

Natura Impact Statement for proposed river walk development at Tipperary Town, Co. Tipperary

Compiled by OPENFIELD Ecological Services

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The Purpose of this document

This document provides information to allow the planning authority (An Bord Pleanála) to carry out an Appropriate Assessment of the proposed project. This document will assess whether significant effects to the integrity of the Natura 2000 network are likely to occur as a result of granting planning permission in accordance with Article 6(3) of the Habitats Directive and the Planning and Development (Amendment) Acts. It will determine whether mitigation measures are required to ensure that negative effects can be avoided to the Natura 2000 network.

This report is based on a separate Screening Report for AA which has been prepared by Openfield Ecological Services and which concluded that significant effect to Natura 2000 areas could not be ruled out.

Under the European Communities (Birds and Natural Habitats Regulations) 2011 an NIS:

...means a report comprising the scientific examination of a plan or project and the relevant European Site or European Sites, to identify and characterise any possible implications of the plan or project individually or in combination with other plans or projects in view of the conservation objectives of the site or sites, and any further information including, but not limited to, any plans, maps or drawings, scientific information or data required to enable the carrying out of an Appropriate Assessment.

It should be noted that under Article 42(1) of the aforementioned legislation it is the relevant competent authority, in this case An Bord Pleanála, which carries out any AA or screening for AA, stating:

A screening for Appropriate Assessment of a plan or project for which an application for consent is received, or which a public authority wishes to undertake or adopt, and which is not directly connected with or necessary to the management of the site as a European Site, shall be carried out by the public authority to assess, in view of best scientific knowledge and in view of the conservation objectives of the site, if that plan or project, individually or in combination with other plans or projects is likely to have a significant effect on the European site.

This NIS therefore aids in the decision-making process.

It should be noted that there is no prescribed format for an NIS. This report therefore follows the generally accepted format for AA provided by the European Commission.

Methodology

The methodology used for this assessment is set out in a document prepared for the Environment DG of the European Commission entitled 'Assessment of plans and projects significantly affecting Natura 2000 sites 'Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC' (Oxford Brookes University, 2001). Chapter 3, part 1, of this document deals specifically with screening while Annex 2 provides the template for an AA report to be used.

In accordance with this guidance, the following methodology has been used to produce this screening statement:

Step 1: Information Required

This assesses whether adequate information is available in order to complete the AA or if, taking the Precautionary Principle into account, additional data are required.

Step 2: Impact Prediction

This identifies the likely impacts that may arise as a result of the project.

Step 3: Conservation Objectives

An assessment of whether or not there will be adverse effects on the integrity of the Natura 2000 site as defined by the conservation objectives and status of the site.

Step 4: Mitigation Measures

Mitigation through avoidance of adverse effects must be proposed. Where it is likely that significant effects will remain despite mitigation then a full assessment of alternative options must be undertaken and an application for the project to proceed made under Article 6(4) of the Habitats Directive: Imperative Reasons of Overriding Public Interest.

The steps are compiled into an AA report, a template of which is provided in Appendix II of the EU methodology.

Reference is also made to guidelines for Local Authorities from the Department of the Environment, Heritage and Local Government (DoEHLG, 2009).

A full list of literature sources that have been consulted for this study is given in the References section to this report while individual references are cited within the text where relevant.

AA Report (Natura Impact Statement) as per Annex 2 of EU methodology:

Step 1 – Information Required

Describe the elements of the project (alone or in combination with other projects or plans) that are likely to give rise to significant effects on the Natura 2000 site (from the screening report prepared by Openfield)

The proposed development will include the ecological reanimation of about 1km of the Ara River, which include enhancement and stabilisation works to its main channel and the creation of a variety of associated habitat features. The site location is shown in figures 1 and 2 while the proposed layout is given in figure 3.

The AA screening report provided follows accepted methodologies. It highlights the fact that the site is within the catchment of the Lower River Suir SAC (site code: 2137).

