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STATEMENT OF SCREENING FOR APPROPRIATE ASSESSMENT FOR THE BALLYHAISE AMENITY TRAIL, BALLYHAISE, CO. CAVAN

IN LINE WITH THE REQUIREMENTS OF ARTICLE 6(3) OF THE
EU HABITATS DIRECTIVE



*c/o Cavan County Council
Courthouse
Farnham St
Cavan*

November 2020

TABLE OF CONTENTS

1	INTRODUCTION	3
1.1	Background	3
1.2	Regulatory Context	3
2	METHODOLOGY	8
2.1	Appropriate Assessment	8
2.2	Statement of Competency	10
2.3	Desk Studies & Consultation	10
2.4	Field Based Studies	10
2.5	Assessment Methodology	10
3	SCREENING	12
3.1	Development Description	12
3.2	Site Location and Surrounding Environment	14
3.3	Natura 2000 Sites Identified	18
3.4	Impact Assessment	28
3.5	Finding of No Significant Effects	31
4	APPROPRIATE ASSESSMENT CONCLUSION	32
APPENDIX I:	PHOTOGRAPHS	33

1 INTRODUCTION

1.1 BACKGROUND

Article 6 of the EU Habitat's Directive (Council Directive 92/43/EEC) requires that all plans and projects be screened for potential impacts upon Special Areas of Conservation (SACs) or Special Protection Areas (SPAs). The aim of this screening process is to establish whether or not a full Appropriate Assessment of the proposed plan or project is necessary.

A comprehensive assessment of the potential effects of the proposed development of an amenity walking trail in Ballyhaise on certain designated Natura 2000 sites was carried out in November 2020 by Noreen McLoughlin, MSc, MCIEEM of Whitehill Environmental. This assessment allowed areas of potential ecological value and potential ecological constraints associated with this proposed development to be identified and it also enabled any potential ecological impacts associated with the proposed development to be assessed.

The location of the proposed development is within 15km of sites designated under European Law. As such and in accordance with Article 6(3) of the EU Habitat's Directive (Council Directive 92/43/EEC) regarding Appropriate Assessment, this screening exercise for Appropriate Assessment was carried out in order to identify whether any significant impacts on designated sites are likely. This exercise will also determine the appropriateness of the proposed project, in the context of the conservation status of the designated sites.

This report contains information required by the competent authority (in this instance the Cavan County Council) to undertake a screening for Appropriate Assessment. It is the responsibility of the competent authority to make a decision as to whether or not the proposed development is likely to have significant effects on European Sites, either individually or in combination with other plans or projects. In accordance with the Legislation and National Guidance, the competent authority should issue an AA Screening Determination, which should set out their decision regarding AA, including the main reasons and considerations on which the determination is based.

1.2 REGULATORY CONTEXT

RELEVANT LEGISLATION

The Birds Directive (Council Directive 2009/147/EC) recognises that certain species of birds should be subject to special conservation measures concerning their habitats. The Directive requires that Member States take measures to classify the most suitable areas as Special Protection Areas (SPAs) for the conservation of bird species listed in Annex 1 of the

Directive. SPAs are selected for bird species (listed in Annex I of the Birds Directive), that are regularly occurring populations of migratory bird species and the SPA areas are of international importance for these migratory birds.

The EU Habitats Directive (92/43/EEC) requires that Member States designate and ensure that particular protection is given to sites (Special Areas of Conservation) which are made up of or support particular habitats and species listed in annexes to this Directive.

Articles 6(3) and 6(4) of this Directive also call for the undertaking of an Appropriate Assessment for plans and projects not directly connected with or necessary to the management of, but which are likely to have a significant effect on any European designated sites (i.e. SACs and SPAs). This is explained in greater detail in the following section (Section 1.2.2 and Section 1.2.3).

The Water Framework Directive (WFD) (2000/60/EC), which came into force in December 2000, establishes a framework for community action in the field of water policy. The WFD was transposed into Irish law by the European Communities (Water Policy) Regulations 2003 (S.I. 722 of 2003). The WFD rationalises and updates existing legislation and provides for water management on the basis of River Basin Districts (RBDs). RBDs are essentially administrative areas for coordinated water management and are comprised of multiple river basins (or catchments), with cross-border basins (i.e. those covering the territory of more than one Member State) assigned to an international RBD. The aim of the WFD is to ensure that waters achieve at least good status by 2021 and that status does not deteriorate in any waters.

Appropriate Assessment and the Habitats Directive

Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora – the ‘Habitats Directive’ - provides legal protection for habitats and species of European importance. Article 2 of the Directive requires the maintenance or restoration of habitats and species of European Community interest, at a favourable conservation status. Articles 3 - 9 provide the legislative means to protect habitats and species of Community interest through the establishment and conservation of an EU-wide network of sites known as *Natura 2000*. Natura 2000 sites are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79/409/EEC).

Articles 6(3) and 6(4) of the Habitats Directive sets out the decision-making tests for plans or projects affecting Natura 2000 sites. Article 6(3) establishes the requirement for Appropriate Assessment:

“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. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.”

Article 6(4) deals with the steps that should be taken when it is determined, as a result of appropriate assessment, that a plan/project will adversely affect a European site. Issues dealing with alternative solutions, imperative reasons of overriding public interest and compensatory measures need to be addressed in this case.

Article 6(4) states:

“If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member States shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.”

The Appropriate Assessment Process

The aim of Appropriate Assessment is to assess the implications of a proposal in respect of a designated site's conservation objectives.

The 'Appropriate Assessment' itself is an assessment which must be carried out by the competent authority which confirms whether the plan or project in combination with other plans and projects will have an adverse impact on the integrity of a European site.

Screening for Appropriate Assessment shall be carried out by the competent authority as set out in Section 177U(1) and (2) of the Planning and Development Act 2000 (as amended) as follows:

'(1) A screening for appropriate assessment of a draft Land use plan or application for consent for proposed development shall be carried out by the competent authority to assess, in view of best scientific knowledge, if that Land use plan or proposed development, individually or in combination with another plan or project is likely to have a significant effect on the European site.

(2) A competent authority shall carry out a screening for appropriate assessment under subsection (1) before—

(a) a Land use plan is made including, where appropriate, before a decision on appeal in relation to a draft strategic development zone is made, or

(b) consent for a proposed development is given.'

The competent authority shall determine that an Appropriate Assessment is not required if it can be excluded, that the proposed development, individually or in combination with other plans or project will have a significant effect on a European site.

Where the competent authority cannot exclude the potential for a significant effect on a European site, an Appropriate Assessment shall be deemed required.

Where an Appropriate Assessment is required, the conclusions of the Appropriate Assessment Report (Natura Impact Statement (NIS)) should enable the competent authority to ascertain whether the plan or proposed development would adversely affect the integrity of the European site. If adverse impacts on the integrity of a European site cannot be avoided, then mitigation measures should be applied during the appropriate assessment process to the point where no adverse impacts on the site remain. Under the terms of the Habitats Directive consent can only be granted for a project if, as a result of the appropriate assessment either (a) it is concluded that the integrity of any European sites will not be adversely affected, or (b) after mitigation, where adverse impacts cannot be excluded, there

is shown to be an absence of alternative solutions, and there exists imperative reasons of overriding public interest for the project should go ahead.

