# APPROPRIATE ASSESSMENT SCREENING OF PROPOSED REHABILITATION AND WIDENING OF DERRYLEA BRIDGE, BALLYJAMESDUFF, CO. CAVAN

# **Appropriate Assessment Screening**

In accordance with the requirements of Article 6 (3) of the Habitats Directive (Council Directive 92/43/EEC)



Derrylea Bridge

## PREPARED FOR

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## **1. INTRODUCTION**

This Appropriate Assessment Screening report has been prepared in compliance with Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities (DoEHLG 2009, February 2010) and the European Communities (Birds and Natural Habitats) Regulations 2011 (DoEHLG) to assess the potential impact of the proposed rehabilitation and widening works to Derrylea Bridge, Ballyjamesduff, Co. Cavan on the Natura 2000 network.

The closest protected Natura site to Derrylea Bridge is Lough Sheelin SPA 004065 which lies approximately 7.5km downstream (5.6km straight line distance). Lough Sheelin is also designated as a proposed Natural Heritage Area pNHA 000987.

The Claddagh River flows in a southerly direction under Derrylea Bridge, turns southwest to flow through Mount Nugent and flows into Lough Sheelin on its western shore at Crover townland.

This report provides the information required to establish whether or not the proposed work is likely to have a potential impact on these protected sites in relation to their conservation objectives or specifically on the habitats and species for which these sites has been designated.

## 2. PROTECTED SITES

### International Conservation Designations

The Habitats Directive (Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora) forms the basis for the designation of Special Areas of Conservation (SAC). It lists certain habitats (Annex I) and species (Annex II) for special protection. Similarly, Special Protection Areas (SPA) are classified under the Birds Directive (Council Directive 2009/147/EEC on the Conservation of Wild Birds).

Collectively, SACs and SPAs are referred to as the Natura 2000 network.

In general terms, they are considered to be of exceptional importance for rare, endangered or vulnerable habitats and species within the European Community. The Screening Assessment is carried out in accordance with the requirements of Article 6(3) of the EU Habitats Directive (92/43/EEC), which attempts to ensure the conservation of a wide range of rare, threatened or endemic animal and plant species through the assessment of the potential adverse effects of a plan or project on SACs and SPAs. An Appropriate Assessment is an evaluation of the potential impacts of a plan or project on the conservation objectives of a Natura 2000 site, and the development, where necessary, of mitigation or avoidance measures to preclude negative effects.

### National Conservation Designations

In Ireland, the basic designation for wildlife is the **Natural Heritage Area (NHA).** This is an area considered important for the habitats present or which holds species of plants and animals whose habitat needs protection.

Proposed Natural Heritage Areas (pNHA) are habitats or sites of interest to wildlife that have been identified by NPWS. These sites become NHAs once they have been formally advertised and landowners have been notified of their designation. NHAs are protected under the Wildlife (Amendment) Act, 2000, from the date they are formally proposed. NHA is a statutory designation according to the Wildlife (Amended) Act, 2000 and

requires consultation with NPWS if any development impacts on a pNHA. Lough Sheelin which lies approximately 7.5 km downstream of Derrylea Bridge is designated as a pNHA.

#### Appropriate Assessment Screening

Appropriate Assessment screening takes into consideration the likely effects on any protected site (SAC or SPA) within 15km of the proposed works site. There are four protected sites in the European NATURA network within 15 km of Derrylea Bridge. These sites are listed in Table 1.

SITE	SITE CODE	DISTANCE FROM SITE
Lough Sheelin SPA	004065	c.7.5 Km downstream to
		south-west
Lough Kinale and Derragh	004061	13.9km to south west
Lough SPA		(linked by river to Lough
		Sheelin)
River Boyne and River	004232	14.1km to south-west
Blackwater SPA		
River Boyne and River	002299	14.1 km downstream
Blackwater SAC		

### Table 1 – Protected Sites with 15km of works site

Only the first site listed in Table 1 (Lough Sheelin SPA) is hydrologically directly linked to the proposed work site. The river running under Derrylea Bridge flows into Lough Sheelin approximately 7.5km downstream of the bridge. Lough Kinale and Derragh Lough SPA is linked to Lough Sheelin via a short watercourse.