The site is not located within or directly adjacent to any Natura 2000 area (SAC or SPA). This site is within the built environment of Tipperary Town and land uses are largely artificial in nature. The River Ara is not subject to any Natura designation. It flows to the south and east and joins the River Aherlow to the north-west of Cahir.

The main phases of this project include:

- The main phases of the project include:
- Site preparation
- Enhancement and stabilisation works to the river's main channel
- Installation of landscaping, amenity, and habitat features.
- A single-span pedestrian bridge.
- Operational phase whereby the walk will be used as an amenity area.

Step 2 - Impact Prediction

The AA screening report describes the elements of the project which “have the potential to cause environmental impact”. These are:

Habitat Loss

The site is approximately 13km from the boundary of the Lower River Suir SAC as the crow flies. Because of the distance separating the two areas there is no pathway for loss or disturbance of habitats listed in table 1 or other semi-natural habitats that may act as ecological corridors for important species associated with the qualifying interests of the Natura 2000 sites.

Habitat Disturbance/Pollution during construction

This project will include clearing and enhancing the river embankment of the riverbank for an approximate 800m stretch of the Ara River, in consultation with Inland Fisheries Ireland, along with the installation of a single-span bridge at

the western end of the project area. This has the potential to result in sediment being lost to the water. Sediment can cause long term damage to fish habitats in freshwater systems. In this case the risk of pollution from this source is high as works are planned to the Ara River. Therefore negative effects to the SAC, and to Atlantic Salmon in particular, cannot be ruled out.

Disturbance to species

The construction phase has the potential to disturb aquatic species which are qualifying interests of the Lower River Suir SAC. This includes Otter, White-clawed Crayfish, and Lamprey species. Although no evidence of Otter was recorded during the site survey for this study, the habitat is considered suitable. Similarly, while White-clawed Crayfish and Lamprey are not recorded from this stretch, the habitat is suitable for them. Construction works could inadvertently result in mortality of these species, were they to be present.

Although the Ara River is not within the Lower River Suir SAC, populations of protected species throughout this catchment are connected. As such, negative impacts arising from this project cannot be ruled out.

Impacts during operation

The project is expected to enhance the riverine ecology and includes fish habitat enhancement measures as well as new tree and wetland vegetation planting. No negative effects to the Lower River Suir SAC are expected to occur during this phase.