Section 177(V) of the Planning and Development Act 2000 (as amended) outlines that the competent authority shall carry out the Appropriate Assessment, taking into account the Natura Impact Statement (amongst any other additional or supplemental information). A determination shall then be made by the competent authority in line with the requirements of Article 6(3) of the Habitats Directive as to whether the plan or proposed development would adversely affect the integrity of a European site, prior to consent being given.

2 METHODOLOGY

2.1 APPROPRIATE ASSESSMENT

This Statement of Screening for Appropriate Assessment (Stage 1) has been prepared with reference to the following:

- European Commission (2000). Managing Natura 2000 Sites: The Provisions of Article 6 of the 'Habitats' Directive 92/43/EEC.
- European Commission (2002). 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 (2006). Nature and Biodiversity Cases: Ruling of the European Court of Justice.
- European Commission (2007). Clarification of the Concepts of: Alternative Solution, Imperative Reasons of Overriding Public Interest, Compensatory Measures, Overall Coherence, Opinion of the Commission.
- Department of Environment, Heritage and Local Government (2009). Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities.

The EC Guidance sets out a number of principles as to how to approach decision making during the process. The primary one is 'the precautionary principle' which requires that the conservation objectives of Natura 2000 should prevail where there is uncertainty.

When considering the precautionary principle, the emphasis for assessment should be on objectively demonstrating with supporting evidence that:

- There will be no significant effects on a Natura 2000 site;
- There will be no adverse effects on the integrity of a Natura 2000 site;
- There is an absence of alternatives to the project or plan that is likely to have an adverse effect to the integrity of a Natura 2000 site; and
- There are compensation measures that maintain or enhance the overall coherence of Natura 2000.

This translates into a four stage process to assess the impacts, on a designated site or species, of a policy or proposal.

The EC Guidance states that “each stage determines whether a further stage in the process is required”. Consequently, the Council may not need to proceed through all four stages in undertaking the Appropriate Assessment.

The four-stage process is:

Stage 1: Screening – The process which identifies the likely impacts upon a Natura 2000 site of a project or plan, either alone or in combination with other projects or plans, and considers whether or not these impacts are likely to be significant;

Stage 2: Appropriate Assessment – The consideration of the impact on the integrity of the Natura 2000 site of the project or plan, either alone or in combination with other projects or plans, with respect to the site’s structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts;

Stage 3: Assessment of Alternative Solutions – The process which examines alternative ways of achieving objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 site;

Stage 4: Assessment where no alternative solutions exist and where adverse impacts remain – An assessment of the compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed.

In complying with the obligations set out in Articles 6(3) and following the guidelines described above, this screening statement has been structured as a stage by stage approach as follows:

- Description of the proposed project;
- Identification of the Natura 2000 sites close to the proposed development;
- Identification and description of any individual and cumulative impacts on the Natura 2000 sites likely to result from the project;
- Assessment of the significance of the impacts identified above on site integrity. Exclusion of sites where it can be objectively concluded that there will be no significant effects;
- Description of proven mitigation measures.

2.2 STATEMENT OF COMPETENCY

This AA Screening report was carried out by Noreen McLoughlin, BA, MSc, MCIEEM. Noreen has an honours degree in Zoology and an MSc in Freshwater Ecology from Trinity College, Dublin and she has been a full member of the Chartered Institute of Ecology and Environmental Management for over thirteen years. Noreen has over 15 years' experience as a professional ecologist in Ireland.

2.3 DESK STUDIES & CONSULTATION

Information on the site and the area of the proposed development was studied prior to the completion of this statement. The following data sources were accessed in order to complete a thorough examination of potential impacts:

- National Parks and Wildlife Service - Aerial photographs and maps of designated sites, information on habitats and species within these sites and information on protected plant or animal species, conservation objectives, site synopses and standard data forms for relevant designated sites.
- Environmental Protection Agency (EPA)- Information pertaining to water quality, geology and licensed facilities within the area;
- Myplan.ie – Mapped based information;
- National Biodiversity Data Centre (NBDC) – Information pertaining to protected plant and animal species within the study area;
- Bing maps & Google Street View – High quality aerials and street images;
- Cavan County Council – Plans and Information on the Route for the ORIS application, information on planning history in the area for the assessment of cumulative impacts.

2.4 FIELD BASED STUDIES

The route of the proposed upgrade to the Cavan Way was walked on November 5th 2020. Notes on the habitats along the route and photographs were taken.

2.5 ASSESSMENT METHODOLOGY

The proposed development was assessed to identify its potential ecological impacts and from this, the Zone of Influence (ZoI) of the proposed development was defined. Based on the potential impacts and their ZoI, the Natura 2000 sites potentially at risk from direct, indirect or in-combination impacts were identified. The assessment considered all potential impact sources and pathways connecting the proposed development to Natura 2000 sites, in view of the conservation objectives supporting the favourable conservation condition of the site's Qualifying Interests (QIs) or Special Conservation Interests (SCIs).

The conservation objectives relating to each Natura 2000 site and its QIs/SCIs are cited generally for SACs as “to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or Annex II species for which the SAC has been selected”, and for SPAs “to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA”.

As defined in the Habitat’s Directive, the favourable conservation status of a habitat is achieved when:

- Its natural range and area it covers within that range is stable or increasing;
- The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future;

The favourable conservation status of a species is achieved when:

- The population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;
- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future;
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Where site-specific conservation objectives (SSCOs) have been prepared for a European site, these include a series of specific attributes and targets against which effects on conservation condition, or integrity, can be measured. Where potential significant effects are identified, then these SSCO should be considered in detail.

3 SCREENING

3.1 DEVELOPMENT DESCRIPTION

Under the Outdoor Recreation Scheme (ORIS) 2020 it is proposed to provide a new looped walking trail in Ballyhaise, Co. Cavan. Under this scheme, it is proposed to create one main trail of 4.5km and additional trails of 2.1km, giving a total network of trails of 7.5km centred around Ballyhaise town and the nearby Oakwood Forest. This proposal would be of significant benefit to the community and add to the growing network of trails across the County.

The Ballyhaise trails will be located on private lands (Coillte and Teagasc, subject to agreement), County Council lands, public rights of way, the local road network and existing village footpaths. Under the current Covid-19 Pandemic and with the requirements of social distancing it is intended that paths will be 3 metres wide, where possible.

The two main sections of the walks are described below.

1. Teagasc Section

This section of the Proposed trail is 1,400 metres long x 3 metres wide.

