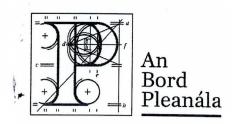
Our Case Number: ABP-317560-23

Planning Authority Reference Number:



Inland Fisheries Ireland Ardnaree House **Abbey Street** Ballina Co. Mavo F26 K029

Date: 05 September 2023

Re: Proposed windfarm development including 13 no. wind turbines in Bunnyconnellan, Co. Mayo and hydrogen plant in Castleconnor, Co. Sligo.

Carrowleagh, Bunnyconnellan, Co. Mayo and Curraun, Castleconnor, Co. Sligo.

Dear Sir / Madam.

An Bord Pleanála has received your submission in relation to the above mentioned proposed development and will take it into consideration in its determination of the matter.

The Board will revert to you in due course in respect of this matter.

Please be advised that copies of all submissions / observations received in relation to the application will be made available for public inspection at the offices of the local authority and at the offices of An Bord Pleanála when they have been processed by the Board.

More detailed information in relation to strategic infrastructure development can be viewed on the Board's website: www.pleanala.ie.

If you have any queries in the meantime please contact the undersigned officer of the Board. Please quote the above mentioned An Bord Pleanála reference number in any correspondence or telephone contact with the Board.

Yours faithfully,

Lauren Murphy

Executive Officer Direct Line: 01-8737275

PA09

Teil Glao Áitiúil

Láithreán Gréasáin Ríomhphost

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Baile Átha Cliath 1 D01 V902

64 Sráid Maoilbhríde 64 Marlborough Street Dublin 1 D01 V902

Niamh Hickey

From:

Aisling Donegan < Aisling. Donegan@fisheriesireland.ie>

Sent:

Friday 1 September 2023 15:36

To:

sid@pleanala.ie; SIDS

Subject:

ABP-307264-20

Attachments:

abp-mr-h-0723.pdf

Dear Sir/Madam,

Please find attached Inland Fisheries Ireland (IFI) submission in relation to the proposed Firlough Wind Farm and Hydrogen Plant Development in County Sligo and County Mayo by Mercury Renewables ref. no. ABP-307264-20.

IFI request an acknowledgement from An Bord Pleanála of receipt of this submission.

Kind Regards

Aisling Donegan

Aisling Donegan

Senior Fisheries Environmental Officer

🖴 Aisling.Donegan@fisheriesireland.ie • 🌣 +353 (0)96 22788 • 🚱 www.fisheriesireland.ie • 🏚 F26 KO29



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An Bord Pleanála 64 Marlborough Street Dublin D01 V902



1st September 2023

Re: <u>Strategic Infrastructure Development under Section 37E of the Planning and Development Act 2000 (As Amended) Proposed Firlough Wind Farm, Carrowleagh Td., Bunnyconnellan, Co. Mayo & Hydrogen Plant, Carraun Td., Castleconnor, Co. Sligo (Ref. No. ABP-307264-20) – Mercury Renewables</u>

Dear Sir/Madam,

Inland Fisheries Ireland (IFI) is the state body responsible for the protection, management and conservation of the inland fisheries and sea angling resource in Ireland. Protection of the aquatic environment and habitat is a vitally important element of IFI's work.

The proposed development crosses a number of important fisheries waters; the Brusna River and its tributaries the Glenree River, the Owencam River and the Srafaungal River, the Gowlan River and the Dooyeaghny River also known as the Newtown River.

The Brusna River and its tributaries provide important salmon, sea trout and brown trout spawning and nursery habitat. This catchment is under environmental pressure with salmon stocks in the catchment below their conservation limit, that is the number of adult salmon returning to spawn required for a sustainable fishery. The Brusna River forms part of the River Moy Special Area of Conservation which is designated for the protection of Atlantic salmon, white-clawed crayfish and lamprey species. The Glenree River and the Srafaungal River are failing to meet their ecological objectives of high ecological status and good ecological status respectively, as required under the Water Frameworks Directive. The Glenree River has been identified as at risk of not achieving high ecological status due to hydromorphology pressures which may include sediment/siltation pollution and alteration to the physical environment. No activity or development is to be granted permission in this catchment which may prevent or delay their ecological status objectives being achieved.