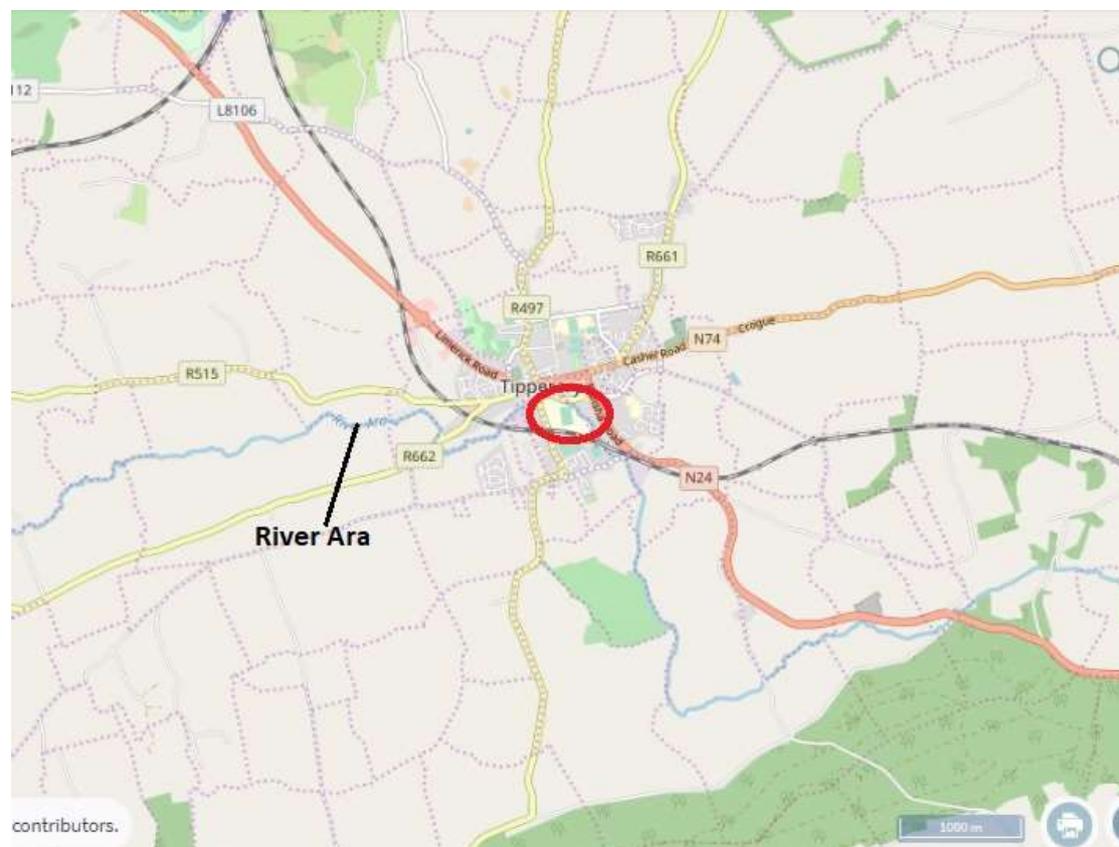


Figure 2 – Site location (red circle) and approximate 2km radius. There are no Natura 2000 areas in this view (from www.epa.ie).

An assessment of the effects of the project 'in combination' with other potential sources is presented:

Implementation of the WFD will result in continued improvements to water quality throughout the Suir catchment, including along the Ara River. Environmental water quality can be impacted by the effects of surface water run-off from areas of hard standing. These impacts are particularly pronounced in urban areas and can include pollution from particulate matter and hydrocarbon residues, and downstream erosion from accelerated flows during flood events.

There are no projects which can act in combination with this development which can give rise to significant effect to Natura areas within the zone of influence.

