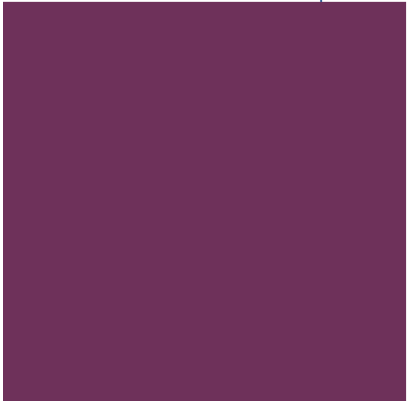




# Raised Bog Conservation Study

National Raised Bog SAC Management Plan  
Natura Impact Statement

IBE0802Rp0009



# TABLE OF CONTENTS

<b>1</b>	<b>INTRODUCTION.....</b>	<b>1</b>
1.1	REQUIREMENT FOR HABITATS DIRECTIVE ASSESSMENT.....	1
1.1.1	The Natura 2000 Network .....	1
1.1.2	Appropriate Assessment .....	1
1.2	BACKGROUND INFORMATION.....	2
1.2.1	Raised Bogs in Ireland .....	2
1.2.2	Threats to raised bogs.....	7
1.2.3	Requirement for a National Management Plan for Raised Bog SACs.....	8
1.3	APPROPRIATE ASSESSMENT PROCESS.....	8
1.4	CONSULTATION .....	9
<b>2</b>	<b>STAGE I - APPROPRIATE ASSESSMENT SCREENING .....</b>	<b>11</b>
2.1	SITE LOCATION AND DESCRIPTION OF THE PLAN .....	11
2.1.1	Aims of the Draft Plan .....	11
2.1.2	Review of the Raised Bog Network.....	12
2.1.3	Conservation Objectives .....	14
2.1.4	Potential Measures to Achieve Conservation Objectives .....	15
2.1.5	Proposed Programme of Conservation Measures .....	16
2.2	BRIEF DESCRIPTION OF THE NATURA 2000 SITES .....	18
2.2.1	Natura 2000 Sites Potentially Affected by the Plan.....	19
2.3	SCREENING ASSESSMENT.....	19
2.3.1	Initial Screening Exercise .....	19
2.4	SCREENING CONCLUSION .....	21
<b>3</b>	<b>STAGE 2 - APPROPRIATE ASSESSMENT .....</b>	<b>22</b>
3.1	INTRODUCTION TO STAGE 2 .....	22
3.2	STEP ONE – IMPACT PREDICTION.....	22
3.2.1	Likely impacts .....	22
3.2.2	Assessment of impacts .....	26
3.3	STEP TWO – MITIGATION MEASURES.....	26
3.4	ASSESSMENT OF IN-COMBINATION EFFECTS WITH OTHER PLANS OR PROJECTS.....	27
3.5	ASSESSMENT TABLES .....	28
<b>4</b>	<b>APPROPRIATE ASSESSMENT CONCLUSION .....</b>	<b>53</b>
4.1	INTEGRATION OF APPROPRIATE ASSESSMENT AND THE PLAN .....	53
4.2	CONCLUSION AND STATEMENT .....	53

## APPENDICES

**Appendix A** Initial Screening Exercise

**Appendix B** Assessment of In-combination Effects

## LIST OF FIGURES

Figure 1.1 Distribution of Active and Degraded Raised bog in Ireland (NPWS 2012) .....	3
Figure 2.1 Ireland's raised bog network .....	13

## LIST OF TABLES

Table 1.1 Raised Bog SACs .....	5
Table 2.1 Raised bog network status, trends and targets .....	14
Table 2.2 Summary of Proposed Programme of Conservation Measures .....	16
Table 2.3 Initial screening rationale .....	20
Table 3.1 Assessment table .....	29
Table 3.2 Summary of Potential Impacts of the Plan on Natura 2000 Sites .....	47

