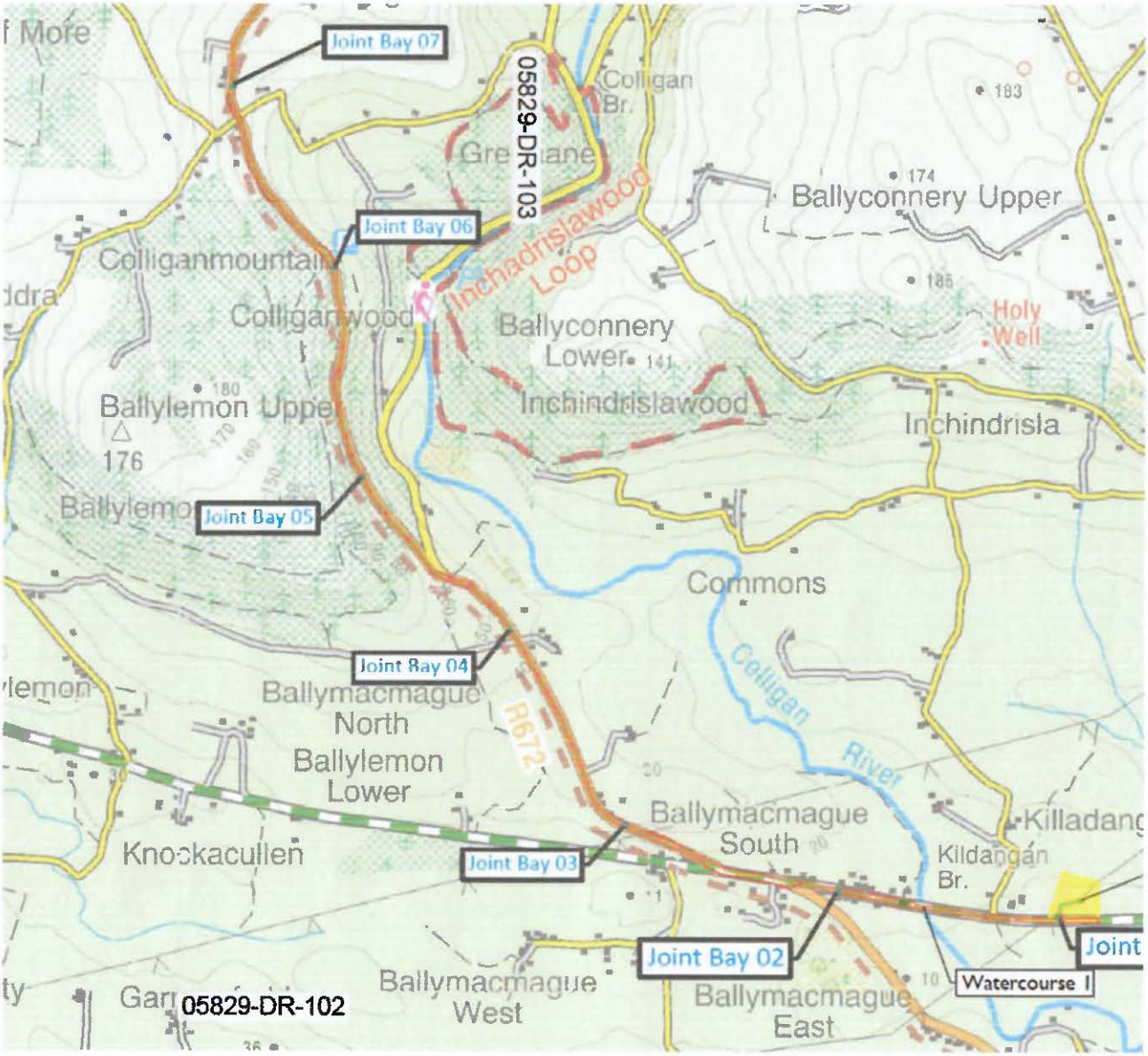
PROJECT NUMBER
05-829

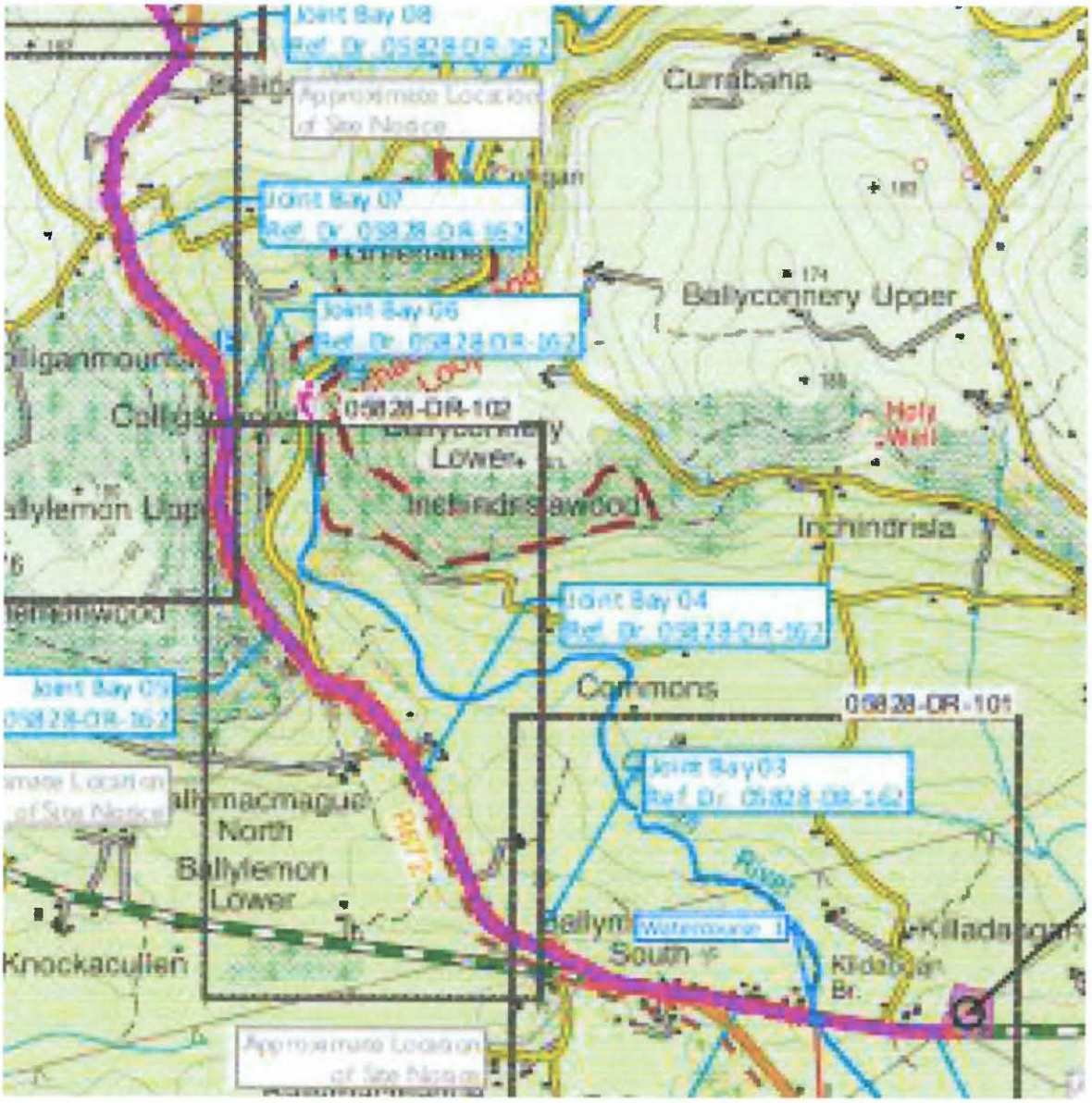
SHEET TITLE
Overall Site Location Map

SHEET NUMBER
05829-DR-100

ISO A1 594mm x 841

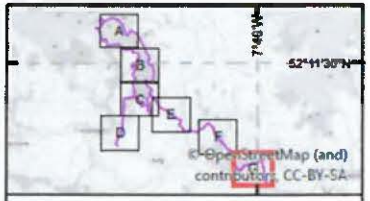
Project Management Initials Designed AF Checked DB Approved NG


Joint Bay 07
05829-DR-103
Joint Bay 06
Inchadrislawood Loop
Joint Bay 05
Joint Bay 04
Joint Bay 03
Joint Bay 02
Watercourse 1
05829-DR-102
Colligan Br.
Ballyconnery Upper
Ballyconnery Lower
Inchindrislawood
Inchindrisla
Holy Well
Ballylemon Upper
Commons
Colligan River
Ballymacmague North
Ballylemon Lower
Knockacullen
Ballymacmague South
Kildangán Br.
Ballymacmague West
Ballymacmague East
R672


Joint Bay 08
Ref. Dr. 05828-DR-162
Approximate Location of Site Notice
Currabaha
Joint Bay 07
Ref. Dr. 05828-DR-162
Ballycommery Upper
Joint Bay 06
Ref. Dr. 05828-DR-162
05828-DR-102
Holy Well
Lower
Inchindrisla
Joint Bay 04
Ref. Dr. 05828-DR-162
Commons
05828-DR-101
Joint Bay 03
Ref. Dr. 05828-DR-162
North
Ballylemon
Lower
River
Knockaculien
South
Killadangan
Br.
Approximate Location of Site Notice

Missing Habitat





Legend

Proposed project

Proposed infrastructure footprint within the proposed wind farm site

Habitats

- FW1 - Eroding/ upland rivers
- WD2 - (Mixed) broadleaved conifer woodland
- WL2 - Treelines
- GA1 - Improved agricultural grassland
- WD1 - (Mixed) broadleaved woodland

0 250 500
Meters

NOTES

1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING
2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE.
3. ENGINEER TO BE INFORMED OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES!
4. ALL LEVELS RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

Rev	Date	Description	By	Chkd
A	13/12/2024	First issue	S.P	A.S

Client: FuturEnergy Ireland

Project: Scart Mountain Wind Farm

Title: Figure 6-3G: Habitats - Page 7 of 7 -

Scale @ A3	1:10,000	
Prepared by:	Checked by:	Date
S.Pezzetta	A.Sands	December 2024

TOBIN

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Email: info@tobin.ie
www.tobin.ie

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Map Ref:	Draft:
11303-010-HAB-Inv SPE-TOB-A	A

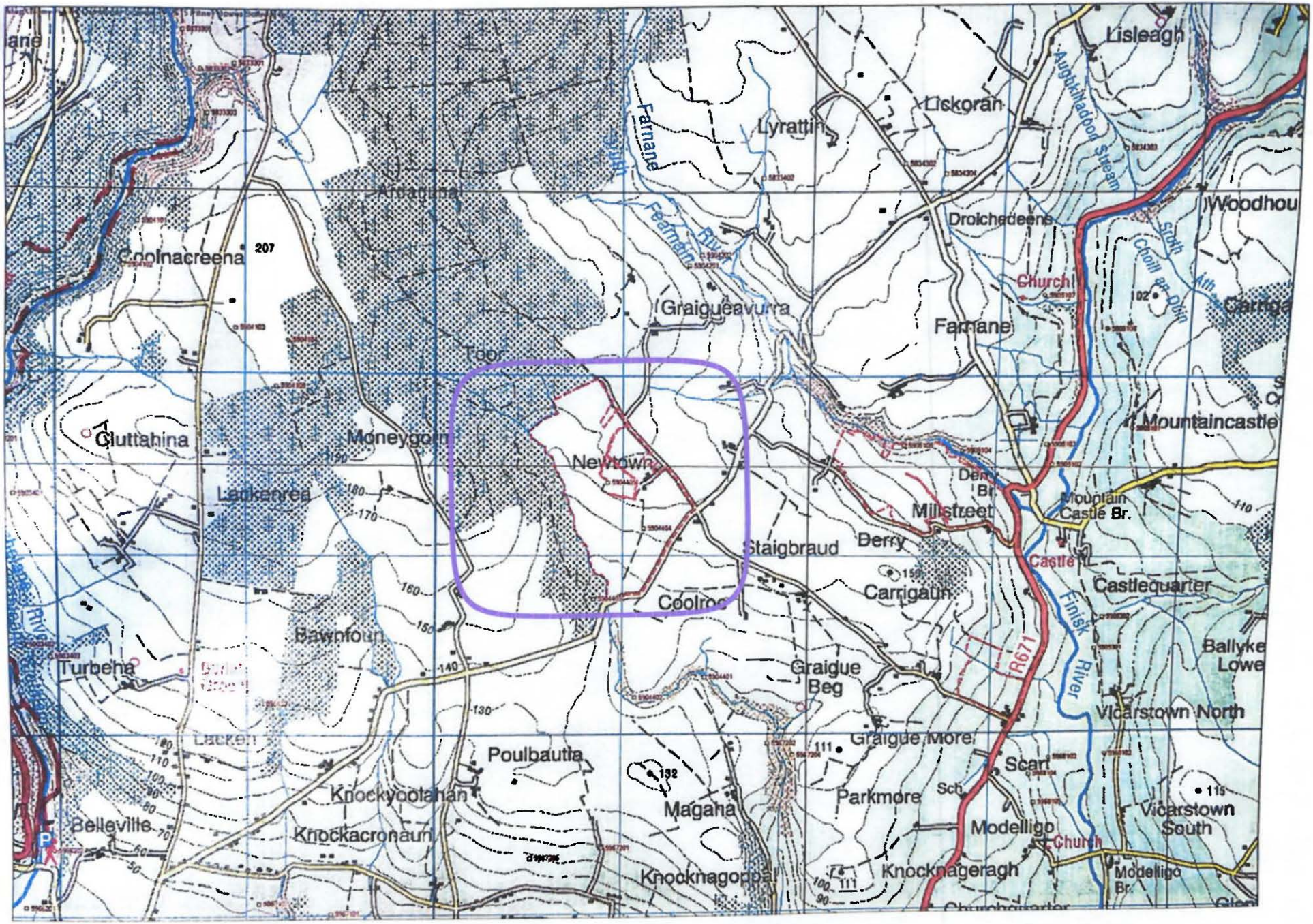
Badger Maps

(as provided in an Observation
against the associated
Scart Mountain Wind Farm)

Herd Number : [redacted]

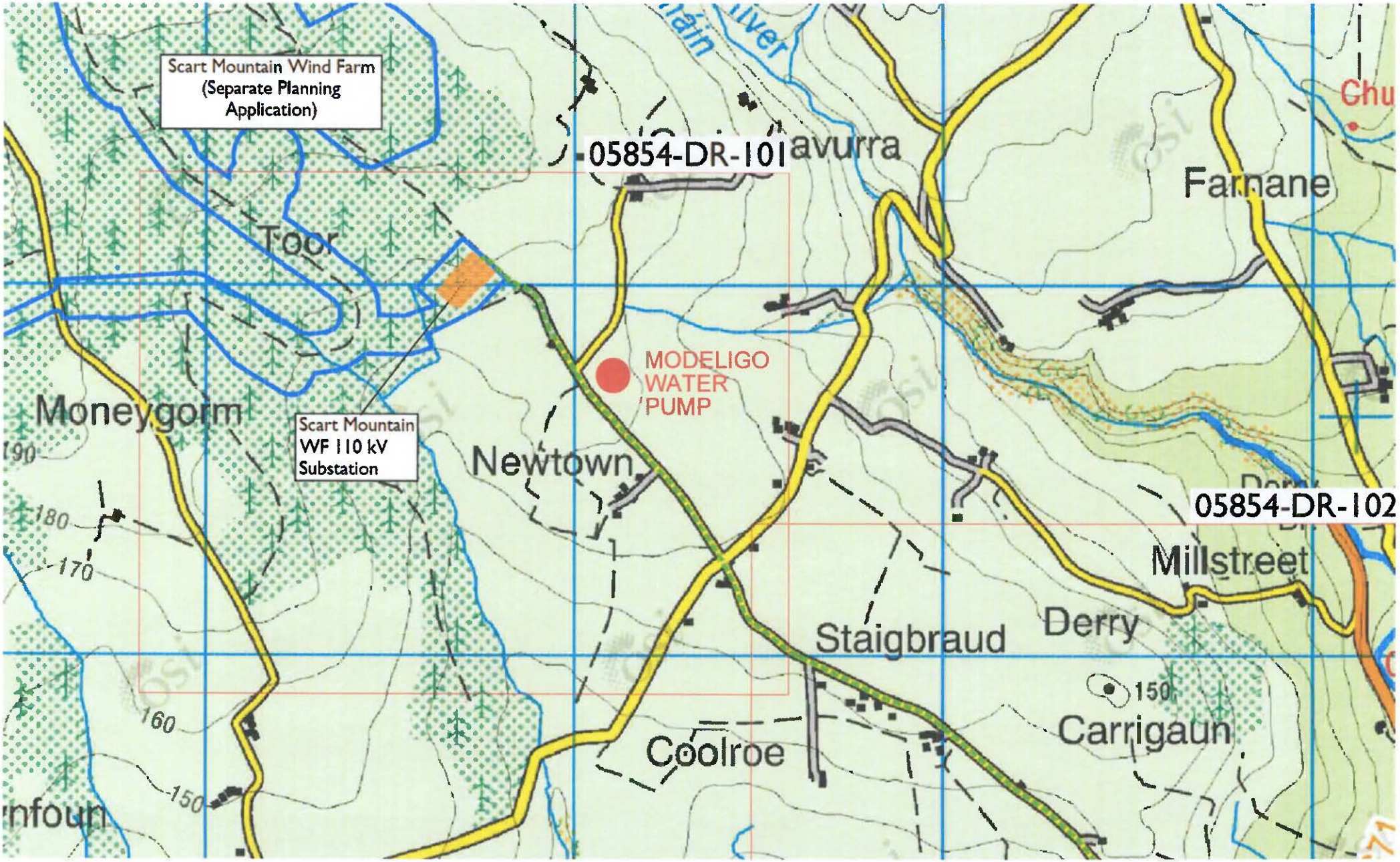
Map of active badger setts in the hinterland of Scart Mountain




Lisleagh
Lickoran
Lyrattin
Farnane
Fearnain River
Droichadeens
Woodhou
Church
Graigueavurra
Farnane
Toor
Coolnacreena
207
Afragalina
Gluttahina
Moneygorm
Newtown
Leukanree
Staigbraud
Derry
Millstreet
Mountaincastle
Mountain Castle Br.
Castle
Castlequarter
Carrigaun
Coolroe
Bawnfoun
Turbeha
Graigue Beg
Graigue More
Vicarstown North
Ballyke Lowe
R671
Finisk River
Lacken
Poulbautia
Knockyoolahan
Knockacronaun
Belleville
Magana
Parkmore
Scart
Modelligo
Church
Vicarstown South
Knocknageragh
Knocknagoppal
Modelligo Br.
Herd Number :

Modeligo
Water Pump Station
Location

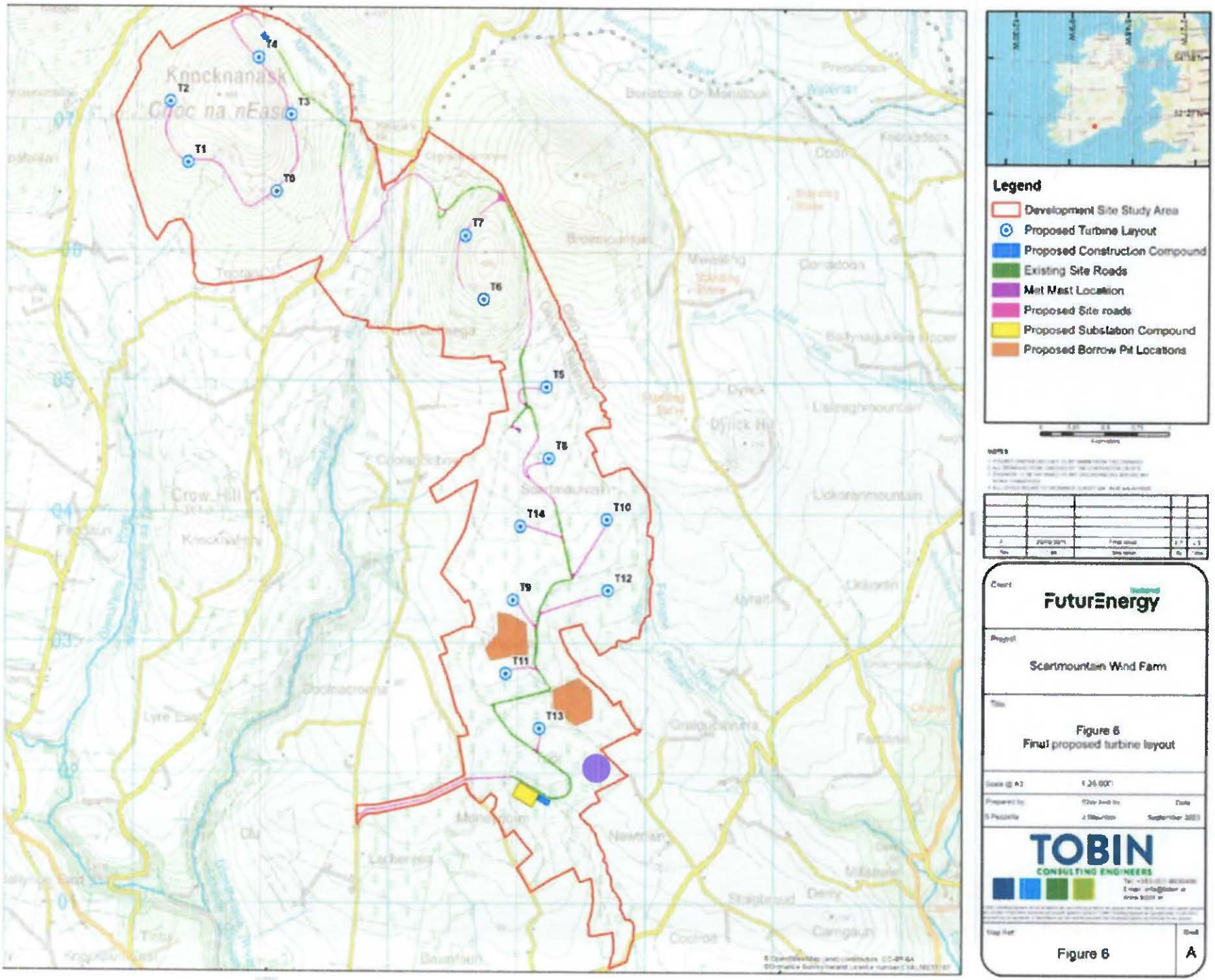

GRAIGUEAVURRA
TOOR
Substation approx. location
Road where Grid Connection Route starts and runs along
Modeligo wtp
NEWTOWN
Derry Upr
Layers
Google Maps
Imagery ©2025 Maxar Technologies, Airbus, Imagery ©2025 Airbus, CNES / Airbus, Maxar Technologies, Map data ©2025 Google
Ireland
Terms
Privacy
Send Product Feedba


Scart Mountain Wind Farm
(Separate Planning
Application)
05854-DR-101
avurra
Farnane
Toor
MODELIGO
WATER
PUMP
Moneygorm
Scart Mountain
WF 110 kV
Substation
Newtown
05854-DR-102
Millstreet
Derry
Staigbraud
Carrigaun
Coolroe
190
180
170
160
150
150

Altered Scart Mountain Wind Farm
Substation Locations

Yellow Box: As shown in Final Layout Design presented to public,
in online Virtual Tour and in final newsletter

Purple Dot: Added by us to show changed location
submitted with Planning Applications


T1
T2
T3
T4
T5
T6
T7
T8
T9
T10
T11
T12
T13
T14
Knocknanask
Croc na nEas
Crow Hill
Lisnaghmountain
Lisnaghmountain
Dyrick
Dyrick Hill
Coolaboy
Coolaboy
Mweeling
Mweeling
Boolatoor Or Mahallow
Boolatoor Or Mahallow
Mountain
Mountain
Mountain

Safari File Edit View History Bookmarks Window Help Fri 14 Nov 14:44

tours.innovision.ie

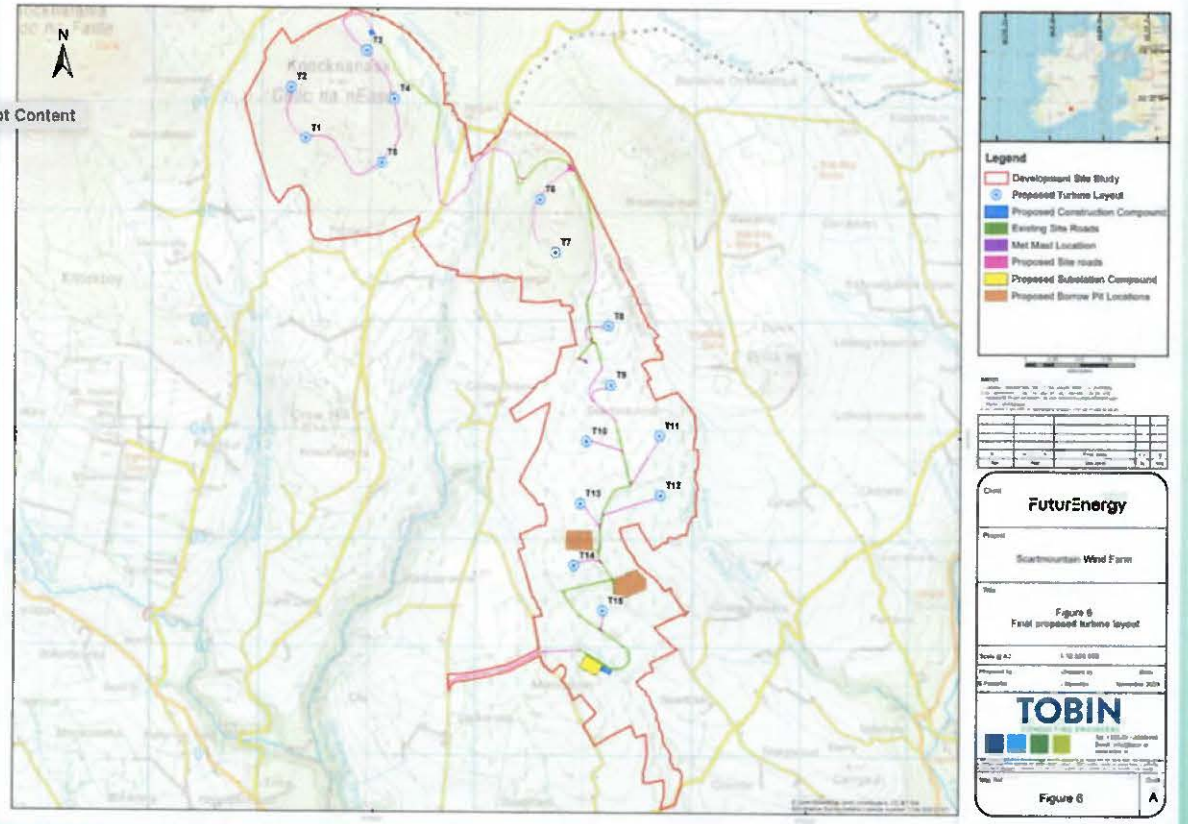
Music Ent Info Health Aroma Pets Food Shops Mail Services Work Words Windfarms Trans FB Maps DigiD

Scart Mountain Wind Farm - Scart Mountain Wind Farm

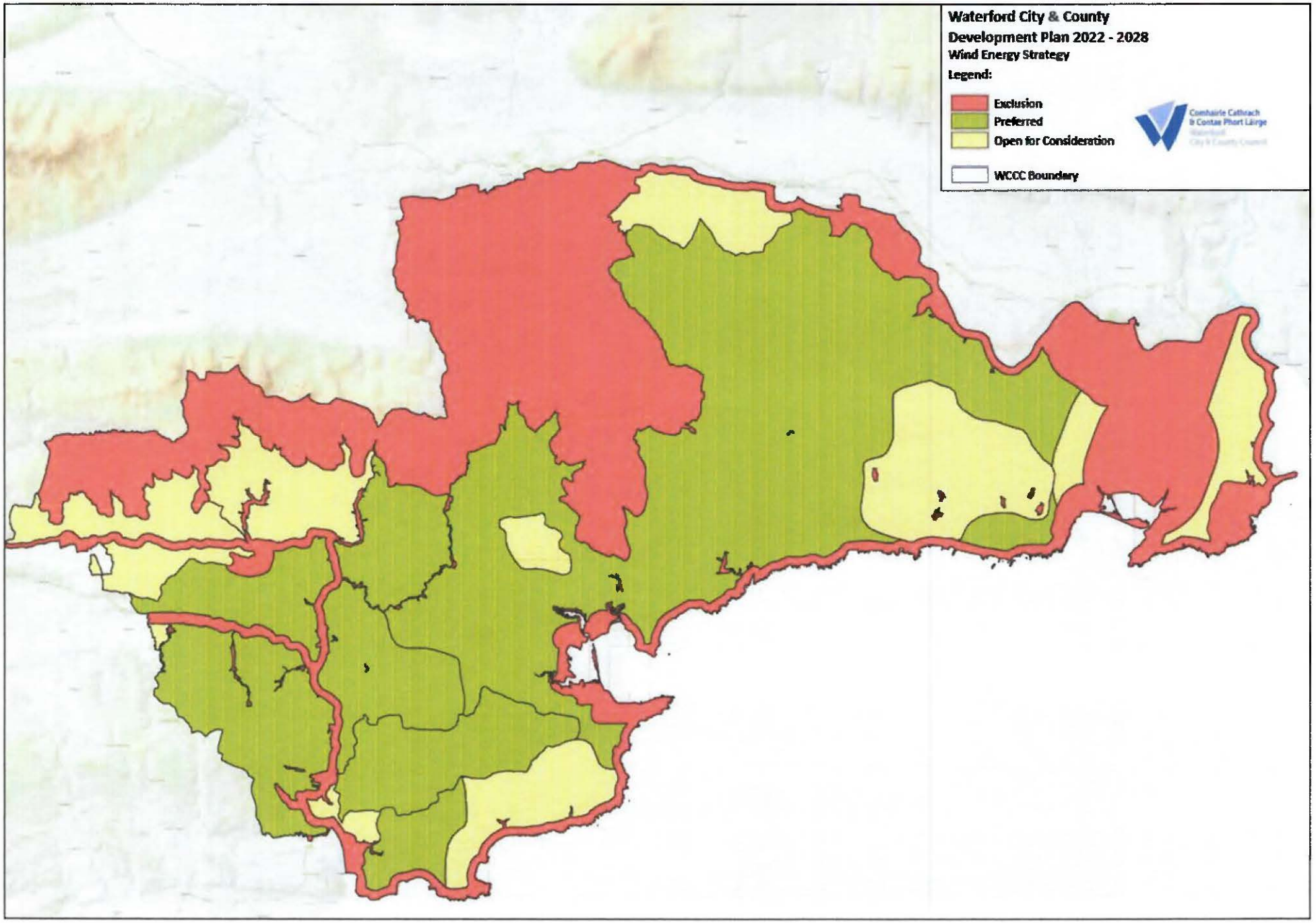
Scart Mountain Wind Farm - Virtual Public Exhibition - Innovision

1/1

Hotspot Content

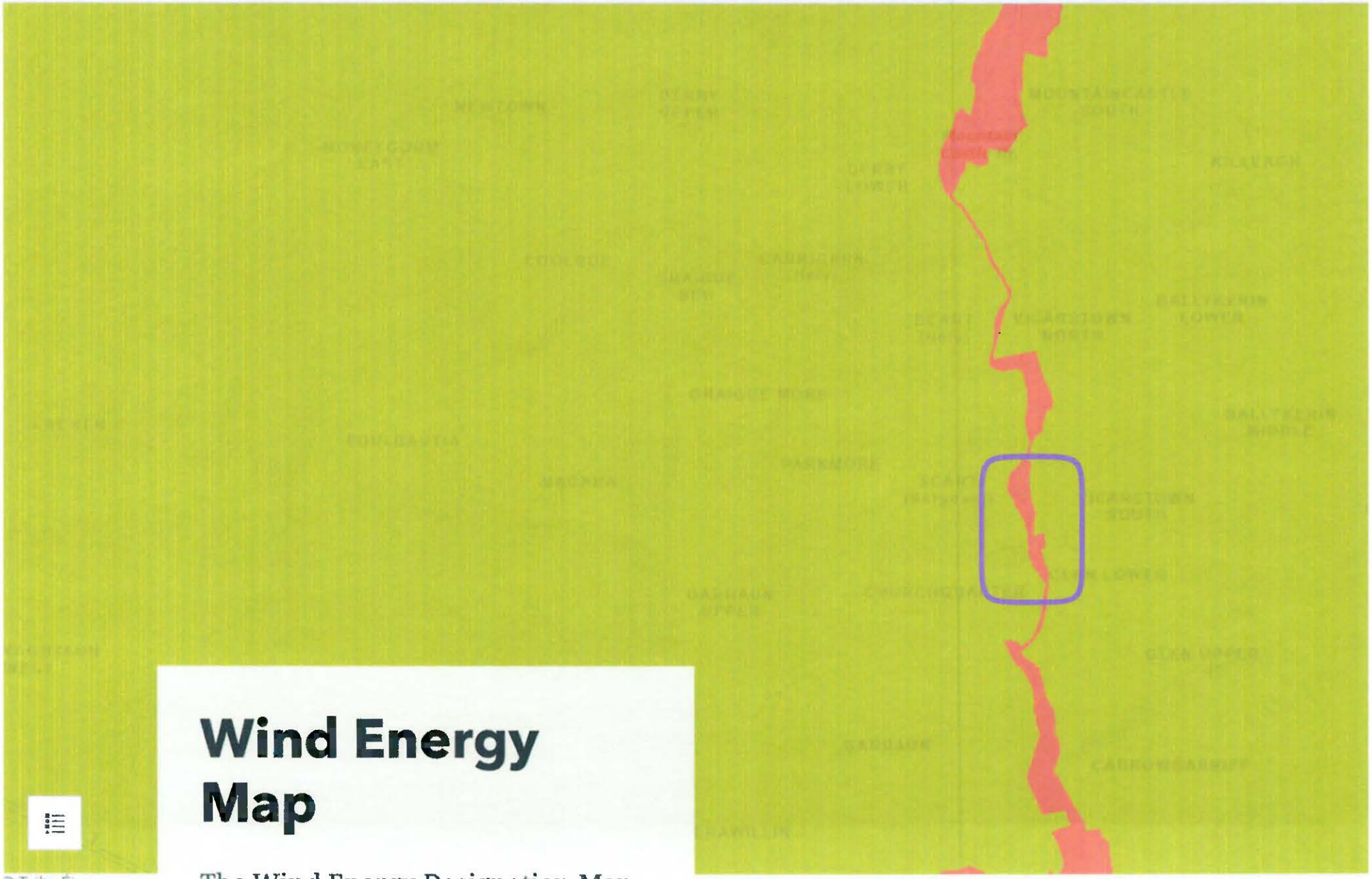


Waterford City & County Council
Development Plan 2022-2028
Wind Energy Map


Waterford City & County
Development Plan 2022 - 2028
Wind Energy Strategy
Legend:
Exclusion
Preferred
Open for Consideration
WCCC Boundary
Comhairle Cathrach
is Contae Phort Láirge

Waterford City & County Council
Development Plan 2022-2028
Wind Energy Map Extract

Showing proposed Scart Mountain GCR crossing Wind Exclusion Zone



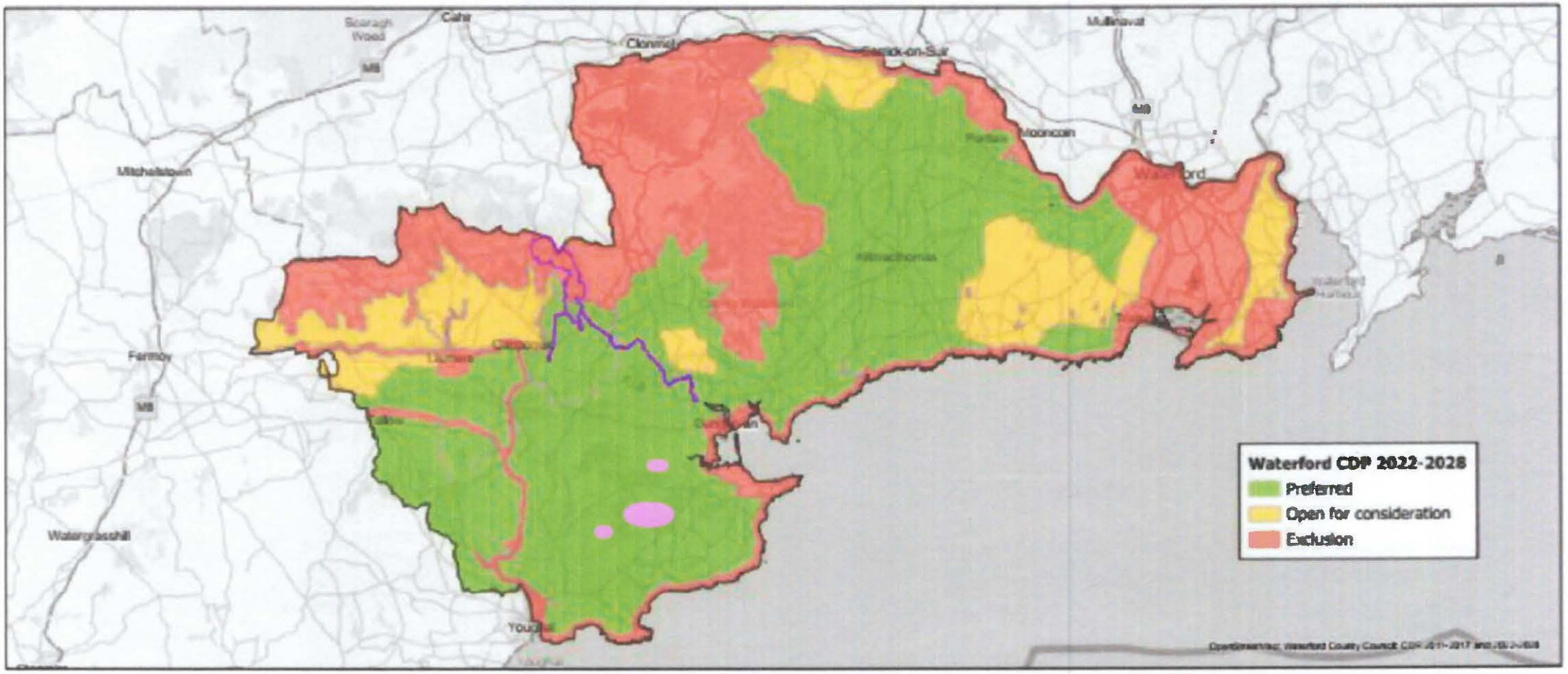
Wind Energy Map

The Wind Energy Designation Map

© Tailte Éireann

Locations of proposed no. 24-turbine Slievegrine Wind Farm Sites * against Waterford City & County Council Development Plan 2022-2028 Wind Energy Map

* MARKED IN PINK EDG


Scaragh Wood
Cahir
Clonmel
Carrick-on-Suir
Mooncoin
Mitchelstown
Fermoy
Waterpasshill
Kilmacthomas
Waterford CDP 2022-2028
Preferred
Open for consideration
Exclusion

APPENDIX:

ECOLOGY REPORT
DR PATRICK MORAN

[Note: This report was originally compiled for our Observation against the Scart Mountain Wind Farm Application (case ref: 321522). However it is being submitted once again with our Observation against this Application and being used to support specific points we are making due to the fact that it addresses inadequacies in the NIS, which is the same documentation and pertaining to the same overall project.]

OBSERVATION ON BEHALF OF THE KNOCKMEALDOWN PROTECTION GROUP IN RELATION TO THE PROPOSED SCART MOUNTAIN WINDFARM PROPOSED BY FUTURENERGY PERTAINING TO NATURA IMPACT STATEMENT PREPARED BY TOBIN CONSULTING ENGINEERS

FEBRUARY 2025



1 Competency of Author

This report, prepared by Dr Patrick Moran on behalf of the Knockmealdown Protection Group in relation to the proposed Scart Mountain Windfarm proposed by Futurenergy, concerns a planning application for a Renewable Energy Project located on the northern border of County Waterford with neighbouring County Tipperary, in the townlands of Knocknanask, Tooranaraheen, Knocknasheega and Scart Mountain. This report comprises a peer-review of the Appropriate Assessment screening process and Natura Impact Statement. Dr Moran holds a 1st class honours degree in Environmental Biology (UCD), a Ph.D. in Ecology (UCD), a Diploma in EIA and SEA management (UCD), a M.Sc. in Geographical Information Systems (UU, Coleraine), a Higher Diploma in Environmental and Planning Law (King's Inn) and a M.Sc. in Environmental and Climate Change Law (UCD). Dr Moran has in excess of 25 years of experience in undertaking ecological surveys on both and academic and a professional basis. Dr Moran has peer-reviewed EIAR and NIS for a multitude of both public (for example An Bord Pleanála, Office of Public Works and Co. Councils) and private clients regarding a wide variety of planning proposals.

2. Brief Outline of proposed development

The proposed project comprises 15 no. wind turbines with an overall blade tip height of 179.5- 185 m inclusive, a rotor diameter range from 149-163 m inclusive, a hub height range from 102.5-110.5 m inclusive, and all associated foundations and hard-standing areas in respect of each turbine. These will have an operational life of 35 years. The proposed GCR for the proposed project comprises 15.5 km of underground cable leading from the southern area of the project site at Sleveen to the existing Dungarvan 110Kv substation at Dungarvan, with the route being mostly along local and regional roads. It must be noted that while renewable energy projects are vital for the achievement of climate goals, the provision of sufficient data to inform the potential environmental impacts of renewable energy projects is nevertheless required.

3 Grounds for objection

Given the current Climate and Biodiversity Emergency, and the inextricable link between the two issues, this objection is not concerned with the necessity for renewal energy or placement of same. Rather, this objection concerns inadequacies within the findings of the Natura Impact Statement (NIS) as presented in relation to the proposed development (*SID Case Ref ABP SID Reference Number: 321522, Case link:* https://www.pleanala.ie/en-ie/case/321522). These inadequacies have potentially precluded the implementation of mitigation measures pertaining to elements of the local ecological resource and in particular, on the Qualifying Interests of proximate Special Protection Areas and Special Areas of Conservation.

The NIS as prepared for the proposed development has been informed by an Environmental Impact Assessment (EIAR) such as to ensure the identification of Key Ecological Receptors. Flaws in the EIAR are thus carried forward into the NIS. Below are outlined a sample of errors contained within the NIS as prepared:

3.1 Identification of Key Ecological Receptors informing the NIS

With regard to any EIAR and NIS, a fundamental step in the process of identifying the potential impacts associated with any development is the identification of Key Ecological Receptors in the form of internationally important Natura 2000 sites within the Zone if Influence. The authors of the NIS have identified the following Natura 2000 sites as being within the Zone of Influence.