The route will start at a new gate near the bridge on the Clones Road, go through the wooded section at the north of the Teagasc campus and past the wastewater treatment plant. An approximate 150 metre section of the existing farm lane may require widening at this point. It will then run through a field close to the Annalee River towards the local road known as "The Bog Road". The trail will then continue along the local road towards Oakwood.

The works required in this section will depend on the existing land. In the initial wooded areas to the north of the college, the works will involve the provision of access gates, the clearance of vegetation, gravel and soil etc. and the disposal of this off-site. Any fallen or overhanging trees will be removed and drainage works may also be needed. The paths will be created by the laying and compacting of Clause 804 crushed stone with depths of 75mm to 100mm.

On open ground along Annalee River, access stiles/gates to agreed detail will be provided. Two footbridges over drains will also be required. The paths will be created by the laying and compacting of Clause 804 crushed stone with depths of 75mm to 100mm. Stockproof fence along the trail will be provided to agreed detail with the landowner. Way-marker

posts along route (recycled plastic – black) will also be provided, as well as fingerpost signs at the public road.

In addition to the above works, there will also be upgrades to the path from the Church of Ireland to the Teagasc College (300 metres). It is proposed to drain a section of this path, widen it and re-surface with macadam.

2. Coillte Teoranta - Proposal at Oakwood

There will be two trails created through the Oakwood Forest. The main trail (Marked in Red) through the forest will be 660 metres x 3 metres wide. This is the main trail route through the forest. Along this trail, existing vegetation will be cleared where necessary. Vegetation, gravel and soil will be disposed off site and fallen or overhanging trees will be cleared. Drains will be included where necessary and the paths will be created by the laying and compaction of Clause 804 crushed stone with depths of 75mm to 100mm.

Way-marker posts will be provided (recycled plastic – black). The colour-coding and disc design will be agreed with Coillte.

The additional looped trail through the forest (Marked in Blue) will be 1200 metres x 3 metres wide. Along this trail, existing vegetation will be cleared where necessary. Vegetation, gravel and soil will be disposed off site and fallen or overhanging trees will be cleared. Drains will be included where necessary and the paths will be created by the laying and compaction of Clause 804 crushed stone with depths of 75mm to 100mm. Way-marker posts will be provided (recycled plastic – black). The colour-coding and disc design will be agreed with Coillte.

It is also proposed to provide a bespoke gateway information panel at the (North) forest entrance in timber, carved to match existing village gateway signage, to Coillte approval.

3.2 SITE LOCATION AND SURROUNDING ENVIRONMENT

The proposed new amenity trail will cross a variety of habitats throughout both sections. The general locations of the works in relation to these habitats are described below.

SECTION 1

From the gate near the bridge on the Clones Road, the proposed trail will go through a small section of mixed woodland, where species such as beech *Fagus sylvatica*, sycamore *Acer pseudoplatanus* and larch *Larix* sp are common. Rhododendron was also noted in this area. This woodland habitat extends down to the River Annalee. The trail will then join up with an existing farm track before going into a large field where the dominant habitat is improved agricultural grassland. The trail will follow around the bend of the river to emerge at the Bog Road. The river banks at this point are generally quite open and unshaded. Grassy verges extend down into the river and there is only an occasional tree (alder *Alnus glutinosa*, ash *Fraxinus excelsior*, oak *Quercus* sp.) along the bank. The remainder of the trail in this section will go along the Local Road towards Oakwood Forest, where Section 2 of the trail begins.

SECTION 2

This section of the Ballyhaise trail will go through Oakwood Forest, a Coillte owned woodland that lies approximately 1km west of Ballyhaise town. The forest is dominated by a mixed woodland habitat with a high proportion of coniferous species. Broadleaved species include birch *Betula* sp, willow *Salix* sp, beech *Fagus sylvatica*, sycamore *Acer pseudoplatanus* and holly *Ilex aquifolium*. There is an existing trail through the forest, but it is quite overgrown and the quality of the path is very poor. This trail is very wet in parts, with streams of water running along it. The proposed Blue Loop of this trail will run adjacent to the Elteen Stream, which is a tributary of the Annalee River.

The trail will exit the forest to the south where it will join with an existing right of way. This right of way will cross over agricultural lands and along treelines and hedgerows, before emerging back onto a local access road that leads towards Ballyhaise town.

The route of the Ballyhaise Amenity Trail has been outlined in Figures 1-3 and an aerial photograph of the route is shown in Figure 4. Photographs taken along the route are shown in Appendix 1.

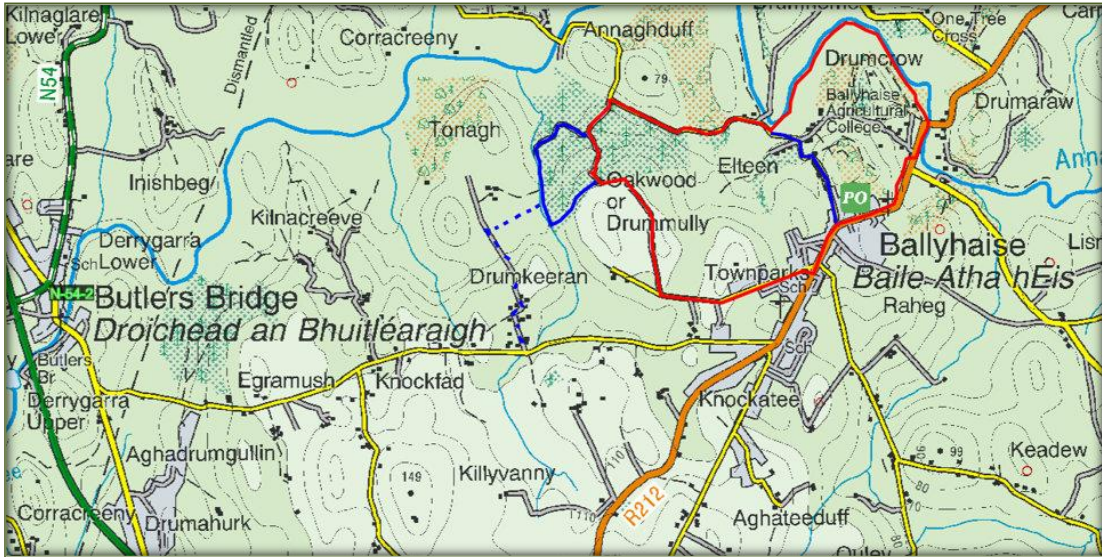


Figure 1 – Site Location Map. The Routes are Outlined in Red and Blue.