River Boyne and River Blackwater SAC/SPA are not hydrologically connected to the proposed work site. Therefore, the works will have no impacts on this site. Only Lough Sheelin SPA will be considered further.

### Lough Sheelin SPA

The boundary of Lough Sheelin Special Protection Area (SPA) for birds lies approximately 7.5km downstream and south west of Derrylea Bridge. The Qualifying Interests for which the SPA was designated are four species of birds - Great Crested Grebe (Podiceps cristatus), Pochard (Aythya ferina), Tufted Duck (Aythya fuligula) and Goldeneye (Bucephala clangula) and the habitat - Wetland and Waterbirds.

The Habitats Directive protects important habitats and species within Special Areas of Conservation (SACs). It lists certain habitats (Annex I) and species (Annex II) for special protection. A second European Directive – the Birds Directive – seeks to protect birds of conservation importance by the designation of Special Protection Areas (SPA's).

European and national legislation places an obligation on Ireland to maintain at favourable conservation status sites designated as Special Areas of Conservation and Special Protection Areas.

Favourable conservation status of a habitat is achieved when:

- Its natural range, and the area it covers within that range, is stable of increasing, and
- The ecological factors that are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- The conservation status of its typical species is favourable.

The favourable conservation status of a species is achieved when:

- Population data on the species concerned indicate that it is maintaining itself, and
- The natural range of the species is neither being reduced or likely to be reduced for the foreseeable future, and
- There is, and probably will continue to be a sufficiently large habitat to maintain its populations on a long-term basis.

This report assesses the likely significant effects of the proposed bridge widening project at Derrylea Bridge on Lough Sheelin SPA (Site Code 004065).

Article 6 assessments are required under the Habitat's Directive (92/43/EEC) where a project may have significant effects on a Natura 2000 site (a European compilation of Special Areas of Conservation - SAC's and Special Protection Areas – SPAs - for birds). Currently a detailed conservation management plan has not been prepared by National Parks and Wildlife Service for Lough Sheelin SPA. A generic Conservation Objectives report was prepared in March 2021. A Site Synopsis for this SPA was prepared by NPWS in 2009. The Conservation Objectives and Site Synopsis are included in the Appendix.

## **3. METHODOLOGY OF SCREENING**

This screening report examines whether the effects of the proposed widening of Derrylea Bridge is likely to have an effect on Lough Sheelin SPA.

## Appropriate Assessment

The assessment of a proposed project likely to affect a Natura 2000 site is a 4-stage process

The relevant guidance documents for Appropriate Assessment set out a staged process for carrying out Appropriate Assessment, the first of which is referred to as screening. Stage 1 - The screening stage identifies the likely impacts on Natura 2000 sites, if any, which would arise from a proposed plan or project, either alone, or in combination with other plans and projects, and further considers whether these impacts are likely to be significant.

If it can be concluded during the screening exercise that there is no likelihood of significant impacts occurring on any Natura 2000 sites, as a result of the proposed development either alone or in combination with other plans and projects, then there is no requirement to proceed to subsequent stages of Appropriate Assessment.

If it is not possible to conclusively rule out significant impacts on Natura 2000 sites, the assessment should proceed to <u>Stage 2</u>: Appropriate Assessment for which a Natura Impact Statement (NIS) must be prepared.

<u>Stage 3</u> of the process is Assessment of Alternative Solutions which examines alternative ways of achieving the objectives of the plan or project that avoid adverse impacts on the integrity of the Natura 2000 site.

<u>Stage 4</u> Assessment where Adverse Impacts Remain is an assessment of 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.

