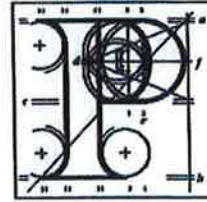


Our Case Number: ABP-313763-22



**An
Bord
Pleanála**

Development Application Unit
C/O The Manager
Government Offices
Newtown Road
Wexford
Co. Wexford
Y35 AP90

Date: 15 August 2022

**Re: Proposed Fermoy Weir remedial works and fish bypass on the River Blackwater.
Fermoy Weir (Protected Structure), Fermoy, Co. Cork.**

Dear Sir / Madam,

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

Please note that the proposed development shall not be carried out unless the Board has approved it with or without modifications.

If you have any queries in relation to the matter 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,

Doina Chiforescu
Executive Officer
Direct Line: 01-8737133

AA02

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64 Sráid Maolbhríde
Baile Átha Cliath 1
D01 V902

64 Marlborough Street
Dublin 1
D01 V902

Doina Chiforescu

From: SIDS
Sent: Wednesday 3 August 2022 08:12
To: Doina Chiforescu
Subject: FW: Your Ref: ABP-313763-22 Our Ref: 177AE Fermoy Weir CK
Attachments: ABP-313763-22.pdf

AN BORD PLEANÁLA

28 JUL 2022

LTR DATED _____ FROM _____
LDG- 056256-22
ABP- 313763-22

From: Bord <bord@pleanala.ie>
Sent: Friday 29 July 2022 17:10
To: SIDS <sids@pleanala.ie>
Subject: FW: Your Ref: ABP-313763-22 Our Ref: 177AE Fermoy Weir CK

From: Housing Manager DAU <Manager.DAU@housing.gov.ie>
Sent: Friday, July 29, 2022 4:45 PM
To: Bord <bord@pleanala.ie>
Subject: Your Ref: ABP-313763-22 Our Ref: 177AE Fermoy Weir CK

A Chara,

Attached please find the Underwater Archaeological and Nature Conservation observations/recommendations of the Department in relation to the aforementioned S177AE application.

Can you please confirm receipt of same?

Kind Regards,
Sinéad

—
Sinéad O' Brien
Executive Officer

—
Aonad na nIarratas ar Fhorbairt
Development Applications Unit
Oifigí an Rialtais
Government Offices
Bóthar an Bhalle Nua, Loch Garman, Contae Loch Garman Y35 AP90
Newtown Road, Wexford, County Wexford Y35 AP90
—



Your Ref: ABP-313763-22
Our Ref: **177AE Fermoy Weir CK**
(Please quote in all related correspondence)

29th July 2022

The Secretary
An Bord Pleanála
64 Marlborough Street
Dublin 1
D01 V902

Via email to sids@pleanala.ie

Re: Notification under Section 177AE (4) (a) of the Planning and Development Act 2000 as amended (as inserted by Section 57 of the Planning and Development (Amendment) Act 2010.

Re: Section 177AE application by Cork County Council for Proposed Fermoy Weir Remedial Works and Fish Bypass on the River Blackwater, at Fermoy Weir (protected structure), Fermoy, County Cork.

A chara

I refer to correspondence received in connection with the above.

Outlined below are heritage-related observations/recommendations co-ordinated by the Development Applications Unit under the stated headings.

Underwater Archaeology

The Department has reviewed the Underwater Archaeological Impact Assessment (UAIA) (Mizen Archaeology, September 2020) and accompanying planning submission documents and the following are the recommended conditions that should be attached to any approval of planning permission by An Bord Pleanála:

1. The Mitigation Strategy described in Section 7 of the Underwater Archaeological Impact Assessment Report (Mizen Archaeology, Sept. 2020) shall be implemented in full.
2. Archaeological monitoring of all groundworks, including all works to the banks and in-stream shall be carried out and shall take the following format:



- The services of a suitably qualified and suitably experienced underwater archaeologist shall be engaged to carry out the archaeological monitoring of all works.
- The archaeological monitoring shall be licensed by the Department of Housing, Local Government and Heritage and a detailed method statement that sets out the monitoring strategy is to accompany the licence application. A Finds Retrieval Strategy shall be included in the methodology and all excavated deposits shall be spread and metal detected (under licence) to recover any archaeological objects that they may contain. The monitoring archaeologist shall obtain a dive survey licence in order to facilitate investigation of in-stream, underwater archaeological materials should they be uncovered.
- A communication strategy is to form part of the monitoring strategy to ensure full communication is in place between the monitoring archaeologist and the plant operator(s) at all times during works. The archaeological personnel undertaking the monitoring will be in a position to monitor directly all elements of the works, to ensure they have unobstructed views of the excavations, and the plant and machinery operators shall be prepared to facilitate the archaeological personnel in the undertaking of their monitoring work.
- Provisions shall be made to ensure that all historic structures within the proposed development area are protected from all potential adverse impacts. The archaeological monitoring strategy shall include the plan for the protection of these heritage assets.
- Should potential archaeological, including underwater, heritage be identified during the archaeological monitoring works, all works shall be suspended in the affected area pending further assessment and consultation with the National Monuments Service, who may recommend further archaeological assessment, monitoring, testing, avoidance/preservation *in situ* or full excavation.