The Gowlan River provides important salmon and trout spawning and nursery habitat for the Easky River Fishery which is a valuable fishery in County Sligo and attracts anglers to the area. The Easky River also provides habitat for a population for freshwater pearl mussel. Both salmonids and freshwater pearl mussel are sensitive to pollution, such as siltation. This catchment has been allocated good ecological status in the River Basin Management Plan and this status must be protected.

The Dooyeaghny / Newtown River provides important spawning and nursery habitat for trout and salmon which support the River Moy Estuary fishery. The River Moy Estuary is an important sea trout fishery with a number of charter boats available for anglers. IFI is investing in a habitat enhancement program in the Dooyeaghny / Newtown River to improve salmonid spawning habitat and protect water quality. It is imperative that water quality in this catchment must be protected to support the success of this program.

IFI request that the following be addressed through further information or conditions of planning, if granted:

IFI recommend an Environmental Monitoring Committee (EMC) including representatives of IFI, Sligo County Council, Mayo County Council and other relevant organisations or groups be put in place for the construction phase of this development.



- IFI is concerned that the Assimilative Capacity calculations for the discharge from the Hydrogen Plan into the Dooyeaghny / Newtown River is based on only two grab samples of the receiving waters. This provides low accuracy analysis at one point in time and do not provide sufficient data to assess the long-term year-round potential impacts of the discharge over different environmental conditions. A long-term monitoring program must be put in place to ensure accurate river flow and water quality data is used to assess the assimilative capacity of the receiving water. This data must be provided to adequately assess the potential impact on the Dooyeaghny /Newtown River and the important salmonid habitat present prior to a decision on the development being made.
- No direct long term flow monitoring for the Dooyeaghny / Newtown River was provided for the Assimilative Capacity calculations with "estimated velocity" being used. A long-term monitoring program must be put in place to ensure accurate river flow is used to assess the assimilative capacity of the receiving water.
- Recommendations in section 5.1 the Preliminary Discharge & Assimilative Capacity Assessment must be implemented including "Surface water quality will be monitored on a routine / continuous basis with a view to establishing site specific Q95 and baseline water quality ranges, and managing source water and process water chemistry"
- IFI request continuous monitoring of discharge out flow volume and receiving water flow to ensure adequate assimilative capacity is available. Water quality monitoring must be carried out by composite sampler on a daily basis.
- Information on the potential for expansion of wind farm site or the capacity of the Hydrogen Production site should be provided. The Preliminary Discharge & Assimilative Capacity Assessment shows discharge flows will have to be managed during low flow conditions to protect water quality in the Dooyeaghny/ Newtown River, any potential long-term expansion of this facility may result in increased pressure on this catchment.
- Atlantic salmon, sea trout and brown trout are cool water species and may become distressed in wasters of 20°C or above. The Freshwater Fish Directive requires that temperature measured downstream of a point of thermal discharge must not exceed the unaffected temperature by more than 1.5°C. The proposed discharge must comply fully with the Freshwater Fish Directive.
- The proposed discharge into the Dooyeaghny/ Newtown River must be licenced by the Environmental Protection Agency or the Local Authority. IFI requests a copy of the discharge licence application.
- The constructed wetlands must be engineered to provide adequate treatment and capacity for all wastewater produced on site. All recommendations contained within the Preliminary Discharge & Assimilative Capacity Assessment must be complied with. The capacity of the constructed wetland must provide adequate capacity for extreme rainfall events. An impermeable lining must be used in construction and a discharge sample chamber provided which is accessible to persons authorised under the Water Pollution Act 1977. A maintenance and repair/replacement program for the wastewater treatment plant and constructed wetlands system must be drawn up and a long-term contract put in place for the provision of this service. The installation of septic tank and constructed wetlands must monitored by an engineer and photos of the installation retained.