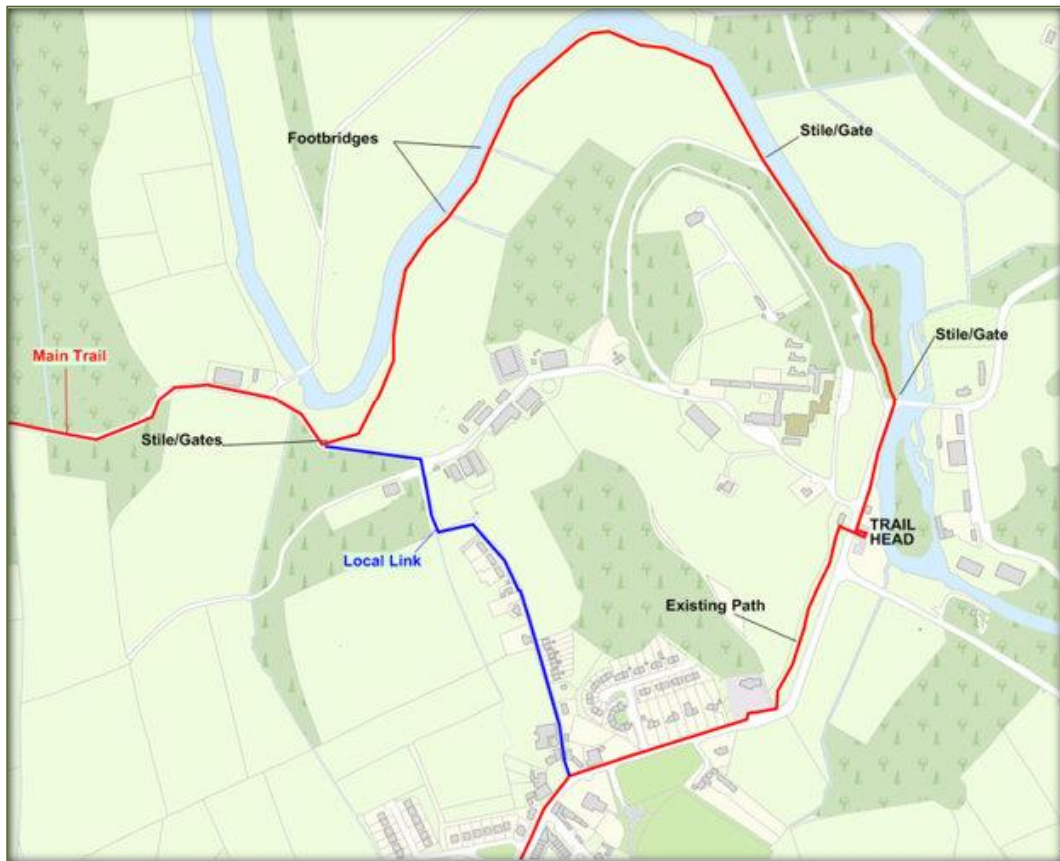


Figure 2 – Site Location Map showing Section 1 of the Proposed Route.

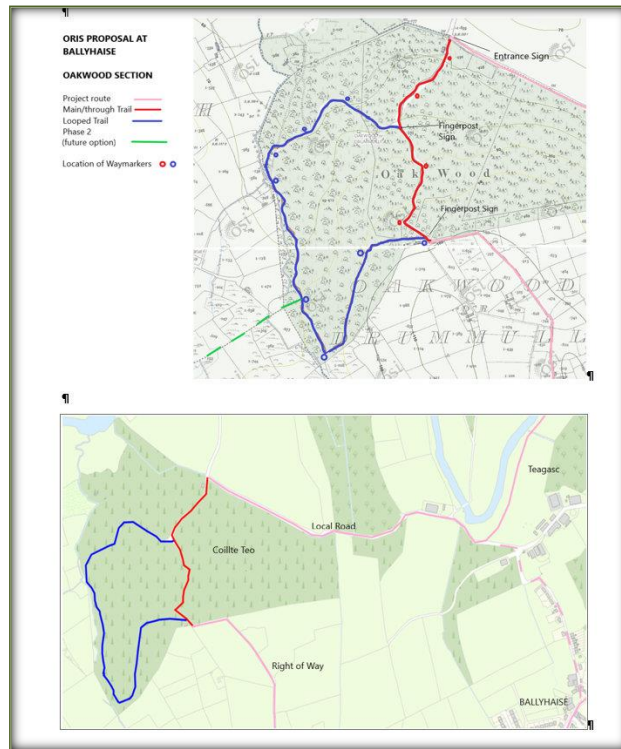


Figure 3 – Maps showing Section 2 of the Loop through Oakwood

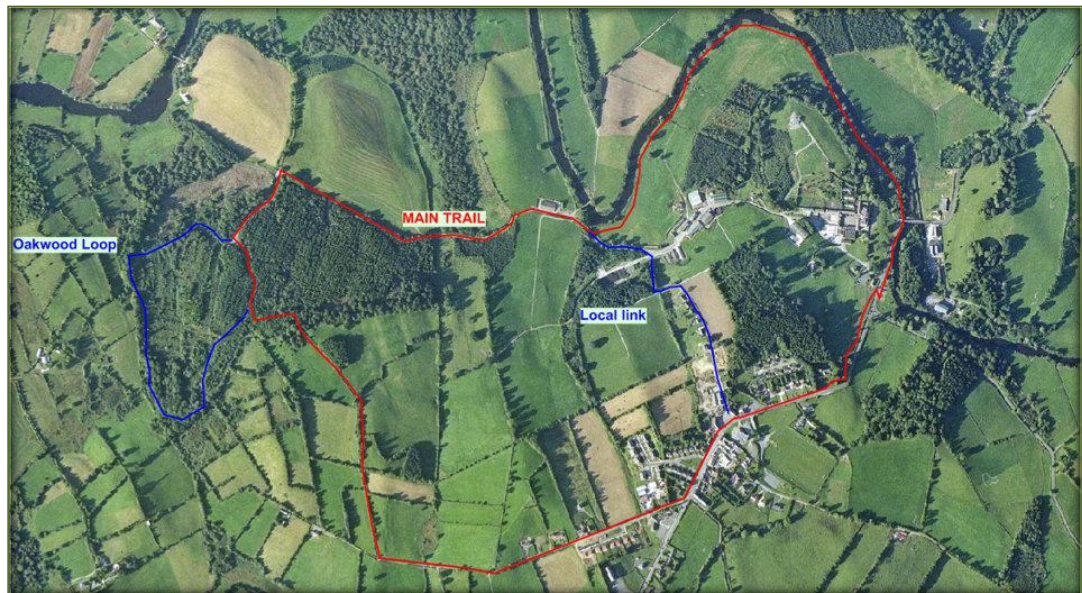


Figure 4 – Aerial Photo of the Proposed Route

WATER FEATURES AND QUALITY

All works will take place within the Erne Hydrometric Area (36) and Catchment (36), the Annalee Sub-Catchment (030) and Sub-Basin (090). Section 1 of the route will pass close to the main channel of the Annalee River. The works in Section 2 will take place in Oakwood Forest and the Elteen Stream flows along the western perimeter of the woodland here. This stream flows north towards the Annalee River.

The EPA has classified the ecological status of the Oakwood Stream as moderate ecological status. The main channel of the Annalee River varies from good ecological status at points upstream of the small bridge at Annaghduff to moderate status downstream of this bridge. Under the requirements of the Water Framework Directive, all waterbodies must achieve good status and any status below this is unsatisfactory.