This report is comprised of the ecological impact assessment and testing required under the provisions of Article 6(3) by means of the first stage of Appropriate Assessment – **Stage 1 - the screening process**.

### EU Guidance states:

"This stage examines the likely effects of a project or plan, either alone or in combination with other projects or plans, upon a Natura 2000 site and considers whether it can be objectively concluded that these effects will not be significant".

This report also provides the information required for the Competent Authority to complete the Appropriate Assessment (Stage 2) should this be necessary in the opinion of the Competent Authority. Screening has been undertaken in accordance with the European Commission's Guidance on Appropriate Assessment (European Commission, 2001) which comprises the following:

- 1. Description of the Plan
- 2. Identification of Natura 2000 Sites potentially affected by the Plan
- 3. Identification and Description of Individual and Cumulative impacts likely to result from the Plan
- 4. Assessment of the Significance of the impacts identified on the Conservation Objectives of the site(s)
- 5. Exclusion of sites where it can be objectively concluded that there will be no significant impacts on conservation objectives

Following the guidelines set out by NPWS (2009), Appropriate Assessment Screening (Phase 1 - Appropriate Assessment) 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) Is the plan or project directly connected to or necessary for the management of the site?
- (2) Is the plan or project, alone or in combination with other such plans or projects likely to have significant negative effects on a Natura 2000 site(s) in view of the conservation objectives of that site(s)?

The proposed widening of Derrylea Bridge does not comply with the first screening test as the proposed development is not directly connected to, or necessary for the management of any Natura 2000 site. This screening exercise will therefore inform the Appropriate Assessment process in determining whether the proposed development, alone or in combination with other plans or projects, is likely to have significant effects on the Natura 2000 sites within the study area. If effects are deemed to be significant, potentially significant, or uncertain, or if the screening process becomes overtly complicated, then the Appropriate Assessment process must proceed to Stage 2 Appropriate Assessment and the preparation of a Natura Impact Statement (NIS).

### **3.1 Guidance and Data Sources**

The following documents have been used to complete this Stage 1 Appropriate Assessment:

- Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities. (Department of Environment, Heritage and Local Government, 2010).
- 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.
- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities (Reference: NPW 1/10 & PSSP 2/10).
- Managing Natura 2000 Sites The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC.
- Appropriate Assessment Mapping Tool at <u>www.gis.epa.ie/EPAMaps/AAGeoTool</u>

### 4. DESCRIPTION OF THE PROJECT

This screening report examines whether the proposed widening and maintenance works on Derrylea Bridge will have a significant impact on Lough Sheelin SPA (Site Code 004065).

Derrylea Bridge spans a river which feeds into Lough Sheelin approximately 7.5 km downstream to the south-west. Derrylea Bridge is a 2 arch masonry structure which carries the R194 over the Claddagh River. It is situated c. 2km south-west of Ballyjamesduff, Co. Cavan. The bridge is situated on a dangerous bend on the R194 road and close to the junctions of three minor roads with the R194.

## 4.1 Site Visit

Derrylea Bridge was surveyed on 24<sup>th</sup> October 2021. A range of photographs were taken to include road alignments, upstream and downstream elevations of the bridge and views under the arches.

The bridge was surveyed for roosting bats and/or evidence of bat usage using a highpowered torch (Led Lenser Rechargeable System) and an endoscope to examine deep crevices. The bridge was also surveyed for birds' nests.

Otters were surveyed by searching for otter spraints deposited in prominent places on rocks/ledges, otter tracks in mud or trails/slides adjacent to the site. Consultation with NBDC maps prior to survey revealed that there are no records of otter from the watercourse running under Derrylea Bridge but there are records from approximately 2km downstream of the bridge.

Consultation with NBDC maps prior to survey revealed that there are no records of Freshwater Crayfish *Austropotomobius pallipies* from the river.

There are no records of Freshwater Pearl Mussel *Margaritifera margaritifera* from this watercourse.

