**Proposed Corgar to Aghawillan** **Greenway,**

**Co. Leitrim**

**A picture containing tree, outdoor, grass, rock

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**SCREENING FOR APPROPRIATE ASSESSMENT**

**Version (27th July 2021) FINAL**

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**EXECUTIVE SUMMARY**

Ecofact have been commissioned to carry out a Screening for Appropriate Assessment for a Proposed

Greenway running from Corgar to Lisgruddy and Corramahan townlands, Aghawillan, Co. Leitrim. The proposed scheme is c. 2.9km in length and will follow a disused railway track. This report assesses whether the proposed development is likely to have a significant effect on the Natura 2000 site network and if an NIS is required. The proposed works will involve vegetation clearance, soil excavation and the laying of asphaltic cement or surface dressing.

There are three Natura 2000 sites within a 15 km radius of the proposed development site. The Cuilcagh - Anierin Uplands SAC (002301) is located c. 7.9 km to the north-west of the proposed development. The Lough Oughter Complex SPA (004049) is located c. 14.4km south-east. There is no downstream hydrological connection to the Lough Oughter Complex SPA or the Cuilcagh - Anierin Uplands SAC. Due to this and the geographical separation there is not potential for significant impacts on these Natura 2000 sites to arise from the proposed works. The Lough Oughter And Associated Loughs SAC (000007) is located 11.8km north-east and 32.1rkm downstream.

The Proposed Corgar to Aghawillan Greenway, Co. Leitrim crosses four small streams with a hydrological connection to the Lough Oughter And Associated Loughs SAC. It is recognised that through these waterways there is the potential for water quality impacts to arise at the site from the proposed works. However, this is not considered to have the potential to travel c. 32.1rkm downstream to the SAC. In addition during the site survey the streams were very small with a low flow. Any impacts would be considered to be localised. Any invasive species impacts that may arise on site during the works would not have the potential to affect the SAC at a distance of c. 32.1 rkm downstream either. This is a large geographical distance and there is no potential for invasive species impacts taking this into account. Regarding other ecological interests, a full Ecological Impact Assessment will be carried out by Ecofact. This will take into account all other ecological features of note including Otters which are designated as part of the Lough Oughter And Associated Loughs SAC. However any Otters present in the vicinity of the site would not be considered part of this population.

From examination of the information available, it is concluded that there is no potential for direct, indirect or cumulative impacts arising from the proposed Corgar to Aghawillan Greenway in Co. Leitrim. No mitigation measures are deemed to be required. Therefore, it is concluded that a Natura Impact Statement is not required for the proposed Corgar to Aghawillan Greenway, Co. Leitrim.

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# 1. INTRODUCTION

Ecofact have been commissioned to carry out a Screening for Appropriate Assessment for a Proposed

Greenway running from Corgar to Lisgruddy and Corramahan townlands, Aghawillan, Co. Leitrim. The proposed scheme is c. 2.9km in length and will follow an existing railway track. The railway track was in use between 1887-1959. This report assesses whether the proposed development is likely to have a significant effect on the Natura 2000 site network and if an NIS is required.

Natura 2000 sites are those identified as sites of European Community importance designated under the Habitats Directive (1992) (SACs) or the Birds Directive (2009) (SPAs). The purpose of the Screening for Appropriate Assessment is to identify any Natura 2000 sites in the locality of proposed plans / projects that are likely to be significantly impacted by the proposed plan / project and / or require mitigation to prevent such impacts. If the proposed plan is found by the Screening to be likely to significantly affect any Natura 2000 it will then be subject to a further stage of Appropriate Assessment, whereby a Natura Impact Statement is prepared.

Appropriate Assessment is required under Article 6 of the Habitats Directive (92/43/EEC), in instances where a plan or project may give rise to significant effects upon a Natura 2000 site. The current document meets this requirement by providing a Screening Assessment of the development and follows the guidance for screening published by the Department of the Environment, Heritage and Local Government (DoEHLG 2010) *'Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities'.*

According to DoEHLG (2010), screening is the process that addresses and records the reasoning and conclusions in relation to the first two tests of Article 6(3) of the EU Habitats Directive:

(1) Whether a plan or project is directly connected to or necessary for the management of the site, and;

(2) Whether a plan or project, alone or in combination with other plans and projects, is likely to have significant effects on a Natura 2000 site in view of its conservation objectives.