# 1 INTRODUCTION

## 1.1 REQUIREMENT FOR HABITATS DIRECTIVE ASSESSMENT

### 1.1.1 The Natura 2000 Network

With the introduction of the Birds Directive (Council Directive 2009/147/EC on the conservation of wild birds) and the Habitats Directive (Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora) came the obligation to establish the Natura 2000 network of sites of highest biodiversity importance for rare and threatened habitats and species across the European Union (EU). In Ireland, the Natura 2000 network of European sites comprises Special Areas of Conservation (SACs, including candidate SACs), and Special Protection Areas (SPAs, including proposed SPAs). SACs are selected for the conservation of Annex I habitats (including priority types which are in danger of disappearance) and Annex II species (other than birds). SPAs are selected for the conservation of Annex I birds and other regularly occurring migratory birds and their habitats. The annexed habitats and species for which each site is selected correspond to the qualifying interests of the sites; from these the conservation objectives of the site are derived.

### 1.1.2 Appropriate Assessment

A key protection mechanism in the Habitats Directive is the requirement to undertake Appropriate Assessment (AA) in line with the requirements of Article 6(3) of the Directive. AA considers the possible nature conservation implications of any plan or project on the Natura 2000 site network before any decision is made to allow the plan or project to proceed. Not only is every new plan or project captured by this requirement, but each plan or project, when being considered for approval at any stage, must take into consideration the possible effects it may have in combination with other plans and projects.

***Article 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.*

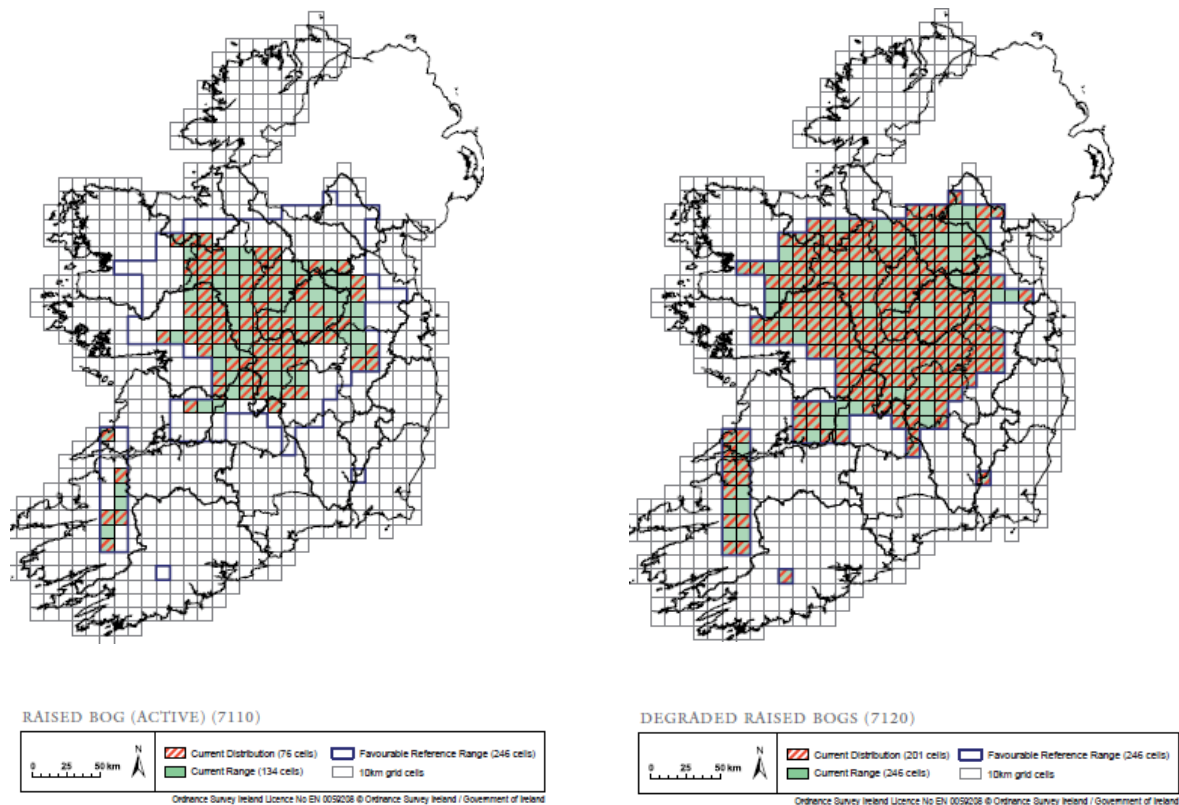
***Article 6(4)** If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of the Natura 2000 site is protected. It shall inform the Commission of the compensatory measures adopted.*