Bridge Name: Derrylea Bridge Grid Reference: Y 289953 X 250613 Watercourse: Claddagh River Species recorded: None



**Figure 1** – aerial photo showing the location of Derrylea Bridge.

Derrylea Bridge is located on the R194 regional road, approximately 2 km south west of Ballyjamesduff. It stands in the rural townland of Derrylea. In the past the watercourse was split to form a millrace. The bridge arch and channel carrying the millrace are still present downstream of Derrylea Bridge.

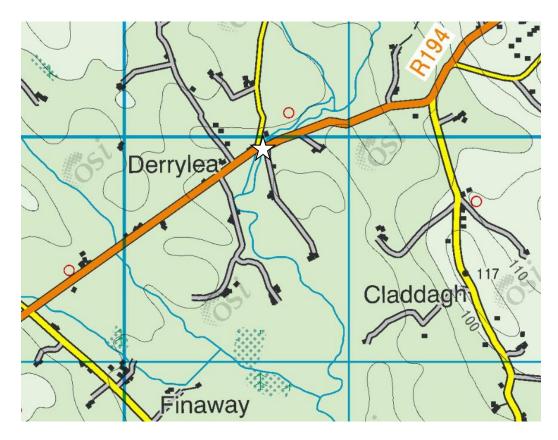


Figure 2 - Discovery map showing location of Derrylea Bridge



Figure 3 - Map showing distance from Derrylea Bridge to Lough Sheelin

Derrylea Bridge is a 2 arch masonry structure with a damaged masonry parapet wall on the downstream side. The original upstream parapet wall has been replaced with a concrete block structure. A smaller arch c. 0.8m in height lies on the western river bank c. 5 m from Derrylea Bridge. This arch spanned the former mill race.

Derrylea Bridge was surveyed for roosting bats and nesting birds. No bats or birds were recorded. There were three crevices under the eastern arch which were considered suitable for roosting bats. These crevices were marked for retention with red paint. The river banks were searched for signs of otters for approximately 50m upstream and downstream of the bridge. No signs of otters were recorded. However, the householder from the old mill building reported seeing otters in the river in the past.

No freshwater crayfish were recorded in the present survey.

No invasive plant species were recorded in the vicinity of the bridge.

The land take for the proposed realignment of the approaches to the bridge were surveyed for invasive plant species. None were recorded.

There is a small stone shed (Photo 1) on the southern side of the R194 which will have to be demolished to allow for the proposed realignment works. This building was surveyed for signs of bats. None were found, even though the building was considered to have high potential for bats.

### 4.2 Photographs



**Photo 1** – looking north east towards Derrylea Bridge. Small stone shed to be demolished is indicated



Photo 2 – looking east across Derrylea Bridge



**Photo 3** – position of proposed walkway to north of bridge structure



**Photo 4** - position of proposed walkway to north of bridge structure (upstream). Several conifer (fir) trees to be felled on east side of bridge



**Photo 5** – eastern side of bridge – location of proposed walkway indicated



**Photo 6** – eastern side of bridge – position of proposed walkway



**Photo 7** – looking west across bridge – several conifer fir trees to be felled for proposed walkway



Photo 8 – looking west towards downstream face of bridge



Photo 9 – downstream face of bridge



**Photo 10** – two crevices marked for retention for bats close to downstream face of eastern arch



**Photo 11** – crevice marked for retention for bats close to upstream face of eastern arch



**Photo 12** – grout and shuttered concrete sealing the undersurface of the western arch



Photo 13 – grout and shuttered concrete sealing the undersurface of the western arch