Screening is a pre-assessment procedure which considers whether an assessment (i.e. appropriate assessment) is required or not. A project or plan may only pass at the Screening stage if there is no reasonable scientific doubt remaining as to the absence of impacts on the Natura 2000 network. The current screening therefore sets out to determine whether the proposed project, alone or in combination with other plans and projects, is likely to have significant effects on any Qualifying Interests of the Natura 2000 sites within the study area. If the effects are deemed to be significant, potentially significant, or uncertain, or if the screening process becomes overly complicated, then the process must proceed to Stage 2 (AA). When assessing the significance of potential effects, DoEHLG (2010) recommends that *"a precautionary approach is fundamental and, in cases of uncertainty, it should be assumed the effects could be significant".*

## 1.1 Legislative context

Part XAB of the 2000 Act and SI. No 477 of 2011 transpose into Irish law, Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (the Birds Directive) and Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive). These Directives require Ireland to establish protected sites as part of a European wide network of sites (known in Ireland as European sites) for habitats and species that are of international importance for conservation. In Ireland, European sites include Special Areas of Conservation (SACs, including candidate SACs) and Special Protection Areas (SPAs)”. Article 6, paragraphs 3 and 4 of the EC ‘Habitats’ Directive (1992) state that:

The 1997 Regulations were updated in 1998 by The European Communities (Natural Habitats) (Amendment) Regulations 1998 (S.I. No. 233/1998) to include Council Directive 97/62/EC which served to update Council Directive 92/43/EEC, adapting it to technical and scientific progress made in the intervening years.

The 1997 Regulations were again updated in 2005, by The European Communities (Natural Habitats) (Amendment) Regulations 2005 (S.I. No. 378/2005). This amendment served to consolidate the main nature conservation legislation enacted in Ireland, meaning The Wildlife Act 1976, The Wildlife (Amendment) Act 2000, The European Communities (Natural Habitats) Regulations 1997, The European Communities (Natural Habitats) (Amendment) Regulations 1998, and to draw direct reference upon Council Directive (2009/147/EC) on the conservation of wild birds – ‘*The Birds Directive’*.

The Birds Directive (2009/147/EC) seeks to protect birds of special importance by the designation of Special Protection Areas (SPAs) whereas the Habitats Directive does the same for habitats and other species groups with Special Areas of Conservation (SACs). It lists certain rare habitats (Annex I) and species (Annex II) whose conservation is of community interest. It is the responsibility of each member state to designate SPAs and SACs, both of which will form part of Natura 2000, a network of protected areas throughout the European Community.

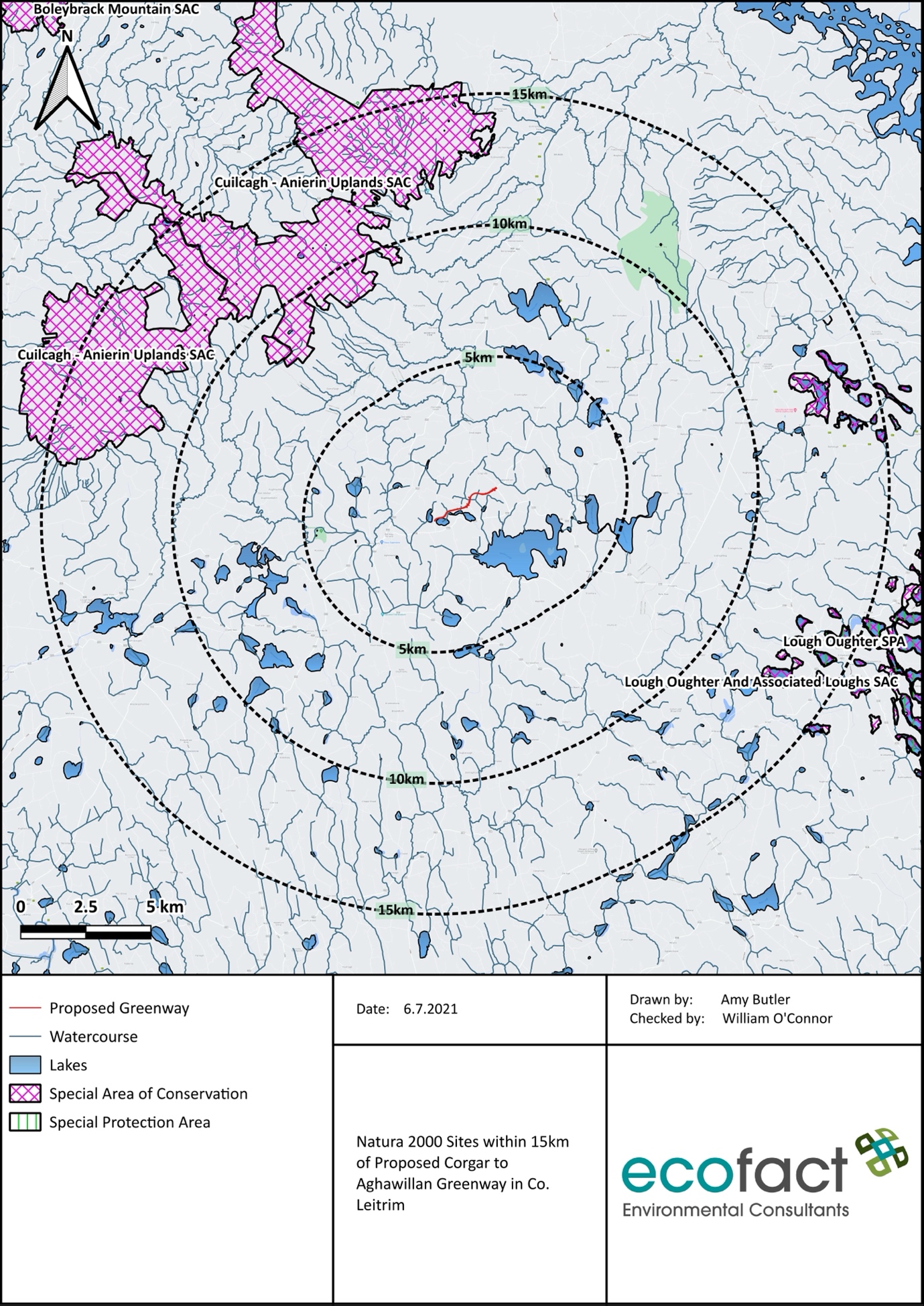
Article 6, paragraphs 3 and 4 of the Habitats Directive state that:

*‘6(3) 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.*

*6(4) 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 State 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.’*

In case C-323/17 People Over Wind and Peter Sweetman v Coillte, the Court of Justice of the European Union (CJEU) ruled that mitigation measures could not be taken into account when undertaking a screening for Appropriate Assessment (AA). If mitigation measures are required to reduce or avoid a significant adverse effect, then Appropriate Assessment is required.

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**Figure 1** Natura 2000 Sites within 15km of Proposed Corgar to Aghawillan Greenway in Co. Leitrim

# 2. METHODOLOGY

## 2.1 Desk study

A desktop study was undertaken to identify the extent and scope of the potentially affected designated Natura 2000 sites within the current study area in relation to the proposed development site. The desktop study identified the qualifying interests (species and habitats) relevant to the designated sites within the area.

Information sources reviewed as part of the current assessment included NPWS site synopses, as well as protected species data held on the NPWS/NBDC online databases. Scientific data on water quality and waterbodies relevant to the subject site was obtained from the websites of the EPA and catchments.ie. The conservation objectives documents as well as the conservation objectives supporting documents for Natura 2000 sites were reviewed on the NPWS website. A full bibliography of information sources reviewed is given in the reference section. Online aerial imagery was accessed to characterise the nature of proposed works locations near the Natura 2000 network.

## 2.2 Site Visit

A site visit was conducted over three days in July 2021. The area of the proposed work was surveyed via a walkover and any evidence of protected flora and fauna were recorded. Particular attention was paid to indications of usage of the adjacent waterways by the Annex II species Otter. Habitat was assessed for its potential suitability for this species.

## 2.3 Assessment Methodology

The European Commission Guidance 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 prescribes a staged process, as set out below, the need for each stage being dependent on the outcomes of the preceding stage.

1. Screening for Appropriate Assessment
2. Appropriate Assessment
3. Assessment of Alternative Solutions
4. Assessment where no alternative solutions exist and adverse impacts remain, i.e. the

Imperative Reasons of Overriding Public Interest test, and compensatory measures

The current report is a Screening Report and therefore makes Stage One assessment only.

According to DoEHLG (2010), screening can result in the following possible conclusions or outcomes:

**AA is not required.** Screening establishes that the plan or project is directly connected with or necessary to the nature conservation management of the site.

**No potential for significant effects/AA is not required.** Screening establishes that there is no potential for significant effects and the project or plan can proceed as proposed. However, no changes may be made after this as this will invalidate the findings of screening. Documentation of the AA screening process, including conclusions reached and how decisions were made, must be kept on file**.**

**Significant effects are certain, likely or uncertain.** The plan or project **must either proceed to Stage 2 (AA), or be rejected**. Rejection of a plan or project that is too potentially damaging and/or inappropriate ends the process and negates any need to proceed to Stage 2 (AA).

The safeguards set out in Article 6(3) and (4) of the Habitats Directive are triggered not by certainty but by the possibility of significant effects. Thus, in line with the precautionary principle, it is unacceptable to fail to undertake an appropriate assessment on the basis that it is not certain that there are significant effects.