Nature Conservation

The proposed weir is within, and the proposed fish pass directly adjacent to, the Blackwater River (Cork/Waterford) candidate Special Area of Conservation (cSAC) (Site Code 0002170). This European site has been designated for, amongst other habitats and species, alluvial woodland, water crowfoot/starwort communities, otter, Twaite shad, salmon, lamprey species, white-clawed crayfish and freshwater pearl mussel. Conservation objectives for this site are available at

https://www.npws.ie/sites/default/files/protected-sites/conservation_objiectives/CO002170.pdf



Twaite shad is a herring-like fish (please see picture of same at Appendix 1 below), and one of the fish species for which the Munster Blackwater River cSAC was designated. Sea lamprey is an agnathan fish, in other words it lacks jaws and possess a powerful suction like mouth. It is a conservation objective for both sea lamprey and Twaite shad to *restore* their favourable conservation condition in the Munster Blackwater River, by making more than 75% of the main channel length of the river accessible to these species from the Blackwater Estuary¹. The upper boundary of the estuary is normally taken to be near Lismore, making 75% upstream of the freshwater length of the Blackwater River to be well above Mallow.

This means that repair of the Fermoy weir should only be permitted² where the fish pass will allow upstream access to both Twaite shad and sea lamprey. The design requirements for shad are more demanding, because, unlike salmonids, they are unable to jump or swim against any plunging water, and they swim in shoals rather than individually. Also, the flow velocities will need to avoid circumstances where shad will swim back down the fish pass, and they can abandon an unsuitable fish pass after entry³. Velocity barriers of 4.15 m/s for 6.1m or 4.5 m/s for 5m have been cited as passable by American shad⁴. Larnier and Travade (2002)⁵ provide design recommendations for shad fish passways, and large numbers of shad have successfully passed designs used in Bergerac (France)⁶, for instance.

Ensuring that the fish pass is suitable for Twaite shad will be a significant challenge for its design, and it is recommended that the Board seeks site-specific advice from Inland Fisheries Ireland (IFI) in relation to the efficacy of the proposed fish pass for Twaite shad and other fish species. The latter include European eel, an important prey species for otter, which is a listed species for the cSAC. In particular, the predicted water velocities in the bypass need to be carefully interpreted.

Natura Impact Statement (NIS): Alluvial woodland

The NIS refers to a small island on the south bank as potential alluvial woodland. The National Parks and Wildlife Service has examined this site and the larger block of woodland on the northern bank of the river 1-2 km upstream of the weir (where the water level is still

¹ NPWS (2012) *Conservation objectives: Blackwater River (Cork/Waterford) SAC 002170*. Version 1.0. https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002170.pdf

² Unless there are imperative reasons of over-riding public interest and the provisions of Art. 6(4) of the EU Habitats Directive apply.

³ Castro-Santos, T. (2012) Adaptive fishway design: a framework and rationale for effective evaluations. Pages 76-90. In: Bundesanstalt für Gewässerkunde (Hrsg.): *Monitoring, Funktionskontrollen und Qualitätssicherung an Fischaufstiegsanlagen. 2. Kolloquium zur Herstellung der ökologischen Durchgängigkeit der Bundeswasserstraßen am 07./08. Juni 2011 in Koblenz.* – Veranstaltungen 7/2012, Koblenz, August 2012.

⁴ Haro, A. and Castro-Santos, T. (2012) Passage of American shad: Paradigms and realities. *Marine and coastal fisheries: Dynamics, management and ecosystem science* 4: 252-261.

⁵ Larnier, M. and Travade, F. (2002) The design of fishways for shad. *Bulletin Français de la Pêche et de la Pisciculture* 364 (Supplement): 135-146.

⁶ Travade, F. et al. (1998) Feedback on four fish pass installations recently built on two rivers in southwest France. Pages 146-170. ICES Annual Science Conference 1996.



affected by the weir). In neither case is it considered that alluvial woodland occurs here due to the dominance of non-native species, especially by sycamore in the upper stretch. Summer snowflake (*Leucojum aestivum*), a characteristic species of alluvial woodland on the River Shannon in Limerick, was recorded in the upstream riparian area. However, it is likely that this species is derived from non-native stock in this part of the Blackwater River, as it is an escaped alien in other Cork rivers.

Natura Impact Statement: Alternatives

If the Board is requesting further information, it would be useful to have a summary table of the advantages and disadvantages of the various alternatives assessed in pages 23-30 of the NIS.

The NPWS was not specifically proposing the option of a fish pass in the existing breach (page 27 of the NIS), but rather aiming to ensure that all options are fully and clearly assessed. The argument presented on page 27 that this is not viable as fish will move to the upstream point raises the question as to why this is so if there is no downstream water flow at this upper point.

Indirect effects: Crayfish plague

If the reinstatement of the weir results in increased international or intercounty recreational usage of the upstream stretch by kayaks and canoes, then it is important to ensure that biosecurity measures are fully implemented to avoid the introduction of crayfish plague. Local extinctions of the crayfish population in parts of the River Suir are considered likely due to this disease, possibly introduced from the UK in recreational boats. It is critical that the Blackwater River remains free of the disease.

Monitoring

On page 136 of the NIS, it proposed that eDNA monitoring of the efficacy of the fish pass, particularly in relation to Twaite shad access, is carried out. As this reads as a proposal, this Department recommends that this monitoring is conditioned.

You are requested to send any further communications to this Department's Development Applications Unit (DAU) at manager.dau@housing.gov.ie, or to the following address:

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

Is mise, le meas

Joanne Lyons
Higher Executive Officer
Development Applications Unit
Administration



Appendix 1

Fish pass: Twaité shad, sea lamprey and eel



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