Photo 14 – downstream elevation of bridge



Photo 15 – watercourse downstream of bridge



Photo 16 – watercourse upstream of Derrylea Bridge



**Photo 17** – Two stone buildings on western downstream side of river



**Photo 18** – farm shed on western side of river which will be demolished to accommodate road widening



**Photo 19** – rear of farm shed with thick stone walls



**Photo 20** – crack in stonework of gable wall – ideal roosting site for bats



**Photo 21** - crack in stonework of gable wall – ideal roosting site for bats



**Photo 22** - Smaller arch which originally carried the mill race

# 5. SCOPE OF THE WORKS

# **Proposed Works**

- Widen existing bridge by the addition of a reinforced concrete arch on both upstream and downstream sides, matching the existing profiles
- Minor repairs to existing bridge
- Addition of walkway to upstream elevation
- Structure to be faced in masonry to match existing masonry
- Demolition of stone shed on western river bank downstream of bridge



**Figure 4** – proposed new alignment at Derrylea Bridge

# 6. DESCRIPTION OF POTENTIAL IMPACTS

### **6.1 Potential Habitats Affected**

Sediment Control:

The rehabilitation of Derrylea Bridge could result in debris, mortar and sediment being washed downstream along the watercourse. Malachy Walsh and Partners have prepared an Environmental Method Statement which outlines measures such as the placement of silt traps downstream of the bridge to catch any suspended sediment.

Tarpaulins lining scaffold and work platforms under the arches will catch any loose mortar inadvertently falling from the bridge structure.

Invasive species

All machinery, vehicles and equipment brought on site are to be treated for potential contamination with biohazards such as invasive species.

**Pollutants** 

A spill kit will be available on site.

### 6.2 Potential Species affected

Derrylea Bridge has some potential for roosting bats. Three crevices under the eastern arch were marked for retention for bats with red paint. No birds' nests were recorded in the structure.

The proposed works will have no significant impact on any of the birds listed within Lough Sheelin SPA - Great Crested Grebe (Podiceps cristatus), Pochard (Aythya ferina), Tufted Duck (Aythya fuligula) and Goldeneye (Bucephala clangula) and the habitat -Wetland and Waterbirds.

It is likely that trout, salmon and lamprey are present in the watercourse at Derrylea Bridge. Salmon would be adversely affected by sediment entering the watercourse. Lamprey may be inadvertently removed during the river realignment process. Any material removed from the watercourse should be inspected for lamprey.

Otters are known to be present on this watercourse. Otters will not be adversely affected by the proposed works.

Consultation with National Biodiversity Data Centre maps confirms that there are no previous records of Freshwater crayfish *Austromotabobius pallipies* from this watercourse.

### **Environmental Risks and Control Procedures**

An Environmental Method Statement will be prepared by Malachy Walsh and Partners. A signed copy of the Environmental Method Statement will be submitted to the District Conservation Officer of the NPWS. Advance notice of all works and associated Method Statements to be provided to NPWS.

The Method Statement must include details of methodology employed to prevent silt entering the stream by use of silt traps immediately downstream of bridge.

Work platforms erected at the structure to be lined with tarpaulins to catch any falling debris/mortar. Tarpaulins to be carefully removed once pointing is completed.

Following the implementation of best practice management any risks associated with the works should be reduced to negligible levels. Although there will be some temporary disturbance associated with the proposed works, this disturbance should not cause any significant impacts.

### 7. ASSESSMENT OF SIGNIFICANCE

The following table summarises the projects construction, operation and decommissioning phases, with special reference to their impact, if any, on any Natura 2000 site (European Commission 2001) - Assessment of plans and projects significantly affecting Natura 2000 sites – methodological guidance on the provisions of Article 6(3) and 6 (4) of the Habitats Directive 92/43/EEC

- Size and Scale
- Land-take
- Distance from Natura 2000 site or key features of the site
- Resource requirements (Water abstraction etc)
- Emissions (disposal to land, water or air)
- Excavation requirements
- Transportation requirements
- Duration of construction, operation, decommissioning etc
- Reduction of habitat area
- Disturbance to key species
- Habitat or species fragmentation
- Reduction in species density
- Changes in key indicators of conservation value (water quality etc)
- Climate change
- Key relationships that define the structure of the sites
- Key relationships that define the function of the sites