The approach to screening is likely to differ somewhat for plans and projects, depending on scale and on the likely effects. It is stated in DoEHLG (2010) that any Natura 2000 site within or adjacent to the proposed development area as well as any Natura 2000 sites within the likely zone of impact should be included for assessment. A distance of 15km is currently recommended by DoEHLG (2010) to loosely define the zone of impact in the case of plans but the distance could be much less than 15km, and in some cases less than 100m: this must be evaluated on a case-by-case basis with reference to the nature, size and location of the project, and the sensitivities of the ecological receptors, and the potential for in combination effects. In the case of the current project, where the proposed works are close to the Lough Oughter And Associated Loughs SAC, these Natura 2000 sites, and indeed any other Natura 2000 sites in close proximity and / or those with downstream hydrological connectivity have been considered.

When doing a screening it is ***merely necessary to determine that there may be such an effect. '****The threshold at the first stage of Article 6(3) is a very low one. It operates merely as a trigger, in order to determine whether an appropriate assessment must be undertaken on the implications of the plan or project for the conservation objectives of the site.' (Finlay Geoghegan J. in Kelly -v- An Bord Pleanála 2013/802 JR).* A significant effect is defined as “*any effect that may reasonably be predicted as a consequence of a plan or project that may affect the conservation objectives of the features for which the site was designated, but excluding de minimis or inconsequential effects*” (EHS, 2002; English Nature, 2004 & 2006; Scottish Natural Heritage, 2006). Where the potential for a significant impact is identified, or if there is any uncertainty regarding an impact, then an Appropriate Assessment must be completed to assess if this effect would cause an integrity level impact. At Appropriate Assessment (NIS) stage mitigation can also be specified to reduce or avoid this effect. A screening assessment cannot replace the requirement of Appropriate Assessment so if any potential impact on qualifying interests or their habitats is identified then Appropriate Assessment is required. Screening must be approached on a precautionary basis with the safeguards set out in Article 6(3) and (4) of the Habitats Directive triggered not by certainty - but by the possibility of significant effects.

# 3. DESCRIPTION OF PROJECT CHARACTERISTICS

The proposed development is for a 2.9km greenway running from Corgar to Lisgruddy and Corramahan townlands, Aghawillan, Co. Leitrim. The proposed development will involve the change of use of a disused railway track to a greenway. At the beginning of the proposed route kissing gates will be installed for access to the greenway. A single pedestrian gate will be installed near the end of the proposed route for local access. Over the 2.9km stretch, there will be six cattle crossings, one of which will include a four inch service duct. In addition, two 600mm culverts will be installed. An existing stone culvert will be repaired or otherwise replaced with a concrete culvert. Two pedestrian gates will be installed to maintain the existing access for fishermen to Drumlonan Lough. Signage will be installed indicating access. The entire greenway will have stock proof fencing.

General construction works for the project will include site clearance of a five metre envelope involving the removal of vegetation and fencing of the site. Soil will also be removed to a depth of < 500mm which will be dependent upon the ground conditions. The dismantled railway line will be improved and the creation of a suitable surface will be carried out which may involve surface dressing or asphaltic cement depending on the site conditions.

Map

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**Figure 2** Location of Proposed Corgar to Aghawillan Greenway in Co. Leitrim

# 4. IDENTIFICATION OF RELEVANT NATURA 2000 SITES

## 4.1 Rationale for Appropriate Assessment Screening

Article 6 assessments are required under the Habitats Directive (92/43/EEC), in instances where a plan or project may give rise to significant effects upon a Natura 2000 site. Natura 2000 sites are those identified as sites of European Community importance designated under the Habitats Directive (Special Areas of Conservation, here after referred to as SACs) or the Birds Directive (Special Protection Areas, here after referred to as SPAs).

Following the guidelines set out by DoEHLG (2010) Screening for Appropriate Assessment is the process that addresses and records the reasoning and conclusions in relation to the first two tests of Article 6(3); i.e. whether a plan or project can be excluded from Appropriate Assessment requirements because it is directly connected with or necessary to the management of the site; and the potential effects of a project or plan, either alone or in combination with other projects or plans, on a Natura 2000 site in view of its conservation objectives, and considering whether these effects will be significant.

According to DoEHLG (2010), screening is the process that addresses and records the reasoning and conclusions in relation to the first two tests of Article 6(3) of the EU Habitats Directive:

(1) Whether a plan or project is directly connected to or necessary for the management of the site, and;

(2) Whether a plan or project, alone or in combination with other plans and projects, is likely to have significant effects on a Natura 2000 site in view of its conservation objectives.