3.3 NATURA 2000 SITES IDENTIFIED

In accordance with the guidelines issued by the Department of the Environment and Local Government, a list of Natura 2000 sites within 15km of the proposed development have been identified and described according to their and described according to their site synopsis, qualifying interests and conservation objectives. In addition, any other sites further than this, but potentially within its zone of interest were also considered. The zone of impact may be determined by an assessment of the connectivity between the application site and the designated areas by virtue of hydrological connectivity, atmospheric emissions, flight paths, ecological corridors etc.

There are five Natura 2000 designated sites within 15km of the application site, plus one additional site with hydrological connectivity to the area of proposed works. These designated areas and their closest points to the proposed development site are summarised in Table 1 and a map showing their locations relative to the application site is shown in Figures 5 and 6. A full description of these sites can be read on the website of the National Parks and Wildlife Service (npws.ie).

Site Name & Code	Distance	Qualifying Interests	Potential Effects
Lough Oughter and Associated Loughs SAC 000007	Parts of the Trail are Adjacent to the SAC (along the Local Road). The works in Section 1 are 462m upstream of the River Annalee where it is designated as an SAC. The works in Oakwood (Blue Loop) are 217m upstream of the SAC.	<ul style="list-style-type: none"> • Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i>-type vegetation • Bog woodland • Otter <i>Lutra lutra</i> 	<i>The potential for significant effects to arise on these QIs will be considered further.</i>
Lough Oughter Complex SPA 004049	3.5km west / 8.2km downstream	<ul style="list-style-type: none"> • Great Crested Grebe (<i>Podiceps cristatus</i>) • Whooper Swan (<i>Cygnus cygnus</i>) • Wigeon (<i>Anas penelope</i>) • Wetlands & Waterbirds 	<i>Given the hydrological distance between the works and this SPA, significant effects can be ruled out. .</i>
Upper Lough Erne SAC UK0016614	7.8km north / 26km downstream	<ul style="list-style-type: none"> • Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i>-type vegetation • Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> 	<i>Given the hydrological distance between the works and this SAC, significant effects can be ruled out. .</i>

		<p>in the British Isles</p> <ul style="list-style-type: none"> Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) Otter (<i>Lutra lutra</i>) 	
Upper Lough Erne SPA UK9020071	7.8km north	<ul style="list-style-type: none"> Whooper Swan <i>Cygnus cygnus</i> 	Given the hydrological distance between the works and this SPA, significant effects can be ruled out. .

Table 1 – Natura 2000 Sites Within the Zone of Influence of the Works

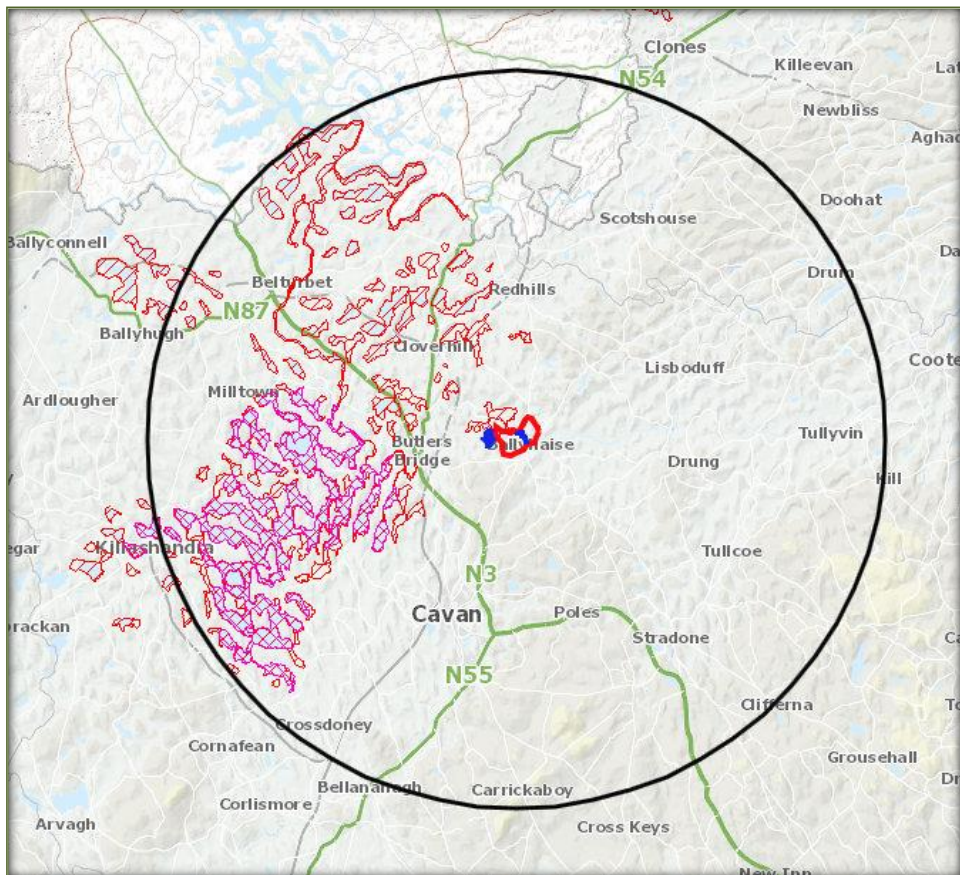


Figure 5 – The Proposed Works (Outlined in Blue/Red) in relation to the Natura 2000 Sites (SACs – Red Hatching; SPAs – Pink Hatching)



Figure 6 – The Proposed Works (Outlined in Blue/Red) in relation to the Natura 2000 Sites (SACs – Red Hatching; SPAs – Pink Hatching)

LOUGH OUGHTER AND ASSOCIATED LOUGHS (SAC SITE CODE 000007)

Site Synopsis

Lough Oughter and its associated loughs occupy much of the lowland drumlin belt in north and central Cavan between Upper Lough Erne, Killeshandra and Cavan town. The site is a maze of waterways, islands, small lakes and peninsulas including some 90 inter-drumlin lakes and 14 basins in the course of the Erne River. The area lies on Silurian and Ordovician strata with Carboniferous limestone immediately surrounding.

This site is a candidate Special Area of Conservation for natural eutrophic lakes and bog woodland, two habitats listed on Annex I of the E.U. Habitats Directive and for the otter, a species listed on Annex II of the same Directive. The site also contains areas of dry woodland, marsh, reedbed and wet pasture.

Drainage within the area is inefficient and the water levels prone to natural fluctuation as a result. The regularly flooded areas still accommodate a variety of specialist plant species such as Amphibious Bistort (*Polygonum amphibium*) and Marsh Foxtail (*Alopecurus geniculatus*), as well as rarer species such as Needle Spike-Rush (*Eleocharis acicularis*) and Lesser Marshwort (*Apium inundatum*).