This document details the appropriate assessment of the potential effects on the Natura 2000 network of the proposed conservation measures outlined in the Draft National Raised Bog SAC Management Plan. It also recommends mitigation measures to avoid, reduce or offset negative effects.

## **1.2 BACKGROUND INFORMATION**

### **1.2.1 Raised Bogs in Ireland**

Raised Bogs are domed masses of peat that build up slowly, over thousands of years, in former lake basins or shallow depressions. They are nutrient-poor, ombrotrophic wetland ecosystems, i.e. they are fed by rainwater only, with no groundwater input. The best raised bog habitat is actively peat-forming, i.e. very wet, with lots of surface water and a high cover of bog mosses (different species of *Sphagnum* moss). This kind of habitat builds up the bog through the accumulation of bog moss layers over time. Typically, a raised bog will consist of high bog, i.e. an uncut bog dome, surrounded by cutover bog, where peat-cutting has taken place. Today, raised bogs are found almost exclusively in central Ireland, chiefly in the Shannon basin. There are a few examples in Ulster and Munster, but the vast majority are found in the midlands. The distribution and range of Active and Degraded Raised Bog in Ireland is recorded by NPWS and is illustrated in Figure 1.1.



**Figure 1.1 Distribution of Active and Degraded Raised bog in Ireland (NPWS 2012)**

Annex habitats present on raised bogs in Ireland include:

### **Active Raised Bog (Habitat code 7110)**

Active Raised Bog has a soft, spongy surface, with pools of open water and flat lawns of coloured bog mosses. The wettest areas are usually found in the central part of the high bog, where you often find hummocks, pools, *Sphagnum* lawns, flushes and soaks. Sometimes, wet bog can develop in the cutover areas, wherever drainage is poor. This habitat type is recognised as an EU Priority Annex I Habitat and is termed Active Raised Bog which is listed as a priority habitat in Annex I of the EU Habitats Directive and is described as “still supporting a significant area of vegetation that is normally peat-forming” (EC, 1996).

### **Degraded Raised Bog (Habitat code 7150)**

The surface of Degraded Raised Bog tends to be firm underfoot, with little surface water to be seen. Heathers and bog cotton species are present as are lichens and bog asphodel. Bog mosses are scarce and these areas are no longer actively peat-forming. This habitat forms when wet raised bog has been affected by drainage. The aim of restoration is to re-wet dry areas and to create, wherever possible, the conditions for active peat formation in future. Degraded raised bogs are therefore considered to be areas of high bog where active peat formation has ceased, but with proper

management, may be restored in the foreseeable future. This habitat type is recognized as an EU Annex I Habitat – Degraded Raised Bog. Degraded raised bog can also occur on cutover, where there is re-wetting and regeneration of raised bog species. Cutover that consists largely of bare peat or is dominated by agricultural grasses of closed canopy woodlands is not considered to qualify as degraded raised bog habitat (EC, 1996).