Table 1 - Likely direct, indirect or secondary impacts of the proposed works (either alone or in combination with any other plans or projects) on Natura 2000 sites within 15km radius of the site by virtue of:

ITEMS	PROJECT FEATURES	DIRECT OR INDIRECT IMPACT ON NATURA 2000 SITES?
Size, scale & land-take	<ul> <li>Addition of walkway to upstream face</li> <li>Structure to be widened on both sides by addition of reinforced concrete arches faced with masonry</li> </ul>	No

Distance from Natura 2000	The closest Natura 2000 site is	No
		INO
site	Lough Sheelin SPA – 5.6km	
	straight line distance from	
	Derrylea Bridge. The actual	
	distance if measured along the	
	watercourse is c. 7.5km. This is	
	within the 15km zone of	
	influence.	
<b>Resource requirements</b>	There are no resource	No
(water extraction etc.)	requirements such as water	
	extraction required for this	
	road realignment work.	
Emissions (disposal to land,	Emissions before and after the	No
water or air)	scheme are not expected to	
	increase significantly.	
	Existing emissions can be	
	expected to increase during the	
	construction period. However,	
	there are expected to be	
	negligible.	
Excavation requirements	None	No
Transportation	Importation of suitable	No
requirements	material to build masonry	
	facing walls and parapets.	
	Existing stone will be reused as	
	much as possible.	
Duration of construction,	At present, the duration of this	
operation,	project is unknown.	
decommissioning etc		
Reduction of habitat area	None within any Natura 2000	No
	site	

## 7.1 Appraisal of Likely Significant Effects

The potential for significant impacts resulting from the proposed bridge widening project has been assessed in relation to Natura 2000 sites within the 15km zone of potential impact. Impacts that require consideration are categorised under the following headings, as outlined in 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, 2001).

- Habitat loss or alteration
- Habitat/ species fragmentation
- Disturbance and/ or displacement of species
- Changes in population density, and
- Changes in water quality and resource

Following an examination of the proposals for widening Derrylea Bridge with respect to impacts affecting Natura 2000 sites, it is considered that the proposed scheme will not result in any significant effects.

The proposed scheme is specific to the area of the Derrylea Bridge and any associated effects are very localised

## 8. CUMULATIVE EFFECTS

Cumulative impacts or effects are changes in the environment that result from numerous human-induced, small-scale alterations. As noted in the Department's Guidance document for Planning Authorities, Appropriate Assessment must take account of cumulative effects, as these effects often only occur over time, plans or projects that are completed, approved but uncompleted, or proposed (but not yet approved). The proposed Derrylea Bridge widening scheme will have no impact on Natura 2000 sites, as determined in the previous section. However, the previous section did not consider the cumulative effect that the road alignment scheme may have on Natura 2000 sites when combined with other projects that have been approved for construction or have recently been constructed.

At the time of writing this report, there were no neighbouring construction projects in development, or recently completed.

## 9. SCREENING STATEMENT

This Stage 1 Appropriate Assessment has investigated the proposed bridge widening and its potential effects on Natura 2000 sites within a 15km radius. There are four Natura 2000 sites within 15km of the proposed site.

Following objective analysis of the proposed bridge widening scheme, and assuming all codes of best practice and management are complied with, this Appropriate Assessment (Stage 1) concludes the following:

- 1. There are four Natura 2000 Sites within the 15km zone of impact, but only one Lough Sheelin SPA is hydrologically linked to the work site.
- 2. The qualifying Interests of Lough Sheelin SPA Great Crested grebe, Pochard, Tufted dusk, Golden eye and the habitat Wetlands and Waterbirds will not be adversely affected by the proposed works
- 3. It is possible to conclude that there would be no significant effects, no potentially significant effects and no uncertain effects if the project were to proceed.

It is therefore the determination of this report that it is not necessary to undertake any further stage of the Appropriate Assessment process. <u>Therefore, Stage II Appropriate</u> Assessment and the preparation of a Natura Impact Statement is not required in this case.