The lakes and basins are shallow, and the water well mixed and nutrient rich (eutrophic). The aquatic flora is varied with several pondweed species such as Bluntleaved Pondweed (*Potamogeton obtusifolius*), Shining Pondweed (*Potamogeton lucens*), Broad-leaved Pondweed (*Potamogeton natans*), Reddish Pondweed (*Potamogeton alpinus*) and Various-leaved Pondweed (*Potamogeton gramineus*). Typical in the zone of aquatic plants are Yellow Water-lily (*Nuphar lutea*), Canadian Pondweed (*Elodea canadensis*), Mare's Tail (*Hippuris vulgaris*), Water Milfoil (*Myriophyllum spicatum*), Brooklime (*Veronica beccabunga*), Water Dropwort (*Oenanthe spp.*) and Starwort (*Callitriche sp.*). The aquatic community includes species of limited distribution in Ireland such as the Duckweed species *Lemna gibba* and *Spirodela polyrhiza*.

Around much of the shoreline there are well developed swamp and marsh communities, typically with a zone of Bulrush (*Schoenoplectus lacustris*) in front of a zone of Common Reed (*Phragmites australis*) which is in turn backed by a more species rich zone of sedges, grasses and herbs, particularly Bottle Sedge (*Carex rostrata*), Common Sedge (*Carex nigra*), Creeping Bent (*Agrostis stolonifera*), Meadowsweet (*Filipendula ulmaria*), Marsh Helleborine (*Epipactis palustris*), Water Plantain (*Alisma plantago-aquatica*), Rough Horsetail (*Equisetum hyemale*), Water Horsetail (*Equisetum fluviatile*) and Wild Angelica (*Angelica sylvestris*). Less widespread species also occur on the wet lake margins; species such as Water Dock (*Rumex hydrolapathum*), Greater Water-parsnip (*Sium latifolium*), Cowbane (*Cicuta virosa*), Tufted Sedge (*Carex elata*), Water Soldier (*Stratiotes aloides*), Arrowhead (*Sagittaria sagittifolia*), Flowering Rush (*Butomus umbellatus*) and Greater Spearwort (*Ranunculus lingua*) may be locally prominent.

There are many variations on this typical zonation of sheltered shores with species such as Reedmace (*Typha spp.*), Branched Bur-Reed (*Sparganium erectum*) and Reed Canary-grass (*Phalaris arundinacea*) gaining local prominence. More exposed shores lack the extensive swamp zones, here smaller species such as Common Spike Rush (*Eleocharis palustris*) can be found.

Level, wet pastures tend to be dominated by Creeping Bent (*Agrostis stolonifera*) and Rush species (*Juncus sp.*) with a scattering of marshland and wet grassland plants such as Marsh Marigold (*Caltha palustris*), Water Forget-me-not (*Myosotis scorpiodes*) and Yellow Iris (*Iris pseudacorus*). Soft Rush (*Juncus effusus*) is most abundant with frequent Hard Rush (*Juncus inflexus*) and Sharp-Flowered Rush (*Juncus acutiflorus*) and less widespread Conglomerate Rush (*Juncus conglomeratus*) also occurring.

Where a general lack of grazing pressure or a particular slope has allowed it, deciduous woodland has re-established itself behind the reedbeds. Two species of Willow (*Salix caprea* and *Salix cinerea*) are common constituents along with Alder (*Alnus glutinosa*), Downy Birch (*Betula pubescens*), Hazel (*Corylus avellana*) and Hawthorn (*Crataegus monogyna*). Along submerged margins Alder and Willow are most commonly found with a flooded understorey typically containing Reed Canarygrass, Meadow Sweet, Yellow Flag and in places Tufted Sedge (*Carex elata*) and Greater Tussock Sedge (*Carex paniculata*). Downy Birch occurs along lake edges and also forms stands of wet woodland on cutover bog with varying degrees of wet and dry peat. Purple Moor-grass (*Molinia caerulea*), Marsh Cinquefoil (*Potentilla palustris*) and Bog Moss (*Sphagnum* sp.) occur in areas with pools and dry areas. Where there is dry peat, Bracken (*Pteridium aquilinum*), Bramble (*Rubus fruticosus* agg.) and Gorse (*Ulex* sp.) occur under the Birch canopy. Birch dominated wood is also found in association with Ling Heather (*Calluna vulgaris*) bog.

In areas of wet bog with good *Sphagnum* cover, bog woodland has developed. Downy Birch characterises this habitat; other typical species include Purple Moor-grass (*Molinia caerulea*) and Bottle Sedge (*Carex rostrata*).

Dry broad-leaved woodland is characterised by Ash (*Fraxinus excelsior*), Hazel, Holly (*Ilex aquifolium*) and Oak (*Quercus* spp.), while shrubs include Blackthorn (*Prunus spinosa*), Spindle (*Euonymus europaeus*) and Guelder Rose (*Viburnum opulus*). The Red Data Book species Bird Cherry (*Prunus padus*) has also been recorded from the site. The clayey soils have a characteristic flora, including Wood Avens (*Geum urbanum*), Wood Sorrel (*Oxalis acetosella*), Primrose (*Primula vulgaris*), Herb Robert (*Geranium robertianum*) and Wood Sedge (*Carex sylvatica*).

The site supports a substantial population of water birds including internationally important numbers of Whooper Swan (average peak 231) and nationally important numbers of Tufted Duck (average peak 247) and Cormorant (average peak 130) as well as important numbers of species such as Greenland White-fronted Goose, Great Crested Grebe, Wigeon, Teal and Pochard. Lapwing, Snipe and Golden Plover also utilise the wet grassland areas. Wildfowl Sanctuaries exist at Inchin Lough, Derrygid Lough, Farnham Lough, Derrybrick Lough, Derrinishbeg Lough and Annagh Lough. Part of the site is designated an SPA under the EU Birds Directive.

Otter, a species listed on Annex II of the E.U. Habitats Directive occurs at the site. Irish Hare has also been recorded. Both of these species are listed in the Irish Red Data Book and are legally protected under the Wildlife Act 1976.

The main threats to the quality of the site are water polluting activities such as run-off from fertiliser and slurry application and sewage discharge which have raised the nutrient status of some lakes to hypertrophic. Housing and boating developments are on the increase, adjacent to and within the site respectively. There is also significant fishing and shooting pressure on and around the lakes. Increased afforestation has resulted in some loss of wetland habitat and also loss of feeding ground for wintering birds such as Greenland White-fronted Geese.

The Lough Oughter area contains important examples of two habitats listed on Annex I of the E.U. Habitats Directive and supports a population of the Annex II species, otter. The site as a whole is the best inland example of a flooded drumlin landscape in Ireland and has many rich and varied biological communities. Nowhere else in the country does such an intimate mixture of land and water occur over a comparable area, and many of the species of wetland plants, some considered quite commonplace in Lough Oughter and its associated loughs, are infrequent elsewhere.