- **Blackwater River (Cork/Waterford) SAC – site code 002170**. Please note that although The Blackwater River (Cork/Waterford) SAC was considered a Key Ecological Receptor, the Blackwater Callows SPA (site code 004094) was not. The detailed Conservation Objectives Document for this site[1] clearly state that *"...Please note that this SPA overlaps with Blackwater River (Cork/Waterford) SAC (002170). See map 2. The conservation objectives for this site should be used in conjunction with those for the overlapping site as appropriate..."*. One of the Qualifying Interests of this site is Whooper Swan, *Cygnus cygnus*. Given the nature of the proposed development – a significant wind farm, this must be deemed "As appropriate". As such, the NIS is fundamentally flawed and cannot be deemed of sufficient scientific robustness to inform adequately the Competent Authority as to potential impacts of the proposed development on the Natura 2000 network.

1 https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004094.pdf

- **Blackwater Estuary SPA – site code 004028 and Dungarvan Harbour SPA - site code 004032.** These Natura 2000 sites share a number of common Qualifying Interests (QIs), most notably Golden Plover (*Pluvialis apricaria*) and Lapwing (*Vanellus vanellus*) in addition to Curlew (*Numenius arquata*). The populations of these species almost certainly travel between the Blackwater Estuary SPA and Dungarvan Harbour SPA depending on tides, weather conditions, disturbance, etc. The NIS as prepared, however, has entirely failed to identify the Ballymacoda Bay SPA site code 004023, as a Key Ecological Receptor. QIs of this site (which is located approximately 4km to the west of Blackwater Estuary SPA) include Golden Plover, Lapwing and Curlew – in common with both the Blackwater Estuary SPA and Dungarvan Harbour SPA. The NIS as prepared has failed to identify potential interaction of QIs between proximate sites and this must be deemed a critical flaw in the Appropriate Assessment process, and indeed the EIAR process that informed the NIS.

3.2 Identification of ecological receptors and potential impacts

With regard to QIs of potentially impacted Natura 2000 sites, all mobile QIs must be considered potential ecological receptors.

The NIS, as presented, has identified that the Blackwater River (Cork and Waterford) SAC is physically, hydrologically and ecologically connected with the proposed development. With regard to several QIs, of the site however, the NIS has ruled out any potential impacts.

An example of one such QI is the White-clawed Crayfish. According to the NIS "*...Because white-clawed crayfish was not recorded in any waterbody hydrologically connected to the proposed project site during surveys and considering the lack of connectivity to the Awbeg [Buttevant] River, where crayfish are known to occur, it was determined that white-clawed crayfish do not occur within the ZoI of the proposed project and will not be impacted...*" According to the National Biodiversity Data Centre Database[2] there is a record of White-clawed Crayfish just to the west of Cappoquin from 2022 (proximate to the proposed development site). Indications are that the population within the Awbeg, as referred to in the NIS, has recently been severely impacted upon by an outbreak of Crayfish Plague. The recovery of White-clawed Crayfish at this location may entirely depend on recolonisation from upstream populations. In addition to ruling out White-clawed Crayfish as a Key Ecological Receptor, the NIS (and EIAR) have failed to recognise any potential impacts through the introduction of the

2 https://maps.biodiversityireland.ie/Map/Terrestrial/Species/17487

Crayfish Plague organism and have this not prescribed any mitigation measures against such an event, which could be catastrophic for this QI within the Blackwater River (Cork and Waterford) SAC.



Figure 1: Excerpt from NBDC online resource (accessed 10/02/25)

Also of note, with regard to QIs of the River Blackwater (Cork and Waterford) SAC, in relation to the presence of Otter (an Annex IV species) the NIS states *"...In the event that otter holts are identified within 150 m of the footprint of the works, an appropriate wildlife (derogation) license will be sought from the NPWS..."*. The granting of planning permission without a derogation licence being in place is contrary to legislation – as such, planning permission cannot be granted for the proposed development without a derogation being in place prior to granting of permission. Otter (in addition to all other Annex IV species occurring in Ireland) must be afforded strict protection, wherever they occur.

In relation to the QIs of Blackwater Estuary SPA, Dungarvan Harbour SPA, Blackwater Callows SPA and Ballymacoda Bay, there has been no scientifically robust analysis of the use of the area of the project as *ex situ* foraging habitat my Golden Plover or Lapwing. Lapwing and Golden Plover typically forage across farmland at night, using tidal flats mainly for roosting. The day-time distribution of these species

cannot be used to predict post-sunset use of habitats[3]. Golden Plover and Lapwing are Qualifying Interest of several SPAs proximate to the proposed development. The failure to determine if habitat present is utilised for night-time foraging by the Qualifying Interests of proximate SPAs is a critical flaw in the assessment of the ecological resource occurring, with serious ramifications for the conclusions of both the EIAR and the NIS prepared in support of the proposed development[4].

The Blackwater Callows SPA is located approximately 5 km from the proposed development. One of the QIs of this site is of Whooper Swan (*Cygnus cygnus*), which were in fact recorded utilising the proposed development site *environs* during surveys. While Vantage point watches (and associated viewshed analysis, which would appear to flawed) can be utilised to determine regular commuting flights between roosts and foraging areas, the surveys as relied upon by the NIS do not satisfy this requirement. It has been established that Whooper Swan move between roosting sites and foraging sites at key times before sunrise dawn and after sunset, and even in darkness[5]. Furthermore, Whooper Swans typically fly at low altitudes (often below 15 metres) when commuting between foraging and roosting sites but can increase flight height during conditions of reduced visibility or when anticipating a longer commute (for example during very cold weather when inland water bodies may be frozen-over). No systematic, vantage point surveys, as informed by terrain-based viewsheds (from which birds flying below 15 m are visible) were undertaken at the key times of an hour before sunrise and an hour after sunset. As such, it cannot be stated that the methodology utilised has established that the vicinity of the site is not utilised by commuting Whooper Swan.

3.3 Failure to comply with guidelines

According to EU Guidelines[6] one of the primary steps in the AA screening process is identification of negative pressures and/or threats with impacts on designated sites and

> *"...The information provided in the Natura 2000 standard data form is the starting point for identifying the habitat types and species that are significantly present on the site and that could be affected by the plan or project, as well as any existing pressures and impacts on the site..."*

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[3] Gillings S, Fullar R and Sutherland W (2005).Diurnal studies do not predict nocturnal habitat choice and site selection of European Golden Plover (*Pluvialis apricaria*) and Northern Lapwing (*Vanellus vanellus*). *The Auk*, **122(4)**, pp 1249 – 1260.

[4] [2020] IEHC 622

[5] Rees E, Bruce J and White G (2005). Factors affecting the behavioural responses of whooper swans (*Cygnus c. cygnus*) to various human activities. *Biological Conservation*, **121**, pp 369 - 382

[6] Commission Notice - Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (2021/C 437/01)

Although this information is readily available online[7], the AA process fails to consult Natura 2000 data forms to consider these threats, pressures and activities (internal and external) with impacts on the sites as comprehensively detailed in the relevant Natura 2000 data-forms. This must be seen as a fatal flaw in the AA process.

The latest IPPC report[8] states that "overshooting" the 1.5˚C threshold, will result in "*...irreversible adverse impacts on certain ecosystems with low resilience, such as polar, mountain, and coastal ecosystems, impacted by ice-sheet melt, glacier melt, or by accelerating and higher committed sea level rise. (high confidence)...*".

The SPAs within the zone of influence of the proposed development are primarily coastal ecosystems, designated for over-wintering bird populations utilising the intertidal zone for roosting/foraging. Increases in sea level will impact on the availability of this habitat, displacing foraging populations of bird species comprising qualifying interests into habitats further inland. According to EU Guidance[9], '*...Deterioration is any form of degradation affecting a habitat. The Member State has to take into consideration all the influences on the environment hosting the habitats...*'. Caselaw[10] has identified that

> "*...it may be necessary to adopt both measures intended to avoid external man-caused impairment and disturbance and measures to prevent natural developments that may cause the conservation status of species and habitats in SACs to deteriorate...*".

Furthermore, guidance indicates that potential modifications of Natura 2000 sites linked to climate change should be assessed case-by-case[11]. The AA of the proposed development (which pertains to renewable energy as a means to combat climate change) has given no cognisance to the potential impact of climate change on the Conservation Objectives of Qualifying Interests of the relevant Natura 2000 sites (both SACs and SPAs), nor on the potential impacts on, for example, changes in species distribution or flight paths.

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[7] https://natura2000.eea.europa.eu/

[8] IPCC, 2023: Summary for Policymakers. In: Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core writing Team, H. Lee and J. Romero (eds.)]. IPCC, Geneva, Switzerland, pp. 1-34, doi: 10.59327/IPCC/AR6-9789291691647.001

[9] Commission notice "Managing Natura 2000 sites The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC, Brussels, 21.11.2018 C (2018) 7621 final.

[10] C-6/04

[11] See guidance on Climate change and Natura 2000 at http://ec.europa.eu/environment/nature/climatechange/pdf/Guidance%20document.pdf

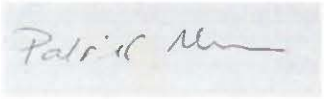
4 Concluding Statement

Having reviewed the NIS as presented, it is my professional opinion that there are significant *lacunae* within the NIS as presented, including a failure to identify all potentially impacted Natura 2000 sites. There is a plethora of *lacunae,* errors and weaknesses the NIS and almost certainly within the EIAR upon which the NIS is dependent. This *lacunae* include weakness in the ornithological findings (in particular associated a lack of post-sunset surveys for Golden Plover and/ or Lapwing and a complete absence of surveys for commuting Whooper Swan at key times in the day).

Please note that a peer review of all of the information (including data acquisition of DTM data to verify viewshed analyses) as provided would be prohibitively expensive and it is not the duty of a local group to pay substantial data acquisition fees and analyse data. I would urge the Board to ensure that all such interrogation of the data is undertaken.

Kind Regards,

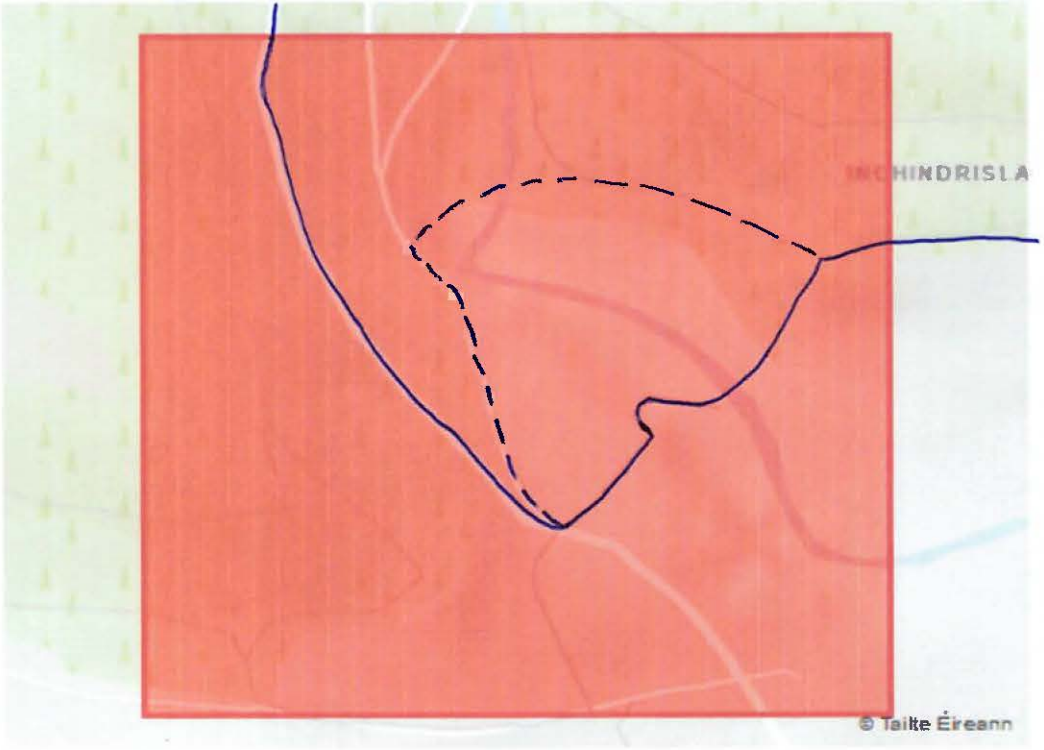
Dr Patrick Moran (Principal Ecologist with FERS Ltd) Dated: 10/02/2025



APPENDIX:

NBDC EXCELS

Species list for X2196: COLLIGAN RIVER CROSSING





GCR in blue
(option 1 → full line)
(option 2 → dotted line)

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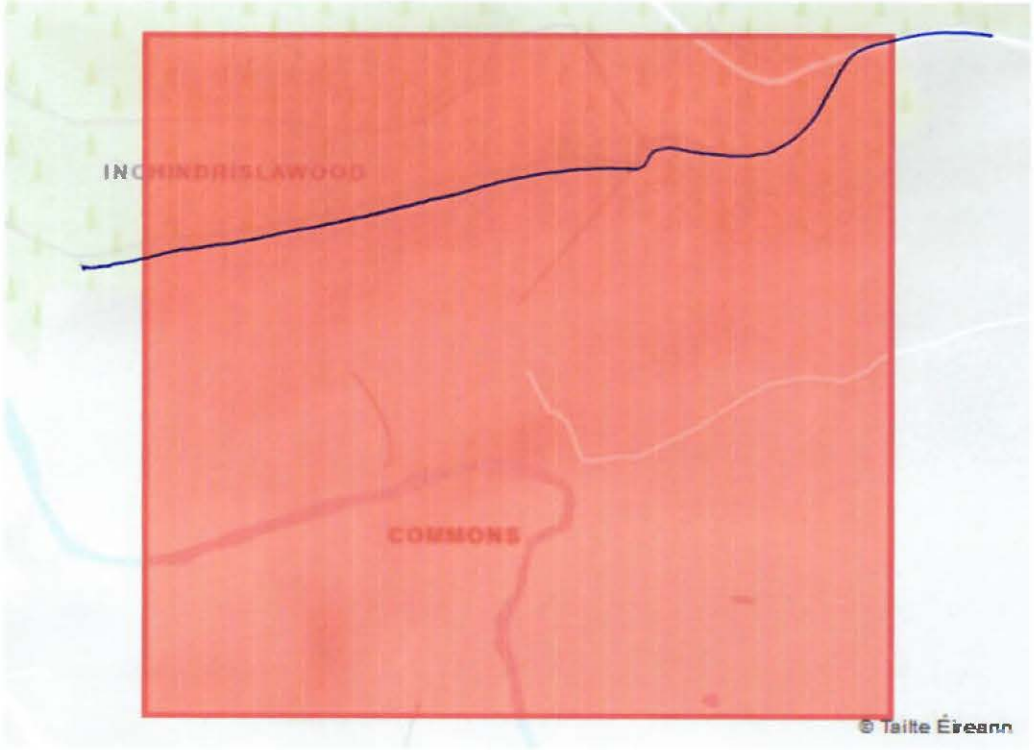
Grid square	Species group	Species name	Record count	Date of last record	Title of dataset	Designation
Custom	Bird	Buzzard (Buteo buteo)	1	06/04/2020	Birds of Ireland	
Custom	Bird	Chaffinch (Fringilla coelebs)	1	08/04/2023	Birds of Ireland	
Custom	Bird	Dipper (Cinclus cinclus)	1	21/04/2017	Birds of Ireland	
Custom	Bird	Grey Heron (Ardea cinerea)	1	08/04/2023	Birds of Ireland	
Custom	Bird	Siskin (Spinus spinus)	1	08/05/2021	Birds of Ireland	
Custom	Bird	Treecreeper (Certhia familiaris)	1	08/04/2023	Birds of Ireland	
Custom	Fern	Asplenium trichomanes subsp. quadrivalens	1	14/04/2012	The Flora of County Waterford	
Custom	Fern	Bracken (Pteridium aquilinum)	1	14/04/2012	The Flora of County Waterford	
Custom	Fern	Buckler-Fern (Dryopteris)	1	14/04/2012	The Flora of County Waterford	
Custom	Fern	Hart's-tongue (Phyllitis scolopendrium)	1	14/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Ash (Fraxinus excelsior)	1	14/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Bramble (Rubus fruticosus agg.)	1	14/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Cleavers (Galium aparine)	1	14/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Common Dog-violet (Viola riviniana)	1	14/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Common Nettle (Urtica dioica)	1	14/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Devil's-bit Scabious (Succisa pratensis)	1	08/09/2023	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Ficaria verna subsp. verna	1	14/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Goldenrod (Solidago virgaurea)	1	08/09/2023	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Greater Plantain (Plantago major)	1	14/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Grey Sedge (Carex divulsa subsp. divulsa)	1	14/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Groundsel (Senecio vulgaris)	1	14/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Hawthorn (Crataegus monogyna)	1	14/04/2012	The Flora of County Waterford	

Custom	Flowering plant	Heather (Calluna vulgaris)	1	08/09/2023	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Herb-Robert (Geranium robertianum)	1	14/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Japanese Knotweed (Fallopia japonica)	1	05/07/2019	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Invasive Species: EU Invasive Alien Species Regulation No. 1143/2014 || Invasive Species: Regulation S.I. 477/2011 (Ireland) || Invasive Species: High Risk Invasive Species (2013 Report) || Invasive Species: Regulation S.I. 374/2024 (Ireland) || Invasive Species: The Wildlife (Northern Ireland) Order 1985
Custom	Flowering plant	Lords-and-Ladies (Arum maculatum)	1	14/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Meadowsweet (Filipendula ulmaria)	1	14/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Narcissus agg.	1	14/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Sessile Oak (Quercus petraea)	1	08/09/2023	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Wall Cotoneaster (Cotoneaster horizontalis)	1	14/04/2012	The Flora of County Waterford	Invasive Species: Medium Risk Invasive Species (2013 Report)
Custom	Flowering plant	Wavy Bitter-cress (Cardamine flexuosa)	1	14/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Wild Privet (Ligustrum vulgare)	1	14/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Wood Avens (Geum urbanum)	1	14/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Wood Dock (Rumex sanguineus)	1	14/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Wood Sage (Teucrium scorodonia)	1	08/09/2023	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Yellow Pimpernel (Lysimachia nemorum)	1	08/09/2023	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Insect - butterfly	Comma (Polygonia c-album)	2	06/04/2019	Butterflies of Ireland pre-2022	

Custom	Insect - butterfly	Green-veined White (Pieris napi)	1	11/08/2021	Butterflies of Ireland pre-2022	
Custom	Insect - butterfly	Holly Blue (Celastrina argiolus)	4	05/05/2019	Butterflies of Ireland pre-2022	
Custom	Insect - butterfly	Orange-tip (Anthocharis cardamines)	1	05/05/2019	Butterflies of Ireland pre-2022	
Custom	Insect - butterfly	Painted Lady (Vanessa cardui)	1	05/05/2019	Butterflies of Ireland pre-2022	
Custom	Insect - butterfly	Peacock (Aglais io)	4	05/05/2019	Butterflies of Ireland pre-2022	
Custom	Insect - butterfly	Small Tortoiseshell (Aglais urticae)	2	06/04/2019	Butterflies of Ireland pre-2022	
Custom	Insect - butterfly	Speckled Wood (Pararge aegeria)	4	11/08/2021	Butterflies of Ireland pre-2022	
Custom	Insect - hymenopteran	Ashy Mining Bee (Andrena cineraria)	1	10/04/2023	Bees of Ireland	
Custom	Terrestrial mammal	Badger (Meles meles)	3	31/12/2016	Badger Setts of Ireland Database	Protected Species: Wildlife Acts
Custom	Terrestrial mammal	Grey Squirrel (Sciurus carolinensis)	1	31/12/2012	Irish Squirrel Survey 2012	Invasive Species: EU Invasive Alien Species Regulation No. 1143/2014 || Invasive Species: Regulation S.I. 477/2011 (Ireland) || Invasive Species: High Risk Invasive Species (2013 Report) || Invasive Species: Regulation S.I. 374/2024 (Ireland)
Custom	Terrestrial mammal	Otter (Lutra lutra)	1	08/10/2011	Otter (Lutra lutra) records 2011-2015	Protected Species: EU Habitats Directive || Protected Species: EU Habitats Directive >> Annex II || Protected Species: EU Habitats Directive >> Annex IV || Protected Species: Wildlife Acts

Custom	Terrestrial mammal	Pine Marten (Martes martes)	1	31/12/2012	Irish Squirrel Survey 2012	Protected Species: EU Habitats Directive || Protected Species: EU Habitats Directive >> Annex V || Protected Species: Wildlife Acts
Custom	Terrestrial mammal	Rabbit (Oryctolagus cuniculus)	1	30/06/2014	Atlas of Mammals in Ireland 2010-2015	Invasive Species: Medium Risk Invasive Species (2013 Report)
Custom	Terrestrial mammal	Red Squirrel (Sciurus vulgaris)	2	29/09/2013	Atlas of Mammals in Ireland 2010-2015	Protected Species: Wildlife Acts

Species list for X2296: BOTTOM RIGHT INCHINDRISLAWOOD





BLUE LINE - GCR

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Grid square	Species group	Species name	Record count	Date of last record	Title of dataset	Designation
Custom	Flowering plant	Butterfly-bush (Buddleja davidii)	1	07/04/2004	The Flora of County Waterford	Invasive Species: Medium Risk Invasive Species (2013 Report)
Custom	Flowering plant	Common Centaury (Centaurium erythraea)	1	07/04/2004	The Flora of County Waterford	
Custom	Flowering plant	Hairy Bitter-cress (Cardamine	1	07/04/2004	The Flora of County Waterford	
Custom	Flowering plant	Hairy Wood-rush (Luzula pilosa)	1	07/04/2004	The Flora of County Waterford	
Custom	Flowering plant	New Zealand Willowherb (Epilobium brunnescens)	1	07/04/2004	The Flora of County Waterford	
Custom	Flowering plant	Plantago major subsp. intermedia	1	03/10/2003	The Flora of County Waterford	
Custom	Flowering plant	Shepherd's-purse (Capsella bursa-pastoris)	1	07/04/2004	The Flora of County Waterford	
Custom	Insect - butterfly	Red Admiral (Vanessa atalanta)	2	10/03/2015	Butterflies of Ireland pre-2022	
Custom	Insect - dragonfly	Common Darter (Sympetrum striolatum)	2	03/10/2003	Dragonfly Ireland	
Custom	Insect - dragonfly	Common Hawker (Aeshna juncea)	1	03/10/2003	Dragonfly Ireland	
Custom	Insect - mayfly (Ephemeroptera)	Baetis rhodani/atlanticus	1	31/12/1996	Mayflies (Ephemeroptera) of Ireland	
Custom	Insect - mayfly (Ephemeroptera)	Blue-winged Olive (Serratella ignita)	1	31/12/1996	Mayflies (Ephemeroptera) of Ireland	
Custom	Insect - mayfly (Ephemeroptera)	Caenis rivulorum	1	31/12/1996	Mayflies (Ephemeroptera) of Ireland	
Custom	Insect - mayfly (Ephemeroptera)	Ecdyonurus insignis	1	31/12/1996	Mayflies (Ephemeroptera) of Ireland	
Custom	Insect - mayfly (Ephemeroptera)	Electrogena lateralis	1	31/12/1996	Mayflies (Ephemeroptera) of Ireland	
Custom	Insect - mayfly (Ephemeroptera)	Rhithrogena germanica	1	31/12/1996	Mayflies (Ephemeroptera) of Ireland	Threatened Species: Vulnerable
Custom	Insect - mayfly (Ephemeroptera)	Rhithrogena semicolorata	1	31/12/1996	Mayflies (Ephemeroptera) of Ireland	
Custom	Terrestrial mammal	Badger (Meles meles)	2	31/12/2011	Badger Setts of Ireland Database	Protected Species: Wildlife Acts

Custom	Terrestrial mammal	Rabbit (Oryctolagus cuniculus)	1	23/02/2015	Atlas of Mammals in Ireland 2010-2015	Invasive Species: Medium Risk Invasive Species (2013 Report)

Species list for X2197: TOP INDRISCHILAWOOD, UPPER COLLIGAN RIVER, PART OF R672 GCR ROUTE





BLUE LINE - GCR

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Grid	Species	Species name	Rec	Date of	Title of dataset	Designation
Custom	Bird	Dipper (Cinclus cinclus)	4	20/03/2021	Birds of Ireland	
Custom	Bird	Great Tit (Parus major)	1	31/03/2020	Birds of Ireland	
Custom	Bird	Grey Heron (Ardea cinerea)	1	03/04/2020	Birds of Ireland	
Custom	Bird	Grey Wagtail (Motacilla cinerea)	1	20/03/2021	Birds of Ireland	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Custom	Bird	Hooded Crow (Corvus cornix)	1	31/03/2020	Birds of Ireland	
Custom	Bird	Treecreeper (Certhia familiaris)	1	20/03/2021	Birds of Ireland	
Custom	Conifer	Western Hemlock-spruce (Tsuga heterophylla)	1	15/07/2005	The Flora of County Waterford	
Custom	Fern	Bracken (Pteridium aquilinum)	4	12/04/2012	The Flora of County Waterford	
Custom	Fern	Hart's-tongue (Phyllitis scolopendrium)	1	02/04/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Fern	Hay-scented Buckler-fern (Dryopteris aemula)	1	15/04/2011	The Flora of County Waterford	
Custom	Fern	Royal Fern (Osmunda regalis)	2	29/06/2008	The Flora of County Waterford	
Custom	Fern	Southern Polypody (Polypodium cambricum)	1	15/04/2011	The Flora of County Waterford	
Custom	Flowering plant	Alder (Alnus glutinosa)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	American Willowherb (Epilobium ciliatum)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Annual Meadow-grass (Poa annua)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Ash (Fraxinus excelsior)	3	12/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Autumn Hawkbit (Scorzoneroides autumnalis)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Barren Strawberry (Potentilla sterilis)	2	02/04/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Bilberry (Vaccinium myrtillus)	5	02/04/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Bird's-nest Orchid (Neottia nidus-	2	15/04/2010	The Flora of County Waterford	
Custom	Flowering plant	Bitter-vetch (Lathyrus linifolius)	1	29/06/2008	The Flora of County Waterford	

Custom	Flowering plant	Bluebell (Hyacinthoides non-scripta)	2	07/05/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Bramble (Rubus fruticosus agg.)	6	02/04/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Bread Wheat (Triticum aestivum)	1	19/03/1997	The Flora of County Waterford	
Custom	Flowering plant	Bristle Club-rush (Isolepis setacea)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Broad-leaved Dock (Rumex	2	17/04/2010	The Flora of County Waterford	
Custom	Flowering plant	Bugle (Ajuga reptans)	1	07/05/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Butterfly-bush (Buddleja davidii)	1	03/07/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Invasive Species: Medium Risk Invasive Species (2013 Report)
Custom	Flowering plant	Cherry Laurel (Prunus laurocerasus)	1	09/04/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Invasive Species: High Risk Invasive Species (2013 Report)
Custom	Flowering plant	Cock's-foot (Dactylis glomerata)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Coltsfoot (Tussilago farfara)	2	22/04/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Common Amaranth (Amaranthus retroflexus)	1	19/03/1997	The Flora of County Waterford	
Custom	Flowering plant	Common Chickweed (Stellaria	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Common Dog-violet (Viola riviniana)	3	22/04/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Common Feld-speedwell (Veronica persica)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Common Nettle (Urtica dioica)	3	12/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Common Orache (Atriplex patula)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Common Ragwort (Jacobaea vulgaris)	1	02/04/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Common Sorrel (Rumex acetosa subsp. acetosa)	4	12/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Common Valerian (Valeriana	3	12/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Crab Apple (Malus sylvestris)	1	15/04/2011	The Flora of County Waterford	
Custom	Flowering plant	Creeping Bent (Agrostis stolonifera)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Creeping Cinquefoil (Potentilla	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Creeping Soft-grass (Holcus mollis)	1	14/07/2003	The Flora of County Waterford	
Custom	Flowering plant	Creeping Thistle (Cirsium arvense)	1	15/07/2005	The Flora of County Waterford	

Custom	Flowering plant	Daisy (Bellis perennis)	1	02/04/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Elder (Sambucus nigra)	3	15/04/2011	The Flora of County Waterford	
Custom	Flowering plant	Enchanter's-nightshade (Circaea lutetiana)	1	17/04/2010	The Flora of County Waterford	
Custom	Flowering plant	English Elm (Ulmus procera)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Euphrasia arctica subsp. borealis	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Euphrasia officinalis agg.	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Fairy Flax (Linum catharticum)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Field Forget-me-not (Myosotis	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Field-rose (Rosa arvensis)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Fox-and-cubs (Pilosella aurantiaca)	1	08/09/2023	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Foxglove (Digitalis purpurea)	3	12/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Germander Speedwell (Veronica chamaedrys)	2	02/04/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Gorse (Ulex europaeus)	1	15/04/2011	The Flora of County Waterford	
Custom	Flowering plant	Great Bindweed (Calystegia sepium subsp. sepium)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Greater Plantain (Plantago major)	2	15/04/2011	The Flora of County Waterford	
Custom	Flowering plant	Greater Stitchwort (Stellaria holostea)	1	07/05/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Green Bristle-grass (Setaria viridis)	1	19/03/1997	The Flora of County Waterford	
Custom	Flowering plant	Guelder-rose (Viburnum opulus)	1	15/04/2011	The Flora of County Waterford	
Custom	Flowering plant	Hairy Bitter-cress (Cardamine	2	17/04/2010	The Flora of County Waterford	
Custom	Flowering plant	Hawthorn (Crataegus monogyna)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Hazel (Corylus avellana)	3	12/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Heather (Calluna vulgaris)	2	15/04/2011	The Flora of County Waterford	
Custom	Flowering plant	Hedge Woundwort (Stachys sylvatica)	2	01/05/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Hemlock Water-dropwort (Oenanthe crocata)	1	15/04/2011	The Flora of County Waterford	
Custom	Flowering plant	Herb-Robert (Geranium robertianum)	1	02/04/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	

Custom	Flowering plant	Himalayan Balsam (Impatiens glandulifera)	1	18/06/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Invasive Species: EU Invasive Alien Species Regulation No. 1143/2014 || Invasive Species: Regulation S.I. 477/2011 (Ireland) || Invasive Species: Detailed Risk Assesment || Invasive Species: High Risk Invasive Species (2013 Report) || Invasive Species: Regulation S.I. 374/2024 (Ireland) || Invasive Species: Detailed Risk Assesment > > High Risk
Custom	Flowering plant	Hogweed (Heracleum sphondylium)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Holly (Ilex aquifolium)	3	02/04/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Irish Spurge (Euphorbia hyberna)	1	15/04/2011	The Flora of County Waterford	
Custom	Flowering plant	Ivy (Hedera helix)	1	02/04/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Japanese Knotweed (Fallopia japonica)	3	14/09/2021	National Invasive Species Database	Invasive Species: EU Invasive Alien Species Regulation No. 1143/2014 || Invasive Species: Regulation S.I. 477/2011 (Ireland) || Invasive Species: High Risk Invasive Species (2013 Report) || Invasive Species: Regulation S.I. 374/2024 (Ireland) || Invasive Species: The Wildlife (Northern Ireland) Order 1985
Custom	Flowering plant	Knotgrass (Polygonum aviculare)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Lesser Celandine (Ficaria verna)	1	07/05/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Lesser Spearwort (Ranunculus	1	12/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Lesser Stitchwort (Stellaria	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Lesser Trefoil (Trifolium dubium)	1	15/07/2005	The Flora of County Waterford	

Custom	Flowering plant	Lords-and-Ladies (Arum	1	12/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Marsh Hawk's-beard (Crepis	2	15/04/2011	The Flora of County Waterford	
Custom	Flowering plant	Meadow Buttercup (Ranunculus	1	17/04/2010	The Flora of County Waterford	
Custom	Flowering plant	Meadow Foxtail (Alopecurus	1	12/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Meadowsweet (Filipendula ulmaria)	3	12/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Montbretia (Crocosmia pottsii x aurea = C. x crocosmiiflora)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Navelwort (Umbilicus rupestris)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	New Zealand Willowherb (Epilobium brunnescens)	3	15/04/2011	The Flora of County Waterford	
Custom	Flowering plant	Oval Sedge (Carex leporina)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Pale Sedge (Carex pallescens)	1	29/05/2008	The Flora of County Waterford	
Custom	Flowering plant	Petty Spurge (Euphorbia peplus)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Pignut (Conopodium majus)	2	15/04/2011	The Flora of County Waterford	
Custom	Flowering plant	Procumbent Pearlwort (Sagina procumbens)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Red Bartsia (Odontites vernus)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Red Clover (Trifolium pratense)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Rhododendron ponticum	1	15/07/2005	The Flora of County Waterford	Invasive Species: Regulation S.I. 477/2011 (Ireland) || Invasive Species: Detailed Risk Assesment | Invasive Species: High Risk Invasive Species (2013 Report) || Invasive Species: Regulation S.I. 374/2024 (Ireland) || Invasive Species: Detailed Risk Assesment >> High Risk
Custom	Flowering plant	Rumex crispus subsp. crispus	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Rusty Willow (Salix cinerea subsp. oleifolia)	1	12/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Sanicle (Sanicula europaea)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Short-fruited Willowherb (Epilobium obscurum)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Slender Parsley-piert (Aphanes	1	15/07/2005	The Flora of County Waterford	

Custom	Flowering plant	Slender Rush (Juncus tenuis)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Small Sweet-grass (Glyceria	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Spear Thistle (Cirsium vulgare)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Spindle (Euonymus europaeus)	1	12/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Square-stalked St John's-wort (Hypericum tetrapterum)	2	15/04/2011	The Flora of County Waterford	
Custom	Flowering plant	Taraxacum agg.	3	12/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Tomato (Lycopersicon esculentum)	1	19/03/1997	The Flora of County Waterford	
Custom	Flowering plant	Trailing St John's-wort (Hypericum humifusum)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Tufted Hair-grass (Deschampsia cespitosa subsp. cespitosa)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Water Figwort (Scrophularia	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Watercress (Rorippa nasturtium-aquaticum agg.)	1	12/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Wavy Bitter-cress (Cardamine	3	12/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Wild Cherry (Prunus avium)	3	12/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Wild Privet (Ligustrum vulgare)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Wild Strawberry (Fragaria vesca)	2	15/04/2011	The Flora of County Waterford	
Custom	Flowering plant	Winter Heliotrope (Petasites fragrans)	5	09/04/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Wood Anemone (Anemone nemorosa)	7	13/04/2022	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Wood Millet (Milium effusum)	1	14/07/2003	The Flora of County Waterford	
Custom	Flowering plant	Wood Sage (Teucrium scorodonia)	1	17/04/2010	The Flora of County Waterford	
Custom	Flowering plant	Wood Speedwell (Veronica	1	17/04/2010	The Flora of County Waterford	
Custom	Flowering plant	Woodruff (Galium odoratum)	3	15/04/2011	The Flora of County Waterford	
Custom	Flowering plant	Wood-sorrel (Oxalis acetosella)	5	22/04/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Yellow Pimpernel (Lysimachia nemorum)	1	01/05/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Fungus	Amanita muscaria	1	23/09/2011	General Biodiversity Records from Ireland	
Custom	Fungus	Amethyst Deceiver (Laccaria amethystina)	1	23/09/2011	General Biodiversity Records from Ireland	

Custom	Fungus	Bay Cup (Legaliana badia)	1	23/09/2011	General Biodiversity Records from Ireland	
Custom	Fungus	Beech Milkcap (Lactarius blennius)	1	23/09/2011	General Biodiversity Records from Ireland	
Custom	Fungus	Beige Fibrecap (Inocybe sindonia)	1	23/09/2011	General Biodiversity Records from Ireland	
Custom	Fungus	Butter Cap (Rhodocollybia butyracea)	1	23/09/2011	General Biodiversity Records from Ireland	
Custom	Fungus	Clustered Toughshank (Gymnopus confluens)	1	23/09/2011	General Biodiversity Records from Ireland	
Custom	Fungus	Conocybe subovalis	1	23/09/2011	General Biodiversity Records from Ireland	
Custom	Fungus	Deer Shield (Pluteus cervinus)	1	23/09/2011	General Biodiversity Records from Ireland	
Custom	Fungus	Elfin Saddle (Helvella lacunosa)	1	23/09/2011	General Biodiversity Records from Ireland	
Custom	Fungus	Green Elfcup (Chlorociboria aeruginascens)	1	23/09/2011	General Biodiversity Records from Ireland	
Custom	Fungus	Greenfoot Fibrecap (Inosperma calamistratum)	1	23/09/2011	General Biodiversity Records from Ireland	
Custom	Fungus	Larch Bolete (Suillus grevillei)	1	23/09/2011	General Biodiversity Records from Ireland	
Custom	Fungus	Lyophyllum fumosum	1	23/09/2011	General Biodiversity Records from Ireland	
Custom	Fungus	Mild Milkcap (Lactarius subdulcis)	1	23/09/2011	General Biodiversity Records from Ireland	
Custom	Fungus	Ochre Brittlegill (Russula ochroleuca)	1	23/09/2011	General Biodiversity Records from Ireland	
Custom	Fungus	Pale Milkcap (Lactarius pallidus)	1	23/09/2011	General Biodiversity Records from Ireland	
Custom	Fungus	Red Cracking Bolete (Xerocomellus chrysenteron)	1	23/09/2011	General Biodiversity Records from Ireland	
Custom	Fungus	Russet Toughshank (Gymnopus dryophilus)	1	23/09/2011	General Biodiversity Records from Ireland	
Custom	Fungus	Scurfy Deceiver (Laccaria proxima)	1	23/09/2011	General Biodiversity Records from Ireland	

Custom	Fungus	Split Fibrecap (Pseudosperma rimosum)	1	23/09/2011	General Biodiversity Records from Ireland	
Custom	Fungus	Stinking Dapperling (Lepiota cristata)	1	23/09/2011	General Biodiversity Records from Ireland	
Custom	Fungus	Sweet Poisonpie (Hebeloma sacchariolens)	1	23/09/2011	General Biodiversity Records from Ireland	
Custom	Fungus	The Miller (Clitopilus prunulus)	1	23/09/2011	General Biodiversity Records from Ireland	
Custom	Fungus	Variable Webcap (Cortinarius anomalus)	1	23/09/2011	General Biodiversity Records from Ireland	
Custom	Fungus	White Fibrecap (Inocybe geophylla)	1	23/09/2011	General Biodiversity Records from Ireland	
Custom	Fungus	Wood Hedgehog (Hydnum repandum)	1	23/09/2011	General Biodiversity Records from Ireland	
Custom	Fungus	Wood Woollyfoot (Gymnopus peronatus)	1	23/09/2011	General Biodiversity Records from Ireland	
Custom	Fungus	Yellow Stagshorn (Calocera viscosa)	1	23/09/2011	General Biodiversity Records from Ireland	
Custom	Horsetail	Field Horsetail (Equisetum arvense)	1	15/07/2005	The Flora of County Waterford	
Custom	Insect - beetle (Coleoptera)	7-spot Ladybird (Coccinella septempunctata)	1	22/05/2014	Ladybirds of Ireland	
Custom	Insect -	Comma (Polygonia c-album)	6	15/08/2021	Butterflies of Ireland pre-2022	
Custom	Insect -	Common Blue (Polyommatus icarus)	2	01/08/2020	Butterflies of Ireland pre-2022	
Custom	Insect -	Green-veined White (Pieris napi)	14	23/07/2021	Butterflies of Ireland pre-2022	
Custom	Insect -	Holly Blue (Celastrina argiolus)	7	01/08/2020	Butterflies of Ireland pre-2022	
Custom	Insect -	Large White (Pieris brassicae)	3	15/08/2021	Butterflies of Ireland pre-2022	
Custom	Insect -	Meadow Brown (Maniola jurtina)	9	23/07/2021	Butterflies of Ireland pre-2022	
Custom	Insect -	Painted Lady (Vanessa cardui)	6	02/09/2019	Butterflies of Ireland pre-2022	
Custom	Insect -	Peacock (Aglais io)	12	15/08/2021	Butterflies of Ireland pre-2022	
Custom	Insect -	Purple Hairstreak (Favonius	3	24/08/2011	Butterflies of Ireland pre-2022	
Custom	Insect -	Red Admiral (Vanessa atalanta)	14	15/08/2021	Butterflies of Ireland pre-2022	
Custom	Insect -	Ringlet (Aphantopus hyperantus)	11	23/07/2021	Butterflies of Ireland pre-2022	
Custom	Insect -	Silver-washed Fritillary (Argynnis	17	15/08/2021	Butterflies of Ireland pre-2022	
Custom	Insect -	Small Copper (Lycaena phlaeas)	1	01/08/2020	Butterflies of Ireland pre-2022	
Custom	Insect -	Small Tortoiseshell (Aglais urticae)	6	23/07/2021	Butterflies of Ireland pre-2022	

Custom	Insect -	Small White (Pieris rapae)	2	15/08/2021	Butterflies of Ireland pre-2022	
Custom	Insect -	Speckled Wood (Pararge aegeria)	16	15/08/2021	Butterflies of Ireland pre-2022	
Custom	Insect - dragonfly	Beautiful Demoiselle (Calopteryx virgo)	3	19/09/2023	Dragonfly Ireland 2019 to 2024	
Custom	Insect -	Ashy Mining Bee (Andrena	1	08/04/2017	Bees of Ireland	
Custom	Insect - hymenopteran	Early Nomad Bee (Nomada leucophthalma)	1	08/04/2017	Bees of Ireland	
Custom	Insect - moth	Ash Spinner (Zelleria hepariella)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Barred Fruit-tree Tortrix (Pandemis cerasana)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Barred Straw (Gandaritis pyraliata)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Beautiful Carpet (Mesoleuca	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Beautiful China-mark (Nymphula nitidulata)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Beautiful Golden Y (Autographa pulchrina)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Beautiful Snout (Hypena crassalis)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Birch Drab (Swammerdamia	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Bramble Shoot Moth (Notocelia uddmanniana)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Bright-line Brown-eye (Lacanobia oleracea)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Brimstone Moth (Opisthograptis	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Brussels Lace (Cleorodes lichenaria)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Bud Moth (Spilonota ocellana)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Buff Arches (Habrosyne pyritoides)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Buff Footman (Eilema depressa)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Buff-tip (Phalera bucephala)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Buff-tipped Marble (Hedya ochroleucana)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Burdock Straw (Aethes rubigana)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Burnished Brass (Diachrysia	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Chequered Pearl (Evergestis	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Chinese Character (Cilix glaucata)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Cinnabar (Tyria jacobaeae)	1	01/08/2007	Moths Ireland	