- 10 IFI request that safe 24h/day access be provided to the discharge location on the Dooyeaghny / Newtown.
- 11 IFI request green infrastructure, such as permeable paving in areas where there is no risk of fuel or chemical spill, be incorporated into the site surface water management. Native tree and native pollinator friendly planting must be incorporated into the site landscaping design.
- The Groundwater Supply Assessment (GSA) Report (Appendix 9.8) proposes rainwater harvesting at the proposed Hydrogen Production Plant, The GSA Report states ongoing groundwater monitoring will be conducted. If monitoring indicates the groundwater is low, e.g., in drought conditions, water stored in two large underground water storage tanks will be used. Alternatively, the connection to the water mains can be used as a further backup. IFI request rainwater harvesting, and storage must be maximised on site from all roofed areas in the Hydrogen production site for use in the production process, to support the proposed 80% process waters being provided by rainwater harvesting.
- 13 IFI request a letter from Uisce Éireann be provided confirming adequate provision of water to supply the process waters for the hydrogen production site, if required.
- The Wastewater Quality & Discharge Report states that the Dooyeaghny/ Newtown River may receive a relatively high volume of groundwater discharge; Mercury Renewables must demonstrate that there will be no impact on the base river flow within the Dooyeaghny/ Newtown River as a result of the proposed groundwater abstraction. A reduction in the base flow during drought conditions will exasperate the impacts of climate change on this river increasing the pressure of high water temperatures and low flow conditions on salmonids within the catchment.
- All chemicals including fuels, cleaning and anti-scaling products, potassium hydroxide sodium bisulphite must be contained within bunder containers of 110% capacity of the largest container.
- 16 IFI must be included as a notifiable body in the Emergency Response Plan in case of discharge to surface waters.
- 17 IFI request an assessment of alternative wastewater treatment and discharge options, including connection to the Ballina sewerage network.
- In case of fire at the hydrogen production plant, waters must not be discharged directly into the Dooyeaghny/Newtown River. A fire water collection system must be in place to prevent direct discharges of polluted waters into the Dooyeaghny/Newtown River.
- 19 IFI request land stability monitoring is carried out throughout the duration of construction across the windfarm site.



- Method Statement for all works which may impact on surface waters must be provided to IFI a minimum of two weeks prior to works commencing. All in-stream works, including culvert installations, directional drilling and grid connection cable water crossings, or any other works that may give rise to high suspended solids in close proximity to these watercourses or may impact on the Brusna River System or the Newtown River will be subject to the closed season (i.e. they cannot take place from 1st October to 30th June). It is important that appropriate scheduling of works is allowed for. Instream works must be during low flow and dry weather conditions.
- All pollution mitigation measures contained within the EAIR must be implemented in full and included in the contract for construction.
- There must be no spread of invasive species as a result of the proposed development. All biosecurity measures contained in the EIAR must be implemented in full and included in the contract for construction.
- There must be no discharge of silted waters, cement products, hydrocarbons or otherwise polluted waters into any surface watercourse as a result of the proposed works. The IFI publication: Requirements for the Protection of Fisheries Habitat during Construction and Development Works at River Sites should be followed. https://www.fisheriesireland.ie/documents/624-guidelines-on-protection-of-fisheries-during-construction-works-in-and-adjacent-to-waters/file.html
- Continuous instream turbidity meter monitoring may be required downstream of active areas of the site where large scale earthworks are being carried out or where silt discharges occur with daily inspections. A message will be sent to dedicated environmental monitoring personnel where turbidity levels exceed set limits.
- 25 IFI request that the locations for surface water monitoring are agreed with IFI prior to works commencing on site.
- All culvert designs, including for delivery route and connection route, must be agreed with IFI before commencement of construction on the site. Following agreement on a crossing design, a method statement with relevant environmental mitigation and control measures should be forwarded to IFI (with minimum 4 weeks prior to commencing) with IFI's agreement required on the method statement before works commence.
- A Directional Drilling method including a fluid management, bentonite recovery and pressure monitoring plan must be provided to IFI a minimum of four weeks prior to works commencing. An emergency response plan in the case of break out through riverbed material or spill at entry and exit pits must also be drawn up. These works will be subject to the closed season (i.e. they cannot take place from 1st October to 30th June) as they occur in river stretches with extensive salmonid spawning and nursery habitat.
- The on-site vehicle wash must use a closed loop system with no discharge of silted waters to surface waters.



Road construction and surfacing materials used must be of adequate strength so as not to give rise to silt/fine solids discharges due to the action of traffic and erosion. The use of sedimentary rocks, such as shale, in road construction should be avoided. This type of material has poor tensile strength and is liable to be crushed by heavy vehicles thereby releasing fine sediment materials into the drainage system which are difficult to precipitate and may give rise to water pollution.

IFI requests an acknowledgement from An Bord Pleanála of receipt of this submission.

Yours sincerely

Aisling Donegan

Aish Daza

Senior Fisheries Environmental Officer

abp-mr-h-0923