The proposed Corgar to Aghawillan Greenway works do not comply with the first screening test (i.e. the proposed works are not directly connected to or necessary for the management of any Natura 2000 site). The current Screening Assessment therefore sets out to determine whether the development, alone or in combination with other plans and projects, is likely to have significant effects on the Natura 2000 sites within the study area.

## 4.2 Natura 2000 sites considered for the proposed works

The Natura 2000 network is a network of nature protection areas across the European Union, comprising of Special Areas of Conservation (SAC’s) and Special Protection Areas (SPA’s). SACs are sites of international importance because of the presence of habitats or species that are of European importance, listed on the EU Habitats Directive (1992). SPAs are important for birds and these sites are designated based on the presence of internationally significant populations of bird species, listed in Annex I of the EU Birds Directive (2009). The SACs and SPAs within 15km of the proposed development are considered in the current screening and are listed in Table 1.

There are 3 Natura 2000 sites within a 15km radius of the proposed development site. The Cuilcagh - Anierin Uplands SAC (002301) is located c. 7.9 km to the north-west of the proposed development. The Lough Oughter And Associated Loughs SAC (000007) is located 11.8km north-east and 32.1rkm downstream. The Lough Oughter Complex SPA (004049) is located c. 14.4km south-east. There is no downstream hydrological connection to the Lough Oughter Complex SPA or the Cuilcagh - Anierin Uplands SAC.

**Table 1** Designated Natura 2000 Sites and associated Qualifying Interests within 15km of the proposed Corgar to Aghawillan Greenway Co. Leitrim

|  |  |  |
| --- | --- | --- |
| **Natura 2000 Site** | **Qualifying Interest** | **Distance (km)** |
| Cuilcagh - Anierin Uplands SAC (000584) | Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia* *uniflorae*) [3110] | C. 7.9km north-west |
| Natural dystrophic lakes and ponds [3160] |
| Northern Atlantic wet heaths with *Erica tetralix* [4010] |
| European dry heaths [4030] |
| Alpine and Boreal heaths [4060] |
| Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230] |
| Blanket bogs (\* if active bog) [7130] |
| Transition mires and quaking bogs [7140] |
| Petrifying springs with tufa formation (Cratoneurion) [7220] |
| Siliceous scree of the montane to snow levels (*Androsacetalia alpinae* and *Galeopsietalia ladani*) [8110] |
| Siliceous rocky slopes with chasmophytic vegetation [8220] |
| *Hamatocaulis vernicosus* (Slender Green Feather-moss) [6216] |
| Lough Oughter And Associated Loughs SAC (000007) | Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation [3150] | c. 11.8 north-east (32.1rkm downstream) |
| Bog woodland [91D0] |
| *Lutra lutra* (Otter) [1355] |
| Lough Oughter Complex SPA (004049) | Great Crested Grebe (*Podiceps cristatus*) [A005] | c. 14.4km south-east |
| Whooper Swan (*Cygnus cygnus*) [A038] |
| Wigeon (*Anas penelope*) [A050] |
| Wetland and Waterbirds [A999] |

# 5. POTENTIAL FOR EFFECTS

Table 2 below outlines the locations of the Qualifying Interests of Natura 2000 Sites within 15km of the proposed Corgar to Aghawillan Greenway, Co. Leitrim, as well as potential pathways for impacts.

**Table 2** Designated Natura 2000 Sites within 15km of the proposed development, the potential location of Q.I.s in relation to the proposed works, potential pathways for impacts and potential impacts arising from the proposed development.