Custom	Insect - moth	Clay (Mythimna ferrago)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Clay Triple-lines (Cyclophora	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Cloaked Carpet (Euphyia	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Cloaked Minor (Mesoligia furuncula)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Cloaked Pug (Eupithecia abietaria)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Clouded Border (Lomaspilis	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Cock's-foot Miner (Elachista	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Common Carpet (Epirrhoe alternata)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Common Emerald (Hemithea	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Common Footman (Eilema lurideola)	2	17/07/2022	Moths Ireland	
Custom	Insect - moth	Common Grass-veneer (Agriphila tristella)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Common Grey (Scoparia ambigualis)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Common Marble (Celypha lacunana)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Common Marbled Carpet (Dysstroma truncata)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Common Zebra Moth (Helcystogramma rufescens)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Common/Lesser Rustic (Mesapamea secalis agg.)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Coxcomb Prominent (Ptilodon	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Dark Arches (Apamea monoglypha)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Dark Blackthorn Tip Moth (Argyresthia albistria)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Dark Fruit-tree Tortrix (Pandemis heparana)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Dark Spectacle (Abrostola triplasia)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Diamond-back Marble (Eudemis profundana)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Diamond-back Moth (Plutella	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Dingy Concealer (Borkhausenia fuscescens)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Dot Moth (Melanchra persicariae)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Dotted Clay (Xestia baja)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Double Square-spot (Xestia	1	17/07/2022	Moths Ireland	

Custom	Insect - moth	Dusky Pearl (Udea prunalis)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Early Thorn (Selenia dentaria)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Elephant Hawk-moth (Deilephila	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Engrailed/Small Engrailed (Ectropis crepuscularia)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Flame (Axylia putris)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Flame Carpet (Xanthorhoe	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Garden Carpet (Xanthorhoe	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Garden Grass-veneer (Chrysoteuchia culmella)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Garden Grey (Eudonia mercurella)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Garden Pearl (Udea olivalis)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Garden Straw (Agapeta hamana)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Green Arches (Anaplectoides	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Green Pug (Pasiphila rectangulata)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Grey Arches (Polia nebulosa)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Grey Pine Carpet (Thera obeliscata)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Hawthorn Tip Moth (Argyresthia bonnetella)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Heart & Dart (Agrotis exclamationis)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Herald (Scoliopteryx libatrix)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Honeysuckle Moth (Ypsolopha	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Iron Prominent (Notodonta	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	July Highflyer (Hydriomena furcata)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Large Fruit-tree Tortrix (Archips	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Large Grey (Scoparia subfusca)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Large Yellow Underwing (Noctua pronuba)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Lesser Broad-bordered Yellow Underwing (Noctua janthe)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Lesser Swallow Prominent (Pheosia gnoma)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Light Arches (Apamea lithoxylaea)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Light Emerald (Campaea	1	17/07/2022	Moths Ireland	

Custom	Insect - moth	Little Buff-tip (Pseudoswammerdamia combinella)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Long-horned Flat-body (Carcina quercana)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Marbled Minor agg. (Oligia strigilis	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Marbled White Spot (Protodeltote pygarga)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Meadow Hook-wing (Ancylis	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Middle-barred Minor (Oligia	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Mother of Pearl (Patania ruralis)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Mottled Beauty (Alcis repandata)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Mottled Rustic (Caradrina	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Muslin Footman (Nudaria mundana)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Narrow-winged Pug (Eupithecia	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Oak Stilt (Caloptilia alchimiella)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Obscure Snout (Anarsia spartiella)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Orange Moth (Angerona prunaria)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Pale Straw Pearl (Udea lutealis)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Peach Blossom (Thyatira batis)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Pebble Prominent (Notodonta	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Pied Tortrix (Eucosma campoliliana)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Pine Knot-horn (Dioryctria abietella)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Pinion-streaked Snout (Schrankia costaestrigalis)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Plain Golden Y (Autographa jota)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Poplar Grey (Subacronicta megacephala)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Poplar Hawk-moth (Laothoe populi)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Purple Clay (Diarsia brunnea)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Red-barred Tortrix (Ditula	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Red-necked Footman (Atolmis	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Regal Piercer (Pammene regiana)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Riband Wave (Idaea aversata)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Round-winged Muslin (Thumatha	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Ruby Tiger (Phragmatobia	1	17/07/2022	Moths Ireland	

Custom	Insect - moth	Rush Veneer (Nomophila noctuella)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Rustic (Hoplodrina blanda)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Rusty Dot (Udea ferrugalis)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Satin Beauty (Deileptenia ribeata)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Satin Grass-moth (Crambus perlella)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Scallop Shell (Rheumaptera	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Scalloped Oak (Crocallis elinguaria)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Sharp-angled Carpet (Euphyia unangulata)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Single-dotted Wave (Idaea	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Small Angle Shades (Euplexia	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Small Fan-foot (Herminia grisealis)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Small Magpie (Anania hortulata)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Small Phoenix (Ecliptopera silaceata)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Small Rivulet (Perizoma alchemillata)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Small Square-spot (Diarsia rubi)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Smoky Wainscot (Mythimna impura)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Snout (Hypena proboscidalis)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Spectacle (Abrostola tripartita)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Spotted Magpie (Anania coronata)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Spruce Carpet (Thera britannica)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Straw Dot (Rivula sericealis)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Straw Grass-veneer (Agriphila straminella)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Sulphur Pearl (Sitochroa palealis)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Swallow-tailed Moth (Ourapteryx sambucaria)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Tawny-barred Angle (Macaria	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Thistle Marble (Lobesia abscisana)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	True Lover's Knot (Lycophotia porphyrea)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Uncertain (Hoplodrina octogenaria)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Variegated Golden Tortrix (Archips xylosteana)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	V-pug (Chloroclystis v-ata)	1	17/07/2022	Moths Ireland	

Custom	Insect - moth	Wakely's Dowd (Blastobasis	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	White Ermine (Spilosoma	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	White-shouldered House-moth (Endrosis sarcitrella)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Yellow Shell (Camptogramma bilineata)	1	17/07/2022	Moths Ireland	Threatened Species: Near threatened
Custom	Insect - moth	Yellow-spotted Tortrix (Pseudargyrotoza conwagana)	1	17/07/2022	Moths Ireland	
Custom	Insect - true bug	Grypocoris (Lophyromiris) stysi	1	21/06/2019	True Bugs (Heteroptera) of Ireland	
Custom	Insect - true bug	Liocoris tripustulatus	1	21/06/2019	True Bugs (Heteroptera) of Ireland	
Custom	Insect - true bug	Metatropis rufescens	1	21/06/2019	True Bugs (Heteroptera) of Ireland	
Custom	Insect - true bug	River Skater (Aquarius najas)	1	21/06/2019	True Bugs (Heteroptera) of Ireland	
Custom	Slime mould	Diderma effusum	1	04/01/2011	General Biodiversity Records from Ireland	
Custom	Slime mould	Licea operculata	1	04/01/2011	General Biodiversity Records from Ireland	
Custom	Slime mould	Trichia munda	1	04/01/2011	General Biodiversity Records from Ireland	
Custom	Terrestrial mammal	Bank Vole (Myodes glareolus)	1	06/09/2006	Atlas of Mammals in Ireland 2010-2015	Invasive Species: Medium Risk Invasive Species (2013 Report)
Custom	Terrestrial mammal	Daubenton's Bat (Myotis daubentonii)	44	29/08/2020	National Bat Database of Ireland	Protected Species: EU Habitats Directive || Protected Species: EU Habitats Directive >> Annex IV || Protected Species: Wildlife Acts

Custom	Terrestrial mammal	Fallow Deer (Dama dama)	1	25/11/2016	Mammals of Ireland 2016-2025	Invasive Species: Regulation S.I. 477/2011 (Ireland) || Invasive Species: High Risk Invasive Species (2013 Report) || Invasive Species: Regulation S.I. 374/2024 (Ireland) || Protected Species: Wildlife Acts
Custom	Terrestrial mammal	Greater White-toothed Shrew (Crocidura russula)	1	17/07/2016	Mammals of Ireland 2016-2025	Invasive Species: Medium Risk Invasive Species (2013 Report)
Custom	Terrestrial mammal	Otter (Lutra lutra)	5	06/10/2012	Otter (Lutra lutra) records 2011-2015	Protected Species: EU Habitats Directive || Protected Species: EU Habitats Directive >> Annex II || Protected Species: EU Habitats Directive >> Annex IV || Protected Species: Wildlife Acts
Custom	Terrestrial mammal	Pygmy Shrew (Sorex minutus)	1	17/07/2016	Mammals of Ireland 2016-2025	Protected Species: Wildlife Acts
Custom	Terrestrial mammal	Rabbit (Oryctolagus cuniculus)	1	29/12/2010	Atlas of Mammals in Ireland 2010-2015	Invasive Species: Medium Risk Invasive Species (2013 Report)
Custom	Terrestrial mammal	Red Squirrel (Sciurus vulgaris)	5	19/10/2016	Mammals of Ireland 2016-2025	Protected Species: Wildlife Acts
Custom	Terrestrial mammal	Siberian Chipmunk (Tamias sibiricus)	2	15/10/2010	National Invasive Species Database	Invasive Species: EU Invasive Alien Species Regulation No. 1143/2014 || Invasive Species: Regulation S.I. 477/2011 (Ireland) || Invasive Species: High Risk Invasive Species (2013 Report) || Invasive Species: Regulation S.I. 374/2024 (Ireland)

Species list for X2297: TOP OF INDRISCHILAWOOD





Quality of information

The National Biodiversity Data Centre makes every effort to ensure the quality of the information available on this website and updates the information regularly. Before relying on the information on this site, however, users should carefully evaluate its accuracy, currency, completeness and relevance for their purposes. The National Biodiversity Data Centre cannot guarantee and assumes no legal liability or responsibility for the accuracy, currency or completeness of the information.

To assist the Centre in the provision of high quality information, should you identify an error in any of the information provided, please notify the Centre and every effort will be made to rectify the error.

Grid square	Species group	Species name	Record count	Date of last record	Title of dataset	Designation
Custom	Bird	Grey Heron (Ardea cinerea)	1	11/03/2020	Birds of Ireland	
Custom	Bird	Grey Wagtail (Motacilla cinerea)	1	03/04/2020	Birds of Ireland	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Custom	Conifer	European Silver-fir (Abies alba)	1	15/04/2010	The Flora of County Waterford	
Custom	Conifer	Japanese Larch (Larix kaempferi)	2	15/04/2010	The Flora of County Waterford	
Custom	Fern	Asplenium trichomanes subsp. quadrivalens	1	07/06/2002	The Flora of County Waterford	
Custom	Fern	Black Spleenwort (Asplenium adiantum-nigrum)	1	07/06/2002	The Flora of County Waterford	
Custom	Fern	Bracken (Pteridium aquilinum)	1	07/06/2002	The Flora of County Waterford	
Custom	Fern	Broad Buckler-fern (Dryopteris	1	07/06/2002	The Flora of County Waterford	
Custom	Fern	Hard-fern (Blechnum spicant)	1	07/06/2002	The Flora of County Waterford	
Custom	Fern	Hart's-tongue (Phyllitis	1	07/06/2002	The Flora of County Waterford	
Custom	Fern	Hay-scented Buckler-fern (Dryopteris aemula)	2	15/04/2010	The Flora of County Waterford	
Custom	Fern	Intermediate Polypody (Polypodium interjectum)	1	07/06/2002	The Flora of County Waterford	
Custom	Fern	Lady-fern (Athyrium filix-femina)	1	07/06/2002	The Flora of County Waterford	
Custom	Fern	Male-fern (Dryopteris filix-mas)	1	07/06/2002	The Flora of County Waterford	
Custom	Fern	Rustyback (Ceterach officinarum)	2	15/07/2005	The Flora of County Waterford	
Custom	Fern	Scaly Male-fern (Dryopteris affinis)	2	10/04/2014	The Flora of County Waterford	
Custom	Fern	Soft Shield-fern (Polystichum	1	07/06/2002	The Flora of County Waterford	
Custom	Fern	Southern Polypody (Polypodium cambricum)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Alder (Alnus glutinosa)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Annual Meadow-grass (Poa annua)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Ash (Fraxinus excelsior)	1	07/06/2002	The Flora of County Waterford	

Custom	Flowering plant	Atlantic Ivy (Hedera hibernica)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Barren Strawberry (Potentilla sterilis)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Beech (Fagus sylvatica)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Bilberry (Vaccinium myrtillus)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Bird's-nest Orchid (Neottia nidus-	1	12/04/2012	The Flora of County Waterford	
Custom	Flowering plant	Blackthorn (Prunus spinosa)	1	15/04/2011	The Flora of County Waterford	
Custom	Flowering plant	Blinks (Montia fontana)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Bluebell (Hyacinthoides non-scripta)	3	22/04/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Bog Pimpernel (Anagallis tenella)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Bog Pondweed (Potamogeton polygonifolius)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Bog Stitchwort (Stellaria alsine)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Bramble (Rubus fruticosus agg.)	2	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Bristle Club-rush (Isolepis setacea)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Broad-leaved Dock (Rumex	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Broad-leaved Willowherb (Epilobium montanum)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Brooklime (Veronica beccabunga)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Bugle (Ajuga reptans)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Bulbous Rush (Juncus bulbosus)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Bush Vetch (Vicia sepium)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Calystega sepium x silvatica = C. x lucana	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Carnation Sedge (Carex panicea)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Cat's-ear (Hypochaeris radicata)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Changing Forget-me-not (Myosotis discolor)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Cherry Laurel (Prunus laurocerasus)	1	07/06/2002	The Flora of County Waterford	Invasive Species: High Risk Invasive Species (2013 Report)
Custom	Flowering plant	Cleavers (Galium aparine)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Clustered Dock (Rumex	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Cock's-foot (Dactylis glomerata)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Common Cow-wheat (Melampyrum pratense)	1	31/08/2004	The Flora of County Waterford	

Custom	Flowering plant	Common Dog-violet (Viola riviniana)	2	18/03/2019	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Common Duckweed (Lemna minor)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Common Figwort (Scrophularia	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Common Fleabane (Pulicaria	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Common Knapweed (Centaurea nigra sens. lat. (=nigra/debeauxii))	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Common Marsh-bedstraw (Galium palustre subsp. palustre)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Common Mouse-ear (Cerastium fontanum)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Common Ragwort (Jacobaea	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Common Sorrel (Rumex acetosa subsp. acetosa)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Common Water-starwort (Callitriche stagnalis)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Common Yellow-sedge (Carex viridula subsp. oedocarpa)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Cow Parsley (Anthriscus sylvestris)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Creeping Bent (Agrostis stolonifera)	1	19/06/1984	The Flora of County Waterford	
Custom	Flowering plant	Creeping Buttercup (Ranunculus repens)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Creeping Forget-me-not (Myosotis secunda)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Creeping Thistle (Cirsium arvense)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Crested Dog's-tail (Cynosurus	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Cuckooflower (Cardamine pratensis)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Daisy (Bellis perennis)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Devil's-bit Scabious (Succisa	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Enchanter's-nightshade (Circaea lutetiana)	2	03/07/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	False Oat-grass (Arrhenatherum	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	False-brome (Brachypodium	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Festuca rubra agg.	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Ficaria verna subsp. verna	1	07/06/2002	The Flora of County Waterford	

Custom	Flowering plant	Field Wood-rush (Luzula campestris)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Field-rose (Rosa arvensis)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Fool's-water-cress (Apium	1	19/06/1984	The Flora of County Waterford	
Custom	Flowering plant	Foxglove (Digitalis purpurea)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Giant Fescue (Festuca gigantea)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Glaucous Sedge (Carex flacca)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Goldenrod (Solidago virgaurea)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Gorse (Ulex europaeus)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Great Willowherb (Epilobium	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Great Wood-rush (Luzula sylvatica)	2	09/04/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Greater Bird's-foot-trefoil (Lotus pedunculatus)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Greater Stitchwort (Stellaria holostea)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Grey Sedge (Carex divulsa subsp. divulsa)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Hawthorn (Crataegus monogyna)	2	15/04/2011	The Flora of County Waterford	
Custom	Flowering plant	Hazel (Corylus avellana)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Heath Spotted-orchid (Dactylorhiza maculata)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Hedge Woundwort (Stachys sylvatica)	2	22/04/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Hemlock Water-dropwort (Oenanthe crocata)	2	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Herb-Robert (Geranium	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Hoary Willowherb (Epilobium parviflorum)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Holly (Ilex aquifolium)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Honeysuckle (Lonicera	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Horse-chestnut (Aesculus hippocastanum)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Hybrid Oak (Quercus petraea x robur = Q. x rosacea)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Irish Spurge (Euphorbia hyberna)	4	15/10/2018	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	

Custom	Flowering plant	Jointed Rush (Juncus articulatus)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Lapsana communis subsp. communis	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Lesser Skullcap (Scutellaria minor)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Lesser Spearwort (Ranunculus	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Lords-and-Ladies (Arum maculatum)	2	09/04/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Marsh Foxtail (Alopecurus	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Marsh Hawk's-beard (Crepis	2	15/04/2010	The Flora of County Waterford	
Custom	Flowering plant	Marsh Pennywort (Hydrocotyle	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Marsh Speedwell (Veronica	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Marsh St John's-wort (Hypericum	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Marsh Thistle (Cirsium palustre)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Meadow Buttercup (Ranunculus	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Meadowsweet (Filipendula ulmaria)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Montbretia (Crocosmia pottsii x aurea = C. x crocosmiiflora)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Opposite-leaved Golden-saxifrage (Chrysosplenium oppositifolium)	2	09/04/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Oval Sedge (Carex leporina)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Pignut (Conopodium majus)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Plantago major subsp. major	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Potentilla erecta subsp. erecta	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Primrose (Primula vulgaris)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Procumbent Pearlwort (Sagina procumbens)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Ranunculus penicillatus subsp. penicillatus	2	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Red Bartsia (Odontites vernus)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Red Clover (Trifolium pratense)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Remote Sedge (Carex remota)	1	07/06/2002	The Flora of County Waterford	

Custom	Flowering plant	Rhododendron ponticum	1	15/07/2005	The Flora of County Waterford	Invasive Species: Regulation S.I. 477/2011 (Ireland) || Invasive Species: Detailed Risk Assesment || Invasive Species: High Risk Invasive Species (2013 Report) || Invasive Species: Regulation S.I. 374/2024 (Ireland) || Invasive Species: Detailed Risk Assesment >> High Risk
Custom	Flowering plant	Ribwort Plantain (Plantago	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Rosebay Willowherb (Chamerion angustifolium)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Rough Meadow-grass (Poa trivialis)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Round-leaved Crowfoot (Ranunculus omiophyllus)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Rusty Willow (Salix cinerea subsp. oleifolia)	2	15/04/2011	The Flora of County Waterford	
Custom	Flowering plant	Sanicle (Sanicula europaea)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Selfheal (Prunella vulgaris)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Sessile Oak (Quercus petraea)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Sherard's Downy-rose (Rosa	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Shining Crane's-bill (Geranium	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Silverweed (Potentilla anserina)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Small Sweet-grass (Glyceria	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Smooth Meadow-grass (Poa	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Smooth-stalked Sedge (Carex	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Soft-rush (Juncus effusus)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Solanum nigrum subsp. nigrum	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Spear Thistle (Cirsium vulgare)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Square-stalked St John's-wort (Hypericum tetrapterum)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Star Sedge (Carex echinata)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Sticky Mouse-ear (Cerastium glomeratum)	1	07/06/2002	The Flora of County Waterford	

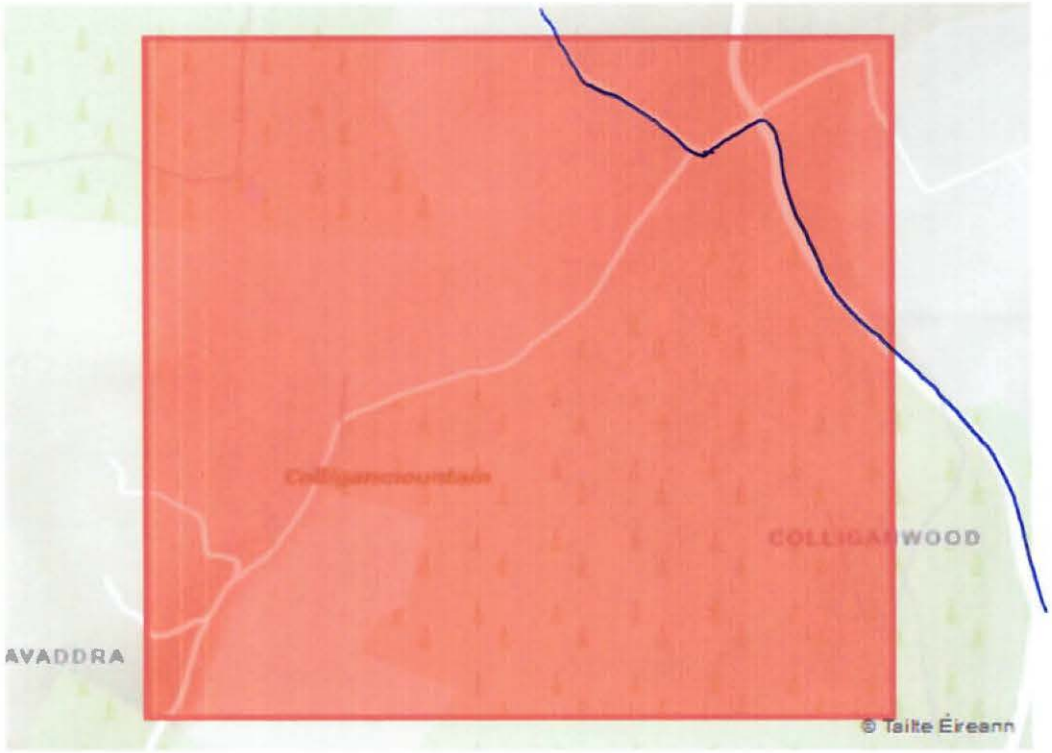
Custom	Flowering plant	Sweet Chestnut (Castanea sativa)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Sweet Vernal-grass (Anthoxanthum odoraturn)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Sycamore (Acer pseudoplatanus)	1	07/06/2002	The Flora of County Waterford	Invasive Species: Medium Risk Invasive Species (2013 Report)
Custom	Flowering plant	Taraxacum agg.	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Toad Rush (Juncus bufonius)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Trailing Tormentil (Potentilla anglica)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Tutsan (Hypericum androsaemum)	2	10/04/2014	The Flora of County Waterford	
Custom	Flowering plant	Two-rowed Barley (Hordeum	1	07/05/1997	The Flora of County Waterford	
Custom	Flowering plant	Upright Hedge-parsley (Torilis	1	10/04/2014	The Flora of County Waterford	
Custom	Flowering plant	Veronica serpyllifolia subsp.	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Water Mint (Mentha aquatica)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Water-cress (Rorippa nasturtium-aquaticum)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Water-pepper (Persicaria	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Wavy Bitter-cress (Cardamine	3	15/04/2011	The Flora of County Waterford	
Custom	Flowering plant	White Clover (Trifolium repens)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Wild Angelica (Angelica sylvestris)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Wild Privet (Ligustrum vulgare)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Wild Strawberry (Fragaria vesca)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Winter Heliotrope (Petasites	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Wood Anemone (Anemone	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Wood Avens (Geum urbanum)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Wood Fescue (Festuca altissima)	3	15/04/2010	The Flora of County Waterford	
Custom	Flowering plant	Wood Millet (Milium effusum)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Wood Sage (Teucrium scorodonia)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Wood Speedwell (Veronica montana)	2	04/06/2017	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Woodruff (Galium odoratum)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Wood-sedge (Carex sylvatica)	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Wood-sorrel (Oxalis acetosella)	2	09/04/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	
Custom	Flowering plant	Wych Elm (Ulmus glabra)	1	15/07/2005	The Flora of County Waterford	
Custom	Flowering plant	Yarrow (Achillea millefolium)	1	07/06/2002	The Flora of County Waterford	

Custom	Flowering plant	Yellow Pimpernel (Lysimachia	1	07/06/2002	The Flora of County Waterford	
Custom	Flowering plant	Yorkshire-fog (Holcus lanatus)	1	19/06/1984	The Flora of County Waterford	
Custom	Horsetail	Field Horsetail (Equisetum arvense)	1	15/07/2005	The Flora of County Waterford	
Custom	Horsetail	Marsh Horsetail (Equisetum palustre)	1	07/06/2002	The Flora of County Waterford	
Custom	Insect - moth	Barred Red (Hylaea fasciaria)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Barred Straw (Gandaritis pyraliata)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Beautiful Carpet (Mesoleuca	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Beautiful Snout (Hypena crassalis)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Beech Mast Piercer (Cydia	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Blue-bordered Carpet (Plemyria rubiginata)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Brimstone Moth (Opisthograptis	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Buff Arches (Habrosyne pyritoides)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Buff Ermine (Spilosoma lutea)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Buff Footman (Eilema depressa)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Buff-tip (Phalera bucephala)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Burnished Brass (Diachrysia	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Cloaked Pug (Eupithecia abietaria)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Clouded Border (Lomaspilis	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Common Carpet (Epirrhoe alternata)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Common Footman (Eilema lurideola)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Common/Lesser Rustic (Mesapamea secalis agg.)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Coxcomb Prominent (Ptilodon	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Dark Arches (Apamea monoglypha)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Dark Spectacle (Abrostola triplasia)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Double Square-spot (Xestia	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Double-striped Pug (Gymnoscelis rufifasciata)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Early Thorn (Selenia dentaria)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Engrailed/Small Engrailed (Ectropis crepuscularia)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Flame Carpet (Xanthorhoe	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Four-spotted Footman (Lithosia	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Furness Dowd (Blastobasis adustella)	1	17/07/2022	Moths Ireland	

Custom	Insect - moth	Garden Grass-veneer (Chrysoteuchia culmella)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Garden Tiger (Arctia caja)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Gold Swift (Phymatopus hecta)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Green Arches (Anaplectoides	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Green Pug (Pasiphila rectangulata)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Grey Arches (Polia nebulosa)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Iron Prominent (Notodonta	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	July Highflyer (Hydriomena furcata)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Large Emerald (Geometra	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Large Ivy Tortrix (Lozotaenia	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Large Yellow Underwing (Noctua pronuba)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Light Arches (Apamea lithoxylaea)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Light Emerald (Campaea	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Little Grey (Eudonia lacustrata)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Map-winged Swift (Korscheltellus fusconebulosa)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Marbled White Spot (Protodeltote pygarga)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Mottled Beauty (Acis repandata)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Netted Tortrix (Acleris forsskaleana)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Pinion-streaked Snout (Schrankia costaestrigalis)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Plum Tortrix (Hedya pruniana)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Poplar Hawk-moth (Laothoe populi)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Riband Wave (Idaea aversata)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Satin Beauty (Deileptenia ribeata)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Scalloped Oak (Crocallis elinguaria)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Small Fan-footed Wave (Idaea	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Small Phoenix (Ecliptopera silaceata)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Spotted Knot-horn (Phycitodes binaevella)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Spotted Magpie (Anania coronata)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Spruce Carpet (Thera britannica)	1	17/07/2022	Moths Ireland	

Custom	Insect - moth	Swallow-tailed Moth (Ourapteryx sambucaria)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Tawny-barred Angle (Macaria	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	White Ermine (Spilosoma	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Willow Beauty (Peribatodes rhomboidaria)	1	17/07/2022	Moths Ireland	
Custom	Insect - moth	Yellow Oak Tortrix (Aleimma	1	17/07/2022	Moths Ireland	
Custom	Insect - true bug (Hemiptera)	Water Cricket (Velia (Plesiovelia) caprai)	1	21/06/2019	True Bugs (Heteroptera) of Ireland	
Custom	Terrestrial mammal	Otter (Lutra lutra)	7	06/10/2012	Otter (Lutra lutra) records 2011-2015	Protected Species: EU Habitats Directive || Protected Species: EU Habitats Directive >> Annex II || Protected Species: EU Habitats Directive >> Annex IV || Protected Species: Wildlife Acts
Custom	Terrestrial mammal	Rabbit (Oryctolagus cuniculus)	2	23/01/2011	Atlas of Mammals in Ireland 2010-2015	Invasive Species: Medium Risk Invasive Species (2013 Report)
Custom	Terrestrial mammal	Red Squirrel (Sciurus vulgaris)	1	31/12/2012	Irish Squirrel Survey 2012	Protected Species: Wildlife Acts

Species list for X2097: R672 GCR ROUTE COLLIGAN WOOD





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Grid square	Species group	Species name	Record count	Date of last record	Title of dataset	Designation
Custom	Bird	Meadow Pipit (Anthus pratensis)	1	21/04/2020	Birds of Ireland	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Custom	Bird	Stonechat (Saxicola rubicola)	1	21/04/2020	Birds of Ireland	Protected Species: Wildlife Acts
Custom	Fern	Buckler-Fern (Dryopteris)	1	17/04/2010	The Flora of County Waterford	
Custom	Flowering plant	Ficaria verna var. bulbifer	1	17/04/2010	The Flora of County Waterford	
Custom	Flowering plant	Gooseberry (Ribes uva-crispa)	1	17/04/2010	The Flora of County Waterford	
Custom	Insect - butterfly	Green-veined White (Pieris napi)	1	28/07/2007	Butterflies of Ireland pre-2022	
Custom	Insect - hymenopteran	Early Bumblebee (Bombus pratorum)	1	06/08/2022	Bees of Ireland	
Custom	Insect - moth	August Thorn (Ennomos quercinaria)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Bramble Shoot Moth (Notocelia uddmanniana)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Brimstone Moth (Opisthograptis luteolata)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Common Carpet (Epirrhoe alternata)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Common Grass-veneer (Agriphila tristella)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Common Marbled Carpet (Dysstroma truncata)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Common/Lesser Rustic (Mesapamea secalis agg.)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Dark Fruit-tree Tortrix (Pandemis heparana)	1	17/08/2022	Moths Ireland	

Custom	Insect - moth	Double-striped Pug (Gymnoscelis rufifasciata)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Early Thorn (Selenia dentaria)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Flame Carpet (Xanthorhoe designata)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Flame Shoulder (Ochropleura plecta)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Four-spotted Footman (Lithosia quadra)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Furness Dowd (Blastobasis adustella)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Garden Carpet (Xanthorhoe fluctuata)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Garden Grass-veneer (Chrysoteuchia culmella)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Garden Grey (Eudonia mercurella)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Garden Rose Tortrix (Acleris variegana)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Grass Emerald (Pseudoterpna pruinata)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Heart & Dart (Agrotis exclamationis)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	July Highflyer (Hydriomena furcata)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Lesser Broad-bordered Yellow Underwing (Noctua janthe)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Light Brown Apple Moth (Epiphyas postvittana)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Little Grey (Eudonia lacustrata)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Mother of Pearl (Patania ruralis)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Northern Spinach (Eulithis populata)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Scalloped Oak (Crocallis elinguaria)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Setaceous Hebrew Character (Xestia c-nigrum)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Sharp-angled Carpet (Euphyia unangulata)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Single-cotted Wave (Idaea dimidiata)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Small Phoenix (Ecliptopera silaceata)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Small Square-spot (Diarsia rubi)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Small Wainscot (Denticucullus pygmina)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Spruce Carpet (Thera britannica)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Square-spot Rustic (Xestia xanthographa)	1	17/08/2022	Moths Ireland	
Custom	Insect - moth	Straw Dot (Rivula sericealis)	1	17/08/2022	Moths Ireland	

Species list for X1799: FINISK RIVER & HDD CROSSING





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Grid square	Species group	Species name	Record count	Date of last record	Title of dataset	Designation
Custom	Acarine (Acari)	Mite (Acari)	2	07/08/2012	A national macroinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Annelid	Leech (Hirudinea)	1	21/08/2018	A national macroinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Annelid	Lumbricidae	1	07/08/2015	A national macroinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Annelid	Lumbriculidae	1	21/08/2018	A national macroinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Annelid	Tubificid Worm Sp. (Tubificidae)	2	21/08/2018	A national macroinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Annelid	Whiteworm (Enchytraeidae)	1	07/08/2015	A national macroinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Crustacean	Freshwater Shrimp (Gammarus) (Gammarus)	3	21/08/2018	A national macroinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Crustacean	Gammarus duebeni	1	18/08/2009	A national macroinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Flowering plant	Ash (Fraxinus excelsior)	1	18/08/2009	River Biologists' Database (EPA)	
Custom	Flowering plant	Elder (Sambucus nigra)	1	18/08/2009	River Biologists' Database (EPA)	

Custom	Flowering plant	Ficaria verna subsp. verna	1	16/04/2004	The Flora of County Waterford	
Custom	Flowering plant	Ficaria verna var. bulbifer	1	16/04/2004	The Flora of County Waterford	
Custom	Flowering plant	Hawthorn (Crataegus monogyna)	1	18/08/2009	River Biologists' Database (EPA)	
Custom	Flowering plant	Japanese Knotweed (Fallopia japonica)	2	18/08/2009	River Biologists' Database (EPA)	Invasive Species: EU Invasive Alien Species Regulation No. 1143/2014 || Invasive Species: Regulation S.I. 477/2011 (Ireland) || Invasive Species: High Risk Invasive Species (2013 Report) || Invasive Species: Regulation S.I. 374/2024 (Ireland) || Invasive Species: The Wildlife (Northern Ireland) Order 1985
Custom	Flowering plant	Reed Canary-grass (Phalaris arundinacea)	1	06/07/2006	River Biologists' Database (EPA)	
Custom	Flowering plant	Sycamore (Acer pseudoplatanus)	1	18/08/2009	River Biologists' Database (EPA)	Invasive Species: Medium Risk Invasive Species (2013 Report)
Custom	Flowering plant	Veronica hederifolia subsp. lucorum	1	16/04/2004	The Flora of County Waterford	
Custom	Flowering plant	Viola odorata var. odorata	1	16/04/2004	The Flora of County Waterford	
Custom	Flowering plant	Water-cress (Rorippa nasturtium-aquaticum)	1	18/08/2009	River Biologists' Database (EPA)	
Custom	Flowering plant	Wild Onion (Allium vineale)	1	16/04/2004	The Flora of County Waterford	
Custom	Hairworm (Nematomorpha)	Gordius	1	07/08/2012	A national macrcinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Insect - beetle (Coleoptera)	Dytiscidae	1	07/08/2012	A national macrcinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	

Custom	Insect - beetle (Coleoptera)	Elmis aenea	3	21/08/2018	A national macrcinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Insect - beetle (Coleoptera)	Limnius volckmari	1	21/08/2018	A national macrcinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Insect - butterfly	Speckled Wood (Pararge aegeria)	1	18/08/2009	River Biologists' Database (EPA)	
Custom	Insect - caddis fly (Trichoptera)	Glossosomatidae	3	21/08/2018	A national macrcinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Insect - caddis fly (Trichoptera)	Hydropsyche	3	21/08/2018	A national macrcinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Insect - caddis fly (Trichoptera)	Leptoceridae	1	21/08/2018	A national macrcinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Insect - caddis fly (Trichoptera)	Limnephilidae	2	07/08/2015	A national macrcinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Insect - caddis fly (Trichoptera)	Polycentropodidae	1	21/08/2018	A national macrcinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Insect - caddis fly (Trichoptera)	Polycentropus	1	07/08/2015	A national macrcinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Insect - caddis fly (Trichoptera)	Rhyacophila	4	21/08/2018	A national macrcinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	

Custom	Insect - caddis fly (Trichoptera)	Sericostoma	1	07/08/2012	A national macrcinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Insect - mayfly (Ephemeroptera)	Baetis	4	21/08/2018	A national macrcinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Insect - mayfly (Ephemeroptera)	Blue-winged Olive (Serratella ignita)	6	21/08/2018	A national macrcinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Insect - mayfly (Ephemeroptera)	Ecdyonurus	3	21/08/2018	A national macrcinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Insect - mayfly (Ephemeroptera)	Flat-bodied Up-wings (Heptageniidae) (Heptageniidae)	1	18/08/2009	A national macrcinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Insect - stonefly (Plecoptera)	Dinocras cephalotes	1	07/08/2015	A national macrcinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Insect - stonefly (Plecoptera)	Leuctra	4	21/08/2018	A national macrcinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Insect - stonefly (Plecoptera)	Perla carlukiana	5	21/08/2018	A national macrcinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Insect - true fly (Diptera)	Black flies (Simuliidae)	4	21/08/2018	A national macrcinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	

Custom	Insect - true fly (Diptera)	Dicranota	3	21/08/2018	A national macroinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Insect - true fly (Diptera)	Non-biting midges (Chironomidae)	3	21/08/2018	A national macroinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Insect - true fly (Diptera)	Rheotanytarsus	1	07/08/2012	A national macroinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Mollusc	River limpets (Ancylus fluviatilis)	6	21/08/2018	A national macroinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Mollusc	Wandering Snail (Ampullaceana balthica)	1	21/08/2018	A national macroinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	
Custom	Terrestrial mammal	Badger (Meles meles)	4	31/12/2008	Badger Setts of Ireland Database	Protected Species: Wildlife Acts
Custom	Terrestrial mammal	Otter (Lutra lutra)	2	27/05/2010	Atlas of Mammals in Ireland 2010-2015	Protected Species: EU Habitats Directive || Protected Species: EU Habitats Directive >> Annex II || Protected Species: EU Habitats Directive >> Annex IV || Protected Species: Wildlife Acts

APPENDIX:

MAIL FROM WATERFORD CITY & COUNTY COUNCIL BIODIVERSITY DEPARTMENT

RE: Urgent request for information from Colligan Woods Birodiversity Event August 2025

From: Marina Mulligan [redacted]

To: [redacted]

Date: Tuesday, November 4, 2025 at 01:05 PM GMT

Hi Julia,

Thanks for your enquiry.

[redacted] I can direct you towards the biodiversity information – you can download any species map for 1-2km squared from the National Biodiversity Data Centre mapping (using the Generate Report function: https://maps.biodiversityireland.ie/Map, example for 2km squared for Colligan Woods attached) and Bat Conservation Ireland will have full details on the bat species present in the woodland.

In relation to the walk, we did not take any official recordings of invertebrate species on the night but we had three species of bat (Soprano pipistrelle, Common Pipistrelle and Leisler's). The Waterford Bat Group before it disbanded noted that 6 of the 9 species of bat in Ireland occur in Colligan woods.

Best wishes,
Marina

Marina Mulligan [redacted] **I Biodiversity Officer**
[redacted]

Environment Department, Waterford City & County Council,
Menapia Building, The Mall, Waterford City

Comhairle Cathrach & Contae Phort Láirge
Waterford City & County Council

Funded by
An Chomhairle Oidhreachta
The Heritage Council

From: Julia [redacted]
Sent: Thursday 30 October 2025 16:50
To: Marina Mulligan [redacted]
Subject: Urgent request for information from Colligan Woods Birodiversity Event August 2025

Hi Marina

Hope all is well with you.

I wanted to find out whether there are any results available from the Bankside Bat Walk that took place at Colligan Woods on 19 August 2025. Could you share the species recorded on the night (and any counts/detector IDs), plus the freshwater invertebrate list from the pre-walk sampling?

[redacted]

[redacted]

Many thanks,

Warm regards

Julia

X29D - Biodiversity Ireland - 2025-11-04T12.49.19.653.xlsx
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APPENDIX:

WHITE-TAILED EAGLE NEWS REPORT

ADVERTISEMENT

News

First white-tailed eagle born in Waterford since 1800s





Jordan Norris
September 03, 2025 10:51 AM

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Ballygunner to play Munster





Jordan Norris
September 03, 2025 10:51 AM

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History has been made in Waterford with the first confirmed birth of a white-tailed eagle chick in the county for more than two centuries.

The breakthrough comes as part of Ireland's national reintroduction programme, which has been working since 2007 to restore the once-extinct bird of prey to Irish skies.

The announcement was made on WLR by John Power, chairperson of Waterford for Nature (WFN), who confirmed that a pair of reintroduced white-tailed eagles, known locally as K and L, have successfully bred on the lower River Blackwater.

"This is the first white-tailed eagle breeding success in County Waterford in upwards of 200 years," Power said. "We are absolutely thrilled."

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Once widespread across Ireland, the species was driven to extinction in the 19th century, largely due to human persecution. Since 2007, 245 young eagles sourced from Norway have been released in Ireland by the National Parks and Wildlife Service. Breeding pairs have since established themselves in Clare, Cork, Tipperary and Galway, and now, finally, in Waterford.

The two adult eagles, identifiable by their wing tags—K (male) and L (female)—were released in Waterford in 2021. For the past four years, volunteers from WFN have been monitoring their movements along the Blackwater estuary, the Knockmealdowns, and even into East Cork.

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Last week, a local wildlife photographer spotted the pair with a juvenile eagle showing the telltale dark tail feathers of a fledgling. Experts confirmed that this young bird is indeed their chick.

Conservationists are urging the public to give the birds space and not to disturb their nesting area, which remains undisclosed for protection. White-tailed eagles are vulnerable to poisoning and shooting—threats that have claimed lives in other counties.

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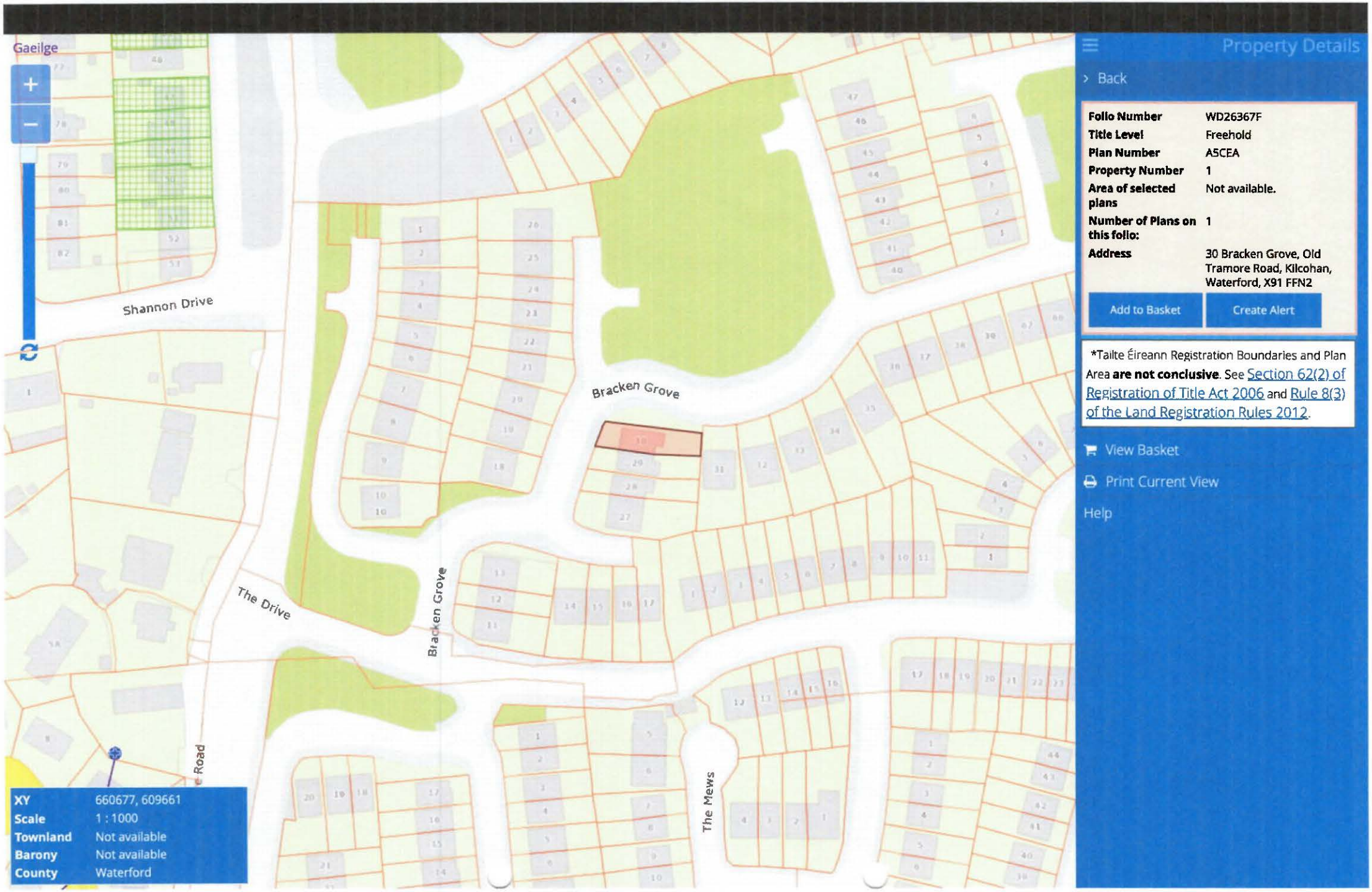
"These are magnificent apex predators," Power stressed. "They play a crucial role in biodiversity, feeding on fish and waterfowl. They're a fabulous addition to our landscape, and we must protect them."