Site Specific Conservation Objectives

Site specific conservation objectives for this site have not yet been prepared. Therefore, the SSCOs of sites with similar QIs were referred to in order to gain an understanding of and make an assessment of the attributes and targets that are needed to restore or maintain the favourable conservation condition of each Qualifying Interest of this SAC. These SSCOs are outlined in Tables 2 – 4.

Natural Eutrophic Lakes with Magnopotamion and Hydrocharition-type Vegetation 3150¹

The SSCO for this habitat is to *maintain* or *restore* its favourable conservation condition which is generally defined by the following list of attributes and targets:

Attribute	Measure	Target
Habitat area	Hectares	Area stable or increasing, subject to natural processes
Habitat distribution	Occurrence	No decline, subject to natural processes
Typical species	Occurrence	Typical species present, in good condition, and demonstrating typical abundances and distribution

¹ SSCOS – Lough Forbes SAC 001818 SSCOs (NPWS, 2016)

Vegetation composition: characteristic zonation	Occurrence	All characteristic zones should be present, correctly distributed and in good condition
Vegetation distribution: maximum depth	Metres	Restore maximum depth of vegetation, subject to natural processes
Hydrological regime: water level fluctuations	Metres	Maintain appropriate natural hydrological regime necessary to support the habitat
Lake substratum quality	Various	Maintain appropriate substratum type, extent and chemistry to support the vegetation
Water quality: transparency	Metres	Maintain/restore appropriate Secchi transparency. There should be no decline in Secchi depth/transparency
Water quality: nutrients	µg/l P; mg/l N	Restore the concentration of nutrients in the water column to sufficiently low levels to support the habitat and its typical species
Water quality: phytoplankton biomass	µg/l Chlorophyll a	Maintain appropriate water quality to support the habitat, including good chlorophyll a status
Water quality: phytoplankton composition	EPA phytoplankton composition metric	Maintain appropriate water quality to support the habitat, including good phytoplankton composition status
Water quality: attached algal biomass	Algal cover and EPA phytobenthos metric	Maintain trace/ absent attached algal biomass (<5% cover) and good phytobenthos status
Water quality: macrophyte status	EPA macrophyte metric (The Free Index)	Restore good macrophyte status
Acidification status	pH units; mg/l	Maintain appropriate water and sediment pH, alkalinity and cation concentrations to support the habitat, subject to natural processes
Water colour	mg/l PtCo	Restore appropriate water colour to support the habitat
Dissolved organic carbon (DOC)	mg/l PtCo	Maintain appropriate organic carbon levels to support the habitat
Turbidity	Nephelometric turbidity units/ mg/l SS/ other appropriate units	Maintain appropriate turbidity to support the habitat
Fringing habitat: area	Hectares	Maintain the area and condition of fringing habitats necessary to support the natural structure and functioning of the lake habitat

Table 2 – Natural Eutrophic Lakes with Magnopotamion and Hydrocharition-type Vegetation 3150

Potential Significant Effects

The QI does not occur in Ballyhaise along the Annalee River. Downstream of Ballyhaise, the first location of this habitat is west of Butlersbridge, beginning with the complex habitats around Carratraw Lough and onto Lough Oughter itself. These habitats are a minimum of 9km downstream of Ballyhaise. Given the small scale of the proposed works and the fact that they are 9km upstream of this QI, significant effects upon this habitat can be ruled out.

Bog Woodland g1Do²

The SSCO for this habitat is to *maintain* or *restore* its favourable conservation condition which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Habitat area	Hectares	Area stable or increasing, subject to natural processes
Habitat distribution	Occurrence	No decline, subject to natural processes
Vegetation composition: positive indicator species	Number in a representative number of monitoring stops	Birch (<i>Betula pubescens</i>), bog moss (<i>Sphagnum</i>) species and at least five other indicator species present
Vegetation composition: negative indicator species	Percentage cover at a representative number of monitoring stops	Both native and non-native invasive species absent or under control. Total cover should be less than 10%
Woodland structure: cover and height of birch	Percentage cover and metres at a representative number of monitoring stops	A minimum 30% cover of birch (<i>Betula pubescens</i>) with a median canopy height of 4m
Woodland structure: dwarf shrub cover	Percentage cover at a representative number of monitoring stops	Dwarf shrub cover not more than 50%
Woodland structure: ling cover	Percentage cover at a representative number of monitoring stops	Ling (<i>Calluna vulgaris</i>) cover not more than 40%
Woodland structure: bryophyte cover	Percentage cover at a representative number of monitoring stops	Bryophyte cover at least 50%, with bog moss (<i>Sphagnum</i> spp.) cover at least 25%
Woodland structure: tree size classes	Occurrence	Each size class present
Woodland structure: senescent and dead wood	Occurrence	Senescent or dead wood present

Table 3 – SSCOs for Bog Woodland

² SSCOS – Lough Corrib SAC 000297 NPWS (2017)

Potential Significant Effects

There are woodlands habitats along the Annalee River at Annaghduff, notably those at Annaghduff and Tonagh. These woodland habitats are within the SAC; however, they do not occur on peaty soils and therefore they are not bog woodland habitats³. Significant effects upon this habitat within the SAC are not likely to occur.

Otter (1355)⁴

The SSCO for this species is to *maintain* or *restore* its favourable conservation condition which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Distribution	% positive survey sites	No Significant Decline
Extent of Terrestrial Habitats	Hectares	No significant decline.
Extent of Marine Habitats	Hectares	No significant decline
Extent of Freshwater (River) Habitat	Km	No significant decline
Extent of Freshwater (Laker) Habitat	Hectares	No significant decline
Couching Sites and Holts	Number	No significant decline
Fish Biomass Available	Kg	No significant decline
Barriers to connectivity	Number	No significant increase

Table 5 – SSCOs for Otter

Potential Impacts

Records for this species exist along the Annalee River, including from Ballyhaise near the bridge. The presence of this species is positively correlated with good water quality and deterioration of same will lead to impacts upon this species. Otters have two basic requirements – aquatic prey and safe refuges where they can rest. In freshwater areas, the diet of the otter consists of a variety of fish from sticklebacks to salmon and eels, whilst crayfish and frog availability can also be important. Impacts that reduce the quality of, or cause disturbance to, their terrestrial or aquatic habitats are likely to affect otters. The main threats to otters in Ireland are thought to be: (1) habitat destruction, including river drainage and the clearance of bank-side vegetation; (2) pollution, particularly organic pollution resulting in fish kills; (3) disturbance of habitat due to recreational activities, and (4) accidental deaths (NPWS, 2009).

As part of the proposed works, there will be no fragmentation of habitats that are used by the otter. The proposed works will maintain a 3m buffer zone between the river at all times and fragmentation of the habitat will not occur. The clearance of riverside vegetation will

³ The woodland at Annaduff corresponds to the Annex I priority habitat *Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Pandion, Alnion incanae, Salicion albae)*

⁴ SSCOS – Blackwater River Cork/Waterford SSCOs 002170 (NPWS, 2012)

not occur. There will be no lighting along the proposed trail. There will be no significant effects upon this species arising from deteriorations in water quality.