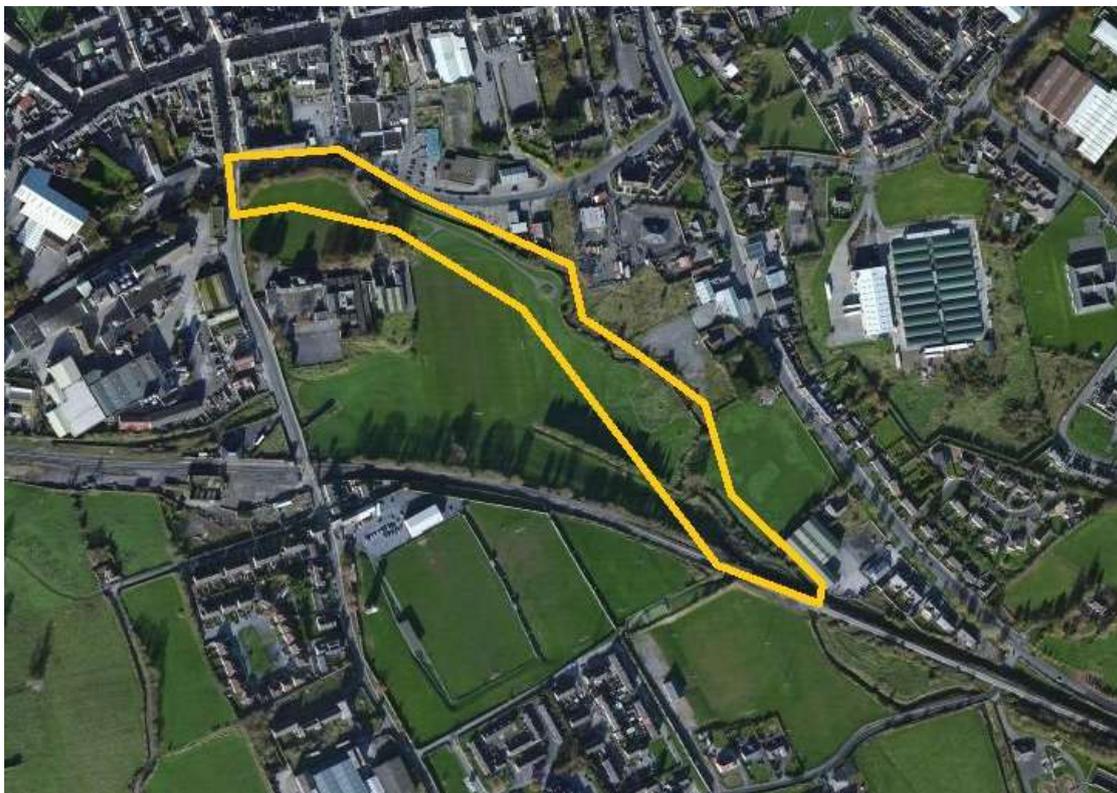


Figure 2 – Indicative site works area

Atlantic Salmon

Maintain river accessibility (no artificial barriers); size of stock measures as 'conservation limit' consistently exceeded; maintain abundance of salmon fry; no significant decline in out-migrating smolt abundance; no decline in the number of spawning beds (redds); water quality at least Q4 at all sites.

Otter

No significant decline in distribution; no significant decline in terrestrial/estuarine/freshwater/lake habitat; no significant decline in couching sites or holts; no decline in available fish biomass;

Twaite Shad (code: 0781)

Greater than 75% of main stem length of rivers accessible from the estuary; more than one age class present; no decline in extent and distribution of spawning habitat; water quality - oxygen levels no lower than 5mg/l; maintain stable gravel substrate with very little fine material, free from filamentous (microalgae) growth and macrophyte (rooted higher plants) growth.

Atlantic/Mediterranean Salt Meadows (1330/1410)

Maintain habitat area and distribution including physical structure (sediment supply, creeks and pans, flooding regime). Maintain vegetation structure as measured by vegetation height, vegetation cover, typical species and sub-communities. Absences of the invasive *Spartina anglica*.

Hydrophilous tall herbs (2137)

No decline in habitat area or distribution; maintain the hydrological regime, vegetation composition in accordance with objectives for positive and negative indicator species, maintain low levels of bare soil and grazing disturbance,

Describe how the project will affect key species and key habitats. Acknowledge uncertainties and any gaps in information.

Hydrological pathways exist to the River Aherlow (Lower River Suir SAC). The conservation objective set for Atlantic Salmon in this SAC is "no decline in the number of spawning beds (redds); water quality at least Q4 at all sites". Given the potential effects to water quality during construction (particularly sediment pollution), significant effects to this qualifying interest cannot be ruled out. This may affect the integrity of the SAC.

For a number of qualifying interests of the SAC (Otter, Lamprey species, White-clawed Crayfish), a conservation objective is for 'no decline in distribution' within the SAC. Although works are to be undertaken well away from the SAC boundary, the species which may be present along the Ara River are connected to populations within the SAC itself. Construction impacts may affect the

distribution, albeit indirectly and temporarily. Nevertheless, a precautionary approach is required, and mitigation will be necessary to avoid this impact (see Step 4 below).

Describe how the integrity of the site (determined by structure and function and conservation objectives) is likely to be affected by the project

Sediment is acknowledged as among the most important pollutants in river ecosystems. This is due to multiple factors, including reducing light penetration, fouling the gills of animal life (such as Atlantic Salmon) and fouling fish spawning beds (particularly for Atlantic Salmon).