| **Natura 2000 Site** | **Qualifying Interests** | **Location in relation to Proposed Development** | **Potential Pathway for Impacts** | **Potential for Significant Impacts** |
| --- | --- | --- | --- | --- |
| Cuilcagh - Anierin Uplands SAC (000584) | Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] | Located c. 8.7km west of the site at its closest point according to Map 2 of the conservation objectives (NPWS, 2016) | No | No – no downstream hydrological connection – geographical separation from the site – no potential pathway for significant impacts |
| Natural dystrophic lakes and ponds [3160] | Located c. 15 km west of the site at its closest point according to Map 2 of the conservation objectives (NPWS, 2016) | No |
| Northern Atlantic wet heaths with Erica tetralix [4010] | Located 7.6km north-west of the site according to Map 3 of the conservation objectives (NPWS, 2016) | No |
| European dry heaths [4030] | Located 7.6km north-west of the site according to Map 4 of the conservation objectives (NPWS, 2016) | No |
| Alpine and Boreal heaths [4060] | Located 8km north-west of the site according to Map 5 of the conservation objectives (NPWS, 2016) | No |
| Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230] | Located 14.6km north-west of the site according to Map 6 of the conservation objectives (NPWS, 2016) | No |
| Blanket bogs (\* if active bog) [7130] | Located 7.6km north-west of the site according to Map 7 of the conservation objectives (NPWS, 2016) | No |
| Transition mires and quaking bogs [7140] | Located 8.7km north-west of the site according to Map 8 of the conservation objectives (NPWS, 2016) | No |
| Petrifying springs with tufa formation (Cratoneurion) [7220] | Located 12.5km north-west of the site according to Map 9 of the conservation objectives (NPWS, 2016) | No |
| Siliceous scree of the montane to snow levels (*Androsacetalia alpinae* and *Galeopsietalia ladani*) [8110] | Located 9.6km north-west of the site according to Map 10 of the conservation objectives (NPWS, 2016) | No |
| Siliceous rocky slopes with chasmophytic vegetation [8220] | Located 9.6km north-west of the site according to Map 11 of the conservation objectives (NPWS, 2016) | No |
| *Hamatocaulis vernicosus* (Slender Green Feather-moss) [6216] | Located 15.4km north-west of the site according to Map 12 of the conservation objectives (NPWS, 2016) | No |
| Lough Oughter And Associated Loughs SAC (000007) | Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation [3150] | Located in the lake habitat of the SAC c. 32.1rkm downstream (NPWS, 2013) | No | No –large geographical separation – no potential pathway for impacts |
| Bog woodland [91D0] | This habitat is not mapped in the conservation objectives but is present in the SAC c. 32.1rkm downstream | No | No –large geographical separation and terrestrial habitat– no potential pathway for impacts |
| *Lutra lutra* (Otter) [1355] | Closest record according to NBDC maps is c. 3km north-west (opposite direction of SAC). Other records from 1982 and 1999 c. 5km away along the banks of Garadice Lough | No | No –large geographical separation – no potential pathway for impacts |
| Lough Oughter Complex SPA (004049) | Great Crested Grebe (*Podiceps cristatus*) [A005] | Located c. 15km south-east of the site | No | No – no downstream hydrological connection and large geographical separation – no potential pathway for impacts |
| Whooper Swan (*Cygnus cygnus*) [A038] | Located c. 15km south-east of the site | No |
| Wigeon (*Anas penelope*) [A050] | Located c. 15km south-east of the site | No |
| Wetland and Waterbirds [A999] | Located c. 15km south-east of the site | No | No – no downstream hydrological connection and large geographical separation – no potential pathway for impacts |

## 5.1 Potential direct impacts affecting Natura 2000 sites

### 5.1.1 Construction Phase

Using the Source-Pathway-Receptor model, there is no potential for significant direct construction phase impacts on some of the qualifying interests of the Lough Oughter And Associated Loughs SAC, the Lough Oughter Complex SPA or the Cuilcagh - Anierin Uplands SAC .

There would be no direct construction phase impacts arising from the proposed Corgar to Aghawillan Greenway as this site is not located within any Natura 2000 site and is located at a distance from the Natura 2000 network.

### 5.1.2 Operational Phase

Using the Source-Pathway-Receptor model, no potential for significant direct operational phase impacts on some of the qualifying interests of the Lough Oughter And Associated Loughs SAC, the Lough Oughter Complex SPA or the Cuilcagh - Anierin Uplands SAC.

There would be no direct construction phase impacts arising from the proposed Corgar to Aghawillan Greenway as this site is not located within any Natura 2000 site and is located at a distance from the Natura 2000 network.

## 5.2 Potential indirect impacts affecting Natura 2000 sites

Indirect (or secondary) impacts are defined as effects that are “caused by and result from the activity although they are later in time or further removed in distance, but still reasonably foreseeable” (Bowers-Marriott, 1997).

### 5.2.1 Construction Phase

Using the Source-Pathway-Receptor model, there is no potential for significant indirect construction phase impacts to arise on the Lough Oughter And Associated Loughs SAC, the Lough Oughter Complex SPA or the Cuilcagh - Anierin Uplands SAC.

The site is located on four small waterways that provide a hydrological connection to the Lough Oughter and Associated Loughs SAC of c. 32.1 rkm downstream at its nearest distance. During the site survey it was noted that these watercourses are very small with a low ability to transport pollutants. These are the 1st order Corgar Stream (EPA code: 36C62), Drumlonan Stream (EPA code: 36D37), Sruhagh Stream (EPA code: 36S62) and the 2nd order River Glennen Beg. In addition, the site runs close to the Corgar Lough (EPA segment code: 36\_586). The Corgar Stream and Drumlonan Stream drain into an unregistered lake (EPA segment code: 36\_555). It is recognised that there is the potential for water quality impacts to arise at the site however the conveyance ability of the streams is very low. Impacts are not considered to have the potential to travel c. 32.1 rkm downstream to the SAC and affect its qualifying interests at this distance. There are also several lakes the biggest of which is Garadice Lough with an area of 3.9km2, between the proposed greenway site and the SAC further increasing the assimilation capacity for any pollutants. Impacts would be considered to be localised. It is not considered likely that any impacts at the site would have the potential to affect the SAC this far downstream.