For the latest Waterford News and Sport, tune into WLR News on the hour and download the WLR App for news on demand.

Waterford **wlr news**

APPENDIX:

LAND REGISTRY DETAILS



Property Details

› Back

Folio Number	WD26367F
Title Level	Freehold
Plan Number	A5CEA
Property Number	1
Area of selected plans	Not available.
Number of Plans on this folio:	1
Address	30 Bracken Grove, Old Tramore Road, Kilcohan, Waterford, X91 FFN2

Add to Basket | Create Alert

*Tailte Éireann Registration Boundaries and Plan Area **are not conclusive**. See Section 62(2) of Registration of Title Act 2006 and Rule 8(3) of the Land Registration Rules 2012.

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APPENDIX:

FUTURENERGY / DYRICK HILL WIND FARM OBSERVATION

FuturEnergy Ireland
27/28 Herbert Place
Dublin 2
D02 DC97

2 August 2023

An Bord Pleanála
34 Marlborough Street
Dublin
DO1 V902

RE: Proposed Dyrick Hill Wind Farm, County Waterford (Ref. No. ABP-312434-22): A Strategic Infrastructure Windfarm Development consisting of 12 wind turbine generators, 110kv substation, connection to the national electricity grid and associated and ancillary works at Ballynaguilkee Upper, Broemountain, Corradoon, Dyrick, Lickoran, Lickoranmountain, Lisleagh, Lisleaghmountain, Lyrattin and Scartmountain, County Waterford.

Dear Sir/Madam,

I refer to the above-mentioned Strategic Infrastructure Development (SID) planning application and submit the following observations for your consideration. We are making this submission in our capacity as the developer of an adjoining wind farm proposition[1], in respect of which further details are below.

1 Set-back from adjacent lands

The Proposed Dyrick Hill Wind Farm (the Proposed Wind Farm) is located adjacent to lands owned by Coillte Teoranta (Coillte) and on which FuturEnergy Ireland Development DAC (FEI) enjoys land rights and is in the process of developing for a wind farm. Coillte is a 50% shareholder in FEI.

Section 5.13 of the Wind Energy Development Guidelines, 2006 (the 2006 WEDGS) - statutory guidelines made by the Minister of the Environment, Heritage and Local Government (DEHLG) pursuant to Section 28 of the Planning and Development Act - addresses the question of 'wind take'; being the adverse effect of a wind farm development on the development potential of neighbouring lands for wind farm use:

> *"In general, to ensure optimal performance and to account for turbulence and wake effects, the minimum distances between wind turbines will generally be three times the rotor diameter (=3d) in the crosswind direction and seven times the rotor diameter (=7d) in the prevailing downwind*

[1] ABP-315920-23

direction. Bearing in mind the requirements for optimal performance, a distance of not less than two rotor blades from adjoining property boundaries will generally be acceptable, unless by written agreement of adjoining landowners to a lesser distance. However, where permission for wind energy development has been granted on an adjacent site, the principle of the minimum separation distances between turbines in crosswind and downwind directions indicated above should be respected."

The meaning of "*...a distance of not less than two rotor blades...*" was subsequently clarified by the (then) Department of the Environment, Heritage and Local Government in "Circular Letter PD 6/06", which is attached for ease of reference. The Departmental Circular confirms that the 2006 WEDGS require a set-back distance of two rotor diameters (2RD) from neighbouring properties.

The 2019 Draft WEDGS (published by the Department of Housing, Planning and Local Government) remain in draft form but have retained the language on wind take used in the 2006 WEDGS.

We would note that the intention of this set-back provision of the Ministerial guidelines is to address issues in relation to potential wind take and to protect the potential for wind farm development on adjoining property. As such, where turbines are located less than two rotor diameters from neighbouring properties, but there is no practical development potential on the neighbouring property, we would accept that a breach of this 2RD guidance limit could be acceptable. We therefore have no issue with the siting of the Proposed Wind Farm's T8 and T6 where there are minor 2RD exceedances in relation to Coillte owned lands, on the basis that the scale of these lands would be insufficient to enable development of turbines. However, the 5No. turbines on the western boundary of the Proposed Wind Farm site (T09 – T13) are all exceeding the 2RD requirement and are adjoining lands which FEI currently enjoys exclusive land rights to, and that are the subject of our active Scart Mountain Wind Farm development project (Refer Figure 1 overleaf).

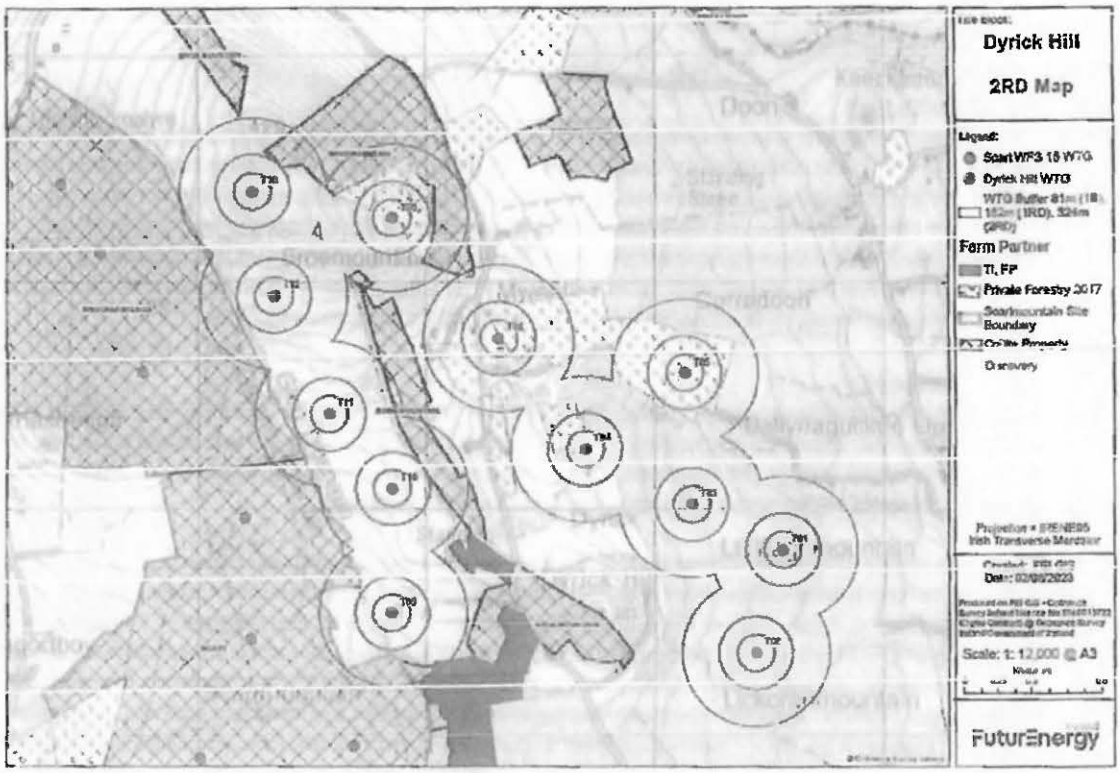


Figure 1: Scart Mountain Wind Farm Site showing 2RD of Dyrick Hill Wind Farm site.

FEI's Scart Mountain Wind Farm project involves a significant financial investment from the shareholders of FuturEnergy Ireland. This investment has been underpinned by an assumption that any potential developments on neighboring lands would be required to follow the Ministerial Guidelines, given the significant wind energy development potential of the Scart Mountain Wind Farm Site. The FEI project has been in design development for several years (originally by Coillte and subsequently since its formation in 2021, by FEI) and was publicly launched in October 2022. The SID pre-application process has been initiated with An Bord Pleanála and a planning application is scheduled for late 2023.

The intent of the 2006 WEDGS is to preserve the development potential of neighbouring property for wind farm development. It is of significant concern that the Proposed Wind Farm fails to have regard to these Ministerial Guidelines.

An Bord Pleanála must have regard to the 2006 WEDGS, as required under Section 37G of the Planning and Development Act, and in circumstances where there is obvious wind energy development potential as is the case on our adjoining lands, Section 5.13 is clearly relevant to its consideration of the Proposed Wind Farm application. We see no objective, reasonable justification for not requiring strict compliance with the set-back prescribed in the 2006 WEDGS.

2 Other observations

2.1 Ornithology

The Proposed Wind Farm is located within an area known to support breeding hen harrier both historically and during present day. We note that Chapter 7 of the EIAR provides some detail on breeding hen harrier but are concerned that the data presented by the applicant is not complete as some known breeding sites within, or in close proximity, to the proposed development site do not appear to be referenced. The habitats present within the proposed wind farm, particularly the area of dry heath, are considered suitable to support breeding hen harrier and records held by NPWS demonstrate that hen harrier successfully bred, and fledged young, in this area for several years including as recently as 2019.

2.2 Biodiversity

Annex I dry heath habitat is present within the Proposed Wind Farm site as stated by the applicant and evidenced by their reference to the Article 17 dataset held by National Parks and Wildlife Service, and survey work carried out at the development site. Table 6.1.1 evaluates the Annex I dry heath habitat within the proposed development site as being of national importance.

The Annex I dry heath habitat will be directly affected by the wind farm infrastructure and approximately 34,000 m2 of this habitat will be permanently lost because of the access track and turbines 10, 11, 12 and 13 (See Chapter 6, Table 6.12 of the EIAR). This estimate is based on the findings of habitat surveys completed at the Proposed Wind Farm by the applicant's consultant and not on the Article 17 dataset provided by NPWS. Chapter 6 of the EIAR states that an accurate area of dry heath habitat, representative of the Annex 1 habitat European dry heath has been mapped by the applicant's consultant, as shown on Figure 6.8 Habitat Map. There does not appear to have been any documented consultation or dialogue with NPWS on the extent of dry heath within the proposed development site.

The direct effect of habitat loss due to the Proposed Wind Farm is identified as a significant negative effect at the national/international scale in Chapter 6 of the EIAR. It is further described as *"This extent of loss of an example of Annex 1 habitat that forms part of the national resource of dry heath habitat is representative of a **significant, permanent negative** impact at the local scale."* [emphasis added]

The proposed approach to compensate the loss of this habitat is through what Chapter 6 describes, under the heading of "offsetting and habitat restoration". This section of the chapter refers the reader to the Habitat Management Plan as follows *"Habitat Management Plan is provided as Appendix 6.4 and all measures set out in this plan will be implemented as part of the Development."* It is not clear following a review of Appendix 6.4 how such measures will be achieved as much of the text appears non-specific to the conditions of the habitats in question and are rather generic in nature. There appears to be a lack of clarity around when the proposed measures will be implemented and when they are likely to achieve their stated aims. It is also not clear what the applicant predicts in terms of residual significant effects as Table 6.15 states that *"The long-term residual impact will be dependent upon achieving the targets set out in the Habitat Management Plan. The successful achievement of the targets set out in this Plan will have the potential to offset the loss of dry heath to the footprint of the proposed wind farm through the provision of a net increase the area of dry heath habitats occurring within the proposed development boundary. The achievement of this aim of the HMP will also have the potential to contribute towards an increase of the favourable reference area of this habitat, with the potential for positive, long-term effects for this habitat*

at the international scale."

Given the evaluation of the habitat as being of national importance, along with the predicted severity of the effect of the proposed development on Annex I dry heath habitat, it seems likely that long term significant residual effects will remain due to the loss of the dry heath habitat and lack of clarity and detail around monitoring the efficacy of the proposed habitat specific measures for restoration and enhancement. In addition, while timelines for monitoring surveys are proposed there is no timeline provided for implementation of the proposed measures nor are there any milestones or points in time provided for achieving the stated objectives of restoration and enhancement.

2.3 Sensitive Receptor

The Proposed Wind Farm has an occupied residential property within 360m of a proposed turbine (Deed of Covenant Appendix 2.3).

The 2006 WEDGS in Section 5.6, Noise, states that *"[i]n general, noise is unlikely to be a significant problem where the distance from the nearest turbine to any noise sensitive property is more than 500 metres"*. Conversely, a property within 500m could present a significant potential noise nuisance risk to the occupants.

The Deed of Covenant signed by the owner of the aforementioned residential property commits to securing vacant possession of the property from a current tenant, who has had occupancy since 2012. There is also a current planning application for change of use of the property, which has been refused by Waterford County Council (File Reference 221073) and is pending an appeal with An Bord Pleanála (Case 316060).

The current occupation of the residential property and the legal rights of any tenant, including their right to renew their tenancy, raises a question as to whether this property can be confidently excluded as a sensitive receptor, under best practice guidance.

2.4 Availability of Information

Chapter 6 Biodiversity was not available on the Dyrick Hill website https://dyrickhillwindfarmplanning.ie until the week commencing 24 July 2023. The chapter is now available on the site (last accessed 28 July 2023).

I trust the above is of assistance to An Bord Pleanála. For any queries, please don't hesitate to contact me.

Yours sincerely,

Paul Blount

Portfolio Director

FuturEnergy Ireland

Cc: Peter Lynch, CEO, FuturEnergy Ireland

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AN ROINN COMHSHAOIL,
OIDHREACHTA AGUS
RIALTAIS ÁITIÚIL
DEPARTMENT OF
THE ENVIRONMENT, HERITAGE
AND LOCAL GOVERNMENT
TEACH AN CHUSTAIM
CUSTOM HOUSE, DUBLIN 1
Tel No: +353 1 888 2000
LoCall No: 890 20 20 21
Fax No: +353 1 80 2888

Circular Letter PD 6/06

6 September 2006

Wind Energy Development
Guidelines for Planning Authorities, June 2006

A chara,

I refer to the above Guidelines following enquiries made to the Planning Section of the Department of the Environment, Heritage and Local Government seeking clarification of the following issue regarding Windfake, and the definition of the distance of "two rotor blades" in the context of the minimum recommended distance between wind energy turbine generators and the boundary of adjoining properties.

In Chapter 2, Section 2.1 of the Guidelines describes the various elements of a wind turbine. The description of blades reads as follows:

"The blades, which capture and are set in motion by the wind, are most commonly made of glass reinforced plastic or wood epoxy but can be made of aluminium or steel. Modern turbines typically have three blades. These may vary in rotor diameter from 35 metres upwards."

The implication of the final sentence is that rotor blades are to be measured according to rotor diameter, and that "a distance of not less that two rotor blades" is therefore equivalent to two rotor diameters. This also applies to Chapter 5 (Environmental Implications), Section 5.13 and Chapter 7 (Planning Conditions), Section 7.17.

If there are any further queries, or if further clarification in relation to the Guidelines is required, please do not hesitate to contact the following Planning Section personnel:

Fergus Doyle: Tel: 01-8882823; E-mail: fergus_doyle@environ.ie
Austin O'Dowd: Tel: 01-8882821; E-mail: austin.o'dowd@environ.ie

Is mise le meas,

Assistant Principal Officer,
Planning Section

To City and County Managers, Town Clerks, Directors of Service (Planning).

COILLTE
GROW · TRANSFORM · SUSTAIN

The Secretary
An Bord Pleanála
64 Marlborough Street
Dublin 1
D01 V902

19th July 2023

RE: Coillte CGA Observation regarding the Proposed Dyrick Hill Wind Farm Development, Co Waterford, Case Ref:PA93.317265

Dear Sir/Madam,

This observation has been prepared pursuant to the planning application for the proposed Dyrick Hill Wind Farm Development, Co Waterford, Case Ref:PA93.317265.

As a neighbouring Landowner, Coillte CGA are concerned that the proposed project is not following established best practice guidance in relation to set back distances from neighbouring properties. Section 5.13 of the 2006 Planning Guidelines for Wind Energy Developments states that: *"a distance of not less than two rotor blades from adjoining property boundaries will generally be acceptable, unless by written agreement of adjoining landowners to a lesser distance".* It was subsequently clarified by the Department in the Circular Letter PD 6/06 (6th September 2006) that a distance of not less than two rotor blades is equivalent to two rotor diameters and that this applied to Section 5.13 of the Guidelines: *"rotor blades are to be measured according to rotor diameter, and that "a distance of not less than two rotor blades" is therefore equivalent to the two rotor diameters. This also applies to Chapter 5 (Environmental Implications), Section 5.13 and Chapter 7 (Planning Conditions), Section 7.17".*

In order to achieve a two rotor diameter separation distance from the Coillte estate for the stated turbine size in the subject proposal, turbines should be located at least 324m away from the Coillte property boundary. According to the site layout drawings submitted as part of the subject proposal, Coillte observes that the separation distances of the following turbines are well below the required separation distance:

T8 – 171m from Coillte boundary
T9 - 185m from Coillte boundary
T10 – 162m from Coillte boundary
T11 – 192m from Coillte boundary
T12 – 187m from Coillte boundary
T13 – 157m from Coillte boundary

Coillte, Dublin Road, Newtownmountkennedy, Co. Wicklow, A63 DN25, Ireland.
0818 367 378 | info@coillte.ie | www.coillte.ie

Stiórthóirí / Directors: Bernie Gray (Cathaoirleach / Chair), Deirdre-Ann Barr, Gerard Gray, Frank Hayes, Imelda Hurley (CEO), Patrick Eamon King, Kevin McCarthy, Gerard Murphy, Eleanor O'Neill.
Cláraithe in Éirinn No. 138108. Oifig Chláraithe: Coillte CGA, Baile an Chinnéidigh, Co. Cill Mhantáin, A63 DN25, Éire.
Registered in Ireland No. 138108. Registered Office: Coillte CGA, Dublin Road, Newtownmountkennedy, Co. Wicklow, A63 DN25, Ireland.

COILLTE
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While Coillte is very supportive of wind farm developments we would like to note that no agreement has been made between the applicant and Coillte to locate turbines within two rotor diameters of the Coillte property boundary.

We request that An Bord Pleanála takes the content of this letter into consideration in relation to any decision that is made in relation to the subject development.

Yours sincerely,

Deirdre Coleman

Deirdre Coleman
Company Secretary & Director of Legal Affairs
On behalf of Coillte CGA

Coillte, Dublin Road, Newtownmountkennedy, Co. Wicklow, A63 DN25, Ireland.
0818 367 378 | info@coillte.ie | www.coillte.ie

Stiúrthóirí / Directors: Barnie Gray (Cathaoirleach / Chair), Deirdre-Ann Barr, Gerard Gray, Frank Hayes, Imelda Hurley (CEO), Patrick Eamon King, Kevin McCarthy, Gerard Murphy, Eleanor O'Neill.
Cláraithe in Éirinn No. 138108. Oifig Chláraithe: Coillte CGA, Baile an Chinnéidigh, Co. Cill Mhantáin, A63 DN25, Éire.
Registered in Ireland No. 138108. Registered Office: Coillte CGA, Dublin Road, Newtownmountkennedy, Co. Wicklow, A63 DN25, Ireland.

APPENDIX:

SCART MOUNTAIN WIND FARM (CASE REF: 321522)

OBSERVATIONS AND SCOPING RESPONSES

Professor Mike Gormally FRES,

Cloonsheen,

Kilconly,

Tuam.

Co. Galway

27.02.2025

Observation

Re: Application Number: PA93.321522

Proposal by Futurenergy Scart Mountain Designated Activity Co. Ltd to erect fifteen wind turbines and associated infrastructure located within the townlands of Coolagortboy, Crinnaghtaun West, Feddaun, Glennafallia, Knockboy, Knocknafrehan, Knocknanask, Knocknasheega, Lackenrea, Moneygorm, Scart Mountain, Toor and Tooranaraheen, Co. Waterford (hereafter referred to as Scart Mountain Wind Farm)

Request for planning permission lodged on 19.12.2024

Competency of Professor Mike Gormally FRES

I am a Professor in Environmental Science at the University of Galway where my scientific research and teaching, over the last 30 years, has focussed primarily on human interactions with and impacts on the environment.

To whom it may concern,

I believe it is essential that The Bord, in considering this application, take account of the fact that the EIAR is fundamentally flawed and is not fit for the purpose intended in allowing a full and robust assessment of the likely significant effects of the proposed development on the receiving environment direct or indirect, or in combination with other effects. The criteria for these considerations of what must be assessed and considered is set out in the criteria of projects falling under the remit of the EU EIA Directive 2011/92/EU as amended by 2014/52/EU under Article 3(1).

The Bord cannot permit this development on the basis of an inadequate adherence to the regulations of this Directive and therefore must refuse.

Council Regulations (EU) 2022/2577 permits streamlining of permit granting processes for renewable energy projects. This does not set aside the obligations for proper environmental assessment and the identification of likely significant and cumulative impacts of a proposed project on the receiving environment.

PTO

Summary

Note: Relevant legislation is given in green.

1. **Bird survey methodologies** used for this EIAR are based on SNH (NatureScot, 2017) guidelines which are out of date. It is strongly recommended that the more recent *Bird Survey Guidelines for assessing ecological impacts (2025)* be used in this EIAR so that adequate and robust baseline data are gathered to safeguard adherence to the EU EIA Directive (2011/92/EU as amended by 2014/52/EU) "*...to ensure maintenance of the diversity of species and to maintain the reproductive capacity of the ecosystem as a basic resource for life*".

Observation

Birds survey methodologies

The EIAR for the Scart Mountain Windfarm (hereafter referred to as the "EIAR") states that "*The scope of, and methods used for, the bird surveys were based on Scottish Natural Heritage's guidance: Recommended Bird Survey Methods to Inform Impact Assessment of Onshore Wind Farms (SNH, 2017)*".

The above SNH document which informed baseline bird surveys methods for this EIAR was published more than seven years ago. It was based, at that time, on a combination of knowledge sourced from the scientific literature leading up to 2017 and expert opinion prior to publication. These guidelines do not take into account the most recent developments in ornithological survey methods. Knowledge regarding appropriate bird survey methods, based on peer-reviewed scientific evidence, has increased enormously.

The most up-to-date guidelines for bird surveys in the UK is:

"Bird Survey & Assessment Steering Group. (2025). Bird Survey Guidelines for assessing ecological impacts. https://birdsurveyguidelines.org *[20.02.2025]*."

These guidelines state that they "*are intended for use by ornithologists and ecological consultants who engage in bird surveys for the purpose of assessing ecological impacts including Ecological Impact Assessments (EcIA) and Environmental Impact Assessments (EIA)*". Given that Northern Ireland shares the island of Ireland and its associated fauna and habitats with the Republic of Ireland, these up-to-date guidelines are also suitable for the Republic of Ireland.

It is important to note that SNH guidance (2017) used in this EIAR also states that the SNH (2017) guidance document is "*not prescriptive or able to cater for every possible scenario..*" and "*.. not exhaustive and there may well be occasions where novel or different survey methods are required*".

The absence of two key bird survey methodologies as recommended by the Bird Survey Guidelines (UK) compared with the SNH methodologies used in this EIAR can be seen in Table 1 below.

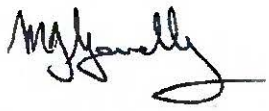
PTO

	Bird Survey Guidelines UK (2025)	Methodologies used in proposed Scart Mountain Windfarm EIAR based on: ***Scottish Natural Heritage's guidance: Recommended Bird Survey Methods to Inform Impact Assessment of Onshore Wind Farms (SNH, 2017)***
Nocturnal bird surveys	Recommends that **thermal imaging** be undertaken to quantify how birds are using habitats after dark, particularly for: • Winter waders • Migratory geese • Certain species of owl Hughes et al (2021) states that thermal imaging has *"resulted in ... an improvement in the accuracy of counts for birds of conservation concern."*	**No thermal imaging** undertaken for this EIAR *Note: This technology has been in use for avian studies since the early 2000s*
Passive audio recording	**Passive audio recording** should be considered to identify: • extent of nocturnal migration over site • presence of nocturnal site usage Perez-Granados & Traba (2021) states that passive acoustic monitoring *"minimizes disturbance due to human presence, increases the spatial and temporal scale of studies and offers a great degree of standardization in data collection.*	**No passive audio recording** undertaken for this EIAR *Note: This technology has been in use for over 10 years in avian studies*

In summary, the outdated bird survey methodologies employed for Scart Mountain Windfarm EIAR are insufficient to provide robust baseline data upon which predicted impacts of the proposed windfarm on birds can be determined with any degree of confidence.

PTO

Yours faithfully,



Professor Mike Gormally

References:

Bird Survey & Assessment Steering Group (2025) Bird Survey Guidelines for assessing ecological impacts, v.1.1.1. https://birdsurveyguidelines.org/".

EPA (2022) Guidelines on the information to be contained in Environmental Impact Assessment Reports (EIAR). Guidelines on the information to be contained in Environmental Impact Assessment Reports (EIAR) | Environmental Protection Agency (epa.ie)

Morgan Hughes, Paul Hopwood, Matilda Dolan & Ben Dolan (2021) Applications of thermal imaging for bird surveys: examples from the field, Ringing & Migration, 36:2, 78-81, DOI: 10.1080/03078698.2022.2123026 https://doi.org/10.1080/03078698.2022.2123026

Perez-Granados, C & Traba, J (2021) Estimating bird density using passive acoustic monitoring: a review of methods and suggestions for further research. Ibis 163, 765–783. Doi: 10.1111/ibi.12944 Ibis - 2021 - Pérez-Granados - Estimating bird density using passive acoustic monitoring a review of methods and (1).pdf

SNH (2017). Recommended bird survey methods to inform impact assessment of onshore wind farms. Scottish Natural Heritage, Inverness, Scotland. Available at: https://www.nature.scot/sites/default/files/2018-06/Guidance%20Note%20-%20Recommended%20bird%20survey%20methods%20to%20inform%20impact%20assessment%20of%20onshore%20windfarms.pdf

Uisce Éireanns Ref: PN24000016426

Planning Ref: PA93.321522

Planning Authority: An Bord Pleanala, 64 Marlborough Street, Dublin 1

Issue Date: 28 February 2025

Uisce Éireann
Bosca OP 448
Oifig Sheachadta na
Cathrach Theas
Cathair Chorcaí

Uisce Éireann
PO Box 448
South City
Delivery Office
Cork City

www.water.ie

Development Location:

Townlands of Coolagortboy, Crinnaghtaun West, Feddaun, Glennafallia, Knockboy, Knocknafrehane, Knocknanask, Knocknasheega, Lackenrea, Moneygorm, Moneygorm East, Scartmountain, Toor, and Tooranaraheen, Co. Waterford.

Development Description:

Proposed wind farm development, which comprises 15 no. wind turbines, a 110kV substation and all associated works.

A Chara,

Please accept this submission in respect to the above-referenced Strategic Infrastructure Development application.

Uisce Éireann (UÉ) has reviewed the plans and particulars submitted with the application specifically the Planning Report, and Chapter 9 (Hydrology & Hydrogeology) and Chapter 19 (Schedule of Mitigation Measure) of the EIAR, the Water Framework Directive Assessment and the Construction Environmental Management Plan and have the following observation(s).

Proposed Development

The proposed development will comprise:

- Erection of 15 no. wind turbines, and all associated foundations and hard standing areas in respect of each turbine;
- Permanent upgrade to the existing forest entrance onto the L5055 local road in the townland of Lackenrea to be used as a construction entrance. It will also be used for operational phase access for HGVs only;
- Construction of 6 no. permanent site entrances to form 3 no. local road crossing points to enable site access during construction (on the L5054, L5055 and L1026)
- Temporary improvements and modifications to 1 no. location at the junction of the N72 and the L1027;

Stiúrthóirí / Directors: Jerry Grant (Cathaoirleach / Chairperson), Niall Gleeson (POF / CEO), Gerard Britchfield, Douglas Millican, Michael Nolan, Patricia King, Eileen Maher, Cathy Mannion, Paul Reid, Michael Walsh.
Oifig Chláraithe / Registered Office: Teach Colvill, 24-26 Sráid Thalbóid, Baile Átha Cliath 1, D01 NP86 / Colvill House, 24-26 Talbot Street, Dublin, Ireland D01 NP86
Is cuideachta gníomhaireachta aitheanta atá faoi theorainn scaireanna é Uisce Éireann / Uisce Éireann is a designated activity company, limited by shares.
Cláraithe in Éirinn Uimh. 530363 / Registered in Ireland No.: 530363.

Windfarm construction has the ability to disturb large volumes of peat. This can have an impact on the quality of the raw water long term and increase the difficulty to treat the water and consequently, the cost of treatment. It is critical that any and all surface/ground water sources within proximity are protected from any possible pollution arising from the proposed development and it is an environmental objective of the Water Framework Directive is to protect drinking water sources and ensure no additional treatment is required.

On review of the application, there are no surface water abstractions within the proposed wind farm site. There are no works proposed within a surface water catchment.

Regarding groundwater sources, there are several groundwater abstractions / Zones of Conntribution located in close proximity to this windfarm development which include:

- Modeligo PWS (serves population 192): Proposed substation to the south of the proposed development is located within the Zone of Contribution (ZOC) for the Modeligo PWS, located approx. 400m from the borehole supply.
- Bawnfoun / Moores Well PWS (serves a population of 91): The site entrance and access track crosses the ZOC for Bawnfoun / Moores Well PWS located approx. 1.2 km from the spring abstraction point.
- Ballinamuck Water Supply (Dungarvan PWS - serves a population of 12,034): Grid connection route – traverse the ZOC for Ballinamuck Water Supply (Dungarvan PWS)
- Melleray PWS (Glenafallia abstraction serves a population of 207): abstraction located in close proximity to the NW portion of the development site (c. 600 m from T2), however, it is outside the ZOC.

A review of Chapter 9 Hydrology & Hydrogeology of the EIAR submitted has identified four of the public water drinking supplies in the vicinity of the proposed windfarm. The EIAR however does not consider the potential effects of the proposed development on the groundwater quality of the Modeligo PWS or the Bawnfoun / Moores Well PWS. The development is within the ZOCs for these supplies and should be considered in the EIAR. The potential risk to these supplies would be very low, however the pre-mitigation effects to ground water quality should be considered.

Uisce Éireann requests that the following information is submitted:

1. The Modeligo Public Water Supply (PWS) and the Bawnfoun / Moores Well PWS should be identified and assessed within the EIAR, in Section 9.4.4 Potential Significant Effects and the potential pre-mitigation effects to groundwater quality should be outlined within the report.

Queries relating to the terms and observations above should be directed to planning@water.ie

Dermot Phelan

Connections Delivery Manager

- Construction of 2 no. temporary construction compounds located within the northern and southern ends of the site, with associated temporary site offices, parking areas and security fencing;
- Erection of 1 no. Meteorological Mast;
- 2 no. temporary borrow pits;
- Permanent construction of 11.9 km new internal site access roads and upgrade of 7.2 km existing internal site roads, to include passing bays and all associated drainage, all within the wind farm site;
- Construction of temporary and permanent drainage and sediment control systems; Construction of 1 no. permanent 110kV electrical substation
- All related site works and ancillary development including signage, berms, landscaping, and soil excavation;
- Forestry felling (both permanent and temporary) to facilitate construction and operation including biodiversity enhancement measures, of the proposed project and any onsite forestry replanting; and
- All associated underground electrical and communications cabling connecting the wind turbines to the proposed wind farm substation.

Connections to Public Infrastructure

No connections to public water or wastewater are proposed as part of this development.

Interactions with Uisce Éireann Assets

The wind turbines and associated works proposed in this Strategic Infrastructure Development application are not in the vicinity of existing Uisce Éireann assets.

The applicant submits that a separate application to obtain permission for the development of associated transmission infrastructure which consists of a 110kV grid connection to facilitate the export of power from the wind farm will be submitted to An Bord Pleanála.

It is noted that the proposed cabling infrastructure will likely interact with existing Uisce Éireann assets that are located within the road reserves. The applicant is required to identify, survey and map the exact location of Uisce Éireann assets relative to their proposed works to allow Uisce Éireann to determine protection measures and/or if diversions are required. The applicant must submit details to Uisce Éireann for assessment of feasibility and have written confirmation from Uisce Éireann prior to the lodgement of the future planning application.

Impact to Public Water Supply

Uisce Éireann applies a precautionary approach to development proposals of this nature and / or any development proposals that may impact public drinking water sources. Protection of drinking water sources from the potential adverse impacts of new development is a priority for Uisce Éireann.

An Roinn Iompair
Department of Transport

Mr. John Staunton
TOBIN Consulting Engineers

Block 10-4
Blanchardstown Corporate Park
Dublin
D15 X98N

16th February 2023

RE: Proposed Development of Scartmountain Wind Farm, Co. Waterford

Dear John,

The Department of Transport makes the following comments on the Scartmountain development located near Cappoquin in County Waterford.

It should be noted that the department considers the construction involved in providing this development and especially, the connection cables to the national grid may have effects on both the environment and the Regional and Local Road network.

Where the developer proposes the placement of any cables (or additional cables) in one or more trenches within the extents of the (regional and local) public road network, it is necessary to consider the following:

- Their presence within the public road could significantly restrict the Road Authority in carrying out its function to construct and maintain the public road and will likely add to the costs of those works.
- Their installation within the lands associated with the public road may affect the stability of the road. In particular where the road is a "legacy road" (where there is no designed road structure and the subgrade may be poor or poorly drained) the design needs to take account of all the variable conditions and not be based on a sample of the general conditions.
- The possible effect on the remaining available road space (noting that there may be need to accommodate other utilities within the road cross-section in the future).
- The necessity to have the power in the cables switched off where the Road Authority considers this necessary in order to carry out its function to construct and maintain the public road.

The department consider it important that the examination of the proposal should include consideration of the following:

- Examination of options other than the routing of cables along the public road,
- Examination of options for connection to the national grid network at a point closer to the wind farm in order to reduce the adverse impact on public roads.
- Details of where within the road cross section cables are to be placed so as to minimise the effect on the Roads Authority in its role of construction and maintenance,

- Examination of details of any chambers proposed within the public road cross section so as to minimise the effect on the Roads Authority in its role of construction and maintenance and,
- Rationalisation of the number of cables involved (including existing electric or possible future cables) and their diversion into one trench, in order to minimise the impacts on the road network and the environment along the road boundary (hedgerows).

The department considers the following should be considered when applying conditions to any approval.

1. A condition requiring the specific approval of the local authority to the detail of the final route of cables through the public road space. If during construction there is a need to deviate from the detailed design then the approval of the local authority would again be sought. This would assist in minimising the impact on the public road.
2. A condition requiring the developer to comply with all appropriate standards and, inter alia the Guidelines for Managing Openings in Public Roads, 2017 in order to ensure orderly development.
3. A condition requiring that the location of the cables would be recorded as exactly as possible (maybe using BIM type technology) so as to facilitate the further use of road space for utilities and the maintenance/construction of the public road by the Roads authority. This record should be lodged with the local authority and with the ESB Networks for retention on their records.
4. A condition requiring the developer to route cables away from bridge structures and specifically preventing the developer from attaching cables to road bridges. This would allow for the future maintenance of bridges without interruption of the electricity supply along the cables.
5. A condition requiring the developer to notify the Roads Authority of the owner of the cables (Owner) and the controller (Power Controller) of the power transmitted along the cables. In addition, the condition should require Owner and Power Controller to notify the Roads Authority of any change in ownership of the cables or change of Power Controller transmitting power along the cables. In all instances the Owner and Power Controller should be required to maintain an agreed contacts list with the Roads Authority.

Yours sincerely,

Central Policy, Coordination and Reform
An Roinn Iompair
Department of Transport
Lána Líosain, Baile Atha Cliath, D02 TR60
Leeson Lane, Dublin, D02 TR60
T [redacted]
gcu@transport.gov.ie www.gov.ie/transport

John Staunton

From: Louise Lynch
Sent: Tuesday 14 February 2023 10:26
To: John Staunton
Subject: FW: TII23-121774 - Proposed development of Scartmountain Windfarm

From: INFO <Information@tii.ie>
Sent: Tuesday 14 February 2023 10:14
To: Louise Lynch <[redacted]>
Subject: TII23-121774 - Proposed development of Scartmountain Windfarm

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. Forward unusual emails to spam@tobin.ie for verification.

Dear Ms. Lynch,

I acknowledge receipt of your email of 26 January 2023 relating to the above Environment Impact Assessment Report (EIAR) Scoping exercise.

Transport Infrastructure Ireland (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 the Section 28 Ministerial Guidelines '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.

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.

National Strategic Outcome 2 of the National Planning Framework includes the objective to maintain the strategic capacity and safety of the national roads network. In addition, Chapter 7 'Enhanced Regional Accessibility' of the National Development Plan, 2021 – 2030, sets out the key sectoral priority of maintaining Ireland's existing national road network to a robust and safe standard for users. This requirement is further reflected in the publication of the National Investment Framework for Transport in Ireland and also the existing Statutory Section 28 Spatial Planning and National Roads Guidelines for Planning Authorities.

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 road 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 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, including the potential haul route,

- The developer should assess visual impacts from existing national roads,

- The developer should have regard to any EIAR/EIS 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 preparing an EIAR, should have regard to TII Publications (formerly DMRB and the Manual of Contract Documents for Road Works).

- The developer, in preparing an EIAR, 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, 2006),

- The EIAR/EIS 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 (1st Rev., National Roads Authority, 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. In relation to 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 the NRA/TII TTA Guidelines which addresses requirements for sub-threshold TTA. Any improvements required to facilitate development should be identified. It will be the responsibility of the developer to pay for the costs of any improvements to national roads to facilitate the private development proposed as TII will not be responsible for such costs,

- The designers are asked to consult TII Publications 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,

- TII recommends that the applicant/developer should clearly identify haul routes proposed and fully assess the network to be traversed. Where abnormal 'weight' loads are proposed, separate structure approvals/permits and other licences may be required in connection with the proposed haul route. All structures on the haul route through all the relevant County Council administrative areas should be checked by the applicant/developer to confirm their capacity to accommodate any abnormal 'weight' load proposed.

In addition, the haul route should be assessed to confirm capacity to accommodate abnormal 'length' loads and any temporary works required.

The national road network is managed by a combination of PPP Concessions, Motorway Maintenance and Renewal Contracts (MMaRC) and local road authorities in association with TII. The applicant/developer should also consult with all PPP Companies, MMaRC Contractors and road authorities over which the haul route traverses to ascertain any operational requirements, including delivery timetabling, etc. to ensure that the strategic function of the national road network is safeguarded.

Additionally, any damage caused to the pavement on the existing national road arising from any temporary works due to the turning movement of abnormal loads (e.g. tearing of the surface course, etc.) shall be rectified in accordance with

TII Pavement Standards and details in this regard shall be agreed with the Road Authority prior to the commencement of any development on site.

- It is noted that grid connection proposals are not mapped in the EIAR Scoping Report received. However, please note any grid connection and cable routing proposals should be developed to safeguard proposed road schemes as TII will not be responsible for costs associated with future relocation of cable routing where proposals are catered for in an area of a proposed national road scheme. In that regard, consideration should be given to routing options, use of existing crossings, depth of cable laying, etc.

In the context of the existing national road network, in accordance with the National Planning Framework National Strategic Outcome no. 2 'Enhanced Regional Accessibility', there is a requirement to maintain the strategic capacity and safety of the network. This requirement is further reflected in the National Development Plan, the National Investment Framework for Transport in Ireland and also the existing Statutory Section 28 Spatial Planning and National Roads Guidelines for Planning Authorities.

There is around 99,000km of roads in Ireland, the national road network which caters for strategic inter urban travel consists of only approximately 5.4% of this. There is a critical requirement to ensure the strategic capacity and safety of this national road network is maintained and significant Government investment already made in the national road network is safeguarded.

The provision of cabling along the national road network represents a number of significant implications for TII and road authorities in the management and maintenance of the strategic national road network and Tii is of the opinion that grid connection cable routing should reflect the foregoing provisions of official policy and therefore, avoid grid connection routing proposals along national roads.

Other consents or licences may be required from the road authority for any trenching or cabling proposals crossing the national road. TII requests referral of all proposals agreed and licensed between the road authority and the applicant which affect the national road network.

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.

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 practice.

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

Yours sincerely,

Aiban Mills
Senior Regulatory & Administration Executive
Ref No. TII23-121774

TII
www.tii.ie info@tii.ie +353 (0)1 646 3600

Bonneagar Iompair Éireann

The Secretary
An Bord Pleanála
64 Marlborough St.
Dublin 1
D01 V902

by e.mail; sids@pleanala.ie

Dáta|Date
14 February, 2025

Ár dTag|Our Ref.
TII24-129857

Re. **Strategic Infrastructure Development – Proposed development of the Scartmountain Wind Farm, Scartmountain, Co. Waterford**

ABP Case ref. PA93.321522

Dear Secretary,

The Authority acknowledges receipt of referral of the above proposed Strategic Infrastructure Development Application on behalf of Futurenergy Scart Mountain Designated Activity Company.

It is proposed to address the proposed development in relation to the provisions of official policy and in relation to national road network maintenance and safety.

1. Official Policy

The Board will be aware that official policy concerning development management and access to national roads is outlined in the Section 28 Ministerial Guidelines 'Spatial Planning and National Roads Guidelines for Planning Authorities' (DoECLG, 2012).

Section 2.5 of the DoECLG Guidelines sets out policy that seeks to avoid the creation of additional access points from new development or the generation of increased traffic from existing accesses (i.e. non-public road access) to national roads, to which speed limits greater than 50 kph apply.

In that regard, the Authority acknowledges that access to all turbine locations is facilitated via local road junction L1027 with the N72, national road, in the first instance.

2. National Road Network Maintenance and Safety

In addition to the above, there are a number of operational issues related to the subject windfarm development proposal, in the Authority's opinion, that are required to be resolved to address concerns relating to network maintenance and road safety prior to any decision on this planning application.

2.1 Proposed Turbine Component Haul Route

In relation to proposed Turbine Component delivery to site, Section 2.7.2.1 of the EIAR details a turbine delivery route to site from Belview Port, indicating the N29, N25 and N72 national roads form part of the turbine delivery route.