Because sediment pollution can reduce the availability of spawning beds and result in a deterioration of water quality, the integrity of the SAC could be compromised. It can act in combination with other sources of sediment and nutrients throughout the Suir catchment to result in a downward pressure on Salmon numbers.

Construction phase impacts where works are to be undertaken at the river bank, could result in disturbance effects to Atlantic Salmon, Otter, White-clawed Crayfish and Lamprey species which are all qualifying interests of the SAC (although the latter three are not recorded from the River Ara in this location).

Step 4 - Mitigation

Describe what mitigation measures are to be introduced to avoid, reduce or remedy the adverse effects on the integrity of the site. Acknowledge uncertainties and any gaps in information.

1. Pollution prevention during construction

Construction will follow guidance from Inland Fisheries Ireland (IFI, 2016) for the protection of fish habitat.

Timing of works: works at or in the river are to be confined to the season of minimal disturbance to salmonids, which lasts from July to September inclusive.

Pollution prevention: This will include the erection of a robust silt curtain (or similar barrier) at the river to prevent the ingress of silt.

Reprofiling works should be undertaken behind this barrier.

Water leaving the site will pass through an appropriately-sized silt trap or settlement pond so that only silt-free run-off will enter the Ara River.

Dangerous substances, such as oils, fuels etc., will be stored in a bunded zone. Emergency contact numbers for the Local Authority Environment Section, Inland Fisheries Ireland, the Environmental Protection Agency and the National Parks and Wildlife Service will be displayed in a prominent position within the

site compound. These agencies will be notified immediately in the event of a pollution incident.

Site personnel will be trained in the importance of preventing pollution and the mitigation measures described here to ensure same.

The site manager will be responsible for the implementation of these measures. They will be inspected on at least a daily basis for the duration of works, and a record of these inspections will be maintained.

2. Disturbance to protected species.

An Ecological Clerk of Works should be engaged for the period when works at the river are to be undertaken. This should include monitoring of soil movements to ensure that protected species (as listed previously), should they be present, are handled correctly and returned to the river as speedily as possible. This should be done under licence from the National Parks and Wildlife Service.

A Construction Management Plan should be prepared which describes in detail how these mitigation measures are to be implemented on the ground. This should be sent to Inland Fisheries Ireland prior to works commencing, to allow for any observations to be accommodated.

The Assessment of Significance of Effects – Conclusion of Stage 2

This report contains an analysis of the proposed project and its relationship with areas designated under the Habitats and Birds Directives. Pathways exist between the development site and one such area and these have been described in detail. Following this analysis, it is concluded that the integrity of the Lower River Suir SAC may be affected. Specifically, this may arise from the impact to the habitat of Atlantic Salmon from pollution during the construction phase, and disturbance to qualifying interest species which may be present along the River Ara. Arising from this assessment, mitigation has been proposed. With the implementation of these measures significant effects to the integrity of the SAC can be avoided. This conclusion is based on best scientific knowledge.

References

Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora

Council Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for the Community action in the field of water policy – more commonly known as the Water Framework Directive

South Eastern River Basin District. 2010. *River Basin Management Plan 2009 – 2015.*

Fossitt J. 2000. *A Guide to Habitats in Ireland.* Heritage Council.

Monaghan S., Shannon D., Wall B. & O’Leary G. 2012. *Focus on Urban Waste Water Discharges in Ireland.* Environmental Protection Agency.

NPWS. 2017. *Conservation Objectives: Lower River Suir SAC 002137. Version 1.* National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

NPWS. 2013. *Site Synopsis. Lower River Suir SAC (Site Code: 2137).* National Parks and Wildlife Service.

NPWS. 2013a. *The Status of EU Protected Habitats and Species in Ireland. Habitat Assessments Volume 2. Version 1.0.* Unpublished Report, National Parks & Wildlife Services. Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.

NPWS. 2013b. *Conservation Objectives: South Dublin Bay SAC 00210.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

Oxford Brookes University. 2001. *Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC.* European Commission, Environment DG.