### **10. REFERENCES**

Anon. (2010) Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. National Parks and Wildlife Service, Dept Environment, Heritage and Local Government.

Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) 1979

Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) 1982

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

Directive 2009/147/EC of the European parliament and of the Council of 30 November 2009 on the conservation of Wild Birds [Birds Directive]

Environmental Protection Agency (1995) Advice notes on current practice in the preparation of Environmental Impact Statements. EPA Wexford

Environmental Protection Agency (1997) Draft guidelines to be contained in the information in Environmental Impact Statements. EPA Wexford

European Commission (2002) Managing Natura 2000 sites: The provisions of Article 6 of the Habitats Directive 92/43/EEC. Luxembourg: Office for Official Publications of the European Communities.

European Commission (2001) Assessment of plans and projects significantly affecting Natura 2000 sites: methodological guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC. Luxembourg: Office of Official Publications of the European Communities

European Commission (2007) Guidance Document on Article 6(4) of the "Habitat's Directive" 92/43/EEC; Clarification of the concepts of alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the Commission.

Fossitt, J. (2000) A Guide to Habitats in Ireland. The Heritage Council. Kilkenny

Kelleher, C. & Marnell, F. (2006) Bat Mitigation Guidelines for Ireland. *Irish Wildlife Manuals*, No. 25. National Parks and Wildlife Service, Department of Environment, Heritage and Local Government, Dublin, Ireland.

Marnell, F., Looney, D. & Lawton, C. (2019) *Ireland Red List No. 12: Terrestrial Mammals*. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Dublin, Ireland.

NPWS (2019) The Status of EU Protected Habitats and Species in Ireland. Conservation status in Ireland of Habitats and Species listed on the European Council Directive on the Conservation of Habitats, Flora and Fauna 92/43/EEC. Volume 1. Summary overview. Unpublished NPWS report. National Parks and Wildlife Service. Department of Environment, Heritage and Local Government, Dublin.

NPWS (2021) Conservation Objectives for Lough Sheelin SPA 004065. Generic version 8.0. Department of Housing, Local Government and Heritage

Wildlife Act 1976 including all other amendments 1979 – 2010. Number 39 of 1976 and Number 38 of 2000. Dublin: Government Publications.

Websites

www.npws.ie – website of the national Parks and Wildlife Service

www.nbdc.ie – website of the National Biodiversity Data Centre

<u>www.epa.ie</u> – website of the Environmental Protection Agency

### **11. APPENDIX**

#### SITE SYNOPSIS SITE NAME: LOUGH SHEELIN SPA SITE CODE: 004065

Lough Sheelin is a medium to large-sized lake, located on the border of Counties Cavan, Westmeath and Meath. It is a relatively shallow alkaline lake with a maximum depth of 14 m. The Inny River, a main tributary of the River Shannon, is the main outflow from the lake. The shore of the lake is wooded in places and there are some very small offshore islands with willows (Salix aurita and S. cinerea). The islands are fringed by swamp communities of Common Reed (Phragmites australis), Common Clubrush (Scirpus lacustris) and Bottle Sedge (Carex rostrata). A good range of Charophytes has been recorded from the lake, including Chare denudata, a Red Data Book species.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Great Crested Grebe, Pochard, Tufted Duck and Goldeneye. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds. Despite variable water quality in recent decades, Lough Sheelin remains a very important site for wintering waterfowl, especially diving duck. It supports nationally important populations of four species, i.e. Great Crested Grebe (140), Pochard (546), Tufted Duck (762) and Goldeneye (224) - all figures are mean peaks for the 5 winters 1995/96-1999/2000.

A number of other species occur in relatively low numbers, including Mute Swan (28), Mallard (76), Coot (24), Little Grebe (19), Cormorant (42) and Black-headed Gull (202).

Lough Sheelin is a nationally important site for four species of wintering wildfowl and is one of the main Midlands lakes sites for wintering birds.