Section 2.7.2.1 and Section 16.2.4.2.2 of the EIAR and Table 16-8 indicate the details of the accommodation works required to facilitate turbine component delivery to site. In relation to the national road network, works include;

- Hard surfacing and temporary signage demounting at the Carrick Road Roundabout on the N25,
- Hard surfacing and temporary signage demounting at the Slieverue Roundabout on the N29,
- Hard surfacing and temporary signage demounting at the Luffany Roundabout on the N25,
- Temporary signage demounting at the intersection of the N25 and N72,
- Temporary signage and bollard demounting on the N72 (where it intersects the R672).

The development description outlined in Section 2.1 of the EIAR also outlines works to include temporary improvements and modifications at the junction of the N72 and the L1027 (known as Boheravaghera Cross or Affane Cross) to facilitate delivery of oversized loads and turbine delivery. These works indicate a proposed temporary bypass of the N72/L1027 junction for turbine component delivery to site.

In the first instance, it should be noted that the national road network is managed by a combination of PPP Concessions, Motorway Maintenance and Renewal Contracts (MMaRC) and local road authorities. The applicant/developer should consult with all PPP Companies, MMaRC Contractors and road authorities over which the haul routes traverse to ascertain any operational requirements such as delivery timetabling, etc. and to ensure that the strategic function of the national road network is maintained.

TII requests referral of all proposals agreed between the road authority, PPP Concessions and MMaRC Companies and the applicant impacting on national roads. Mitigation measures identified by the applicant should be included as conditions in any decision to grant permission.

With specific reference to proposed works impacting national roads, in accordance with the National Planning Framework National Strategic Outcome no. 2 'Enhanced Regional Accessibility', there is a requirement to maintain the strategic capacity and safety of the national road network. This requirement is further reflected in the National Development Plan, the National Investment Framework for Transport in Ireland and also the existing Statutory Section 28 Spatial Planning and National Roads Guidelines for Planning Authorities.

Therefore, there is a critical requirement to ensure the strategic capacity and safety of the national road network is maintained and significant Government investment already made in the national road network is safeguarded.

To give effect to such requirements, TII outlines the following matters for the Boards consideration in the assessment of the subject proposal concerning the proposed works at the N72/L1027 Junction in particular and other minor works to the national road network in general to facilitate turbine component delivery to site;

- The proposed temporary works to the N72/L1027 Junction is for a temporary period only to facilitate turbine component delivery and thereafter any temporary access and works removed and lands reinstated. TII considers that any temporary access arrangement should be closed and lands reinstated following completion of the construction phase of development in the interests of road safety and adherence to the provisions of official policy.

- The temporary works to the N72/L1027, national road junction, should be closed off with a temporary safety barrier when not in use for turbine component delivery, as it could be misinterpreted by drivers as part of the roadway. Pending completion of construction, the temporary works shall thereafter be permanently closed and the lands reinstated.

- Any damage caused to the pavement on the existing national road at the access from the N72, national road, due to the turning movement of abnormal loads (eg. tearing of the surface course) shall be rectified in accordance with TII Pavement Standards and details in this regard shall be agreed with the Road Authority prior to the commencement of any development on site.

- It is unclear that the proposed temporary works at the N72/L1027, national road junction, has been subject to Road Safety Audit. Road user safety on the national road shall be safeguarded. A Road Safety Audit should be undertaken and recommendations of the Road Safety Audit shall be incorporated into final designs for construction and the requirements to implement the recommendations of the Road Safety Audit included as a condition on any permission granted.

- In the interests of road user safety, all works to the national road shall comply with TII Publications (formerly NRA DMRB); technical design standards for national roads.

2.2 Abnormal Weight Loads

While abnormal 'oversized' loads are addressed in the EIAR in the context of turbine component haul route proposals, no details appear to be included in the EIAR related to abnormal 'weight' loads.

Any operator who wants to transport a vehicle or load whose weight falls outside the limits allowed by the Road Traffic (Construction Equipment & Use of Vehicles) Regulations 2003, SI 5 of 2003, must obtain a permit for its movement from each Local Authority through whose jurisdiction the vehicle shall travel.

The Authority considers that it is critical a full assessment by the applicant/developer of all structures on the national road network along the haul route should be undertaken, where relevant, and all road authorities along the haul routes should confirm their acceptance of proposals by the applicant.

The Authority has reviewed the EIAR documentation referred and is concerned that no technical load assessment of structures appears to have been undertaken in support of this proposed application. However, it is acknowledged that abnormal weight loads may not be a feature of the proposed development.

The Authority considers that it is critical a full assessment by the applicant/developer of all structures on the national road network along the haul route should be undertaken, where relevant, to confirm that all structures can accommodate the proposed loading associated with the delivery of turbine and associated development components to site where the weight of the delivery vehicle and load exceeds that permissible under the Road Traffic Regulations. Specific arrangements for 'Exceptional Abnormal Loads' will also be required, where necessary.

The Authority requests referral of all proposals agreed between the road authorities and the applicant impacting on national roads.

2.3 Grid Connection Routing

Proposals for grid connection to the Dungarvan substation are noted and indicate a short section of the N72, national road, is proposed to be utilised. Section 2.1 of the EIAR confirms a second separate application will be made to An Bord Pleanála for the proposed grid connection route as it comprises development comprising or for the purposes of electricity transmission, under section 182A of the Planning and Development Act 2000.

Notwithstanding, in relation to proposed works utilising the N72, national road, as part of the grid connection routing, it is TII's opinion that the works outlined have the potential to impact the levels of safety and strategic function of the national road network in this area.

In accordance with the National Planning Framework National Strategic Outcome no. 2 'Enhanced Regional Accessibility', there is a requirement to maintain the strategic capacity and safety of the national road network. This requirement is further reflected in the National Development Plan, the National Investment Framework for Transport in Ireland and also the existing Statutory Section 28 Spatial Planning and National Roads Guidelines for Planning Authorities.

TII has identified a number of significant implications for TII and road authorities in the management and maintenance of the strategic national road network resulting from the laying of high voltage electricity cabling in the national road reservation, including;

- Impacts on embankments, bridges, drainage and road furniture infrastructure leading to future maintenance liabilities,
- Impediments to future maintenance and operations activities, such as safety barrier repair and French drain renewal,
- Impediments to future routine network improvements such as pavement overlay and strengthening, installation of new verge-side signs and other road furniture,
- Impacts on network traffic flows during installation,
- Impediment to future on-line upgrades of national roads because of the implications to road authority / TII in having to incur the additional costs of moving underground cables in order to accommodate the road improvements.

Proposals to lay cable in the national road reservation have the potential to impact road authorities and TII in undertaking future maintenance and improvement requirements. There may also be additional cost implications to national road improvements and maintenance resulting from the presence of high voltage cabling within the national road reservation.

Section 12.4.1.1 'Accelerate Renewable Electricity Generation' of the Climate Action Plan 2024 (CAP24) outlines the objective of reaching 80% of electricity demand from renewable sources by 2030 through a range of measures, including; 'All relevant public bodies will carry out their functions in a manner which supports the achievement of the renewable electricity targets, including, but not limited to, the use of road and rail infrastructure to provide a route for grid infrastructure where this is the optimal solution'.

Consistent with CAP24, for all renewable energy developments requiring grid connection to the national grid, TII recommends that a full assessment of all route alternatives for grid connection takes place, including alternatives to public road, where appropriate. In TII's experience, grid connection accommodated on national roads has the potential, inter alia, to result in technical road safety issues such as differential settlement due to backfilling trenches and can impact on ability and cost of general maintenance, upgrades and safety works to existing national roads.

Having regard to the measures identified in CAP24 and the information in relation to grid routing included in the subject application, TII recommends that it is established that the routing proposed represents the optimal routing solution.

In addition to the above, the Board will also be aware of a number of other private grid connections to the Dungarvan Substation utilising this same section of N72, national road, have been proposed, these include;

- ABP Case ref. PA93.321522 (the current application),
- ABP Case ref. PA93.318446 (Coumnagappul Wind Farm).
- ABP Case ref. PA93.317265 (Dyrick Hill Wind Farm),
- ABP Case Ref. PL93.311670 (Sunrise Energy Supply Limited).

TII understands that it is not technically feasible to lay multiple electricity connections in the same section of road arising from the required separation distances. Given these 4 proposals, this is a serious concern which highlights the absence of a plan-led and co-ordinating mechanism for private grid connections and presents significant risk to the strategic national road network maintenance and operation as well as impacting project delivery of independently proposed renewable energy projects.

It is also unclear from the documentation submitted that the scheme proposer has sought to address these interactions between permitted and proposed connections on a national road or sought collaboration with others as part of preparation of the project development to address these concerns both for the maintenance and safety of the national road network but also for effective delivery of energy projects in this area in general. TII would recommend that such issues are addressed in any subsequent application for the proposed grid connection route.

2.4 Greenways

in relation to any Greenway or Active Travel proposals in the vicinity of the proposed works, consultation with Waterford County Councils own internal project and/or design staff is recommended.

Conclusion

It is requested that the above matters are taken into consideration prior to any decision on the subject application.

In the interests of clarification, no part of this submission shall be construed as TII giving consent to access or alter any national road infrastructure assets including drainage regimes, vehicle restraint and safety systems, ducting, HDD crossings, structures, etc.

In the event that any damage is caused by any development works to the national road or associated assets, overground or underground, costs arising to fully remediate all impacted infrastructure assets to TII Publications standards and requirements will be pursued by or on behalf of TII.

Yours sincerely,

Michael McCormack
Senior Land Use Planner

TII Observation to Dyrick Hill Wind Farm (317265) whose GCR overlaps Scart Mountain GCR.

KPG

Bonneagar Iompair Éireann

The Secretary
An Bord Pleanála
64 Marlborough St.
Dublin 1
D01 V902

by e.mail; sids@pleanala.ie

Dáta|Date	Ár dTag|Our Ref.
21 July, 2023	TII22-118216

Re. Strategic Infrastructure Development – Construction of Dyrick Hill Wind Farm comprising 12 wind turbines and related works, Co. Waterford (ABP Case ref. PA93.317265)

Dear Secretary,

TII has become aware of the above Strategic Infrastructure Development application on behalf of Dyrick Hill Wind Farm Limited. Although included in the list of consultees, TII has no record of formal receipt of the application. TII outlines the following observations for the Boards consideration.

It is proposed to address the proposed development in relation to the provisions of official policy and in relation to national road network maintenance and safety.

1. Official Policy

The Board will be aware that official policy concerning development management and access to national roads is outlined in the Section 28 Ministerial Guidelines 'Spatial Planning and National Roads Guidelines for Planning Authorities' (DoECLG, 2012).

Section 2.5 of the DoECLG Guidelines sets out policy that seeks to avoid the creation of additional access points from new development or the generation of increased traffic from existing accesses (i.e. non-public road access) to national roads, to which speed limits greater than 50 kph apply.

In that regard, the Authority acknowledges that access to all turbine locations is facilitated via the regional road network in the first instance prior to access to the national road network.

2. National Road Network Maintenance and Safety

In addition to the above, there are a number of operational issues related to the subject windfarm development proposal, in the Authority's opinion, that are required to be resolved to address concerns relating to network maintenance and road safety prior to any decision on this planning application. In that regard, issues concern the proposed turbine component haul route to site and the grid connection to the Dungarvan 110kV Substation which both impact the strategic national road network.

2.1 Proposed Turbine Haul Route

In relation to the proposed Turbine Component delivery to site, Section 2.5.4 of the EIAR outlines the Turbine Component Haul Route to site from the port of entry at Belview via the N29, N25 and N72, national roads. Section 14.3.1 of the EIAR confirms that detailed analysis of the proposed turbine haul route was undertaken and is set out in Appendix 14.1 (Abnormal Indivisible Load Route Review).

Próiseálann BIÉ sonraí pearsanta a sholáthraítear dó i gcomhréir lena Fhógra ar Chosaint Sonraí atá ar fáil ag www.tii.ie.
TII processes personal data in accordance with its Data Protection Notice available at www.tii.ie.

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Appendix 14.1 outlines proposed temporary works impacting the national road network at the following locations;

- N29 Slieverue Roundabout
- N25 Luffany Roundabout
- N25 Carrick Road Roundabout
- N25/N72 Junction
- N72/R672 Junction
- N72/R672 Junction (Master McGraith Monument)

The national road network is managed by a combination of PPP Concessions, Motorway Maintenance and Renewal Contracts (MMaRC) and local road authorities. The section of national road being traversed which includes the N25 Slievrue Roundabout, the N25 Luffany Roundabout and the N25 Carrick Road Roundabout is within the N25 Waterford Bypass PPP Contract Area and is managed and operated by the PPP Concession (Celtic Roads Group (Waterford) Ltd.)

The applicant/developer should consult with all PPP Companies, MMaRC Contractors and road authorities over which the haul route traverses to ascertain any operational requirements such as delivery timetabling, etc. and to ensure that the strategic function of the national road network is maintained.

Any proposed works to the national road network to facilitate turbine component delivery to site shall comply with TII Publications and shall be subject to Road Safety Audit as appropriate. Works should ensure the ongoing safety for all road users and prior to any development necessary licenses, approvals or agreements with PPP Concessions, Motorway Maintenance and Renewal Contracts (MMaRC) Companies and local road authorities, as necessary, shall be in place.

TII requests referral of all proposals agreed between the road authority, PPP Concessions and MMaRC Companies and the applicant impacting on national roads. Mitigation measures identified by the applicant should be included as conditions in any decision to grant permission.

Any damage caused to the pavement of the existing national road due to the turning movement of abnormal 'length' loads (eg. tearing of the surface course) shall be rectified in accordance with TII Pavement Standards and details in this regard shall be agreed with the Road Authority prior to the commencement of any development on site.

2.2 Abnormal Weight Loads

While abnormal 'oversized' loads are addressed in the EIAR in the context of turbine component haul route proposals, no details appear to be included in the EIAR related to abnormal 'weight' loads.

Any operator who wants to transport a vehicle or load whose weight falls outside the limits allowed by the Road Traffic (Construction Equipment & Use of Vehicles) Regulations 2003, SI 5 of 2003, must obtain a permit for its movement from each Local Authority through whose jurisdiction the vehicle shall travel.

The Authority considers that it is critical a full assessment by the applicant/developer of all structures on the national road network along the haul route should be undertaken, where relevant, and all road authorities along the haul routes should confirm their acceptance of proposals by the applicant.

The Authority has reviewed the EIAR documentation referred and is concerned that no technical load assessment of structures appears to have been undertaken in support of this proposed application. However, it is acknowledged that abnormal weight loads may not be a feature of the proposed development.

The Authority considers that it is critical a full assessment by the applicant/developer of all structures on the national road network along the haul route should be undertaken, where relevant, to confirm that all structures can accommodate the proposed loading associated with the delivery of turbine and substation components to site where the weight of the delivery vehicle and load exceeds that permissible under the Road Traffic Regulations.

The Authority requests referral of all proposals agreed between the road authorities and the applicant impacting on national roads.

2.3 Grid Connection Routing

Section 2.2 of the EIAR outlines that the proposed development also includes proposals for the connection of the wind farm to the national electricity grid via a 110 kV underground cable connection approximately 16km in length to the existing Dungarvan 110 kV Substation; approx. 1.2km of the grid connection routing is proposed within the N72, national road.

Drawing Sheet No. 05829-DR-101 outlines the extent of works to the section of N72, national road, impacted, including the grid connection routing, Joint Bays 1 and 2 and a HDD crossing of the River Colligan in the vicinity of Kildangan Bridge which is a national road structure (TII Structure ID: WC-N72-007.00). TII has not agreed nor consented to any works in the national road.

The works outlined have the potential to significantly impact the levels of safety and strategic function of the national road network in this area. The Board will also note that this issue was brought to the attention of the application team in the course of EIAR Scoping and TII advised that alternatives to grid connection routing in the national road should be identified.

In accordance with the National Planning Framework National Strategic Outcome no. 2 'Enhanced Regional Accessibility', there is a requirement to maintain the strategic capacity and safety of the national road network. This requirement is further reflected in the National Development Plan, the National Investment Framework for Transport in Ireland and also the existing Statutory Section 28 Spatial Planning and National Roads Guidelines for Planning Authorities.

TII has identified a number of significant implications for TII and road authorities in the management and maintenance of the strategic national road network resulting from the laying of high voltage electricity cabling in the national road reservation, including;

- Impacts on embankments, bridges, drainage and road furniture infrastructure leading to future maintenance liabilities,
- Impediments to future maintenance and operations activities, such as safety barrier repair and French drain renewal,
- Impediments to future routine network improvements such as pavement overlay and strengthening, installation of new verge-side signs and other road furniture,
- Impacts on network traffic flows during installation,
- Impediment to future on-line upgrades of national roads because of the implications to road authority / TII in having to incur the additional costs of moving underground cables in order to accommodate the road improvements.

Proposals to lay cable in the national road reservation, including the construction of associated joint bays, such as that outlined in the subject application, have the potential to impact road authorities and TII in undertaking future maintenance and improvement requirements. There may also be additional cost implications to national road improvements and maintenance resulting from the presence of high voltage cabling within the national road reservation.

In addition to the foregoing, it does not appear that the impact on traffic flows, delays, etc. of necessary traffic management measures to facilitate construction in the N72, national road, has been considered in any detail in the EIAR.

None of the above concerns appear to have been factored into the applicants consideration of the proposed cable routing which is proposed to utilise the strategic national road network.

TII is also concerned with what appears to be a significant lack of co-ordination in grid connection proposals in the vicinity. TII is aware of a permission, notwithstanding the recommendations of TII on the relevant application, for grid connection routing along this section of N72, national road, granted under ABP Case Ref. PL93.311670

following an appeal against the decision of Waterford City and County Council to initially refuse the application under ref. 21/735 (Sunrise Energy Supply Limited).

In the interests of safeguarding the investment in and the potential for future upgrade works to the national road network, the Authority is of the opinion that the Proposed Grid Connection Cable Routing fails to address important policy considerations impacting national roads.

There is a critical requirement to ensure the strategic capacity and safety of the national road network is maintained and significant Government investment already made in the national road network is safeguarded. TII is of the opinion that the proposed grid connection cable routing does not reflect the foregoing provisions of official policy and recommends that an alternative grid connection proposal is prepared.

In addition to the foregoing, TII notes proposals for grid connection routing by HDD crossing in the vicinity of Kildangan Bridge which is a TII Structure (Structure ID: WC-N72-007.00) and TII has not confirmed any acceptance for the proposals related to TII Structures included in the subject application.

There are Technical Acceptance requirements relating to modification or works impacting TII Structures and insufficient information has been provided in the subject application to demonstrate that the proposed works can be accommodated in the manner proposed. TII recommends identification of an alternative grid connection routing avoiding impact to national roads and associated structures in the interests of safeguarding the investment in and levels of safety on the strategic national road network in accordance with the provisions of official policy.

2.4 Greenways

In relation to any Greenway or Active Travel proposals in the vicinity of the proposed works, consultation with Waterford City and County Councils own internal project and/or design staff is recommended.

2.5 TII Publications

TII notes reference to the NRA DMRB (Design Manual for Roads and Bridges) in Section 14.2.2 Table 14.1 of the EIAR and advises that the NRA DMRB has been superseded by TII Publications (www.tiipublications.ie) which contains all relevant standards relating to national roads.

Conclusion

It is requested that the above matters are taken into consideration prior to any decision on the subject application.

Yours sincerely,

Michael McCormack
Senior Land Use Planner

An Roinn Tithíochta,
Rialtais Áitiúil agus Oidhreachta
Department of Housing,
Local Government and Heritage

Your Ref: **ABP-321522-24**
Our Ref: **SID-WD-2024-37**
(Please quote in all related correspondence)

28 February 2025

The Secretary
An Bord Pleanála
64 Marlborough Street
Dublin 1
D01 V902

Via email to laps@pleanala.ie

Re: Notification under the Planning and Development Act, 2000, as amended.

Proposed Strategic Infrastructure Development (SID): Proposed wind farm development, which comprises 15 no. wind turbines, a 110kV substation and associated works. It is located within the townlands of Coolagortboy, Crinnaghtaun West, Feddaun, Glennafallia, Knockboy, Knocknafrehane, Knocknanask, Knocknasheega, Lackenrea, Moneygorm, Moneygorm East, Scartmountain, Toor, and Tooranaraheen, County Waterford.

A chara

I refer to correspondence received in connection with the above.

Outlined below are heritage-related observations/recommendations of the Department under the stated headings.

Archaeology

It is noted that the Environmental Impact Assessment Report (EIAR) submitted as part of the planning application includes a desk-based Archaeological Impact Assessment (AIA) which was carried out in relation to the proposed development by IAC Ltd (EIAR Chapter 15; date December 2024).

The proposed development is located in general proximity to a number of Recorded Monuments which are subject to statutory protection under Section 12 of the National

Monuments (Amendment) Act 1930-2014. The EIAR acknowledges that there is a potential that previously unknown sub-surface archaeological features or deposits may be present within the proposed development site (PDS), which may be negatively impacted by the proposed development. The Department notes that no advance archaeological investigations have been carried out within the PDS to inform the EIAR, other than a walkover survey. The Department advises that advance archaeological test excavation should be carried out in advance of any development to determine if previously unknown sub-surface archaeological features or deposits are present. If such material is present, then additional mitigation measures to ensure the preservation in situ or preservation by record (i.e. full archaeological excavation) of such discoveries will be necessary. The Department advises that this can be addressed by the inclusion of an appropriate condition if the development is permitted.

This Department therefore, advises that the following should be included as a condition of any grant of permission. Note these recommended conditions align with Sample Conditions C3, C5 and C6 as set out in *OPR Practice Note PN03: Planning Conditions* (October 2022), with appropriate site-specific additions/adaptations based on the particular characteristics of this development and informed by the findings of the EIAR.

Archaeological Requirements:

1. All mitigation measures in relation to archaeology and cultural heritage as set out in Chapter 15 of the EIAR (IAC Ltd; date December 2024) shall be implemented in full, except as may otherwise be required in order to comply with the conditions of this order.

2. In addition, the developer shall engage a suitably qualified archaeologist (licensed under the National Monuments Acts) to carry out pre-development archaeological testing in areas of proposed ground disturbance and to submit an AIA report for the written agreement of the planning authority, following consultation with this Department, in advance of any site preparation works or groundworks, including site investigation works/topsoil stripping/site clearance and/or construction works.
   a. The report shall include an archaeological impact statement and mitigation strategy. Where archaeological material is shown to be present, avoidance, preservation in-situ, preservation by record (archaeological excavation) and/or monitoring may be required.

   b. Any further archaeological mitigation requirements specified by the planning authority, following consultation with this Department, shall be complied with by the developer.



c. No site preparation and/or construction works shall be carried out on site until the archaeologist's report has been submitted to and approval to proceed is agreed in writing with the planning authority.

3. The Construction Environment Management Plan (CEMP) shall include the location of any and all archaeological or cultural heritage constraints relevant to the proposed development as set out in Chapter 15 of the EIAR and by any subsequent archaeological investigations associated with the project. The CEMP shall clearly describe all identified likely archaeological impacts, both direct and indirect, and all mitigation measures to be employed to protect the archaeological or cultural heritage environment during all phases of site preparation and construction activity.

4. The applicant shall retain the services of a suitably qualified archaeologist to advise on an archaeological mitigation plan for decommissioning of the development, to include mitigation measures for the removal of the turbines and the protection of any archaeological sites and monuments that may be *in situ* at the site. The Decommissioning Plan shall include the location of any archaeological or cultural heritage constraints as set out in Chapter 15 of the EIAR and by any subsequent archaeological investigations associated with the project. It shall clearly describe all identified likely impacts from decommissioning—both direct and indirect—and all mitigation measures to be employed to protect the archaeological or cultural heritage environment during decommissioning works.

5. The planning authority and this Department shall be furnished with a final archaeological report describing the results of all archaeological monitoring and any archaeological investigative work/excavation required, following the completion of all archaeological work on site and any necessary post-excavation specialist analysis. All resulting and associated archaeological costs shall be borne by the developer.

Reason:
To ensure the continued preservation (either *in situ* or by record) of places, caves, sites, features or other objects of archaeological interest.

Nature Conservation

Thank you for your correspondance on this application. In relation to impacts on nature conservation and biodiversity in general, this Department has the following observations which are intended to assist in identifying potential impacts from the current proposal.



This Department has significant ecological concerns in relation to proposed turbines 1-9 and associated infrastructure located on Knocknanask and linked areas. These are located on upland habitats in largely undisturbed areas which contain nationally declining habitats of conservation interest and provide habitat to nationally declining species of conservation concern. Turbines 1-9 and linked infrastructure would in the view of this Department adversely impact these interests with turbines 1-5 the most damaging of these.

It is important when considering this site to see it as a part of a larger interconnected complex of declining upland habitat which requires substantial scale to be ecologically functional and sustainable. The project proposes the direct removal of the Habitats Directive[1] Annex I habitats Dry siliceous heath (0.33 hectares) and Wet heath (2.79 hectares). In addition, there will be extensive hydrological effects on both heath habitats and on Annex I Blanket Bog habitat. At Knocknanask, "*infrastructure will encircle three quarters of the upland blanket bog*" (Alterations of Groundwater Flow, EIAR Chapter 6, p60), this area is not quantified by the Environmental Impact Assessment Report but approximate scaling of drawings indicates the area upslope of infrastructure to exceed 100 hectares of Annex I habitat with an additional area of Annex I habitat down slope of infrastructure also likely to be impacted. Each of these Habitat's Directive Annex I habitats is of ecological value but they are of increased importance in this location because they occur in close proximity to similar habitats within the greater Knockmealdown Mountains area. The greater the area of a habitat the more robust it is, more likely to withstand pressures, have the ability to recover from damaging events and more likely to provide habitat for habitat specialists such as red grouse and wide ranging upland species such as hen harrier, golden plover, merlin etc..

Conversely, for the same reasons, the removal of such connected habitats reduces the robustness of adjoining related habitat. The Department acknowledges, as pointed out in the EIAR that these habitats have in places undergone some damage; however, they remain Habitats Directive listed Annex I habitats of conservation value; references to poor condition in the assessment relate to current conditions in specific areas due to recent management, these pockets will return to better condition if managed appropriately and furthermore these pockets occur within a larger landscape of Annex I and related habitats and should be seen in this context. Areas within the site which were historically cut for peat are no longer cut and are rehabilitating well with substantial unassisted natural heath recovery. It would be of concern if ecologically inappropriate management of an area of conservation value leading to some degradation could facilitate or become possible justification for further more serious degradation of the habitat by another means while simultaneously adversely affecting

[1] Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.

adjacent annexed habitat by reducing continuity of habitats, connectivity and the ability to buffer damaging occurrences. Upland habitats routinely occur in mosaic form and degraded blanket bog where it cannot be restored often becomes wet or dry heath, also of ecological significance, the fact that habitats may be damaged or not fit perfectly into a classification does not mean that they are not ecologically valuable.

In the view of the Department, Knocknanask contains significant areas of Annex I habitat and these habitats are of ecological value, both for their own inherent value and for the conservation of other dependant species. The connectivity and ecological continuity of these habitats would be adversely impacted by the development.

Both "active" (peat forming) and "inactive" blanket bog are the Annex I [7130] habitat referred to in the Habitat's Directive. Both are of ecological importance but active blanket bog is accorded a further priority status under Habitats Directive with additional legal significance. Reference to "non-priority" is not a reflection of a lack of importance, it simply distinguishes it from the rarer priority habitat but "non-priority" blanket bog is also the Annex I habitat referenced by the Habitats Directive and of significant ecological value.

It is notable that an area of the "priority" blanket bog habitat was also recorded within the site as part of the habitat mix in addition to the very large area of Annex I blanket bog. The existence or sustainability of "priority habitat" is often directly related to adjoining or supporting "non-priority" habitat. If the development proceeds it appears clear that adverse hydrological impacts on such water table dependant habitats, ringed by infrastructure will occur and be significant. Intermittent drainage pipes under proposed roads as proposed mitigation are not in any way a substitute for the hydrological conveyance value of natural peatland habitat and may lead to additional erosional problems by channelling of water which is currently naturally distributed interstitially over large area within the peat. Excavated peat faces and underlying soil faces on the up slope side of infrastructure, particularly the circular connecting road, will inevitably constantly leach water that otherwise would be retained within the peat for a much slower gradual release to lower habitats. Such leaching and conversion of interstitial water to surface water is already visible in many places along the existing excavated track/firebreak around the north and east margins of the site.

The large scale excavation required on steeply sloping land for the proposed development would be in addition to and of hugely greater scale and depth than existing cuts. This leached subsurface water will then become surface water with erosional potential creating a double adverse impact. Both of these actions will have obvious adverse impacts on the annexed habitats but more general environmental factors may also be impacted through increased release of carbon from the peat due to drying and mobilisation of sediment in surface waters

with downstream adverse implications. These are adverse effects that environmental projects elsewhere are, with considerable difficulty, trying to reverse.

The EIAR points out that management of the site has caused some degradation in quality of habitat through grazing regime and inappropriate burning and there are some elements of this but in the view of this Department it remains Annex I habitat that can restore itself to better condition again through appropriate management. Many areas of habitat within formally designated sites are also damaged through management practices but this is not a reason to disregard them. The current Irish national assessment[2] of the conservation status for all three annex I habitats; wet heath, dry heath and blanket bog is classified as "Bad". It is expected that increasing regulation combined with increasing public awareness and increasing financial incentives (ACRES CP, EIPs etc.) to better manage such upland areas will in time improve ecological conditions. Ecologically rich areas such as Knocknanask are likely to be those targeted for further future environmental and ecological schemes such as those likely to be required under the now in place Nature Restoration Regulations[3].

The Knocknanask and Broe Mountain area is included in the national reference area for Blanket Bog, Wet Heath and Dry Heath Annex I habitats on which Ireland must report on under the terms of the Habitats Directive. The overall objective of the Habitats Directive, in particular Articles one and two, is to ensure that certain listed species and habitat types, including Annex I habitats, are maintained, or restored, to a favourable conservation status within the EU. This applies across member states and not just inside the Natura 2000 network. In terms of Article 17 Guidance, the area of these habitats is among the three criteria that Ireland is obliged to assess and report on. The Favourable Reference Area (FRA) is the total national area that a habitat should cover in order for "Area" of the habitat to be considered in "*Favourable Conservation Status*". According to the guidance[4]; the FRA cannot be smaller than the habitat area at the date of entry into force of the Directive and must be without significant changes in distribution pattern within range. The most recent assessment[5] (2019), determined that both the short term and long term trend in the area of the FRA for Wet heath [4010] in Ireland was decreasing with future prospects listed as Poor and summarised overall conservation status as Bad with a decline in the habitat overall and in particular an increase in the area with unfavourable Structure and functions, wind farm development is listed as one of the issues for this habitat. In the case of Dry heaths [4030]

[2] NPWS_2019_Vol1_Summary_Article17.pdf
[3] Regulation (EU) 2024/1991 of the European Parliament and of the Council of 24 June 2024 on nature restoration and amending Regulation (EU) 2022/869.
http://data.europa.eu/eli/reg/2024/1991
[4] https://www.eionet.europa.eu/etcs/etc-be/activities/reporting/article-17/docs/art17-public-consultation-guide.pdf
[5] NPWS_2019_Vol1_Summary_Article17.pdf

area trends are also decreasing with future prospects determined as Poor and summarised overall conservation status as Bad. For Blanket Bog [7130] overall conservation status is assessed as Bad and deteriorating with wind farm construction listed as one of a number of issues of concern. Further losses would be incompatible with attaining the FRA.

Hen Harrier

Hen Harrier is included on Annex I of the EC Birds Directive[6] and based on the latest Breeding Hen Harrier Survey[7], the Republic of Ireland national breeding population is in the range of 85–106 pairs. The population is 33% smaller than the population in 2015 and there was a 27% contraction in breeding range during the same period. The 2015 survey previously recorded an 8.7% decline in population since 2010. The magnitude of decline in total numbers of breeding pairs of hen harrier in Ireland is unsustainable and appears to have increased since 2015[4]. Nationally, non-designated areas hold approximately 48.1% of the known breeding territories.

The proposed development site is entirely within the non-designated Important Breeding Area (IBA 16) Knockmealdowns–Kilworth identified in the Hen Harrier national surveys. This area was not selected as a Special Protection Area (SPA) but to provide context on the value of this site, criteria used for SPA designation included if used regularly by 1% or more of the all-Ireland population of a species listed in Annex 1 of the Birds Directive in any season; the Knockmealdown area significantly exceeds this threshold.

The EIAR has gathered valuable data on hen harrier usage and Section 7.3.2.1 (p 7-18) details that up to five hen harrier territories were recorded during the study area surveys, this would equate to between 4.7 and 5.9% of the 2022 recorded national population in a study area only a fraction of the overall Knockmealdowns area. The 1-2 pairs recorded for the Knockmealdowns in the 2022 national survey were not at Knocknanask, so a combined estimate of the two locations would bring the Knockmealdowns area to between approximately 6.6 and 8.2% of the national population. The ornithological assessment further underlines this with over 133 flightlines recorded during the vantage point surveys of winter 2022/23 and summer 2024, these are the flightlines detected during survey samples, they are not all flightlines and therefore reflect only a fraction of actual usage. It is clear the site is both a breeding site and a foraging site and that there is a long history of the site being used

[6] Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds [also See amending acts].
[7] Ruddock, M., Wilson-Parr, R., Lusby, J., Connolly, F., J. Bailey, & O'Toole, L. (2024). The 2022 National Survey of breeding Hen Harrier in Ireland. Report prepared by Irish Raptor Study Group (IRSG), BirdWatch Ireland (BWI), Golden Eagle Trust (GET) for National Parks & Wildlife Service (NPWS). Irish Wildlife Manuals, No. 147. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Ireland.

by hen harriers which continues up to the present day. It is a national stronghold for the species and is identified as such in national surveys.

Article 4(4) of the European Birds Directive specifies that Member states shall strive to avoid pollution or deterioration of habitats and in case C-374/98[8] the European Court of Justice held (paragraph 47) that "*It is clear, therefore, that areas which have not been classified as SPAs but should have been so classified continue to fall under the regime governed by the first sentence of Article 4(4) of the Birds Directive*". In parallel with the national picture the 2022 survey recorded a decline in the Knockmealdown/Kilworth/Comeragh area since the 2015 survey, down from 5-7pairs to 1-2 pairs but nevertheless still used by greater than 1% of the national population. The EIAR for this project strongly suggests more territories are present in the proposed development site area than were reflected in the 2022 national survey and underlines the national significance of the area.

The Hen Harrier Threat Response Plan 2024-2028[9] notes the considerable overlap between the breeding range of hen harrier and the upland areas in which wind energy development has been concentrated in Ireland and references the Windharrier[10] project carried out by University College Cork between 2012 and 2014. This examined a range of potential impacts of wind energy development on Hen Harrier and found: (i) that while statistically non-significant, breeding success was lower within 1000 metres of wind turbines, although sample sizes were relatively small; and (ii) that, based on composite considerations of findings, it is possible that lower breeding success recorded within 1000 metres of wind turbines reflects a biologically relevant pattern. In addition, the density of all bird species, including likely prey species for hen harrier, was lower at wind energy development sites than control sites, and lower again closer to turbines. Windharrier found that the risk of direct collision with wind turbine rotors was low. However, since its conclusion in 2015, this Department has received evidence of one possible and three probable/confirmed incidences of hen harrier mortality caused by turbine strike[5].

The 2015 national survey noted that "*Three of the five confirmed pairs in the Knockmealdowns are in heather moorland which is perhaps more extensive and of higher quality here than elsewhere in Munster. Use of heather moorland sites is likely to be more stable over time than afforested sites*". The proposed development site is part of an upland

[8] Commission of the European Communities v The French Republic, Case C-374/98, European Court of Justice (sixth Chamber) 7 December 2000. C-374/98, Commission v. France - Basses Corbières - Part II - Nature and biodiversity cases. Ruling of the European Court of Justice - Books and Journals - VLEX 457793

[9] https://assets.gov.ie/304583/3c321ea1-c7bc-494d-b809-0a310be70a80.pdf

[10] Wilson M., Fernández-Bellon D., Irwin S., O'Halloran J. 2015. The interactions between Hen Harriers and wind turbines. Windharrier: final project report. https://www.ucc.ie/en/media/research/planforbio/forestecology/WINDHARRIE RFinalProjectReport.pdf

range that is identified as an important non designated breeding area for hen harrier[4] and the development site itself on its own is core habitat to a nationally significant number of birds. Apart from its own inherent value we consider hen harrier an indicator species for upland habitat. When it occurs consistently as it does at this site it indicates the presence of a high quality habitat. The consistent occupancy of the site by declining resident BOCCI red-listed[11] species such as red grouse, woodcock, kestrel (347 recorded flightlines) and snipe further supports this view. The lesser but repeated occurrence of other Annex I bird species such as wintering golden plover and merlin (nest outside site at present but development site likely within the breeding territory, nests can move from year to year) again point to a habitat of significant value.

Golden Plover

The Department has concerns in relation to the survey and associated assessment of implications of the development on the Annex I species Golden Plover. It is noted that the assessment states "*Golden Plovers were not recorded using habitats within the wind farm*" and "*there are no records of birds on the ground in the vicinity of Knocknanask Hill*" (EIAR 7.4.2.2 and 7.4.2.3). In preparation of these comments an ecologist from this Department carried out one single visit to Knocknanask Hill on 31-01-25. During this relatively short visit which included traversing the hill, a flock of 49 golden plover were unintentionally flushed from the ground on the western slope of Knocknanask. For approximately 10 minutes this flock circled the hill at various heights before descending again on the south eastern side of the hill. During this circling they ranged a number of times around the proposed locations of turbines and at heights that regularly would be within the 50-180 metres sweep zone of the turbines. This Department considers it unlikely this was a random once off occurrence and question whether survey methods were sufficient to detect birds such as these. Distant vantage points may not see birds on the ground that are not flushed from the surface and in addition there can be large depressions or hollow areas that are not sufficiently visible in viewsheds. A walked winter transect survey method would in the view of this Department have been the appropriate method to detect this species. Similarly, due to their cryptic nature and behaviour, snipe, woodcock and red grouse winter numbers are not in the opinion of this Department correctly reflected by the vantage point survey and are therefore under reported in the assessment. It is noted that golden plover flock flightlines were detected over the site with 50 flightlines in the winter vantage point survey 2022/23, with median flock size 28 birds and a maximum flock size 140. It is also noted that the 2022/23 records were smaller than the flock sizes in the previous winters, with 160-649 bird flock size recorded. As would be expected the highest concentrations of flightline densities were detected over the open habitats at Knocknanask and Broe Mountain. While acknowledging birds also overfly the site,

[11] Gilbert G., Stanbury A. & Lewis L. 2021. Birds of Conservation Concern in Ireland 4: 2020–2026. Irish Birds 43: 1–22.

the Department considers these sightings likely indicate a significant level of undetected usage on the ground. Based on experience at other similar sites including the EIAR survey data from the adjacent Broe Mountain (Dyrick Hill Windfarm) site, EIAR data from the proposed Coumnagappul Windfarm and experience of similar habitat more generally within the Knockmealdowns mountain range, the Department considers that there is a winter golden plover presence on the site which is not adequately assessed.

Nocturnal movements of and feeding of golden plover are well established[12], it is possible that there are nocturnal movements of golden plover both on the site, over the site or between the site and surrounding farmland or areas designated for this species some distance away (Dungarvan Harbour, Blackwater Estuary, Blackwater Callows). There has been no measurement of such nocturnal movements and no consideration of this in the EIAR and it remains an unquantified potential adverse impact. The EIAR has considered diurnal movement of golden plover from the Blackwater Estuary SPA (approximately 21 kilometres away) and Dungarvan Harbour SPA (approximately 11 kilometres away) which have golden plover as a listed Qualifying Interest (QI); however, there is no consideration of nocturnal movement from any designated site or the general hinterland and no consideration of diurnal or nocturnal movement from the closer Blackwater Callows SPA (approximately 10 kilometres) where while golden plover is not a named Q.I. the more general term "*Waterbirds*" is. Golden plover are included in this migratory waterbird category and do occur in the Blackwater Callows SPA and in the view of this Department, potential adverse ex-situ effects on birds moving from this site should have been considered. The Department acknowledges, however, that movement from this site if occurring is likely small relative to movement from foraging habitat in the general hinterland.

Displacement from core habitat remains the greatest concern with golden plover as with other species but it should also be considered that collision risk estimates in the EIAR are based on diurnal records and do not reflect nocturnal movements which apart from perhaps being numerically different presumably are also at increased risk due to reduced visibility at night and especially reduced visibility in nocturnal weather events such as fog, or precipitation in winter conditions. It is also unclear what the effect of lights on turbines, as proposed, would be in such conditions with some studies indicating they may attract birds rather than increase avoidance. The addition of lighting on wind turbines may in some circumstances reduce collision risk from lack of visibility but it is documented[13] that in adverse weather conditions

[12] Gillings, S., Fuller, R.J. & Sutherland, W. 2005. Diurnal studies do not predict nocturnal habitat choice and site selection of Eurasian Golden Plovers Pluvialis apricaria and Northern Lapwings Vanellus vanellus. Auk Volume: 122

[13] Avery, M. L., P. F. Springer, and N. S. Dailey. 1980. Avian Mortality at Man-made Structures: an annotated bibliography (revised). U.S. Fish & Wildlife Service, Biological Services Program, National Power Plant Team, FWS/OBS-80/54. Washington, DC: U.S. Government printing office.

(low ceiling, fog, precipitation) night migrating birds congregate around lighted structures. These birds have lost access to normal orientation cues and tend to approach lights, become disorientated, and fly about in the lighted area, this would increase collision risk and such scenarios are not accounted for in collision risk estimates.

Red Grouse

The results of the 2006-2008 Irish national Red Grouse survey[14] showed a dramatic decline in the Irish population over the last 40 years and estimated that the breeding range has declined by 50%. Red grouse can only survive in large areas of heather and Knocknanask hill contains a large area of suitable red grouse habitat, particularly valuable because it is connected to other habitat and other birds in the Knockmealdown range which in the national survey had the 11th largest population in the country. The EIAR appears to conclude that Knocknanask Hill consistently contains only one breeding red grouse territory with adjoining territories outside the site. This Department agrees that the site is occupied red grouse habitat and that there are connected territories adjoining but the Department is not clear on the survey methodology used to quantify the size of the population. Vantage point surveys are wholly inadequate to make any such assessment and there is a lack of clarity on the exact methodology of the Breeding Distribution Surveys (BDS). It is noted from Appendix 7-4, 7-5 that these were based on elements of other survey methods designed for lowland breeding waders and moorland species but it is not clear what exactly was done, how much of the site was covered or at what intensity, the only information is that there were four visits in the 2023 season only.