In the unlikely event that impacts did travel downstream they would not be detectable by the time they reached the SAC. To assess the capacity of the rivers between this SAC and the site Hydrotool data was used. The EPA Hydrotool provides flow data for ungauged catchments as well as historical flow data. There is no available Hydrotool flow data for the small streams that flow through the site. However, there is data for the River Woodford [Cavan] downstream. The first downstream station is located where the River Woodford [Cavan] drains Garadice Lough c. 5.3 rkm downstream of the proposed greenway site. This station data shows that the catchment area upstream from here is 203 km2. The River Woodford [Cavan] at this point is a 4th order river. Dry Weather Flow (95%ile), which is low flow conditions, is given as 0.531 m3/sec. The Median Flow of the river is given as 3.76 m3/sec. During flood conditions 15.6 m3/sec is given as the flow rate. This shows that even in low flow conditions, that station c. 5.3rkm downstream of the site has a high dilution factor. While low flow in dry periods is expected, given the 50%ile flow and the 4th order status of this river any pollutants that did enter the waterways from the proposed site would likely be sufficiently diluted by the time they reach this station c. 5.3 rkm downstream from the proposed site. By the time they reached the SAC any impacts would likely be imperceptible. In addition to this there is the Garadice Lough and other small waterbodies upstream. Another station, the closest to the SAC on the now 5th order River Woodford [Cavan] which is c. 21.7 rkm downstream from the proposed site has a Dry Weather Flow (95%ile) of 0.0834 m3/sec, a median flow of 7.944 m3/sec and a flow of 23.652 m3/sec during flood conditions. This shows the assimilation capacity increasing downstream and further emphasises the unlikelihood of any impacts being detectable at this distance.

Disturbance impacts could affect Otters in the vicinity of the site which are a qualifying interest of the Lough Oughter and Associated Loughs SAC. However, Otter at the site are not considered to be part of the SAC population. Evidence of a potential Otter holt were recorded on the route by Corgar Lough. Any Otters present on the site will be dealt with in a separate Ecological Impact Assessment being carried out by Ecofact.

Regarding non-native invasive species these impacts would also be localised. Any invasive species impacts that may arise on site during the works would not have the potential to affect the SAC at a distance of c. 32.1 rkm downstream. This is a large geographical distance and there is no potential for invasive species impacts taking this into account.

### 5.2.2 Operational Phase

Using the Source-Pathway-Receptor model, there is no potential for significant indirect operational phase impacts to arise on the Lough Oughter And Associated Loughs SAC, the Lough Oughter Complex SPA or the Cuilcagh - Anierin Uplands SAC.

It is recognised that there is the potential for water quality impacts to arise at the site as it will allow for increased access to farming and forestry and potentially an increase in these activities in the area. However as discussed in Section 5.2.1, this is not considered to have the potential to travel c. 32.2 rkm downstream to the SAC and affect its qualifying interests at this distance. In addition the streams present at the site are small 1st and 2nd order waterways with low assimilation capacity and once any pollutants did enter larger waterways there is sufficient dilution to render them imperceptible.

Disturbance impacts could affect Otters in the vicinity of the site which are a qualifying interest of the Lough Oughter and Associated Loughs SAC. However, if Otter are present at the site they would not be considered part of the SAC population. Due to the nature of how the site will be used there will be less disturbance when Otters are active. Evidence of a potential Otter holt were recorded on the route by Corgar Lough. Any Otters present on the site will be dealt with in a separate Ecological Impact Assessment being carried out by Ecofact.

Any impacts would be considered to be localised and would not concern the Natura 2000 network. It is not considered likely that any impacts at the site would have the potential to affect the SAC this far downstream.

## 5.3 Potential cumulative impacts affecting the Natura 2000 site

Cumulative impacts or effects are changes in the environment that result from numerous human-induced, small-scale alterations. Cumulative impacts can be thought of as occurring through two main pathways: first, through persistent additions or losses of the same materials or resource, and second, through the compounding effects as a result of the coming together of two or more effects (Bowers-Marriott, 1997).

There is no hydrological connection the Lough Oughter Complex SPA or the Cuilcagh - Anierin Uplands SAC and they are a considered distance from the site and therefore it is considered that there is no potential for impacts on these sites.