3.4 IMPACT ASSESSMENT

The potential impacts of the proposed development on the Natura 2000 sites within the Zone of Influence of the works are described below.

Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on nearby Natura 2000 site:

The proposed development involves the creation of an amenity walking trail in Ballyhaise. The works will involve the clearing of vegetation and topsoil and the laying of 75mm-100mm crushed stone. Some parts of the trail construction will take place on land that is upstream of the SAC. There will also be works on lands adjacent to the SAC; however, the route in this area extends along the existing road and apart from signage no other works will be proposed in this area.

Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the nearby Natura 2000 sites by virtue of:

Size and scale: Given the small size and scale of the development in relation to the overall size of the Lough Oughter and Associated Loughs SAC, the likelihood of any direct, indirect or cumulative impacts on these designated sites are low.

Land-take: The proposed Ballyhaise Amenity trail will not be developed within any area of the SAC and there will be no land-take from the SAC.

Distance from Natura 2000 site or key features of the site: The trail is adjacent to the Annaghduff Woodland (Annex I Alluvial Woodlands) for a distance of 70m but the route here is along the existing road and no works are needed. The works at Section 1, through Teagasc lands and around the field will take place 500m upstream of the Lough Oughter and Associated Loughs SAC. In addition, the blue trail in the Oakwood Forest is close to the Elteen Stream, which is a tributary of the River Annalee. The lower reaches of this stream are within the SAC and the upstream distance is approximately 220m.

Resource requirements (water abstraction etc.): No resources will be taken from the SAC / SPA and there are no resource requirements that will impact upon any designated site.

Emissions: There will be no direct emissions into the Lough Oughter SAC. Some works will take place 220m upstream of the SAC (at Oakwood) while those on the Teagasc lands will be 500m upstream of the SAC. Where there are works close to the Annalee River and Elteen Stream, a minimal buffer zone of 3m will be retained at all times. This will ensure that there is no excess run off of silt into the water.

Excavation requirements: There will be no excavation works in any designated site. Excavated soil from the works will be removed from the site and disposed of by a registered contractor in a

registered site.

Transportation requirements: There will be no additional transportation requirements resulting from the proposed development and associated works that will have any impact upon the SAC / SPA.

Duration of construction, operation, decommissioning etc: Construction will take place over a period of four months. Works will take place outside of the bird nesting season where tree removal is required. The operation of the site will be long term.

Describe any likely changes to the nearby Natura 2000 sites arising as a result of:

Reduction of habitat area: There will be no reduction in any area that is designated as an SAC. The trail will extend for 70m along the SAC boundary at one location. The SAC in this area contains an area of wet willow-alder-ash woodland. Although this is not a QI of the Lough Oughter and Associated Loughs SAC, it does correspond to the Annex I priority habitat *Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Pandion, Alnion incanae, Salicion albae)*. The trail along this area will extend along the existing local road and no works are required here. There will be reduction in this woodland habitat or any other habitat within the SAC.

Disturbance to key species: The Lough Oughter SAC near Ballyhaise is designated for the otter. The main impacts upon this species is habitat fragmentation and loss. There will be no fragmentation or loss of any habitat within the SAC and there will be no significant effects upon these species arising from the trail. The trail will not be lit.

Habitat or species fragmentation: There will be no habitat or species fragmentation within the SAC.

Reduction in species density: There will be no reduction in species density within the Lough Oughter and Associated Loughs SAC.

Changes in key indicators of conservation value (water quality etc.): There will be no negative impacts upon surface or ground water quality within the Lough Oughter and Associated Loughs SAC.

Describe any likely impacts on the nearby Natura 2000 sites as a whole in terms of:

Interference with the key relationships that define the structure or function of the site: It is not considered likely that there will be any impacts on the key relationships that define the structure or function of the Natura 2000 sites identified.

Provide indicators of significance as a result of the identification of effects set out above in terms of:

Loss, Fragmentation - None

Disruption & disturbance: None

Change to key elements of the site (e.g. water quality etc.): None

3.5 FINDING OF NO SIGNIFICANT EFFECTS

Finding of No Significant Effects Report Matrix	
Name of project	Creation of the Ballyhaise Amenity Trail.
Name and location of Natura 2000 site	Parts of the Trail are Adjacent to the SAC (along the Local Road). The works in Section 1 are 462m upstream of the River Annalee where it is designated as an SAC. The works in Oakwood (Blue Loop) are 217m upstream of the SAC.
Description of project	Application for Funding under Oris 2020 for the Creation of the Ballyhaise Amenity Trail
Is the project directly connected with or necessary to the management of the site?	No
Are there other projects or plans that together with project being assessed could affect the site?	No
The Assessment of Significance of Effects	
Describe how the project is likely to affect the Natura 2000 site	Having regard to the location, nature and scale of the proposed development, it is considered that there is no potential for significant effects either from the proposed development on its own or in combination with other plans and projects.
Explain why these effects are not considered significant	Not applicable as there is no potential for negative impacts
Describe how the project is likely to affect species designated under Annex II of the Habitats Directive.	No impacts likely
Data Collected to Carry out the Assessment	
Who carried out the assessment	Noreen McLoughlin, MSC, MCIEEM. Consultant Ecologist
Sources of data	NPWS, EPA, National Biodiversity Data Centre, Cavan County Council
Level of assessment completed	Stage1 Appropriate Assessment Screening
Where can the full results of the assessment be accessed and viewed	Full results included

4 APPROPRIATE ASSESSMENT CONCLUSION

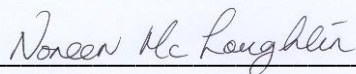
In accordance with Article 6(3) of the Habitats Directive, the relevant case law, established best practice and the precautionary principle, this AA Screening Report has examined the details of the project in relation to the relevant Natura 2000 sites within 15km of the application site. This report has analysed the potential impacts and effects of the proposed project on the Special Conservation Interests of these designated sites. It has evaluated the significance of these potential impacts and effects in view of these sites' conservation objectives.

At this stage of the AA process, it is for the competent authority, i.e., Cavan County Council, to carry out the screening for AA and to reach one of the following determinations:

a) AA of the proposed development is required if it cannot be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will not have a significant effect on any European sites;

b) AA of the proposed development is not required if it can be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will not have a significant effect on any European sites.

It is of the opinion of the author that an AA of the proposed development is not required as it can be excluded, on the basis of objective information provided in this report, that the proposed development, individually or in combination with other plans or projects, will not have a significant effect on any European sites.



Noreen McLoughlin, MSc, MCIEEM.
Ecologist.

(PI Insurance details available on request)

Appendix I: PHOTOGRAPHS



The River Annalee Near the Teagasc College



Woodland Near the Teagasc College



Existing Lane Near the Annalee River



The River Annalee near Section 1 of the Trail



The River Annalee near Section 1 of the Trail



The River Annalee from the Local Road



Oakwood Forest



Location of the Blue Loop



Existing Public Right of Way at Oakwood