In the view of this Department, a specific red grouse survey method involving call playback methods, transects and dropping analysis would be required to estimate the breeding density of these birds on Knocknanask. Other methods may be useful for presence absence recording but are not a reliable indicator of density. There appears to have been no attempt to measure the number of grouse on site in winter when numbers may be larger. While red grouse have been recorded as one of the species less affected by collision risk and displacement, the development will directly remove areas of existing undisturbed heather habitat and introduce new potential adverse edge effects through predation particularly nest predation and disturbance from access roads and other infrastructure. Distance to edge of nesting habitat has been found to be the most important predictor of nest predation with one

[14] Cummins, S., Bleasdale, A., Douglas, C., Newton, S., O'Halloran, J. & Wilson, H.J. (2010) The status of Red Grouse in Ireland and the effects of land use, habitat and habitat quality on their distribution. Irish Wildlife Manual No. 50. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin, Ireland.

study[15] on grey partridge in Europe finding predation probability increasing from 18.5% at 85.5m to 66.8% at the edge habitat. Therefore, increasing edge can have adverse impacts well beyond the immediate footprint. Proposed infrastructure will create a large amount of edge.

The lack of clarity on the nature of the Breeding Distribution Survey also raises questions on recorded densities of snipe and woodcock and there is no reliable information on wintering densities of these species as vantage point surveys are not suitable for these species.

Overview of impacts on key avian receptors

In the Department's opinion the assessment of the significance of the impact of the development on the key avian receptors is underestimated. Apart from collision risk and direct removal of habitat for infrastructure, it is generally accepted[16] that wind turbines and associated infrastructure will cause displacement of certain species on adjoining habitat, this includes hen harrier and golden plover but also other red-list birds of conservation concern such as snipe and to a lesser extent meadow pipit. While the extent of documented habitat displacement may be debated and varies between species; for hen harrier 2-300 metres of foraging habitat[17] with reduced usage[18] up to 500 metres has been mooted.

It should be noted that where displacement guidance is available for example McGuinness 2015[19] it is qualified guidance based on studies carried out much earlier than 2015 when turbines were far smaller than the turbines being proposed in this case. The EIAR references some studies which found low displacement effects on hen harrier and considers that 250 metres is a "precautionary" distance to assume 100% displacement and it derives this from a study (Pearce-Higgins *et al.* (2009)); however, while the EIAR explores statistical assumptions as to why 250 metres may be larger than reality in that particular study, it overlooks the much larger fact that the study used data from several windfarms where the hub heights of turbines varied between 30 and 60 metres with no turbine hub above 60 metres, the proposed turbines in this case will have hub heights of 102.5-110.5 metres with proportionately larger blades and sweep zones.

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[15] Laux A., Mayer K., Beeke W., Waltert M. and Gottschalk E. 2024. Distance to the edge and other landscape features influence nest predation in grey partridges. Animal Conservation volume 27, Issue 2, pp 196-211.

[16] Pearce-Higgins, J.W., Stephen, L., Langston, R.W., Bainbridge, I.P. and Bullman, R. (2009). The distribution of breeding birds around upland wind farms. Journal of Applied ecology, 46: 1323-1331.

[17] Madders, M & Whitfield, D.P. (2006). Upland raptors and the assessment of windfarm impacts. Ibis, 148, 43–56.

[18] Pearce-Higgins, J.W., Stephen, L., Langston, R.W., Bainbridge, I.P. and Bullman, R. (2009). The distribution of breeding birds around upland wind farms. Journal of Applied Ecology 46: 1323-1331.

[19] Mc Guinness, S., Muldoon, C., Tierney, N., Cummins, S., Murray, A., Egan, S. & Crowe, O. (2015). Bird Sensitivity Mapping for Wind Energy Developments and Associated Infrastructure in the Republic of Ireland. BirdWatch Ireland, Kilcoole, Wicklow.

The Department is not aware of studies of displacement around these much larger modern turbines but consider it possible that displacement zones are proportionately larger and that 250 metres may be a considerable underestimate. This is in addition to the fact that while above referenced study used a statistical analysis to derive a displacement zone of 250 metres for foraging areas it also noted a 52.5% reduction in harrier activity within 500 metres of operating turbines and another study[20] calculated disturbance displacement distance of 500-750 metres for breeding and resting harrier locations, Currie (1997)[21] recommended a safe working distance for forestry of 1000 metres. The previously mentioned Windharrier Irish study found likely negative effects on breeding outcomes up to a radius of 1 kilometre from turbines.

The difference between turbines of the size now proposed and the impacts of much smaller turbines in research used as evidence to quantify impacts needs to be considered. This Department is not convinced, in the absence of evidence, that dramatically larger turbines than previous studies will not also have a greater impact on displacement. The turbines proposed in this case are of the order of twice the height and sweep of the largest turbines in earlier studies on which referenced displacement distances were estimated. It is possible that displacement distances may therefore also be greater[22] and as a consequence may adversely affect sensitive species identified in surveys over a greater distance than the EIAR recognises. This might not be a concern if the habitats and species concerned were widespread and abundant such as coniferous forestry or improved grassland; however, they are not, they are in decline, limited in availability and are important habitat for species which are of conservation concern and themselves in decline in the surrounding much greater area of intensively managed agricultural landscape.

Consideration of displacement at this site has only considered a circular displacement zone around each single turbine and calculated habitat loss on that basis, this might be reasonable for linear turbine arrangements (e.g. turbine 6 and 7); however, at Knocknanask turbines 1-5 are proposed in a large circular array with any habitat upslope of the turbines significantly separated from lower habitat by the 180 metre high turbine arrangement and connecting infrastructure. The turbines will effectively create a ring of disturbance around any upslope habitat. For this reason, the Department is concerned that sensitive avian receptors such as

[20]Ruddock, M. and Whitfield, D.P. 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage.
[21] Currie, F. & Elliott, G. (1997) Forests and Birds: A Guide to Managing Forests for Rare Birds. Forest Authority, Cambridge and Royal Society for the Protection of Birds, Sandy, UK.
[22] Hötker, H., Thomsen, K.-M. & Jeromin, H., 2006. Impacts on biodiversity of exploitation of renewable energy sources: The example of birds and bats. Report by Nature and Biodiversity Conservation Union (NABU).

hen harrier or golden plover may largely avoid this upslope area even though it may be outside what would ordinarily be considered the displacement zone. On the down slope side, the turbines will create a narrow corridor between themselves and the existing mature forestry on the north, south and eastern sides, again potentially excluding sensitive species from habitat that might technically be outside estimated displacement zones estimated from other studies, as open country birds are likely to avoid forestry edge due to predation risk and avoidance of tall vegetation. The proposed narrow corridor adjoining forest edge would be inferior habitat to open moorland. Thus a significantly larger area of foraging and breeding habitat could be lost than is apparent from the EIAR. The Department considers that most of Knocknanask Hill will likely be severely compromised as a foraging and breeding area if the development proceeds. This is not to say occasional birds could not temporarily use parts the site but it would become a substantially inferior and less used habitat to the one now present.

Displacement estimates also do not consider the additional displacement caused by associated infrastructure such as roads and associated human disturbance in this currently largely undisturbed area. Human related disturbance distances[23] for hen harrier are considered to be 300-750 metres and for golden plover 200-500 metres with the upper limit of the disturbance buffer recommended for use. Provision of roads and other infrastructure in combination with increased human presence may increase usage of the site and general area by nest predators such as corvids and foxes with follow on adverse implications for ground nesting birds such as hen harrier, snipe, woodcock, red grouse, skylark and meadow pipit.

The main reason for the decline of most of the key ornithological receptors (hence Annex I or red list status) is the decline or degradation of their habitat nationally or internationally. The development proposes to remove and degrade a significant area of such habitat, either directly or through displacement. There are other areas of habitat nationally but even wide ranging species cannot alternate between disparate fragments of habitat at national scale and for species which cannot range far and are habitat type specialists, such as red grouse; the existence of suitable habitat elsewhere is irrelevant as they cannot utilise it unless it is close to existing habitat and therefore the range of the species is affected by habitat degradation or fragmentation. The existence of adjoining habitat in this case, rather than making the proposed loss less significant, points to the potential loss of a more ecologically valuable area because it is connected to or makes up part of a bigger more stable ecological

[23] Goodship, N.M. and Furness, R.W. (MacArthur Green) (2022). Disturbance Distances Review: An updated literature review of disturbance distances of selected bird species. NatureScot Research Report 128.

unit. Given these concerns and others discussed later this Department believes that the proposed Biodiversity Management Plan (BMP) would not compensate for this.

"*Nature Conservation proof*" in the Biodiversity Management Plan and EIAR

The EIAR and BMP reference the proof of the success of the proposed conservation measures. This in the view of this Department is misleading in the current context. Yes they are similar to measures employed in state run and funded Hen Harrier schemes in SPAs but, as evidenced in the 2022 National survey, even in these areas, despite the schemes, numbers of hen harriers have fallen significantly. There is in the view of this Department no substitute for core habitat that has already proven long term suitability and sustainability.

The "*Conservation Evidence*" referenced in the EIAR and BMP provides a link to a website detailing 47 studies. Three of these found higher numbers of wildlife on land before agri-environment schemes were introduced, two studies found no difference in the overall number of birds or earthworms and soil microorganisms between areas with and without agri-environment schemes. In six studies agri-environment schemes had little or no effect in terms of diversity, abundance or species richness. A further eleven studies (including one systematic review and four reviews) found negative or no effects. A number of the studies relate to species or circumstances not found in Ireland and the Department can find no reference to hen harrier in the studies referenced and almost no reference on the other upland birds identified as key ecological receptors by this project with the only exception being a minor reference to snipe. One Irish study[24] found some wildlife benefits for a Dutch and UK scheme but not for the Irish scheme. Another Irish study[25] found no consistent difference between lands in an agri scheme and those not, in relation to plant or ground beetle diversity or abundance. A 2003 review[26] of 62 studies from six European countries found that agri-environment schemes had no consistent effect on bird species. Two studies reported negative effects and nine reported both positive and negative effects.

The situation is therefore far from as clear as the EIAR suggests. Well managed targeted schemes can improve conservation outcomes in some circumstances but certainly not all circumstances and are not a satisfactory alternative to conserving an already well functioning existing habitat. Ecologically valuable upland sites are a complex interaction of many biotic and abiotic factors interacting with a human dominated landscape. A combination of

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[24] Feehan J. 2003. Investing in monitoring and evaluation:an overview of practical approaches to biodiversity monitoring of agri-environment schemes. Tearmann, the Irish journal of agri-environmental research Vol. 3. 17-26

[25] Feehan J., Gillmor D. & Culleton N. 2005. Effects of an agri-environment scheme on farmland biodiversity in Ireland. Agriculture, Ecosystems & Environment, 107, 275-286.

[26] Kleijn D. & Sutherland W.J. 2003. How effective are European agri-environment schemes in conserving and promoting biodiversity? Journal of Applied Ecology, 40, 947-969.

exposure and difficulty in intensifying agriculture has created areas removed from intensive agriculture and intensive disturbance and a certain subgroup of declining species is specifically adapted to this interface of different factors which must also be of sufficient landscape scale to work, if damaged or lost it cannot be easily compensated for elsewhere.

The Biodiversity Management Plan

As outlined above, the fact that some agri schemes have conserved certain species in other types of habitat is no indication that they can compensate for the type of ecological losses proposed for this site. Despite considerable investment and effort in similar schemes[27] populations of the specific sub group of the Irish avifauna which is specifically threatened i.e. the upland Annex I and red listed species, continue to decline even in the areas where the schemes were targetted (Hen harrier SPAs). Such schemes are welcome efforts in an attempt to halt a decline but they are not a substitute for core habitat and an overriding principal of any such scheme would first be to prevent further loss of core habitat.

The BMP proposes that it will undertake baseline surveys "*to asssist in identifying areas which can be optimised for the target species*" it is appears from this that the developers do not know at this stage, prior to survey, if these areas will be suitable for the measures proposed. There is repeated reference to the hen harrier project and "*tried and tested*" methodology but there is no acknowledgment in the BMP that the hen harrier project would not consent or support the destruction or sterilization by displacement of a large area of core traditional, sustainable actively occupied high quality habitat with strategic linkage to other established core habitat on the promise of minor alterations to a nearby less desirable currently unoccupied habitat of inferior quality and questionable suitability that might never be occupied or if occupied would not offer the same benefits as the habitat to be lost. The habitat on Knocknanask is already important and of proven value at present and will remain that way unless damaged. The Hen Harrier Farm Plan scheme was designed to address a decline in a species by enhancing existing conditions not as a substitute for existing natural systems. Similarly one of the underpinning main principles of the "*Farming for Nature*" guidance incentives is to first identify habitats of ecological value that already exist and to retain them, applied to this case that would mean retaining the area of high conservation value on Knocknanask, not removing core habitat and implementing minor improvements on inferior habitat elsewhere.

In relation to the peripheral foraging habitat that the BMP proposes as compensatory habitat, that habitat is already available to hen harrier without any measures being implemented, maybe the scheme would improve it a little, but its not new and is not a replacement for loss

[27] http://www.henharrierproject.ie/

of core habitat. Nor does it have the same strategic linkages to other core habitat or the reduced disturbance levels created by being on remote upland.

It is apparent from the EIAR that the hen harrier breeding season flightline surveys show little or no usage of the areas where some of the agri scheme measures are proposed. There may be many reasons beyond the control of the BMP for this and the proposed measures may not significantly change this. For example a large section of the proposed "*third party enhancement land*" has a public road running through it, this immediately reduces its potential to become comparable habitat to Knocknanask or similar. This road has recently become a part of the publicised St. Declans Way. Neither the adjoining landowners or the developers have the ability to limit usage of this public road and pedestrian traffic is likely to increase around the time of year when birds are breeding and most sensitive to disturbance. There is also a series of dwellings immediately south of this enhancement area again increasing human disturbance potential, potential disturbance from pets, foraging foxes/corvid nest predators assocated with habitation. etc.. Disturbance can occur even in core habitat and nest predators occur there also but less so and birds recognise this and act accordingly. A further proposed five plus hectares of third party enhancement land on the southern side of Knocknanask is an intensive improved grassland closed in by high plantation forestry on three sides and a public road and forestry on the fourth side, this in the view of this Department has little if any upland bird potential regardless of any measures implemented.

Some proposed mitigation measures are in the displacement zone close to turbines or the compulsory bat buffer zones which birds such as harriers will not use even if habitat is restored. In a different context they would be welcome measures to support an existing adjoining population on core habitat but not as a substitute for it.

The destruction or burning of moorland such as Knocknanask between 1st March and 31st August is already an illegal and criminal act under Section 40 the Wildlife Act, therefore a BMP measure to obey national law is not a significant compensatory or mitigatory commitment. Alternatively, if such burning occurs outside owners control it is difficult to see how assurance can be given that it could not reoccur. Burning outside of these dates is legally possible in some years but is rare and when it occurs is less damaging to conservation interests.

The restructuring of rural land holdings and commencing to use uncultivated land or semi-natural areas for intensive agriculture and removal of farm boundaries above certain thresholds are regulated under the European Coummunities (Environmenmtal Impact Assessment) (Agriculture) Regulations 2011 and drainage operations are also subject to the

2011 Regulations and/or the Planning and Development Act if wetlands are involved. Consent is also no longer granted for the afforestation of such upland/heathland/peat sites. There are therefore already limitations on potentially damaging activities without any BMP required. This is not to say that sub-threshold damaging activities have not or could not occur, but a range of legislation and incentives are increasingly in place to move towards the protection and improvement of these habitats in the longer term.

In this Department's view the compensatory measures proposed by the EIAR and BMP substantially overlap with some already in place or imminent and offer little in addition to measures already likely to come about without the development.

In addition to the role out of national agri-environmental schemes, the administration and inspection of agricultural payments and their strong linkage to environmentally sustainable management practises is increasing, and damaging land uses will face more scrutiny going forward than in the past. The main EU support for farming; Basic Income Support for Sustainability Scheme (BISS) is already subject to Cross Compliance and conditional on Good Agricultural and Environmental Condition.

Components of the proposed compensatory package may become part of future agricultural schemes without any requirement from this development and some are already part of the ACRES scheme, some farmers in these areas may already be part of or can enter such schemes without the development. It is apparent from the sample Farm Plan in the BMP that there is an existing Knockmealdown Mountains ACRES Local Area Plan and it is unclear whether the lands in question are already in this scheme and receiving payments for carrying out some activities now proposed as mitigation for the development (p28 BMP), therefore it is unclear what additional compensatory habitat/measures beyond what would occur in any case would happen. The Knocmealdowns including the proposed development site is one of only eight areas nationally that have been selected as ACRES Co-operation (CP) zones[28].

These are zones targeted specifically at High Nature Value farmland identified by a cross-government working group as high priority. Farmers within these zones are supported, trained and financially incentivised to carry out various actions to improve habitat condition and higher habitat condition scores receive higher payments. This ACRES CP zone is managed by the Hen Harrier Project Ltd..

In relation to the return of forest to heath or bog, Coillte have several projects of this nature at an advanced stage for the purpose of fulfilling nature conservation committments rather

[28] https://acresireland.ie/

than as compensation for development. Similar projects may be possible in the future without any requirement to sacrifice core high nature value habitat now. Coillte's stated future ambition is to increase the area of their estate managed primarily for nature from 20% to 30% by 2025 and 50% managed primarily for nature in the long term[29]. Among the four strategic themes of Coillte Nature Branch are "*Restoring important biodiversity areas and rehabilitating ecosystem services*". Therefore the forestry related mitigation proposed for the project may be possible without the development.

EIAR and BMP therefore appear to have included a range of actions which overlap with environmental actions already in the process of being addressed by other means and considers them mitigation for the development.

The recent Nature Restoration Regulations[30] prioritse the prevention of further deterioration of annexed habitats/species and the enhancement/restoration of areas of known existing ecological value such as Knocknanask and the Knockmealdowns more generally. Article 4 of the NRL relates to the restoration of the Favourable Reference Areas of these habitats and Article 7 to restoration measures for annexed species including among other things to "*enhance connectivity, until sufficient quality and quantity of those habitats is achieved*". The NRL applies to both designated and undesignated lands and is likely to include areas such as Knocknanask and Broe Mounain which are high value conservation areas for various reasons including being included in national reference areas for Annex I habitats and containing significant populations of important and declining species. The specifics or mechanisims by which this legislation will be applied in Ireland is still being prepared but the development as proposed appears to conflict with the aims of the legislation.

Nature Conservation Overview

While not formally designated it is clear from the information provided that Knocknanask hill is of importance for wildlife, both ornithologically and for the habitats present, in addition it provides a wild natural undisturbed habitat of large scale with connectivity to similar habitat for declining species to survive. Despite this and advice to consultants from this Department at pre-planning stage (online meeting 24-10-23) that turbines on the open heath/bog habitat on Knocknanask Hill would in the view of this Department be ecologically damaging, this area has not been avoided by the proposed development.

At this time of declared biodiversity crisis high conservation value habitats are comparitively rare and declining in the landscape while habitats of low conservation value such as

[29] https://www.coillte.ie/our-forests/public-goods/biodiversity-2/

[30] Regulation (EU) 2024/1991 of the European Parliament and of the Council of 24 June 2024 on nature restoration and amending Regulation (EU) 2022/869. http://data.europa.eu/eli/reg/2024/1991

coniferous plantation forestry and improved grassland are widespread. Having viewed the Hen Harrier flight activity maps it is clear that Knocknanaska is core occupied hen harrier habitat and is connected to the core habitat at Knocknasculloge, Broe Mountain and the greater Knockmealdowns. In the opinion of this Department that a development such as is proposed on top of this habitat will seriously adversely impact it. Minor changes to an already available but less desirable habitat nearby will not in the view of this Department compensate for the loss of core habitat. The BMP is not comparable to the negative impact of the displacement that will occur from what the Department knows to be currently existing core, sustainable high quality habitat. This is in addition to creating barriers to free movement, fragmenting or potentially severing connection to adjoining core premium habitat.

The Department considers core habitat for hen harrier to be habitat that is suitable for both nesting and foraging and habitat which is likely to persist and be sustainable in the long term. As hen harrier occupy large ranges their habitats also include a wide range of habitats where they may forage widely or which may be temporary in nature (forestry available approx 33% of cycle), these habitats can also be important but are not as important as the core habitat without which birds will not be sustained in the long term.

This Department has previously made a submission to An Bord Pleanála on the Dyrick Hill Wind Farm planning application which directly adjoins the current proposed site and where this Department expressed a number of concerns which are directly connected to and also arise again in this application. The consultants acting for this applicant were aware of that submission and were made aware such concerns also applied to Knocknanask, but the concerns have not been addressed and original proposals have not changed.

At the online scoping meeting this Department expressed strong concern about turbines 1-5 as in the view of this Department it was already clear that those turbines could not be constructed without significant adverse ecological effects. Further survey data and assessment was required to determine the impacts of turbines 6 and 7 due to linkages and potential displacement on the adjoining Broe Mountain established core habitat.

This Department did state that the other turbines, located in existing coniferous plantation forestry, were less of a concern and, subject to more detailed examination, this Department was not opposed in principal to them. In general, this Department welcomes the movement of development away from open high conservation value habitats into compromised habitats such as coniferous forestry provided other conservation interests are not impacted. It is clear now however that the further investigation (this Department has reviewed the redacted information also) has established significant movement of hen harrier and adjoining nesting areas near proposed turbines 6, 7 and 8. In the opinion of this Department, if these turbines

are constructed they will adversely affect the local hen harrier population both through habitat loss, displacement and habitat fragmentation. Turbine 9 is of lesser concern as little occupancy was recorded in that area but it is still close to suitable breeding and foraging habitat. The Department has no comment on turbines 10-15 or the associated infrastructure.

The zone of influence of the proposed development contains large areas of Habitats Directive listed Annex I habitat and provides habitat for and supports species listed on Annex I of the Birds Directive such as hen harrier, golden plover and merlin in addition to Birds of Conservation Concern Red listed species such as breeding woodcock, breeding snipe, kestrel and red grouse. This Department believes the development would remove or degrade potential habitat for these species. The Southern Regional Assembly Regional Spatial & Economic Strategy (RSES) lists Regional Policy Objectives (RPOs) for this region and RPO1 states *"Any reference to support for all plans, projects, activities and development in the RSES should be considered to refer to 'environmentally sustainable development' that has no adverse effects on the integrity of European sites and no net loss of biodiversity"*. The project as currently proposed would in the view of this Department, cause a significant net loss of biodiversity and adversely affect nature conservation.

You are requested to send any further communications to this Department's Development Applications Unit (DAU) at manager.dau@npws.gov.ie, or to the following address:

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

Is mise, le meas

Julie Sullivan
Assistant Principal
Development Applications Unit
Administration

Table 19-1 Table of EIAR Mitigation Measures

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
Pre-construction Phase				
Description of Proposed Project				
MM1	Environmental Management – CEMP	EIAR Chapter 2	A CEMP has been prepared for the proposed project and is included in Appendix 2-8 of the EIAR. The CEMP will be updated prior to commencement of development to address the requirements of any relevant planning conditions, including any additional mitigation measures which are conditioned and will be submitted to the planning authority for written approval. The construction contractor will be responsible for implementing the mitigation measures specified in the EIAR and CEMP and for communicating the requirements with all staff on-site. Their implementation of the mitigation measures will be overseen by the supervising environmental manager, ecologists, archaeologists and/or geotechnical engineers, as appropriate.	As required through the Contractor's CEMP.
MM2	Health and Safety	EIAR Chapter 2	A Health and Safety Plan covering all aspects of the construction process will address the Health and Safety requirements in detail. This will be prepared prior to the construction stage. A Project Supervisor Design Process (PSDP) and Project Supervisor Construction Stage (PSCS) are required to be appointed in accordance with the provisions of the Safety, Health and Welfare at Work (Construction) Regulations.	As required through the Contractor's CEMP and the Health and Safety Plan.
MM3	Surface Water Drainage System	EIAR Chapter 2 and Chapter 9	The surface water drainage system will require weekly and daily inspections depending on the construction phase works to ensure that it is working optimally. Settlement ponds will require regular inspection and cleaning where sediment collects. The drainage and treatment system for the proposed wind farm monitored more frequently during/after heavy rainfall events during the construction phase. A programme of inspection and maintenance will be designed and dedicated construction personnel assigned to manage the inspection programme. This is discussed further in the CEMP (Appendix 2-8 of the EIAR).	which is is? - not precise not precise As required through the Contractor's CEMP. more frequently than what?

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
MM4	Traffic Management	EIAR Chapter 2 and Chapter 16	A Traffic Management Plan (TMP) has been prepared for the proposed project and is included as Appendix 2-4 of the EIAR. This is a living document and will be updated ahead of construction to address the requirements of any relevant planning conditions, including any additional mitigation measures which are conditioned by An Bord Pleanála, in the event planning permission/approval is granted. Also, a confirmatory survey of road condition, including the condition of all road water crossings on the route, will be carried out along the proposed grid connection route (GCR) in advance of any works.	As required through the Contractor's CEMP and TMP.
Biodiversity				
MM5	Biodiversity: Otter	EIAR Chapter 6 / NIS	A Pre-construction Otter survey will be undertaken no more than 10—12 months in advance of the construction works as per the advice in the NRA (2008) guidelines, particularly at the directional drilling and clear-span bridge locations. In the event that a new holt (established within the interim period) is identified within the footprint of the works during the pre-construction survey, a method statement will be prepared detailing survey / monitoring methods, if required, and any mitigation will be applied. The method statement will also be used to support a licence application to the NPWS licensing unit if a licence to disturb is required. The survey works and any mitigation required will be implemented prior to starting site clearance and any construction works.	As required through the Contractor's CEMP and Biodiversity Management Plan. not precise good intention. who checks/supervises it?
MM6	Biodiversity: Badger	EIAR Chapter 6 / NIS	A pre-construction badger survey will be carried out prior to site clearance or works commencing. In the event that a new sett is discovered within the footprint of the construction works appropriate measures such as exclusion zones or sett exclusions will be carried out following industry methods. A method statement will be prepared detailing survey / monitoring methods, if required, and any mitigation to be applied. The survey works and any mitigation required will be implemented prior to starting site clearance and any construction works.	As required through the Contractor's CEMP and Biodiversity Management Plan. good intention. who checks/supervises it?

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
MM7	Biodiversity: Common Frog	EIAR Chapter 6 / NIS	Common Frog will be surveyed during the appropriate season in advance of any works at drainage ditches, slow flowing streams and ponds where the Common Frog may spawn. Suitable breeding habitat such as pools, ponds and drainage ditches within the project site were noted during the baseline surveys and will inform the pre-construction survey. A method statement will be prepared to detail specific measures to translocate the frogs and spawn, by hand or net, to suitable nearby habitat (to be identified prior to carrying out the survey) that will not be impacted by the proposed project. The method statement will be used to inform the application to NPWS for a licence to capture and relocate spawn and Frogs.	As required through the Contractor's CEMP and Biodiversity Management Plan. who decides - not precise
MM8	Biodiversity: Common Lizard	EIAR Chapter 6 / NIS	Common Lizard will be surveyed during the appropriate season (March to October) in advance of any works at suitable habitat for the species. The survey work will focus on the peatland habitats at Knocknanask and Knocknasheega as these are suitable for use by the species. A method statement will be prepared to detail specific measures to translocate Common Lizard within the footprint of the works to similar habitat a sufficient distance away from the works. The method statement will be used to inform the application to NPWS for a licence to capture and relocate Common Lizard.	As required through the Contractor's CEMP and Biodiversity Management Plan. who decides - not precise
Ornithology				
MM9	Construction Disturbance Mitigation	EIAR Chapter 7	Breeding bird surveys will be carried out in the breeding season preceding the start of construction, and in every subsequent breeding season across the duration of the construction period. These surveys will include Hen Harrier surveys and Snipe surveys. The survey methods will follow those used for the breeding raptor and breeding distribution surveys in 2023 and 2024 (see Appendices 7-4 and 7-5 of the EIAR). If nesting Hen Harriers are found, an assessment will be carried out by a suitably experienced ornithologist to determine the restrictions to construction work that will be required. This will start from the basis a potential 1 km disturbance distance (Goodship and Furness, 2022). However, depending on the location of the nest site, some lower	The pre-construction breeding bird surveys will be carried out in the breeding season preceding the start of construction, and in every subsequent breeding season across the duration of the construction period.

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			magnitude construction work may be possible within 1 km without causing any disturbance.	who decides - not precise
			If breeding Snipe are found, no construction work will take place within 500 m of the nest site, or the centre of the territory if the nest site is not found.	? If you cannot find the nest - how do you know if they are breeding?
			If other sensitive breeding species are found, appropriate mitigation will be implemented based on evidence about their disturbance distances.	who decides - not precise
Material Assets				
MM10	Underground Services	EIAR Chapter 11	A confirmatory survey of all existing services (electrical/ESB, water/Uisce Éireann, gas/Gas Networks Ireland (GNI)) will be carried out prior to construction to verify the assumptions in this report and identify the precise locations of any services. The Applicant will liaise with the service provider where such services are identified. Digging around existing services, if present, will be carried out as per best practice/guidance by hand to minimise the potential for accidental damage.	As required through the Contractor's CEMP.
MM11	Telecommunications	EIAR Chapter 11	In order to ensure there are no issues at construction, all telecom operators will be contacted in advance of construction to check that they have no new links in operation at that time.	As required through the Contractor's CEMP.
Archaeology				
MM12	Archaeological Investigations: Test Trenching / Metal Detection	EIAR Chapter 15	The proposed TDR, where it passes through 220 m of greenfield, will be subject to a programme of archaeological test trenching and metal detection, prior to the commencement of construction. These investigations will be carried out under licence to the National Monuments Service of the DoHLGH. Dependant on the results of the assessment and if archaeological remains are identified, further mitigation may be required, such as preservation in-situ or by record. Any further mitigation will require agreement from the National Monuments Service of the DoHLGH.	As required by archaeological test trenching and metal detection.
Traffic and Transport				
MM13	Traffic: Pre-Construction Condition Survey	EIAR Chapter 16	A pre-condition survey of roads on approach to the site will be carried out prior to construction commencement to record the condition of the road.	what is the As required through the Contractor's CEMP and TMP.

Type text here

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
Construction Phase				
Description of Proposed Project				
MM14	Forestry Felling	EIAR Chapter 2	With the exception of commercial forestry felling, vegetation clearance will commence outside the breeding birds season, which runs from the 1st of March to the 31st of August. If any minor clearance or trimming is required within those dates, or if the initial vegetation clearance extends past the 1st of March due to unsuitable weather conditions, the works will be preceded by an ecological survey (from a qualified and suitably experienced ecologist) to ensure there are no sensitivities associated with the action.	not specific - what is minor? As required through the Contractor's CEMP.
MM15	Construction Hours	EIAR Chapter 2	The hours of construction activity will be limited to avoid unsociable hours where possible. Construction operations will generally be restricted to between 7:00hrs and 19:00hrs Monday to Friday (excluding public holidays) and between 07:00hrs and 14:00hrs on Saturdays. However, during the following critical periods longer hours will be required: • Concrete pours for turbine foundations; • During turbine installation when the weather is suitable (i.e. light winds); • Delivery of oversized loads; • In the unlikely event of an emergency (this is unlikely - see Chapter 17 of the EIAR (Major Accidents and Natural Disasters)). Any such out of hours working will be agreed in advance with Waterford City and County Council apart from in the case of an emergency and in line with the Schedule of Mitigation requirements of this EIAR (Chapter 19)..	??? this is about the gid route? As required through the Contractor's CEMP.
MM16	Surface Water Drainage / Silt Control	EIAR Chapter 2	A Surface Water Management Plan (SWMP) has been prepared (Appendix 2-11 of the EIAR). The purpose of this plan is to ensure that all works are conducted in an environmentally responsible manner so as to minimise any potential adverse impacts from the proposed project on surface water quality. The plan incorporates the following specific objectives: • Provide overall surface water management principles and guidelines for all phases of the proposed project;	As required through the Contractor's CEMP and SWMP.

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			• Address erosion, sedimentation and other water quality issues; and • Present measures and management practices for the prevention and/or mitigation of potential downstream impacts.	
MM17	Concrete Deliveries & Pouring	EIAR Chapter 2	Primarily ready-mixed concrete will be used during the construction phase, with all concrete being delivered from local batching plants in sealed concrete delivery trucks. Localised mixing will be used for small tasks such as blockwork for building the substation. The use of ready-mixed concrete deliveries will eliminate any potential environmental risks from large scale on-site batching. When concrete is delivered to site, only the chute of the delivery truck will be cleaned, using the smallest volume of water necessary, before leaving the site. Concrete trucks will be washed out fully at the batching plant, where facilities are already in place. The small volume of water that will be generated from washing of the concrete lorry's chute will be directed into a temporary lined impermeable containment area. These residual liquids and solids will be collected by an appropriately licensed waste collector. Where temporary lined impermeable containment areas are used, such containment areas are excavated and lined with an impermeable membrane. This washout will be located near the site entrance and also at any significant concrete pour locations (e.g. at turbine hardstand during a foundation pour) so that it is easily accessed when departing. An example of a concrete washout is shown in Figure 2-11 OF Chapter 2 of the EIAR. Although unlikely to happen any disposal of surplus concrete after completion of a pour will be off-site at the concrete production facility. Localised mixing of concrete for blockwork, etc. will only be carried out as needed, but any small volume of surplus will be disposed of in the concrete washout area. The CEMP (Appendix 2-8 of the EIAR) provides further details of best practice and environmental considerations in relation to concrete deliveries and concrete pouring.	where is the batching plant As required through the Contractor's CEMP.
MM18	Refuelling	EIAR Chapter 2	Any easily manoeuvrable road-going vehicles (i.e. cars, jeeps, lorries etc) will be refuelled off-site. For any vehicles which are slow moving	As required through the Contractor's CEMP.

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			or tracked or those for whom regular trips off-site to refuel will not be practical, on-site fuelling will be required.	
			A limited amount of fuel will need to be stored on the site within the construction compounds for this purpose, and this will be within a double skinned and bunded mobile tank which can be moved around the site using a 4x4 vehicle to refuel. This will be stored in the construction compound when not in use.	specifically how much?
			A spill kit in the form of a supply of fuel absorbent material and mats and a drip tray will be kept with the tank at all times. The drip tray and fuel absorbent mats will be used at all times during refuelling. Similar spill kits will be stored in each construction compound, and at the on-site substation in case of emergency.	
			No refuelling will be carried out within 50m of a stream. Only designated trained and competent operatives will be authorised to refuel plant on site.	
			In the event of an accidental fuel spill, the source of the spill will be fixed, fuel will be contained and cleaned as quickly as possible using the fuel absorbent material in the spill kits. The incident will be reported to the site manager and Environmental Clerk of Works, and appropriate remediation will be carried out (i.e. soil removal for safe disposal at a licensed waste facility by licensed waste collectors. The CEMP (Appendix 2-8 of the EIAR) provides further details of best practice and environmental considerations in relation to refuelling.	
MM19	Dust Suppression	EIAR Chapter 2	In periods of extended dry weather, dust suppression will be necessary along haul roads and along the site roads to ensure dust does not cause a nuisance to any residential properties long the route. If necessary during a period of extended dry weather, water will be taken from settling ponds in the site's drainage system and will be pumped into a bowser or water spreader to dampen down haul roads and site compounds to prevent the generation of dust. Silty or oily water will not be used for dust suppression, because this will transfer the pollutants to the haul roads and generate polluted runoff or more dust. Water bowser movements will be carefully monitored, as the application of too much water would lead to increased risk of runoff.	As required through the Contractor's CEMP.

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			The CEMP (Appendix 2-8 of the EIAR) provides further details of best practice and environmental considerations in relation to this.	
MM20	Waste Management	EIAR Chapter 2	The CEMP (Appendix 2-8 of the EIAR) provides an overview of the best practice in waste management during all phases of the proposed project, with a view to reducing, reusing, recycling and recovering waste produced, in that order of preference. Waste disposal will be avoided where possible. The Waste Management Plan and waste management practices associated with the proposed project are provided in the CEMP (Appendix 2-8) and will be in accordance with relevant provisions of the Waste Framework Directive (Directive 2008/98/EC on waste), the Waste Management Act 1996 as well as all other Irish and EU legislation. The main site contractor will appoint a Environmental Clerk of Works who will ensure that all waste contractors have the correct permits for any waste streams they are removing from site, and that they are taking it to the appropriately licensed/permitted waste facilities. They will also ensure that all parts of the Waste Management Plan will be implemented onsite.	where are the details of this assesment? As required through the Contractor's CEMP.
MM21	Vehicle Management	EIAR Chapter 2	Vehicles will be kept on site access roads for the vast majority of the construction phase, however in the initial construction phases, there will be some requirement for off-road vehicle movements (for forestry felling, ground works, etc.). For forestry felling, standard practices and equipment/vehicles will be used (as described in the Forestry Report – see Appendix 2-7 of the EIAR).	As required through the Contractor's CEMP. indeed: where? NOT SPECIFIC
			For ground works and other off-road activity, the use of specialist vehicles that are tracked or use large low ground pressure tyres or bog mats which distribute their weight evenly across a large surface area will be used. These will minimise ground disturbance, particularly where there is a presence of peat (albeit very shallow on this site) and therefore minimise the risk of sediment entering downstream watercourses.	
			All vehicles will be restricted to the areas where works are required, and unnecessary off-road movements around the wider site will be avoided. Where there are any sensitive habitats present around a	

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			proposed work area, these areas will be marked out so that vehicles will not enter and damage them.	
MM22	Vehicle Washing	EIAR Chapter 2	Wheels or vehicle underbodies are often washed before leaving sites to prevent the build-up of mud on public (and site) roads. Site roads will be already formed using on-site materials before other road-going trucks begin to make regular or frequent deliveries to the site (e.g. with steel or concrete). The site roads will be well finished with compacted hardcore, and so the public road-going vehicles will not be travelling over soft or muddy ground where they might pick up mud or dirt. However, in the interest of best practice and to avoid the potential for the transfer of alien invasive plant species into the site, it is proposed to install a self-contained wheel-wash system near the project site entrance. The drawings in Appendix 1-1 include details and proposed location of a proposed self-contained wheel-wash system which will be installed as part of the construction phase of works. Water will be supplied for this using a water bowser. A road sweeper will be available if any section of the surrounding public roads becomes soiled by vehicles associated with the proposed project. The CEMP (Appendix 2-8) provides further details of best practice and environmental considerations in relation to this..	As required through the Contractor's CEMP.
MM23	Spoil Management	EIAR Chapter 2	The use of the borrow pits will be phased. This will allow materials to be permanently placed in the first borrow pit while the second is in use, thereby minimizing the volume of soils requiring temporary storage. In order to further reduce temporary storage requirements, soils and turves will be reinstated around infrastructure as part of restoration and landscaping works. This will be carried out during the construction phase, as soon as is practical after the completion of the works in any one area of the site.	As required through the Contractor's CEMP.
			Where the proposed project footprint is located on any mineral-based soil, this material will be side-cast and profiled as close to the excavation areas as practical. In the case of peat, or where other adjacent infrastructure or constraint features might prevent side-casting, it will be used to reinstate the borrow pits. The sides of the excavated areas will be battered/sloped sufficiently to ensure that	

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			slippage does not occur (2:1 for mineral soil). The excavated sidecast material will be smoothed with the back of an excavator bucket and surrounded by silt fences to minimise the potential for sediment-laden run-off occurrence. Side-casting will not occur within 50m of a watercourse. The side-cast material will be used later in backfilling the working area around the turbine foundations, or for landscaping locally or reinstatement elsewhere on site (such as the borrow pits). Further and more detailed information on the spoil management is provided in Appendix 2-3 of the EIAR (Spoil & Peat Management Plan).	that seems like an arbitrary distance - and rather close
			Where side-casting is not possible, topsoil and sub-soil are to be stockpiled separately. Turves will be stored turf side up and will not be allowed to dry out. Stockpiles are to be isolated from any surface drains and a minimum of 50m away from watercourses, and will be located at points with easy access to internal roads within the proposed borrow pit areas which have not yet been extracted. Measures that will be employed will include interceptor ditches around these areas (with sediment traps within these (see Drainage Drawings 11303-2040 to 2046 in Appendix 1-1 of the EIAR) deployment of double silt curtains and seeding of the piles will be incorporated to prevent runoff of suspended solids and soil erosion. No permanent spoil or stockpiles will be left on site. No stockpiles will be located on peat areas. Peat material (from Knocknanask in particular) will be used to reinstate the borrow pits (see Section 2.8.8 and Appendix 2-3 for information on sequencing of work).	
			Where available, vegetative sods/turves or other topsoil in keeping with the surrounding vegetation type will be used to provide a dressing for the final surface. Where sods/turves are not available, some seeding with native species will be carried out. This method for restoration of excavated or disturbed areas is to encourage stabilisation and early establishment of vegetation cover.	
			To prevent erosion and run-off and to facilitate vegetation reinstatement, any sloped soil embankment will be graded such that the slope angle is not too steep (i.e. 1:3) and that embankments match	

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			the surrounding ground profile. See Section 2.8.9. for further information on sequencing and spoil management.	
			Management of spoil for the turbine delivery accommodation works and the GCR are discussed in sections 2.8.2 and 2.8.5 OF Chapter 2 of the EIAR respectively.	
MM24	Health and Safety	EIAR Chapter 2 and Chapter 5	The proposed project will be constructed in accordance with all relevant Health and Safety Legislation as described in the CEMP (Appendix 2-8 of the EIAR).	As required through the Contractor's CEMP.
			The scale and scope of the project requires that a Project Supervisor Design Process (PSDP) and Project Supervisor Construction Stage (PSCS) are required to be appointed in accordance with the provisions of the Safety, Health and Welfare at Work (Construction) Regulations.	
			The PSDP and PSCS appointed for the project will be required to perform his/her duties as prescribed in the Safety, Health and Welfare at Work (Construction) Regulations as described in the CEMP (Appendix 2-8 of the EIAR).	
Population and Human Health				
MM25	Health and Safety	EIAR Chapter 5	All activities carried out by the appointed Contractor on the proposed project will be in accordance with the requirements of the Safety, Health and Welfare at Work Act 2005 as amended and Regulations made under this Act. The CEMP sets out the Health and Safety requirements for the project including the erection of fencing, signage and notification of commencement of works to the Health and Safety Authority (HSA). This will apply to whatever final turbine dimensions are chosen from the entire proposed range of turbine dimensions.	As required through the Contractor's CEMP.
			The proposed TDR to allow for the transport of the turbines to the proposed wind farm site will involve some works as discussed in Chapter 2 of the EIAR (Description of the Proposed Project). These works will be carried out to the relevant construction and road safety guidelines. When the turbine components are being transported, they will have a Garda escort, and will be carried out at night when there is less traffic on the road. The proposed turbine delivery works allow for the entire range of proposed turbine dimensions.	