There is a hydrological connection with the Lough Oughter and Associated Loughs SAC. The standard data Natura 2000 form for the Lough Oughter And Associated Loughs SAC lists the threats and pressures currently having an impact on this protected site. The following are listed as having a high impact on the site: diffuse pollution to surface waters via storm overflows or urban run-off, removal of hedges and copses or scrub, invasive non-native species, diffuse pollution to surface waters due to agricultural and forestry activities and flooding and rising precipitations. The following are listed as having a medium impact on the site: artificial planting on open ground (non-native trees) and outdoor sports and leisure activities, recreational activities.

The main pathway to the SAC is via four streams which the site crosses. These are the 1st order Corgar Stream (EPA code: 36C62), Drumlonan Stream (EPA code: 36D37), Sruhagh Stream (EPA code: 36S62) and the 2nd order River Glennen Beg. In addition, the site runs close to the Corgar Lough (EPA segment code: 36\_586), in addition, the Corgar Stream and Drumlonan Stream drain into an unregistered lake (EPA segment code: 36\_555). The Sruhagh Stream and the River Glennen Beg flow into Corduff Lough (EPA segment code: 36\_563). None of these lakes are assigned water quality ratings. The Garadice Lake (EPA segment code: 36\_555) is located c. 2.9rkm downstream and was rated “Moderate” ecological lake water status 2007-2009 and is “At Risk”. Pressures on the River Woodford [Cavan] are agriculture (mostly pasture), forestry, anthropogenic activities, channelisation, peat extraction and a wastewater treatment plant. On the River Woodford [Cavan] there have been no recent EPA monitoring downstream. In addition, the status of all streams draining the site are “Under Review”. However as discussed in Section 5.2.1 it is not considered that any impacts could reach the Lough Oughter And Associated Loughs SAC.

As explained in Section 5.3.1 it is considered that any water quality impacts would not have the potential to travel this far downstream and act in combination with existing pressures on the SAC.

In addition this project is part of a larger Greenway project running through Cavan and Leitrim. The impacts of other sections along with this one could result in cumulative impacts regarding water quality and non-natives. European case law shows that project splitting does not meet the requirements of the Habitats Directive and therefore these potential cumulative impacts must be taken into account. The entire Cavan to Leitrim greenway has been subject to a Screening for Appropriate Assessment and it was concluded that there was no potential for impacts from the entire scheme on any Natura 2000 site (Roughan & O’Donovan 2016). Therefore there is no potential for cumulative impacts in this regard.

# 6. SCREENING STATEMENT WITH CONCLUSIONS

According to the guidance published by the DoEHLG (2010), Screening for Appropriate Assessment can either identify that an Appropriate Assessment is not required, where a project / proposal is directly related to the management of the site; or that there is no potential for significant effects affecting the Natura 2000 network; or that significant effects are certain, likely or uncertain (i.e., the project must either proceed to Stage 2 (AA) or be rejected).

From examination of the information available, it is concluded that there is no potential for direct, indirect or cumulative impacts arising from the proposed Corgar to Aghawillan Greenway, Co. Leitrim. No mitigation measures are deemed to be required. Therefore, it is concluded that a Natura Impact Statement is not required for the proposed Corgar to Aghawillan Greenway, Co. Leitrim.

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# APPENDIX 1 NPWS Site Synopses

**SITE NAME: Lough Oughter and Associated Loughs SAC**

**SPA SITE CODE: 000007**

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.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (\* = priority; numbers in brackets are Natura 2000 codes):

[3150] Natural Eutrophic Lakes

[91D0] Bog Woodland\*

[1355] Otter (*Lutra lutra*)

As well as the habitats and species listed above, the site also contains areas of dry woodland, marsh, reedbed and wet pasture.

Drainage within the area is inefficient and the water levels are 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 Spikerush (*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 species (*Oenanthe* spp.) and Waterstarwort (*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 Common Club-rush (*Scirpus 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*), 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 Marsh Helleborine (*Epipactis palustris*), 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 Bulrush (*Typha* sp.), 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 and rushes (*Juncus* spp.) with a scattering of marshland and wet grassland plants such as Marsh-marigold (*Caltha palustris*), Water Forget-me-not (*Myosotis scorpioides*) 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 *S. 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 Iris and in places Tufted-sedge and Greater Tussocksedge (*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 mosses (*Sphagnum* spp.) 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 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 Moorgrass and Bottle Sedge.

Dry broadleaved 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 a Special Protection Area (SPA) under the E.U. 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 runoff 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, both adjacent to and within the site. 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 Goose

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.