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			The project will employ all of the latest and relevant guidelines and legislation (See CEMP in Appendix 2-8 of the EIAR in terms of health and safety both for works within the proposed wind farm site as well as for works outside the main wind farm such as those on the proposed TDR). The required levels of safety (e.g. during road works) will be maintained for all road users as well as pedestrians. The proposed wind farm site itself will not be open to the public. Public access will be restricted to works areas outside the proposed wind farm site such as the proposed TDR works areas and the proposed GCR while work is underway. Appropriate health and safety measures as described in the CEMP (Appendix 2-8 of the EIAR) will be taken for all works areas during the construction phase in the interest of worker and public safety also. Should any public health advice be in place during the construction phase (such as the recent Covid-19 public restrictions) these will be implemented on site.	
Biodiversity / Ecology				
MM26	European Sites	EIAR Chapter 6 / NIS	Mitigation measures protecting surface water quality will ensure the protection of the Blackwater River (Cork/Waterford) SAC, Dungarvan Harbour SPA and the Blackwater Estuary SPA during the construction phase are outlined in Chapter 9 – Hydrology and Hydrogeology, Section 9.5 and Section 7 of the NIS which is contained in the Planning Application.	As required through the Contractor's CEMP and Biodiversity Management Plan.
MM27	Proposed Natural Heritage Areas	EIAR Chapter 6 / NIS	Mitigation measures protecting surface water quality which will ensure the protection of the Blackwater River and Estuary pNHA and Dungarvan Harbour pNHA during the construction phase are outlined in Section 9.5 of Chapter 9 – Hydrology & Hydrogeology and Section 7 of the NIS which is contained in the Planning Application.	As required through the Contractor's CEMP and Biodiversity Management Plan.
MM28	Biodiversity: Habitats	EIAR Chapter 6 / NIS	All mitigation measures associated with the protection of water quality are outlined in Chapter 9 – Hydrology and Hydrogeology Section 9.5 and within the SWMP will be implemented, which will ensure the protection of the eroding/ upland river habitats located within or hydrologically connected to the proposed project.	As required through the Contractor's CEMP and Biodiversity Management Plan.
			Sediment runoff at clear span bridge and directional drilling sites:	

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			• No instream works will take place during all phases of the proposed project. • Silt fences will be erected along all areas where the construction works are within 20m of a stream or river and 10m around stockpiled material. All silt fences will be erected outside of flood zones. The silt fencing will remain in position during the full construction phase of the project. • Silt fences (woven, high tensile strength heavy porous filter fabric) will be used. No mesh type silt fences will be permitted. Silt fencing will be installed as per the manufacturer's guidelines (the bottom section buried at least 10cm deep) prior to any ground disturbance works. • The excavated subsoil will be utilised on site and used to create bunds around the proposed facilities to create surface water runoff barriers. • Excavation works will not be carried out during or following heavy rainfall (i.e. if there is a yellow weather warning or higher in place or 5-mm in a 1-hour period). • A minimum 10m untouched vegetated buffer zone will be retained between the silt fence and the watercourse. • No permanent storage of excavated material will be permitted within 50m of the any watercourse within the proposed project or within 10m from drainage ditches; Construction pollution control at clear span bridge and directional drilling sites: • Spill-kits and hydrocarbon absorbent mats will be stored in the cabin of all construction vehicles. All machine operators and site staff must be fully trained in the use of this equipment. • All machinery will be regularly maintained and checked for fuel, oil or hydraulic fluid leaks. Servicing of machinery will only be undertaken within the construction compound or offsite.	Type text here regularly is NOT specific
			A total of 0.33ha of Annex I dry heath will be lost to the development on Knocknanask and Knocknasheega. To compensate for this loss,	basis of calculation?

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			restoration and enhancement measures will be implemented as detailed in the Biodiversity Management Plan (BMP) which is included in Appendix 2-1 of the EIAR.	
			Vegetation clearance will be kept to a minimum to prevent unnecessary habitat loss where works are to be carried out within dry heath habitat, especially in areas of Annex I habitat.	not specific - should it not be kept to a maximum?
			The proposed construction work areas will be demarcated prior to the construction works commencing, to minimise the footprint of the works within dry heath habitat. No clearance of vegetation will be undertaken outside of the demarcated areas within the proposed project.	
			Suitably sized access / bog mats will be used where appropriate to mitigate rutting on soft or wet ground and reduce soil erosion.	
			All plant vehicles will be restricted to designated areas and access tracks to avoid impacting adjacent habitats and to ensure that soil compaction is restricted to these tracks.	
			No access will be permitted to the areas of blanket bog habitat, especially the small area of intact priority Blanket Bog located 100m to the southeast of Turbine no. 5. Suitably sized drainage pipes will be perpendicularly placed under the road to ensure the hydrological link between blanket bog habitat on the upper and lower mountain side is maintained. Measures that will benefit the enhancement of the degraded blanket bog in the upland areas of Knocknanask are further described in the BMP, Appendix 2-1 of the EIAR.	
			A Dust Management Plan has been prepared and in included as an Appendix 14.1 of the EIAR (Air Quality & Climate). The Plan outlines dust suppression measures which will be implemented during the construction phase which will ensure the protection of habitats.	
			Areas to be cleared / felled will be demarcated prior to the works commencing, to ensure vegetation clearance is kept to a minimum. If vegetation / hedgerows are to be cleared / trees to be felled within the bird nesting season, it is recommended that the trees are first surveyed for the presence of bird nests. Where a nest is found, and if feasible, the	vague - when would it NOT be feasible?

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			tree will be cornered off until the chicks have fledged or until nesting has failed. Following the removal of the proposed TDR turning bay (which will result in the loss of 70m of hedgerow) new hedgerow, comprising a mix of native species will be replanted at the same location.	which species?
MM29	Biodiversity: Otter	EIAR Chapter 6 / NIS	The following mitigation measures will be implemented to minimise water quality impacts on Otter: • Water quality will be protected in all watercourses hydrologically connected to the proposed project following the mitigation measures detailed in sections 6.7.1.3.1 of Chapter 6 of the EIAR. In order to prevent barrier effects to Otter commuting along the Glenshalane River the following mitigation measures will be implemented: • Temporary fencing will be erected, allowing a 3m buffer from the riverbanks and the construction works area, creating an exclusion zone. The exclusion zone will protect the riverbanks and maintain safe passage of otter along the banks during the construction phase. All construction lighting will be directed away from the river to maintain a dark corridor.	protected how As required through the Contractor's CEMP and Biodiversity Management Plan.
MM30	Biodiversity: Badger	EIAR Chapter 6 / NIS	The following mitigation measures will be implemented to minimise the impacts on Badger: • Any temporary construction lighting used during the construction works will be cowled away from potential foraging/commuting sites to prevent disturbance to Badger within the area. To protect individual Badgers during the construction phase of the proposed project, all open excavations on site will be backfilled as soon as possible. Any deep excavations will have egress ramps in place, where feasible, to allow badger to safely exit the excavations.	As required through the Contractor's CEMP and Biodiversity Management Plan.
MM31	Biodiversity: Bats	EIAR Chapter 6 / NIS	Bats typically use woodland edge habitats for commuting and feeding purposes. Where turbines occur in close proximity to conifer plantation, the areas of conifer will be felled in order to discourage bat species from flying close to turbines.	As required through the Contractor's CEMP and Biodiversity Management Plan.

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			The turbines blade tip height range from 179.5m to 185m, a rotor diameter range from 149m to 163m, a hub height range from 102.5m to 110.5m inclusive. Thus, all turbines within the proposed wind farm site will have a buffer between 97m to 100m.	THUS???
MM32	Biodiversity: Other mammal species	EIAR Chapter 6 / NIS	The following mitigation measures will be implemented to minimise the impacts on other mammal species: • Any temporary construction lighting used during the construction works will be cowled away from potential foraging sites. To protect other mammal species during the construction phase of the proposed project, all open excavations on site will be backfilled as soon as possible. Any deep excavations will have egress ramps in place to allow mammals to safely exit the excavations.	As required through the Contractor's CEMP and Biodiversity Management Plan.
MM33	Biodiversity: Common Frog and Common Lizard	EIAR Chapter 6 / NIS	All open excavations on site will be backfilled as soon as possible.	
MM34	Biodiversity: Aquatic Species (Atlantic salmon, Lamprey and Eel)	EIAR Chapter 6 / NIS	All mitigation measures associated with sediment and pollution control outlined in Chapter 9 (Hydrology and Hydrogeology) of the EIAR, this CEMP, and within the surface water management plan (SWMP) will be implemented, which will ensure the protection of aquatic habitat located within or hydrologically connected to the proposed project. Mitigation measures for all aquatic species identified as KER (Atlantic Salmon, Lamprey sp. and European Eel) will also follow the specific measures as set out in Section 6.8.1.3.1 of Chapter 6 of the EIAR.	As required through the Contractor's CEMP, SWMP and Biodiversity Management Plan.
Ornithology				
MM35	Ornithology: General Mitigation	EIAR Chapter 7	An Ecological Clerk of Works (ECoW) will be appointed by the contractor carrying out the construction of the wind farm and will be responsible for monitoring compliance with the mitigation measures and construction phase monitoring requirements relating to ecology / biodiversity. This will include toolbox talks, supervision of vegetation clearance, protection of nesting birds and minimising disturbance from site vehicles. See Section 6.9.2 of Chapter 6 of the EIAR for further details.	A post-construction monitoring programme will be carried out. This will include carcass searches to monitor collision mortality, vantage point surveys to help interpret the results of the carcass searches, and various surveys to assess displacement impacts to breeding Hen Harrier, Red Grouse, Woodcock and Snipe. The design of the monitoring programme will be based on the SNH's

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			A Bird Protection Plan will be implemented as part of the construction programme. This will incorporate all the measures discussed below that are designed to mitigate impacts to bird populations during the construction phase.	Guidance on Methods for Monitoring Bird Populations at Onshore Wind Farms (SNH, 2009). The carcass searches will be carried out using detection dogs and will include trials of searcher efficiency and scavenger removal. The frequency of the searches, and the duration of the monitoring, will be designed to collect sufficient data to generate a robust assessment of the collision mortality impacts to Kestrel. The vantage point surveys will take place in tandem with the carcass searches. The other surveys will take place at suitable intervals to cover the construction and operational periods (e.g., Years 1, 2, 3, 5, 10 and 15). The Hen Harrier surveys will be designed to assess occupancy by breeding Hen Harriers of the 2 km buffer around the proposed wind farm site. A suitable survey method would be the methods of Hardey et al. (2013). The Red Grouse surveys will be designed to assess occupancy by breeding Red Grouse of the bog/heath habitats on Knockanask Hill. A suitable survey method would be the methods used in the 2023 and 2024 breeding distribution surveys (see Appendices 7-4 and 7-6 of the EIAR). The Woodcock surveys will be designed to sample representative habitat at various distances from the turbines (e.g., 0-250 m, 250-500 m and > 500 m from turbines). A suitable survey method would be that of Heward et al. (2015), which involve surveys from point locations. Repeat of the transect surveys carried out for this report would also help assess changes in Woodcock activity patterns. The Snipe surveys will be designed to assess occupancy by breeding Snipe of potential breeding Snipe habitat within 500 m of the turbines. A suitable survey method would be the methods used in the 2023 and 2024 breeding
			A Hen Harrier Protection Plan will be implemented throughout the construction, operational and decommissioning phases of the wind farm. This will incorporate all the measures that discussed below that are designed to mitigate impacts to Hen Harriers.	

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
				distribution surveys (see Appendices 7-4 and 7-6 of the EIAR).
MM36	Habitat / land use of the Biodiversity Management Plan lands	EIAR Chapter 7	The habitat / land use of the Biodiversity Management Plan lands are summarised in Table 7.21 of Chapter 7 of the EIAR. The section within the wind farm site and part of one section adjacent to the site were covered by the habitat survey for the proposed project. The land use of the remaining sections was assessed using CORINE data. Based on these data sources, around 25 ha of the lands are occupied by forestry and another 30 ha are occupied by improved grassland. The remaining area is mapped as heath or peat bogs. However, a lot of the area mapped as peat bogs in the CORINE dataset may be degraded bog / heath or acid grassland.	As required by the Biodiversity Management Plan.
			The conifer plantations currently provide potential Hen Harrier foraging habitat for around a third of the forestry rotation. Successful implementation of the Biodiversity Management Plan will make the area currently occupied by these plantations permanently available as Hen Harrier foraging habitat and will improve the quality of the habitat	

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			(bog/heath generally provides higher quality foraging habitat than pre-thicket forestry).	
			The areas mapped as heath or peat bogs are considered to be in degraded condition (based on assessments carried out by Future Energy Ireland). However, they may have some degree of suitability for foraging Hen Harriers. Successful implementation of the Biodiversity Management Plan will significantly increase the quality of these habitats and their potential contribution to the foraging resources available to the local Hen Harrier population.	where are the details of this assesment?
			The areas mapped as pastures are likely to have negligible current value for Hen Harriers. Successful implementation of the Biodiversity Management Plan will create new foraging habitat for the local Hen Harrier population.	Future Energy playing God for Hen Harriers?
MM37	Mitigation of disturbance impacts to Kingfisher and Grey Wagtail	EIAR Chapter 7	Construction work on the grid connection route crossing of the Colligan River will only take place during the Kingfisher and Grey Wagtail breeding seasons if appropriate surveys have shown that there are no Kingfishers or Grey Wagtails breeding in the vicinity of the crossing.	who is doing that survey? As required by the Biodiversity Management Plan.
MM38	Ornithology: Other mitigation measures	EIAR Chapter 7	Construction-phase mitigation measures to protect retained habitats within the proposed wind farm site, and to protect wetlands and watercourses, are described in Chapter 6 (Biodiversity) and Chapter 9 (Hydrology & Hydrogeology).	As required by the Biodiversity Management Plan.
			Where possible, tree felling, and scrub clearance will not be carried out during the bird breeding season (1st March – 31st of August).	what would make it impossible?
Land, Soils and Earthworks				
MM39	Land Use	EIAR Chapter 8	Vegetation clearance will be kept to a minimum.	non specific an should rather be a maximum
			The proposed construction work areas will be demarcated prior to the construction works commencing. No clearance of vegetation will be undertaken outside of the demarcated areas.	
			Construction vehicles will be restricted to designated areas and access tracks in order to avoid impacting adjacent habitats and to ensure that soil compaction is restricted to these areas.	As required by the Contractor's CEMP.
			All disturbed ground outside of the permanent footprint will be fully reinstated following the completion of the works.	

who

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			Biodiversity enhancement measures will be undertaken to improve ecological habitats as detailed in Appendix 2-1 of the EIAR.	
MM40	Contaminated Sites/Potential for contamination - Materials and Fuel Management	EIAR Chapter 8	Dedicated, bunded storage areas will be used for all fuels or hazardous substances. The earthworks will not be scheduled to be carried out during severe weather conditions. Good site practice will be applied to ensure that no fuels, oils, wastes or any other substances are stored in a manner on site in which they may spill and enter the ground.	how much and what fuel As required by the Contractor's CEMP.
			Fuel storage and fuelling facilities will be required at several fixed locations and at mobile locations around the proposed project, given the size of the it is impractical to track large plant to a single fixed facility. Fuel storage and any oil storage will be carried out in accordance with the Enterprise Ireland Best Practice Guide BPGCS005 Oil Storage Guidelines.	
			Fuel and oil storage at fixed locations will be in a fixed tank, undercover and within a steel or concrete bund.	
			A dedicated impermeable bunded refuelling area will be constructed adjacent to the fixed fuel storage areas.	
			Double skinned plastic tanks will not be acceptable for any purpose unless they are placed within fixed concrete or steel bunds.	
			Each fixed fuel and oil storage bunds will be sized to hold 110 % of the volume of the largest tank therein. The rainwater pumped from each bund will be discharged to the surface water drainage system via an oil interceptor.	
			In the event of a spill, the liquid contained in the bund will be removed by a liquid waste tanker, as will the contents of the surface water drainage system and oil interceptor. Where refuelling is required on site away from fixed storage locations, this will only be carried out utilising intrinsically bunded mobile steel fuel bowsers. At site refuelling locations, refuelling will take place within mobile bunds, but at a minimum the fuel line from the bowser to the plant being fuelled will be contained by drip trays.	
			Generators and associated fuel tanks to be used will either be placed within bunds as per fuel storage tanks or will be integrated units (i.e., fuel tank and generator in one unit) that are intrinsically bunded. No	

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			external tanks and associated fuel lines will be permitted on site unless these are housed within a fixed bund with the generator.	
			The contractor's yard/maintenance yard will incorporate a bund for the storage of small items of plant and oil filled equipment, such as hand portable generators, pumps, etc. Storage of small volume oils or chemicals, in barrels, IBCs, etc, will be confined to a covered bunded area. Where barrels or other containers are required at work locations these will be stored in enclosed bunded cabinets, and drip trays will be used where distribution of the material is required.	
			The main storage areas for oil filled equipment, vehicles, plant, etc, will be on an impermeable surface and the discharge of surface water from these areas will be via oil interceptors. An oil spill response plan will be developed for the construction works and appropriate containment equipment will be available at work locations in the event of a spillage. Oil spill response will form part the induction and training of site personnel.	
			All wastes generated on site will be segregated and appropriate materials are re-used on site. Residual materials will be collected by licensed waste hauliers for appropriate sorting, recycling and disposal.	
MM41	Contaminated Sites/Potential for contamination - Concrete/cement management	EIAR Chapter 8	Contractors will be required to provide a designated bin for washing down the chutes of concrete lorries on site.	As required by the Contractor's CEMP.
			Wash down and washout of concrete transporting vehicles will not take place on site. It is proposed to washout at the (offsite) source concrete batching site to prevent cementitious material and water entering the surface water network.	
			Waste material will be removed from site to an appropriate waste permit facility.	
			Disposal of excess concrete on any part of the construction site will be prohibited.	
MM42	Soil Compaction and Erosion	EIAR Chapter 8	Landscaping areas will be sealed and levelled using the back of an excavator bucket to minimise the potential for erosion. The upper vegetative layer will be stored with the vegetation part of the sod facing the right way up to encourage growth of plants and vegetation	As required by the Contractor's CEMP.

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			at the surface. These measures will prevent the erosion of any peat in the short and long term.	
			Peat, overburden, and rock will be reused on site to reinstate borrow pits and other excavations. Peat soils are limited and will be placed in the borrow pit deposition areas, completely below the existing ground profile on all sides thereby containing the peat/peaty soils and eliminating any possibility of a peat stability-related slope failure. The borrow pit deposition areas are located between T13 and T15 and provide an opportunity for landscaping and restoration to match the natural surroundings.	
			On completion, the borrow pit deposition area surfaces will be stabilised by the establishment of natural vegetation. The detailed design, construction, and operation and maintenance of the borrow pit backfill operation will be documented in the design stage Peat Stability Risk Assessment, the Peat Stability Risk Register, and the Site Geotechnical Folder which is to be handed over for operation and maintenance.	
			A key project goal is to incorporate sustainability into the design and construction of the project where practical. Where mineral soils are encountered in the excavation and construction of site roads, bases, etc, this material will be stockpiled for assessment and subsequent re-use. Where mineral soil is not directly suitable for construction it will be used for reinstatement works and will be geo-engineered as necessary.	
			As part of the proposed works two borrow pits are proposed to provide materials suitable for construction, the purpose of which is to minimise the need to import of aggregates from elsewhere, reducing the project's environmental footprint. It is not intended that the borrow pits be fully reinstated, although it is proposed that the borrow pits will be partially reinstated using suitable excess materials. The remaining borrow pit areas, post reinstatement, will be established to enhance biodiversity.	

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			The construction traffic will utilise the permanent access track network for access and egress, and this access will be constructed in advance of other ground works in a sequential manner.	
			A Spoil Management Plan (SMP) was developed as part of the planning application – See Appendix 2-3. This plan documents how spoil will be managed on site for re-use of materials, the design for on-site re-use and disposal options, and a scheme for the tracking and recording of soil movements. These measures will prevent the erosion of soil in the short and long term. Soils, overburden, and rock will be reused on site to reinstate any excavations where appropriate.	
			Access tracks will be constructed first to allow for access within the proposed project. Vehicular movements will be restricted to the footprint of the proposed project, particularly with respect to the newly constructed access tracks. This means that machinery must be kept to the tracks and aside from advancing excavations not move onto areas that are not permitted for the development, such as areas which have not been designated for access or infrastructure.	
			Construction of internal electricity transmission cables will present similar, but lower-level risks, to the construction risks outlined above, and the same mitigation measures will be adopted as above. Surplus material from the onsite roads will be reused on site in the borrow pits or on road upgrades.	
MM43	Proposed GCR and works areas of the proposed TDR	EIAR Chapter 8	The majority of the proposed GCR cabling will be laid in the public road. Construction method statements and templates will be implemented to ensure that the proposed GCR infrastructure is installed in accordance with the correct requirements, materials, and specifications of ESBN and EirGrid. The ducts will be installed and the trenches will be reinstated in accordance with ESBN/EirGrid, private third-party landowners and County Council specifications. Once all are satisfied, then the cables are pulled through the installed ducts in approximately 500 to 700 m sections.	As required by the Contractor's CEMP.
			Excavated mineral material will be temporarily stockpiled onsite for re-use during reinstatement. Stockpiles will be restricted to less than 2 m in height. Stockpiles will be located a minimum of 50 m from surface	

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			water features and all stockpiling locations will be subject to approval by the Site Manager and Project Ecological Clerk of Works (ECoW).	
			For concrete and asphalt/bitmac road sections, it is proposed to carry out immediate permanent reinstatement in accordance with the specification and to the approval of the local authority and/or private landowners, unless otherwise agreed with the local authority. Surplus excavated bitmac material will be brought to a recycling facility for processing in accordance with the circular economy approach.	
			For offroad i.e. access tracks/grass sections, the cable section will be laid within an existing access track. Silt fences will be utilised along the offroad sections. Short sections (<50m) will be excavated and reinstated on a phased basis with suitable excavated material to ground level and finish in a gravel track as per the EirGrid/ESBN specification. By limiting the excavated sections, the potential for compact or erosion is limited.	
MM44	Geohazard / Peat and Soil Stability	EIAR Chapter 8	Peat or peaty soils on the proposed wind farm are shallow. Given the scale of the project, a major consideration for its development is the management of the materials excavated as part of the construction works. To this end and in order to further mitigate against any risk of peat instability, it is proposed to use any excavated peat to backfill the extant borrow pit areas. A Spoil and Peat Management Plan is provided in Appendix 2-3. A full material management plan for the various phases of the development will be designed and maintained over the course of the project.	what defines "shallow"?
			Mitigation measures include stepping or battering back of excavations to a safe angle to support the peat and soft clays during construction. To ensure slope stability, excavations will be battered back (sloped) to between 1:1.5 and 1:2 depending on the depth and type of material. Permanent slopes will generally be less than 1:3. The works programme for the construction stage of the proposed project will also take account of weather forecasts and predicted rainfall in particular. Large excavations and movements of subsoil or vegetation stripping will be suspended or scaled back if heavy rain is forecast. Works will be	As required by the Contractor's CEMP.

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			suspended if the forecast suggests any of the following is likely to occur: • >10 mm/hr rainfall (i.e., high intensity local rainfall events); • >25 mm rainfall in a 24-hour period (heavy frontal rainfall lasting most of the day); or • >Half the monthly average rainfall in any 7 days.	
			Prior to works being suspended the following control measures will be completed: • All open excavations to be secured; • Temporary or emergency drainage to be provided to prevent back-up of surface runoff; and • Work during heavy rainfall and for up to 24 hours after heavy rainfall events to be suspended to ensure that drainage systems are not overloaded.	What does "secured" mean?
			The management of peat stability will be ongoing throughout the construction and operational stages of the project and will be managed through the use of a geotechnical risk register.	sounds impressive but what SPECIFIC actions and control measures does this entail?
			A physical barrier will be implemented between the excavations and the potentially unstable material at unstable conditions, in the form of a granular berm or sheet piles. The long-term stability of the area around the wind turbine foundations will be achieved by filling the area back up to existing ground level following installation of the foundation.	will the piling of the sheets in itself not be de-stabilising?
			A suitably qualified and experienced geotechnical engineer or engineering geologist will monitor excavation works. The earthworks will not be carried out during severe weather conditions.	
Hydrology and Hydrogeology (Water Quality Management)				
MM45	Surface Water Drainage	EIAR Chapter 9	The design of the proposed project includes a range of best practice measures including the use of bunding and Sustainable Drainage Systems (SuDS), and the implementation of a construction environmental management plan (CEMP) and a surface water management plan (SWMP) (Appendix 2.8 and 2-10 of the EIAR). Approaches to manage surface water that take account of water	As required through the Contractor's CEMP and the SWMP.

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			quantity, water quality, biodiversity and amenity are collectively referred to as SuDS. The principal behind SuDS devices is to reduce the quantity of discharge from developments such as the proposed project to predevelopment flows and to improve the quality of run-off. The SuDS devices as part of the proposed project design mimic existing greenfield runoff in terms of volume, rate of runoff and quality of runoff. For the proposed project the quantity of run-off will be decreased to greenfield rates by providing SuDs methods such as surface water settlement ponds.	
MM46	not specific Surface Water Quality	EIAR Chapter 9	The SWMP will be implemented by the appointed contractor and will be regularly audited throughout the construction phase. The Environmental Manager will be required to stop works on site if he/she is of the opinion that a mitigation measure or corrective action is not being appropriately or effectively implemented. No instream works are proposed on the Glenshelane River crossing. The proposed bridge span is 19 m and there are no works with 3.5 m from the banks of the Glenshelane River. The proposed bridge flow capacity is >20 m^3/s which is greater than the 1:100 year flow. Further details of the bridge crossing are provided on Drawing 10303-2024 of the EIAR. Near-stream construction work will only be carried out during the period permitted by the IFI (2016) guidance document "Requirements for the Protection of Fisheries Habitat during Construction and Development Works at River Sites", that is, May to September inclusive. This time period coincides with the period of lowest expected rainfall and, therefore, minimum runoff rates. This will minimise the risk of entrainment of suspended sediment in surface water runoff, and transport via this pathway to surface watercourses. For the Glenshelane River crossing, any water in excavations will be pumped to lands that are >10 metres from any watercourse and discharged via a silt bag and overland flow to a discharge point. Silt fencing will be erected at the location of stream crossings. It is proposed to use triple silt fences (woven, high tensile strength heavy porous filter fabric) near the stream. The first silt fence will be installed by hand. Installing silt fencing requires proper placement based on the	It is recommended that local surface water features at the proposed wind farm site boundary are monitored pre-construction and during construction to take account of any variations in the quality of the local surface water environment as a result of activities related to the proposed wind farm site. A surface water management plan (SWMP) is included in Appendix 2-9 of the EIAR. The main water parameters in terms of their potential to cause damage to aquatic life, ecosystems, human health, and water quality in the receiving waters are outlined in the proposed surface water monitoring schedule. Inspections of silt traps are critical after prolonged or intense rainfall while maintenance will ensure maximum effectiveness of the proposed measures. Stockpiles will be evaluated and monitored and kept stable for safety and to minimise erosion. Turbidity monitors/alarms will be strategically placed upgradient on the Glenshelane River and downgradient of the works to assess the effects, if any, of the main construction works including bridge crossings and turbine base construction. Elevated turbidity could result from a number of on-site construction activities or from off-site sources i.e. erosion, forestry or agricultural activities. Where elevated turbidity is noted both upstream and downstream, visual checks will be undertaken. All

regularly = not specific

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			contours, fencing without long runs, heavy porous filter fabric i.e. Terrastop™, posts with proper depth and spacing, and tight soil compaction on both sides of the silt fence.	monitoring equipment will be calibrated regularly to ensure that results are accurately measured. Corrective Actions would include: • Investigate whether channels used to convey water are protected with vegetation, erosion control blankets, or a similar erosion control measure. If not, implement appropriate erosion control measures. • Check all outlets and locations of turbidity monitors • Stop dewatering if the downgradient area shows elevated turbidity or erosion. . • Check outlet protection or a velocity dissipation device. • Ensure a stable, erosion-resistant surface (e.g., well-vegetated grassy areas, clean filter stone, geotextile underlay) in place at outlets. • Check for leaking pumps, hoses, and pipe connections and fix same if identified. A programme of inspection and maintenance will be designed, and dedicated construction personnel assigned to manage this programme. A checklist of the inspection and maintenance control measures will be developed, and records kept. During the construction phase, field testing, sampling and laboratory analysis of a range of parameters will be undertaken at adjacent watercourses, specifically following heavy rainfall events (i.e., weekly, monthly and event-based as appropriate). Monitoring and maintenance as required throughout the construction stage. which laboratory where will results be published?
MM47	Forestry: Felling	EIAR Chapter 9	The Standards for Felling and Reforestation describe the universal standards that apply to all felling (thinning, clear felling) and reforestation projects on all sites. The standards will be implemented under a felling licence issued by the Department of Agriculture, Food & the Marine.	
			In accordance with the Forestry and Water Quality Guidelines (Forestry Service, 2000), buffer zones will be identified and marked out on the ground. These guidelines deal with sensitive areas, erosion, buffer zone guidelines for aquatic zones, ground preparation and drainage, chemicals, fuel and machine oils. Construction activities will be curtailed within the buffer zones in order to reduce erosion and sedimentation and, therefore, to protect surface water quality. Buffer zone widths vary from 10 m to 25 m, depending on slope and soil erosion classification. Details of buffer zones to be implemented during construction are included in Table 9-19 of the EIAR.	
			The slopes across the proposed wind farm site are predominantly moderate (<1:7) with steeper slopes to the southeast and northeast. As the soil type varies across the proposed wind farm site, in line with the Forestry Service Guidelines (2000) a 10 m to 20 m buffer zone is appropriate.	
			All associated tree felling will be undertaken using good working practices as outlined in the Forestry Report and the CEMP (Appendices 2-5 and 2-10 of this EIAR), the Forestry Harvesting and Environment Guidelines (Forestry Service, 2000) and the Forestry and Water Quality Guidelines (Forestry Service, 2000). Brash mats will be used to support harvesting and forwarding machinery. The brash mats reduce erosion of the surface and will be renewed as they become used and worn over time.	
MM48		EIAR Chapter 9	During any near stream construction work, silt traps and triple row silt fences will be placed immediately down-gradient of the construction	

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
	Forestry: Silt fencing / sediment traps		area for the duration of the construction phase. Silt fencing is presented on Drawing 10303-2040 to 10303-2042 of the EIAR.	
			Typical sediment trap designs are illustrated in Section 9.5.1.1 of Chapter 9 of the EIAR and within the Forestry Schemes Manual, 2017. Sediment traps will require monitoring and maintenance throughout the construction stage. Sediment traps will be constructed and maintained in line with the requirements of the Forest Road Manual and Forest Drainage Engineering – A Design Manual (Forestry Schemes Manual, 2011).	
MM49	Forestry: Drainage	EIAR Chapter 9	With reference to the COFORD 2002 guidance, the following measures will be implemented in relation to the existing forest drainage: • Minimise the crossing of drains during felling and extraction and restrict machine activity to brashed extraction racks and forwarding routes; • Where a drain crossing is needed, based on the size of the forest drain one of the following methods will be selected that prevents the breakdown and erosion of drain sides, namely: o For larger drains, deploy a heavy-duty plastic culvert lengthways into the channel and cover with brash material. The culvert must be of a diameter approximating the depth of the drain, to avoid any unnecessary undulation along the extraction route. o Where required, a solution for smaller drains is to temporarily lay log sections lengthways into the channel and overlay with brash. Again, logs will be that approximate to the depth of the channel to be crossed.	
MM50	Forestry Aquatic Zones and Larger Relevant Watercourses	EIAR Chapter 9	Minimise the crossing of streams during felling and extraction by choosing alternative routes which avoid the watercourses/aquatic zones.	
			Direct crossing over the stream bed will not be permitted.	
			Water Features will be crossed at a right angle to the flow of water.	

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			Any necessary crossing will be via an appropriate structure that spans proud of the flow of water and prevents the breakdown and erosion of the banks.	
MM51	Concrete Management	EIAR Chapter 9	Concrete is required for the construction of the turbine bases and foundations. Wash out of the main concrete mixing drum will not be permitted on site; wash out is restricted only to chute wash out. Wash down and washout of the concrete transporting vehicles will take place at an appropriate facility off-site. Cement and raw concrete will not be spilled into watercourses. Ready-mixed supply of wet concrete products and emplacement of pre-cast elements such as culverts and the clear span bridge across the Glenshelane River will take place. During the delivery of concrete on site, only the chute will be cleaned on-site. Chute cleaning will be undertaken at lined cement washout lagoons. The collected concrete washout water and solids will be emptied on a regular basis. Washout will be undertaken at the construction compounds. These lagoons will be cleaned out by a licensed waste contractor. No discharge of cement contaminated waters to the construction phase drainage system or directly to any artificial drain or watercourse will be allowed. Weather forecasting will be used to plan dry days for pouring concrete. The pour site will be kept free of standing water and plastic covers will be ready in case of sudden rainfall event.	that is a great relief, but hardly a mitigation measure - not specific As required through the Contractor's CEMP.
MM52	Fuels & Chemicals	EIAR Chapter 9	With regards to on-site storage and handling of potentially pollutant materials: • All on-site refuelling will be carried out by a trained competent operative. • Mobile measures such as drip trays and fuel absorbent mats will be kept with all plant and bowsers and will be used as required during all refuelling operations; • A spill kit will be stored with the bowser and the person operating the bowser will be trained in its use; • All equipment and machinery will have regular checking for leakages and quality of performance and will carry spill kits;	As required through the Contractor's CEMP. not specific

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			• Any servicing of vehicles will be confined to designated and suitably protected areas such as construction compounds; and • Additional drip trays and spill kits will be kept available on site, to ensure that any spills from vehicles are contained and removed off site.	why do they not go to a garage?
MM53	Drainage Management	EIAR Chapter 9	Interceptor drains will be installed up-gradient of all proposed infrastructure to collect clean surface runoff, in order to minimise the amount of runoff reaching areas where suspended sediment could become entrained.	where do the interceptor drains lead to?
			Track edge drainage/swales will be implemented to control run-off from the running surface to lower water levels in the subgrade, to control surface water and to carry this flow to outlet points. Swales along access tracks will be installed in advance of the main construction phase.	
			Swales will provide additional storage of storm water, located along gradient. Given the steep longitudinal gradients on some sections of access track, regular check dams will be employed within the trackside swale on these sections to reduce the flow velocity and provide settlement opportunity. Swales will re-vegetated following excavation. Vegetation will reduce the flow velocity, treat potential pollutants, increase filtration and silt retention.	As required through the Contractor's CEMP.
			Settlement ponds will be located downstream of road swale sections and at hardstand locations, to manage/buffer volumes of runoff discharging from the drainage system during periods of high rainfall, thereby reducing the hydraulic loading to watercourses. Settlement ponds are designed in consideration of the greenfield runoff rates. The settlement pond design (Drawing 11303-2036 of the EIAR) is based on primary settling out of suspended solids from aqueous suspension. Settlement ponds will be installed alongside with the formation of the road and will be fenced off for safety. Only the proposed onsite access track will be used for project-related traffic.	

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
MM54	Borrow Pit reinstatement areas	EIAR Chapter 9	Excavated material will be reused on site. The stockpiling of materials will be carefully supervised as per the mitigation measures listed in Chapter 8 of the EIAR (Land, Soils and Geology). Surplus material and peaty soil/peat will be placed in the borrow areas.	50m as minimum seems stills close - arbitrary As required by the Contractor's CEMP.
			The nature of the spoil deposition areas is an important measure in mitigating against suspended solids in run-off. The spoil deposition areas have the following characteristics; >50 m from rivers, no in situ peat, relatively flat (<3 degrees), and topographically constrained. This mitigates against potential stability issues. The drainage scheme for the spoil deposition area will be controlled through a series of proposed settlement ponds with the provision of an overflow.	
			Settlement ponds will be maintained over the course of the development and for a period until vegetation has stabilised.	
			The reinstated borrow pit will be allowed to naturalise and utilise the vegetative features to filter water on site. Revegetation of the spoil deposition areas will stabilise the surfaces. Based on the existing plant species, the vegetation will initially comprise predominantly rushes, grasses, sedges and bryophytes. These areas will reseed naturally utilising adjacent and local seed banks.	
MM55	Stream crossings / Proposed GCR and works areas on the proposed TDR	EIAR Chapter 9	Where stream crossings occur, it is proposed to use clear span bridges (i.e. Glenshelane River). For the Glenshelane River crossing, three lines of silt fence will be erected to provide a physical separation, which will trap suspended sediment from the works area (see Drawings 11303-2024, 11303-2040 to 11303-2042 of the EIAR). Silt fences will be inspected routinely and inspections will be increased after runoff events. A bottomless culvert/clear span bridge will be utilised on the smaller Boherawillin and Moneygorm east streams. Commercial forestry drains will be crossed using standard culverts.	As required by the Contractor's CEMP.
			Silt fencing will be erected at the location of stream crossings along the proposed GCR. Appropriate steps will be taken to prevent soil/dirt generated during the temporary upgrade works to the proposed TDR from being transported on the public road. Road sweeping vehicles will be used as required, to ensure that the public road network remains	

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Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			free of soil/dirt from the location of the proposed TDR works when required. This will reduce the potential for sedimentation of surface watercourses locally.	
			Appropriate steps will be taken to prevent soil/dirt generated during the temporary upgrade works to the proposed TDR from being transported on the public road. Road sweeping vehicles will be used as required, to ensure that the public road network remains free of soil/dirt from the location of the proposed TDR works areas when required. This will reduce the potential for sedimentation of surface watercourses locally.	
			Further mitigation measures in relation to the proposed GCR route and road/junction accommodation works on the proposed TDR are outlined in the CEMP in Appendix 2.8 of the EIAR.	
MM56	Groundwater Quality	EIAR Chapter 9	During the construction phase, all works associated with the construction of the wind farm site will be undertaken in accordance with the guidance contained within CIRIA Document C741 'Environmental Good Practice on Site' (CIRIA, 2015). Groundwater pumped from excavations will be treated to remove silt by the use of silt bags. Water will discharge from the silt bags into settlement ponds and the SuDS network.	The dewatering operations will be inspected once each day when dewatering is taking place to ensure that dewatering treatment controls are working correctly and to evaluate whether there are observable indicators of sediment discharges. Where any issues are encountered, action will be undertaken to correct any problems at the proposed project or with the dewatering controls that may have contributed to the discharges. Regular monitoring of groundwater (levels and quality) will take place using existing monitoring boreholes during the construction phase. The existing groundwater well on site will be monitored on site during construction and for a period following cessation of construction activities (to be agreed with the relevant authorities).
			Groundwater encountered will be managed and treated in accordance with CIRIA C750, 'Groundwater control: design and practice' (CIRIA, 2016). Groundwater from the borrow pits will be treated in the settlement ponds, see Drawing 11303-2040 to 11303-2043 of the EIAR. An alternative supply to the onsite well will be provided in the event of a derogation of the water supply. A CEMP (Appendix 2.8 of the EIAR) was developed for the proposed project to ensure adequate protection of the water environment. All personnel working on the proposed project will be responsible for the environmental control of their work and will perform their duties in accordance with the requirements and procedures of the CEMP.	

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
Material Assets				
MM57	Telecommunications	EIAR Chapter 11	In the unlikely event that a communication underground cable or link is damaged or interfered with during construction, the operator will be contacted to agree a repair which will be carried out as soon as possible at the developers cost. In addition, the developer will sign an agreement with 2RN prior to construction to commit to restoring service to any end users that may have their service disrupted as a result of the proposed project. This is standard industry practice and will eliminate any potential effects in this regard.	As required by the Contractor's CEMP. As agreed with 2RN.
MM58	Waste Management (including wastewater)	EIAR Chapter 11	Segregation of waste will be carried out to maximise the potential for waste recycling and minimise potential effect on waste services. Suitably permitted commercial waste collectors will be employed to remove any waste arisings generated from construction to the nearest appropriately licensed waste management facilities within County Waterford.	As required by the Contractor's CEMP.
			Wastewater from the staff welfare facilities will be managed by means of a sealed storage tank, with all wastewater being tankered off-site occasionally (as required) by a permitted waste collector to a wastewater treatment plant. The permitted waste collector will also be responsible for ensuring clean water storage tanks are topped up. The proposed wastewater storage tank will be fitted with an automated alarm system that will provide sufficient notice that the tank requires emptying. It is proposed to use low volume flush toilets (such as those in commonly used port-a loos) and low volume sink faucets to significantly reduce the volume of waste water produced. In addition, the number of staff is likely to fluctuate rather than being constantly at 100 people per day, thereby reducing the volume of wastewater produced.	As required by the Contractor's CEMP.
Noise & Vibration				
MM59	Noise and Vibration	EIAR Chapter 12	The Contractor undertaking the construction works will be obliged to take specific noise abatement measures and comply with the recommendations of British Standard BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Noise and BS 5228-2:2009+A1:2014 Code of	As required by the Contractor's CEMP.

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			practice for noise and vibration control on construction and open sites – Vibration. To ameliorate any potential noise impacts that may present during the construction phase, a schedule of noise and vibration control measures has been formulated in accordance with best practice guidance. These are outlined in the CEMP that has been prepared for the proposed project.	
MM60	Proposed GCR Construction Works	EIAR Chapter 12	In respect of the GCR construction, a temporary solid hoarding may be employed where there are NSL's within 25 m to the activity. This can be expected to reduce noise at the NSL by 5 - 10 dB. With this mitigation measure in place, noise levels at 20 m distance from construction activity are expected to be within the criterion for linear construction works in Section 12.2.2.1.1 of Chapter 12 of the EIAR.	As required by the Contractor's CEMP.
			Additional or alternative mitigation measures include: • Monitoring typical levels of noise and vibration during critical periods and at sensitive locations; • Selection of plant with low inherent potential for generation of noise and/ or vibration, and; • Placing of noisy / vibratory plant as far away from sensitive properties as permitted by site constraints.	
			It is noted that the assessment presented in Section 12.5.2.5 of Chapter 12 of the EIAR is conservative, and the assessment has identified a potential exceedance of the noise criteria at two number NSL's with 25 m of the works. If the appointed contractor can demonstrate through onsite monitoring or other means that mitigation measures are not required to meet the relevant construction noise criteria, then works can proceed without specific mitigation measures in place.	
MM61	Blasting	EIAR Chapter 12	If blasting is undertaken as part of the proposed project, a detailed assessment will be undertaken by a specialist blast design engineer to determine the blast design parameters; all mitigation measures specified by the blast design engineer to keep vibration values within the criteria in Section 12.2.2.2 of Chapter 12 of the EIAR will be implemented.	As required by the Contractor's CEMP.

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			Air overpressure from a blast is difficult to control, however, because of its variability much can be done to reduce the effect. A reduction in the amount of primer cord used, together with the adequate burial of any that is above the ground, can give dramatic reduction to air overpressure intensities especially in the audible frequency range. Should complaints arise, they are likely to be received from an area downwind of the blast site, and therefore, blasting will be postponed during unfavourable weather conditions. Furthermore, as air blast intensity is a function of total charge weight, then a reduction in the total amount of explosives used can also reduce the air overpressure value.	
			Further guidance will be obtained from the recommendations contained within BS 5228: Part 1 and the European Communities (Construction Plant and Equipment) (Permissible Noise Levels) Regulations 1988 in relation to blasting operations.	
			The methods used to minimise complaints could consist of some or all of the following: • Restriction of hours within which blasting can be conducted (e.g. 09:00 – 18:00 hrs). • Notification to nearby residents before blasting starts (e.g. 24-hour written notification). • The firing of blasts at similar times to reduce the 'startle' effect. • On-going circulars informing people of the progress of the works. • The implementation of an onsite documented complaints procedure. • The use of independent monitoring by external bodies for verification of results. • Trial blasts in less sensitive areas to assist in blast designs and identify potential zones of influence.	not specific what is "nearby" what external bodies
Air Quality / Dust				
MM62	Dust Management Plan	EIAR Chapter 14	In order to minimise dust emissions during construction, a series of mitigation measures have been prepared in the form of an outline Dust Management Plan (Appendix 14.1 of the EIAR). The Dust Management	As required by the Dust Management Plan and the Contractor's CEMP.

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			Plan will be reviewed prior to the construction and decommissioning phase of the proposed project, it includes the following: • On-site access tracks and public roads in the vicinity of the site shall be regularly cleaned to remove mud, aggregates and debris and maintained when the daily inspections deem any trackout to public roads has occurred. All road sweepers shall be water assisted; • Any road that has the potential to give rise to fugitive dust shall be regularly watered, as appropriate, during dry and/or windy conditions; Public roads within 250 m of the site entrance/exit shall be regularly inspected for cleanliness and cleaned as necessary due to trackout from the proposed project; • In the event of dust nuisance occurring outside the site boundary, movement of materials will be immediately terminated, and satisfactory procedures implemented to rectify the problem before the resumption of operations; • During movement of materials both on and off-site, trucks carrying materials which have the potential to generate dust will be covered at all times. Before entrance onto public roads, trucks will be adequately inspected to ensure no potential for dust emissions; • Material handling systems and site stockpiling of materials will be designed and laid out to minimise exposure to wind. Water misting or sprays will be used as required if particularly dusty activities are necessary during dry or windy periods (as determined by the site environmental manager on site); and • The Dust Management Plan will be reviewed by the appointed contractor and client at regular intervals during the construction phase to ensure the effectiveness of the procedures in place and to maintain the goal of minimisation of dust through the use of best practice and procedures. At all times, these procedures will be strictly monitored and assessed. In the event of dust nuisance occurring outside the site boundary, movements of materials likely to raise dust will be curtailed and	

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			satisfactory procedures implemented to rectify the problem before the resumption of construction operations.	
MM63	Climate Mitigation	EIAR Chapter 14	The IEMA GHG Management Hierarchy (IEMA 2020b) will be followed for impact minimisation. The Hierarchy is as follows: First eliminate: • Influence business decisions/use to prevent GHG emissions across the lifecycle; • Potential exists when organisations change, expand, rationalise or move business; • Transition to new business model, alternative operation or new product/service. Then reduce: • Real and relative (per unit) reductions in carbon and energy; • Efficiency in operations, processes, fleet and energy management; • Optimise approaches (e.g. technology) and digital as enablers. If you can't eliminate or reduce, then Substitute • Adopt renewables/low-carbon technologies (on site, transport etc.); • Reduce carbon (GHG) intensity of energy use and of energy purchased; • Purchase inputs and services with lower embodied/embedded emissions. The final option is to compensate: • Compensate 'unavoidable' residual emissions (removals, offsets etc.); • Investigate land management, value chain, asset sharing, carbon credits; • Support climate action and developing markets (beyond carbon neutral).	why are not all required machinery electric vehicles? As required by the Contractor's CEMP. how specifically?
MM64	Embodied carbon	EIAR Chapter 14	Embodied carbon of materials and construction activities will be the primary source of climate impacts during the construction phase. Measures to reduce the embodied carbon of the construction works will be implemented as follows:	As required by the Contractor's CEMP.

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			• A construction programme will be created to allow for sufficient time to determine reuse and recycling opportunities; • Alignment with requirements under the Local and National Climate Action Plan; • The replacement, where feasible, of concrete containing Portland cement with a low carbon concrete as per the Climate Action Plan; • The IEMA mitigation hierarchy will be followed (see above); • A suitably competent contractor will be appointed who will undertake waste audits detailing resource recovery best practice and identify materials can be reused/recycled; • Materials will be reused on site within the new build areas where possible; • Prevention of on-site or delivery vehicles from leaving engines idling, even over short periods; • All plant and machinery will be well maintained and inspected regularly; • Minimising waste of materials due to poor timing or over ordering on site will aid to minimise the embodied carbon footprint of the site; and • Sourcing materials locally where possible to reduce transport related CO2 emissions.	quantify please idling only relevant to gasoline/diesel vehicles/ machinery why not stipulate electric only?
MM65	Future climate change	EIAR Chapter 14	Measures (see Section 14.4.3.3 of Chapter 14 of the EIAR) have been incorporated into the design of the proposed project in order to mitigate against the impacts of future climate change. These measures have been considered when assessing the vulnerability of the proposed project to climate change but will be reviewed on a regular basis (every 5 years) to ensure they continue to be appropriate to mitigate the effects of climate change (see Section 14.4.3.3 of chapter 14 of the EIAR).	The vulnerability of the proposed project to climate change but will be reviewed on a regular basis (every 5 years) to ensure the measures incorporated in to the design continue to be appropriate to mitigate the effects of climate change (see Section 14.4.3.3 of chapter 14 of the EIAR). vague and not specific
Archaeology and Cultural Heritage				
MM66	Topsoil / Excavations	EIAR Chapter 15	All stripping of topsoil across the proposed project, including excavations as part of the proposed GCR within 40m of AH1 (ringfort) and AH2 and AH3 (church and graveyard), as part of watercourse crossings and road widening along the proposed TDR will be	A suitably qualified archaeologist will be appointed to monitor all stripping of topsoil across the proposed project, including excavations as part of the proposed GCR within 40m of AH1 (ringfort) and AH2 and AH3 (church

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			monitored by a suitably qualified archaeologist. Should any features of archaeological potential be discovered during the course of the works the DoHLGH will be informed immediately and archaeological excavation (preservation by record) or in-situ will be required. Preservation by record or in-situ will require approval from the DoHLGH, with all archaeological excavation carried out under licence from the National Monuments Service of the DoHLGH.	and graveyard), as part of watercourse crossings and road widening along the proposed TDR.
Traffic Management				
MM67	Construction Traffic	EIAR Chapter 16	To mitigate the effect of the construction traffic, the proposed project will utilise all available resources within the existing site to reduce the requirement for importation of materials to site. Excavation of stone material from the borrow pits within the proposed wind farm site to provide construction material will reduce the HGV volumes required.	As required through the TMP.
			The greatest traffic volume effect is associated with the haulage of the materials for the site compounds, site roads and turbine hardstands from July to September 2027. Key deliveries during this period are aggregate and stone which may be sourced from the borrow pits onsite. The internal access tracks have been designed to utilise existing forestry access tracks where feasible, reducing the volume of materials required for importation to the site.	
			The second greatest volume of traffic effect is associated with the concrete pours for the turbine foundations. The works at other areas within the proposed wind farm site will continue during these concrete pours, but only essential deliveries will be scheduled to occur on the same day as the concrete pours, and local authorities and the community will be informed in advance of the foundation pours.	
MM68	Traffic Management Plan (TMP)	EIAR Chapter 16	The Traffic Management Plan (TMP) is a comprehensive set of mitigation measures that will be implemented by the Contractor before and during the construction phase of the proposed project to minimise its effects. The purpose of the TMP is to capture the mitigation measures in this EIAR as discussed with Waterford County Council and Kilkenny County Council during scoping and any future traffic mitigation as they may arise during the proposed project. The TMP proposed for the proposed project is included in Appendix 16-1	As required through the TMP.

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			of the EIAR. The following mitigation has been incorporated into the TMP:	
			Traffic movements will be limited to 07:00 - 19:00 Monday to Friday and 07:00 – 14:00 Saturday, unless otherwise agreed in writing with Waterford County Council.	
			HGV movements will be restricted during peak road network hours (including school hours) from 08:30 – 09:30 and 16:30 – 17:30 Monday to Friday, unless otherwise agreed in writing with Waterford County Council.	
			HGV movements for the proposed project shall be directed away from sensitive areas (i.e., schools, urban centres).	
			No parking shall be permitted along the access route for unloading or activities that result in blockages of access routes. Such vehicles will be immediately requested to move to avoid impeding the works and traffic on the road network.	
			Measures to remove queuing of construction traffic on the adjoining road network, including turning space and queuing of convoy HGVs will be provided within the sites.	
			Wheel wash equipment will be used on site to prevent mud and stones from being transferred from the site to the public road network.	
			Activities generating dust will be minimised where practical during windy conditions. Loads will be covered on arrival and departure from the site, where required.	
			Clear construction warning signs will be placed on the public road network to provide advance warning to road users of the presence of the construction site and slower-moving vehicles making turning manoeuvres.	
			Access to the construction site will be controlled by onsite personnel and all visitors will be asked to sign in and out of the site by security/site personnel, and site visitors will all receive a suitable Health and Safety site induction.	
			Security gates will be sufficiently set back from the public road, so that vehicles entering the site will stop well clear of the public road.	

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
MM69	TMP: Construction Practice	EIAR Chapter 16	Traffic Management Co-ordinator – a competent traffic management co-ordinator will be appointed for the duration of the proposed project and this person will be the main point of contact for all matters relating to traffic management.	define area
			Delivery Programme – a programme of deliveries will be submitted to Waterford County Council in advance of the delivery of the turbine components to the site.	
			Information to locals – residents in the area will be informed of any upcoming traffic related matters, e.g., temporary lane/road closures or any night deliveries of turbine components, via posters in public places. Information will include the contact details of the Applicant's representative, who will be the main point of contact for all queries from the public or local authority during normal working hours. An "out of hours" emergency number will also be provided.	
			Pre and Post Construction Condition Survey – a pre-condition survey of roads on approach to the site will be carried out prior to construction commencement to record the condition of the road. A post construction survey will be carried out after the works are completed. The timing of these surveys will be agreed with Waterford County Council.	As required through the TMP.
			Liaison with Local Authorities – liaison with Waterford County Council and Kilkenny County Council, including the roads and transport section, through which the delivery route traverses, and An Garda Siochána, during the delivery phase of the AILs, wherein an escort for all convoys may be required.	
			Temporary Alterations – implementation of temporary alterations to road network at critical junctions.	
			Travel plan for construction workers – a travel plan for construction staff and sub-contractor construction staff.	
			Temporary traffic signs – As part of the traffic management measures, temporary traffic signs will be put in place.	
			TMOs will be present at site access point during peak delivery times under supervision of Co-Ordinator.	

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Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			Delivery Times of Large Turbine Components – TMP will include the option to deliver the large wind turbine plant components at night in order to minimise disruption to general traffic during the construction stage.	
MM70	Traffic Effect	EIAR Chapter 16	To mitigate the effect of the construction traffic, the Traffic Management Plan in Appendix 16-1 will be implemented in full by the appointed Contractor. During the construction phase, all available resources within the existing site will be utilised to reduce the requirement for the importation of materials to the site. Excavation of stone material from two borrow pits within the proposed wind farm site to provide capping material will reduce the HGV volumes required.	As required through the TMP.
			In addition to the borrow pits, the internal access tracks have been designed to utilise existing forestry access tracks where feasible, reducing the volume of materials required for importation to the site.	
			The largest traffic volume is associated with the concrete pours for the turbine foundations. The works at other areas within the proposed wind farm site will continue during these concrete pours, but only essential deliveries will be scheduled to occur on the same days as the concrete pours. To mitigate this effect, liaison with local authorities and the community in advance of the foundation pours will occur.	
MM71	Junction Visibility	EIAR Chapter 16	Adequate visibility is available from the site access onto the Local Road L5055, of 4.5 m 'x- distance' and 'y-distance' of 160 m and, in three points where internal route cross local roads (i.e., local roads L5054, L5055 and L1026). On these three crossing points, adequate visibility is available of 4.5 m 'x- distance' setback from road and 'y-distance' of 55 m. Visibility sightlines are in accordance with Waterford City and County Development Plan and TII DN-GEO-03060 (May 2023).	As required through the TMP.
			Maintenance of the hedgerows within the visibility splays will be undertaken to maintain the required visibility splays and mitigate the potential for overgrown vegetation which may result in inadequate visibility at the access and crossing points during the construction activities, see Drawings No. 11303-2020 to 11303-2023.	

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			Adequate visibility at the site accesses will mitigate the potential increased likelihood for collisions between construction generated traffic and existing road network traffic.	
MM72	Junction Swept Past Analysis	EIAR Chapter 16	In accordance with the TII DN-GEO-03060 (May 2023) swept path analysis has been undertaken at the site access for a worst-case construction vehicle (i.e., articulated truck with 16.5m long), in addition to those undertaken for the AIL as outlined in Table 16-8 of Chapter 16 of the EIAR. The swept path of the maximum legal articulated vehicle accessing/departing the site are available in Drawing No. 11303-2020.	As required through the TMP.
			The swept path analysis of the longest AIL, the turbine blade, were undertaken following identification of potential pinch points in the route assessment report as presented in drawings in Appendix 16-2 of the EIAR. The swept path analysis used an 81.5 m blade length which is the maximum blade length to be used in the proposed project, thus the worse-case scenario for this analysis.	
			The proposed site access design has been developed to take cognisance of the swept path of all vehicles arriving to and departing from the site. The gate has been positioned to allow for a large vehicle to wait clear of passing traffic on the L5055, to avoid potential collision between a passing vehicle and one stopped to open the gates at the site access.	
			At the approach to the site access, the internal access tracks are proposed at a widened width of 7.0 m, to accommodate safe clearance width between two large construction vehicles passing.	
MM73	Haul Routes	EIAR Chapter 16	Mitigation measures on the proposed haul roads: • Selection of a viable route with the lowest impact on the road network. • Avoidance where possible of sensitive receptors and urban settings: ○ The site access route encourages the use of the existing infrastructure in the area while avoiding the local road and potential sensitive receptors.	As required through the TMP.

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			○ Proposed TDR along national roads with largest capacity to accommodate the vehicles. ○ The typical construction materials (i.e., gravel, aggregates, concrete, etc.) are obtained from borrow pits onsite and from local quarries in the proximity of site. ○ Restricting HGV movements during peak sensitive times on the road networks (i.e., at school times) • To mitigate the effect of the AIL delivery on the road network, the advanced works will be undertaken (i.e., hardstanding, making signs demountable, utility diversions etc). The hardstanding works areas will be temporary in nature and removed once the final turbine is delivered to site.	
			To mitigate potential effects of the AIL deliveries, these deliveries will be undertaken under Garda and traffic management escort during off-peak (i.e., night-time) hours. The arrangement of the appropriate abnormal load licences will be obtained by the appointed contractor in a timely fashion on procurement of the AIL. The appointed contractor will liaise with the relevant road's authorities and, An Garda Síochána on the delivery schedule for the AILs.	
MM74	Post-Construction Pavement Surveys	EIAR Chapter 16	The client will undertake post-construction visual pavement surveys on the construction material haul routes and proposed TDR. Where the surveys conclude that damage on the roadway is attributable to the Construction Phase of the proposed project, the Applicant will fund the appropriate reinstatement works to bring the road back to pre-construction condition, details for which will be agreed with the Roads Authorities.	Post-construction visual pavement surveys on the construction material haul routes and proposed TDR will be undertaken.
MM75	Project Delays	EIAR Chapter 16	All required road opening licences, agreements with the Local Authorities, and An Garda Síochána to facilitate the movement of AILs will be sought by the appointed Contractor in a timely manner to avoid delays to the proposed project.	As required through the TMP.
			A delay to the project construction programme will have a negative effect by increasing the duration of construction vehicles on the road network and potentially extending traffic management timeframes.	

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
MM76	Grid Connection Route	EIAR Chapter 16	The proposed GCR is from the proposed wind farm site to the existing substation near Dungarvan. To mitigate the effect on the road network, at the time of the construction work and in advance of the required Road Closure, the appointed Contractor will consult and comply with the Roads Authority, An Garda Síochána and other Emergency services to agree a suitable diversion route prior to implementing a Road Closure.	As required through the TMP.
			To mitigate the effect of the cable laid within the public road, the reinstatement works will be backfilled and reinstated as soon as practicable. The reinstatement works will be undertaken in accordance with the Guidelines for Managing Openings in Public Roads from the Department of Transport, Tourism and Sport (2017), also known as the "Purple Book". The proposed reinstatement and construction details and phasing will be agreed with associated Local Authorities in advance of the works. The Contractor will be responsible for arranging for the required road opening licences.	As required through the relevant agreements / permits and licences.
Operational Phase				
Description of Proposed Project				
MM77	Operational Health and Safety	EIAR Chapter 2	Access to the turbines is through a door at the base of the structure, which will be locked at all times outside maintenance visits.	As required through the Operational Management Plan / Health and Safety Plan.
			Signs will be erected at suitable locations across the site as required for the ease and safety of operation of the wind farm. Further details are provided in the CEMP (Appendix 2-8 of the EIAR).	As required through the Contractor's CEMP.
			The components of a wind turbine are anticipated to have a useful lifespan of 35 years or more and are equipped with a number of safety devices to ensure safe operation during their lifetime. During the operation of the wind farm regular maintenance of the turbines will be carried out by the turbine manufacturer or appointed service company. A project or task specific Health and Safety Plan will be developed for these works in accordance with the site's health and safety requirements.	As required through the Operational Management Plan / Health and Safety Plan.
Biodiversity Flora and Fauna				
MM78	Bats	EIAR Chapter 6	Various measures will be implemented which lower the risk of bat fatalities throughout the lifespan of the wind farm. Buffer zones	The baseline Bat survey will be updated in the first year of operation of the proposed wind farm.

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			surrounding each turbine will dissuade woodland bats that depend on landscape features for guidance from flying near turbines. Two further methods are proven to reduce bat fatalities; feathering (reduced rotation speed when turbines are idling) and curtailment (keeping turbines turned off when conditions are good for bat activity). All turbines in the proposed wind farm will be feathered, while turbines 9, 10, 11, 12, 13 and 14, deemed high risk during the entire bat active season will be curtailed from April to September inclusive and turbines 1, 2, 4, 6, 7 and 8 will be curtailed from July to September.	In addition, monitoring will take place for three years after turbines have become operational, providing sufficient data to detect any significant change in bat activity relative to pre-construction levels. It will assess changes in Bat activity patterns and the efficacy of mitigation to inform any changes to curtailment. During years one to three of operation (under blanket curtailment restrictions) bat activity will be measured at each turbine location (1 to 15), in combination with carcass surveys. Systematic searches for carcasses on the ground below wind turbines (focusing on the hard standing) will be undertaken. The searches will be undertaken by appropriately trained ecologist(s). In addition, wind speed and temperature data will be continuously recorded at the nacelle height of each turbine. Modern remotely-operated wind turbines as proposed here allow cut-in speeds to be controlled centrally/automatically, facilitating an operation regime designed to minimise harmful impacts to Bats.
MM79	Bats: Feathering of turbine blades	EIAR Chapter 6	Turbines will operate in a manner which restricts the rotation of the blades as far as is practicably possible below the manufacturer's specified cut-in speed. This is achieved by feathering the blades during low wind speeds; the angle of the blades is rotated to present the slimmest profile possible towards the wind, ensuring they do not rotate or 'idle' when not generating power. Automatic 'feathering' of idling blades will be implemented (through Supervisory Control and Data Acquisitions [SCADA]) to reduce rotation speed of blades to below 1 RPM while idling (as recommended in Mathews, [2016]). Turbine blades spinning in low wind can kill bats, however bats cannot be killed by feathered blades which are not spinning (Horn et al., 2008). The feathering of turbine blades combined with increased cut-in speeds have been shown to reduce bat fatalities from 30% to 90% (NIEA, 2021; SNH, 2021; Wellig S.D., 2018; Rydell J., 2010; Arnett, 2011 and	As required through the curtailment monitoring schedule.

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			Baerwald, 2009). As such, the feathering of blades to prevent 'idling' during low wind speeds is a requirement for all turbines and will be implemented.	
MM80	Bats: Cut-in speeds/ Curtailment	EIAR Chapter 6	Increasing the cut-in speed above that set by the manufacturer can reduce the potential for bat/turbine collisions. A study by Arnett et al., (2011) showed a 50% decrease in bat fatality can be achieved by increasing the cut-in speed by 1.5m/s. The feathering of turbine blades combined with increased cut-in speeds has been shown to reduce bat fatalities from 30% to 90% (Adams et al., 2021, Arnett et al., 2008, 2011, 2013; Baerwald et al., 2009). The most recent of studies showed a 63% decrease in fatalities (Adams et al., 2021). Species with elevated risk of collision (Leisler's bat, Soprano and Common Pipistrelle) in particular would benefit from increasing the cut-in speed of turbines, as dictated on a case-by case basis depending on the activity levels recorded at each turbine (see Table 6 12). Increased cut-in speeds will be implemented from commencement of operation. Cut-in speeds will be increased during the bat activity season (April-September) where weather conditions are optimal for bat activity (see below) from 30 minutes prior to sunset and to 30 minutes after sunrise at turbines 9, 10, 11, 12, 13 and14. In addition, turbines 1, 2, 4, 6, 7 and 8 will be curtailed under the same parameters from July to September inclusive. No curtailment is currently necessary for turbines 3, 5 and 15. Cut-in speeds restrictions will be operated according to specific weather conditions: • When the air temperature is above a 10.0°C at nacelle height. • Wind speeds below 5.0m/s (at nacelle height).	If, following the initial three years of post-construction surveys, Bat activity increases above the baseline and/or remains consistently high and carcass searches indicate fatalities are occurring (refer below), increased cut-in speeds will continue. This will subsequently be monitored in years 5, 7, 10, 15, 20, 25 and 30 with further review after each monitoring period. Alternatively, if it is found that the results of Bat activity surveys and fatality searches confirm that the level of Bat activity at turbine locations is low then consent will be sought from Waterford County Council (in consultation with NPWS) for the cessation in the requirement for these cut-in speeds / curtailment measures, or a reduction on the timing restrictions for these measures. Where post construction acoustic surveys are undertaken, they will utilise full spectrum automatic detectors deployed, as a minimum, for one complete Bat activity season. An assessment of static data gathered during operational surveillance will be completed using the online analysis tool Ecobat as recommended by SNH (2021) as a minimum, or other equivalent guidance as dictated by up-to date standards and practices.
MM81	Bats: Alternative smart curtailment option	EIAR Chapter 6	Due to the considerable unnecessary down time resulting from the proposed 'blanket curtailment' (above) and the advances in smart curtailment a focused curtailment regime could replace the proposed blanket curtailment outlined above once case studies have been published demonstrating its effectiveness at avoiding bat collisions.	Although curtailment is a mitigation proven to lower bat fatalities it is recommended that the scheme be monitored for bat fatalities for the first three years of operation (post construction surveys) and subsequently in years 5, 7, 10, 15, 20, 25 and 30 as part of the additional curtailment monitoring schedule. A

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			This would focus on times and dates, corresponding with periods when the highest level of bat activity occurs within the site. This includes the use of the SCADA operating system (or equivalent) to only pause/feather the blades below a specified wind speed and above a specified temperature within specified time periods. Post-constructions surveys will be undertaken for three years of operation to confirm if blanket curtailment restrictions can be amended in line with post-construction activity levels. The post construction surveys will be used to update the current curtailment regime (blanket curtailment) designed around the values for the key weather parameters and other factors that are known to influence collision risk. This will include all of the following: • Wind speed in m/s (measured at nacelle height) • Time after sunset • Month of the year • Temperature (°C) • Precipitation (mm/hr)	comprehensive onsite fatality monitoring programme is to be undertaken following published best practice (e.g. SNH 2021 or equivalent at the time of operation). Turbines 10, 13 and 14 will be included in all searches (highest recorded Bat activity). a) Carcass removal trials to establish levels of predator removal of possible fatalities. This will be done following best recommended practice and with due cognisance of published effects such as predator swamping, whereby excessive placement of carcasses increases predator presence and consequently skews results. At the time of writing (2024), predation trials set using trail cameras following guidance set out in (Smallwood, 2010) provides the most accurate results; b) Turbine searches for fatalities will be undertaken with the use of conservation dogs following best practice in terms of search area (minimum radius hub height) and at intervals selected to effectively sample fatality rates as determined by carcass removal trials in. At the time of writing (2024), the typical search area surrounding the turbine bases follow (Edkins, 2014) Impacts Of Wind Energy Developments On Birds And Bats: Looking Into The Problem, who recommends the "search width should be equal to the maximum rotor tip height", e.g. turbines at proposed project have a max tip height of 185m thus the spread of searched area, as a rectangle, square or circle, should be 92.5 m in either direction form the turbine base; c) Search intervals will follow SNH (2021) guidance; d) Recorded fatalities will be calibrated against known predator removal rates to provide an estimate of overall fatality rates; e) Monitoring report to be submitted annually to Waterford County Council and the NPWS.

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
MM82	Bats: Buffer zones	EIAR Chapter 6	The vegetation-free buffer zones around the identified turbines will be managed and maintained during the operational life of the development. Annual inspections of each buffer zone will be carried out and any regenerating trees or tall shrubs above 1m will be cut back. These buffer zones will be maintained as bog / heath type vegetation dominated by low-growing dwarf shrubs and grasses.	Annual inspections of each buffer zone will be carried out.
Ornithology				
MM83	Mitigation of replacement of turbine blades	EIAR Chapter 7	If replacement of turbine blades is required during the operational phase, the following mitigation protocol will be followed to prevent disturbance to sensitive species: 1) If the work will take place during the Hen Harrier breeding season (April-August), the proposed works will be reviewed by a competent ecologist to assess whether there is potential for disturbance impacts to occupied Hen Harrier nest sites. If the available information is inconclusive, Hen Harrier surveys will be carried out. 2) If the work will take place during the Snipe breeding season (April-July), surveys will be carried out of the 500 m buffer around the turbine location to locate any Snipe breeding territories. 3) If active Hen Harrier nest sites, or occupied Snipe breeding territories are present within the relevant buffer distances (1 km for Hen Harrier and 500 m for Snipe), no work will take place until the birds have completed breeding.	As required by the Operation Management Plan for the wind farm.
Lands Soils and Geology				
MM84	Contamination Management	EIAR Chapter 8	Oil containing components of the wind turbines will be periodically refurbished and replaced. Fuel and oil storage and handling requirements will be as detailed for construction, with permanent fuel and oil storage located within permanent covered bunds. Electrical apparatus, such as transformers, will be required within the substations. All such oil containing electrical apparatus will be placed within permanent concrete bunds that will have been constructed and tested to provide containment. Each bund will be sized to hold 110 % of the oil volume within the respective electrical	As required by the Operation Management Plan for the wind farm

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			apparatus enclosed. The bunds will be bunded and alarmed to allow for the regular removal of clean rainwater by means of a pump. In the event of a spill, the liquid contained in the bund will be removed by liquid waste tanker, as will be the contents of the surface water drainage system and oil interceptor.	
			Surface water discharges from permanent storage areas and substation bunds will be to surface water via an oil interceptor. The oil interceptors at the proposed project will be subject to a regular inspection and de-sludging to ensure that they retain full operational efficiency.	
			Site operatives will receive appropriate training and materials will be available on site to immediately respond to any fuel or oil spill.	
			Welfare facilities will be provided at the substation location. These welfare facilities will produce foul effluent and these effluents will be stored in a holding tank prior to removal to an approved treatment facility.	
MM85	Geohazard /Peat and Soil stability	EIAR Chapter 8	Communication of residual peat risk to appropriate site operatives. Ongoing monitoring of residual risks and maintenance if required.	As required by the Operation Management Plan for the wind farm. Monitoring will consist of regular inspection of drains to prevent blockages and inspections of specific areas after a significant rainfall events.
Hydrology and Hydrogeology – Water				
MM86	Alteration of Surface Water Quality	EIAR Chapter 9	No additional mitigation over and above that stated in Chapter 2 of the EIAR is required during the operational phase.	As required by the Operation Management Plan for the wind farm.
MM87	Alteration of Surface Water Flow	EIAR Chapter 9	Design measures outlined in Section 9.5.1 of Chapter 9 of the EIAR will be protective of surface water flow.	
MM88	Alteration of Groundwater Flow	EIAR Chapter 9	Design measures outlined in Section 9.5.1 of Chapter 9 of the EIAR will be protective of ground water flow.	
MM89	Alteration of Groundwater Quality	EIAR Chapter 9	Design measures outlined in Section 9.5.1 of Chapter 9 of the EIAR will be protective of ground water quality.	

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
Shadow Flicker				
MM90	Turbine Shutdown	EIAR Chapter 10	The Applicant has committed to having near zero shadow flicker at any occupied dwelling house within 1.63km (ten rotor diameters) of the proposed turbine locations. There may be a very brief time where a shadow moves over a property in the time it takes for the proposed turbine rotor to come to a safe stop, between 1 and 2 minutes. This will depend on the reaction time of the shadow flicker control modules and the particular proposed turbine type, however this is considered a negligible effect as it would likely take at most 1-2 minutes to stop. In the interest of transparency, it has been called "near zero shadow flicker" in the EIAR to account for this fact that it will never be possible to entirely eliminate it.	A process will be established by the wind farm operator whereby local residents can highlight any concerns or complaints about the operation of the scheme. All concerns raised will be investigated by the wind farm operator and the turbine shutdown software adjusted accordingly, as required. and what if that does not happen how is it enforcible?
			Due to the potential for shadow flicker to affect receptors within the shadow flicker study area, it is proposed that a shadow control system will be installed on each of the wind turbines that have the potential to cause shadow flicker for sensitive receptors. The control system will detect and calculate, in real-time: • Whether shadow flicker has the potential to affect nearby properties, based on pre-programmed co-ordinates for the properties and turbines outlined in this assessment; • Wind speed (can effect how fast the proposed turbine will turn and how quickly the flicker will occur); • Wind direction; • The intensity of the sunlight. When the sunlight is strong enough to cast a shadow, and the shadow falls on a property or properties, then the proposed turbine will automatically shut down; and will restart when the potential for shadow flicker ceases at the affected properties.	Monitoring of shadow flicker will be undertaken by a shadow control system installed on each of the wind turbines.
			A Turbine Shutdown Scheme will be the primary mitigation measure for shadow flicker effect and will be implemented for the proposed project based on the predicted shadow flicker at each shadow flicker receptor. The Turbine Shutdown Scheme will be employed to ensure that shadow flicker does not occur at the affected property(s). A process will be established by the proposed	As required through the Turbine Shutdown Scheme.

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			wind farm operator whereby local residents can highlight any concerns or complaints about the operation of the scheme. All concerns raised will be investigated by the proposed wind farm operator and the turbine shutdown software adjusted accordingly, to ensure that the turbines shut down at the appropriate time. After adjustments are made to the software, the flicker occurrence will be monitored where the residents still report flicker occurrence. This will determine any further adjustments that might be required to the shutdown times for any given turbine.	
			During the commissioning phase, there is potential for some shadow flicker to be experienced as the shadow flicker management software is installed and refined. However, the commissioning team will ensure that the maximum daily limit of 30 minutes per day is not exceeded during this temporary commissioning period, which will last approximately 12 weeks.	Monitoring of shadow flicker will be undertaken by a commissioning team during the temporary commissioning period, which will last approximately 12 weeks.
MM91	Screening Measures	EIAR Chapter 10	If there is sufficient existing screening at a shadow flicker receptor, the Turbine Shutdown Scheme may not be necessary for that receptor. The Applicant will engage with any affected residents to investigate options for new or additional screening measures (, such as planting vegetation to act as a screen or installation of suitable window blinds in the affected rooms of the residence) where appropriate and agreeable to the affected residents. If screening is not acceptable and/or will not be effective the Turbine Shutdown Scheme as set out in Section 10.5.1 of Chapter 10 of the EIAR will be implemented to ensure 'near zero shadow flicker'. Where agreed screening measures are implemented, the effectiveness of the measures will be monitored and if the measures are not functioning to the satisfaction of the property owner/occupant, they will be included in the Turbine Shutdown Scheme as set out in Section 10.5.1 of Chapter 10 of the EIAR.	As required through the Turbine Shutdown Scheme.
Material Assets				
MM92	Aviation	EIAR Chapter 11	The Applicant will, as requested by the IAA, agree an aeronautical warning light scheme, provide the as-constructed coordinates of the turbines and give 30 days' notice before any crane operations	To be agreed with the relevant stakeholders.

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			commence as requested. This was described in a consultation response from the IAA in February 2023 (see Appendix 1-4 of the EIAR). The details for this lighting will be agreed with the IAA and will be applied to the appropriate turbines and met mast. This will ensure the required visibility of the proposed project to any local aircraft. The final locations and dimensions of each turbine will be mapped and provided to Waterford County Council and stakeholders (including the IAA, Waterford Airport and Cork Airport) prior to erection to ensure that maps and databases are up-to-date for flight navigation.	
MM93	Telecommunications	EIAR Chapter 11	The proposed project is not anticipated to have any effect on any telecommunication links in the region due to the distance between the existing links and the proposed turbine locations. The applicant will sign an agreement with 2RN (who run Ireland's principal digital terrestrial television and radio broadcast networks) prior to commencement of construction to commit to restoring service to any end users that may have their service disrupted as a result of the proposed project. This is standard industry practice and will eliminate any potential effects in this regard.	To be agreed with the relevant stakeholders.
MM94	Waste management	EIAR Chapter 11	Segregation of waste will be carried out during operation of the proposed wind farm site to maximise the potential for waste recycling and minimise any potential for effects on waste services. A licensed waste collector will be used to remove any waste that does occur as part of the operation of the proposed wind farm site. A low-flush cistern will be fitted to reduce the volume of wastewater produced and a rainwater harvesting system will be used as the source of water for this and hand-washing basin, with all potable water being brought onsite in bottles.	As required by the Operation Management Plan for the wind farm.
Noise and Vibration				
MM95	Noise and Vibration	EIAR Chapter 12	If alternative turbine models within the proposed specifications are considered for the proposed project, an updated noise assessment will be prepared to confirm that the noise emissions will comply with the noise criteria as per best practice guidance outlined in Section 12.4.2 of Chapter 12 of the EIAR and/or the relevant	Commissioning noise surveys will be undertaken to ensure compliance with any noise conditions applied to the development. It is common practice to commence surveys within six months of a proposed wind farm being commissioned. If an exceedance of the noise

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Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			operational criteria associated with the grant of planning for existing/permitted developments. A suitable curtailment strategy will be designed and implemented for alternative technologies to ensure compliance with the relevant noise criteria, should detailed assessment conclude that this is necessary.	criteria is identified as part of the commissioning assessment, the guidance outlined in the IOA GPG and Supplementary Guidance Note 5: Post Completion Measurements (July 2014) will be followed, and relevant corrective actions taken. For example, implementation of noise reduced operational modes resulting in curtailment of turbine operation can be implemented for specific turbines in specific wind conditions to ensure turbine noise levels are within the relevant noise criterion curves/planning conditions limits. Such curtailment can be applied using the wind farm SCADA system without undue effect on the wind turbine performance. Following implementation of these measures, noise surveys will be repeated to confirm compliance with the noise criteria.
MM96	Amplitude Modulation	EIAR Chapter 12	In the event of a complaint that indicates potential amplitude modulation (AM) associated with turbine operation, the operator will employ a qualified acoustic consultant to assess the level of AM in accordance with the methods outlined in the Institute of Acoustics (IOA) Noise working Group (Wind Turbine Noise) Amplitude Modulation Working Group (AMWG) namely, Institute of Acoustics IOA Noise Working Group (Wind Turbine Noise) Amplitude Modulation Working Group Final Report: A Method for Rating Amplitude Modulation in Wind Turbine Noise (9 August 2016) or subsequent revisions. The measurement method outlined in the IOA AMWG document, known as the 'Reference Method', will provide a robust and reliable indicator of AM and yield important information on the frequency and duration of occurrence, which can be used to evaluate different operational conditions including mitigation. These mitigation measures, if required, will consist of the implementation of operational controls for the relevant turbine type, which may include curtailment of turbines under specific operational conditions.	
Traffic and Transport				
MM97	Operational Traffic	EIAR Chapter 16	In the event that a turbine requires replacing in the future, the proposed TDR at the construction phase will be considered, and the swept path analysis will take into account any road improvements and changes to the network.	As required by the Operation Management Plan for the wind farm.
Decommissioning Phase				
Description of Proposed Project				
MM98	Decommissioning Plan	EIAR Chapter 2	A detailed decommissioning plan will be agreed in advance of works taking place with Waterford City and County Council. A	As required by the agreed Decommissioning Plan.

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			decommissioning plan is contained within the CEMP (Appendix 2-8 of the EIAR).	
MM99	Protection of water quality / Prevention of pollution	EIAR Chapter 2	The protection of water quality and prevention of pollution events requires a sustained and concentrated input from the Contractor with regard to the provision and maintenance of sediment control structures. The drainage system is described in further detail in Chapter 9 of this EIAR (Hydrology & Hydrogeology) and the SWMP.	As required by the agreed Decommissioning Plan.
Population and Human Health				
MM100	Decommissioning Activities		The same mitigation as the construction phase is proposed for the decommissioning phase in respect of effects on land use, population, sensitive receptors and residential amenity property value, employment/economy, tourism and human health, (for information regarding decommissioning refer to Chapter 2, Section 2.) This is because many of the same effects will occur during this phase, but to a much lesser extent.	As required by the agreed decommissioning plan / mitigation measures agreed at the time of decommissioning.
Biodiversity Flora and Fauna				
MM101	Decommissioning activities	EIAR Chapter 6	The same mitigation measures implemented during the construction phase (see Section 6.8.1 of Chapter 6 of the EIAR), will be applied during the decommissioning works.	As required by the agreed decommissioning plan / mitigation measures agreed at the time of decommissioning.
Lands Soils and Geology				
MM102	Fuel management	EIAR Chapter 8	A fuel management plan to avoid contamination by fuel leakage during decommissioning works will be implemented as per the construction phase mitigation measures.	As required by the fuel management plan agreed at the time of decommissioning.
MM103	Decommissioning activities	EIAR Chapter 8	Mitigation measures for decommissioning would conform to those given for construction (section 8.6.1 of Chapter 8 of the EIAR) and would be anticipated to be fully protective of the environment.	As required by the agreed decommissioning plan / mitigation measures agreed at the time of decommissioning.
Hydrology and Hydrogeology – Water				
MM104	Decommissioning activities	EIAR Chapter 9	The mitigation measures for the construction phase (section 9.5.1 of Chapter 9 of the EIAR) will also be implemented during decommissioning.	As required by the agreed decommissioning plan / mitigation measures agreed at the time of decommissioning.
MM105	Alteration of Surface Water Quality	EIAR Chapter 9	Mitigation measures applied during decommissioning activities will be similar to those applied during construction where relevant. Some of the significant potential effects will be avoided by leaving elements of the proposed wind farm site in place.	As required by the agreed decommissioning plan / mitigation measures agreed at the time of decommissioning.

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			The hydrocarbon interceptor will be in place at the proposed substation site with regular inspection and maintenance, to ensure optimal performance. Given the requirement for sanitary facilities during decommissioning works, wastewater effluent will continue to be directed to the on-site holding tank, from where it will be tankered off-site to a suitably licensed wastewater treatment plant. The decommissioning phase will not require any significant works that will potentially affect the drainage network. A fuel management plan to avoid contamination by fuel leakage during decommissioning works will be implemented as per the construction phase mitigation measures. Mitigation measures to avoid contamination by accidental fuel leakage and compaction of soil by on-site plant will be implemented as per the construction phase mitigation measures in Section 9.5.2 of Chapter 9 of the EIAR.	
MM106	Alteration of Surface Water Flow	EIAR Chapter 9	Measures outlined in Section 9.5.1 of Chapter 9 of the EIAR will be protective of surface water flow. SuDS measures will remain in place during the decommissioning period.	As required by the agreed decommissioning plan / mitigation measures agreed at the time of decommissioning.
MM107	Alteration of Groundwater Quality	EIAR Chapter 9	Measures outlined in Section 9.5.1 of Chapter 9 of the EIAR will be protective of ground water quality.	As required by the agreed decommissioning plan / mitigation measures agreed at the time of decommissioning.
Material Assets				
MM108	Waste management	EIAR Chapter 11	Segregation of waste will be carried out during operation of the proposed wind farm site to maximise the potential for waste recycling and minimise potential effects on waste management infrastructure. Appropriately permitted waste collectors will be employed to remove any municipal waste, wastewater, or demolition waste generated within the wind farm site. The majority of wastes from decommissioned infrastructure will be recyclable, and the large items (turbines, met mast) will be collected and processed by	As required by the agreed decommissioning plan / mitigation measures agreed at the time of decommissioning.

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			appropriately licensed specialist companies with the capability to process these items correctly.	
Noise and Vibration				
MM109	Noise and Vibration	EIAR Chapter 12	In relation to the decommissioning phase, similar overall noise levels as those calculated for the construction phase would be expected, as similar tools and equipment will be used. The noise and vibration impacts associated with any decommissioning of the proposed project can be considered to be comparable to those outlined in relation to the construction phase (as per Section 12.5.2 of Chapter 12 of the EIAR), albeit less works will be required as only above ground structures will be removed. Turbine and mast foundations would remain underground and cable ducting will remain in situ. The GCR, underground cabling and on-site substation will remain in place. Refer to Chapter 2 of the EIAR for full details.	As required by the agreed decommissioning plan / mitigation measures agreed at the time of decommissioning.
Air Quality and Climate				
MM110	Air Quality: Decommissioning activities	EIAR Chapter 14	Mitigation measures as per Section 14.5.1.1 will be put in place for the decommissioning phase. At all times, these procedures will be strictly monitored and assessed. In the event of dust nuisance occurring outside the site boundary, movements of materials likely to raise dust will be curtailed and satisfactory procedures implemented to rectify the problem before the resumption of decommissioning operations.	As required by the agreed decommissioning plan / mitigation measures agreed at the time of decommissioning.
MM111	Climate: Decommissioning activities	EIAR Chapter 14	A detailed decommissioning plan will be agreed in advance of works taking place with Waterford City and County Council. This plan will include mitigation measures as per Section 14.5.1.1 and 14.5.1.2 of Chapter 14 of the EIAR, including the IEMA GHG Management Hierarchy (IEMA 2020b) will be followed for impact minimisation for the decommissioning phase.	As required by the agreed decommissioning plan / mitigation measures agreed at the time of decommissioning.
Traffic and Transport				
MM112	Decommissioning Activities and Traffic	EIAR Chapter 16	Before the decommissioning of the proposed project, a detailed decommissioning plan will be prepared and implemented to minimise the effects during this phase. The decommissioning phase will employ similar mitigation measures as the construction phase.	As required by the agreed decommissioning plan and TMP / mitigation measures agreed at the time of decommissioning.

Ref No.	Related to	Location	Mitigation Measure	Monitoring Requirements
			As the decommissioning phase is envisaged to be over 35 years from now, a detailed TMP will be undertaken and will consider any road improvements and changes to the network. The plan will also consider the future baseline traffic in order to minimise the decommissioning phase effects in the vicinity. The turbine components will be separated and removed in manageable sizes. The reduced blade section lengths, tower sections, and nacelle will be transported by HGVs. This will reduce the impact on third-party lands and existing road infrastructure. As previously mentioned, the large volume of aggregate and concrete imported will remain onsite. The principal expected volumes of traffic will be primarily associated with the transportation off-site of turbine components and a significantly reduced volume of materials.	

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