### **Bog Woodland (Habitat code 91D0)**

Naturally-growing native woodlands dominated by birch have always been a feature of Irish raised bogs. These woodlands often occur in the margins of raised bogs where the peat is shallow. Typical species are birch, willow and Scots pine, with ferns and mosses. In Ireland either *Betula pubescens* or *Pinus sylvestris* dominate strands that may be of interest (EC, 1996). This habitat type does not include the drier Birch woodland found on cutover bog. Wet birch woodland on permanently waterlogged peat soils corresponds to EU Priority Annex I habitat – Bog Woodland.

#### **1.2.1.1 Special Area of Conservation (SAC) Raised Bogs**

Special Areas of Conservation (SACs) are selected to protect habitats and species that are rare and threatened at a European scale. The EU Habitats Directive lists certain habitats (listed in Annex I) and species (listed in Annex II) that must be conserved by designating and appropriately managing SACs. Habitats and species on these lists that are considered to be particularly endangered are called “priority” habitats and species. There are 59 habitats listed in Annex I in Ireland, including raised bogs, blanket bogs, turloughs, sand dunes, limestone pavement, heaths, orchid-rich grassland, estuaries and reefs. Annex II species found in Ireland include salmon, otter, freshwater pearl mussel, Killarney fern and bottlenose dolphin. Each SAC is designated for one or more Annex I habitats and/or Annex II species. 429 SACs have been nominated for designation throughout the State.

The Natura 2000 network was introduced by the Habitats Directive. It comprises the network of SACs and SPAs (Special Protection Areas for birds) throughout the EU.

A significant portion of the world’s remaining active raised bog is found in Ireland, and 53 raised bog sites have been designated as SACs under the Habitats Directive (Table 1.1). Ireland is required by the directive to protect, manage and restore these sites but Ireland is also committed, from a wider perspective, to maintaining a robust raised bog network that is sustainable into the future. Active raised bogs are extremely rare in global and European terms and contain the last functioning remnants of the great bogs that once covered much of the midlands. The SACs are different from the vast majority of Ireland’s raised bogs, because generally they still have substantial areas of active raised bog, where the conditions are right for peat to continue to form, and where species of plants and animals typical to bogs can thrive. Damaging activities such as land reclamation, drainage and peat extraction over time have left Ireland with less than 1% of the area of active raised bog we once had. These bogs also contain large tracts of degraded raised bog, which is the area of high, uncut

bog which has been damaged by drainage but which could be transformed into active raised bog again through restoration measures.

**Table 1.1** Raised Bog SACs

Ref	SAC Site Code	Location	SAC Site Name
1	000006	Cavan/Meath	Killyconny Bog (Cloghbally)
2	000231	Galway	Barroughter Bog
3	000248	Galway	Cloonmoylan Bog
4	000285	Galway	Kilsallagh Bog
5	000296	Galway	Lisnageeragh Bog and Ballinstack Turlough
6	000301	Galway	Lough Lurgeen Bog/ Glenamaddy Turlough
7	000326	Galway	Shankill West Bog
8	000382	Kerry	Sheheree (Ardagh) Bog
9	000391	Kildare	Ballynafagh Bog
10	000497	Mayo/Sligo	Flughany Bog
11	000566	Offaly	All Saints Bog and Esker
12	000572	Offaly	Clara Bog
13	000575	Offaly	Ferbane Bog
14	000580	Offaly	Mongan Bog
15	000581	Offaly	Moyclare Bog
16	000582	Offaly	Raheenmore Bog
17	000585	Offaly	Sharavogue Bog
18	000592	Roscommon	Bellanagare Bog
19	000597	Roscommon	Carrowbehy/Caher Bog
20	000600	Roscommon	Cloonchambers Bog
21	000604	Roscommon	Derrinea Bog
22	000614	Roscommon	Cloonshanville Bog
23	000641	Tipperary	Ballyduff/Clonfinane Bog
24	000647	Tipperary	Kilcarren-Firville Bog
25	000679	Westmeath	Garriskil Bog
26	001242	Galway	Carrownagappul Bog
27	001818	Longford/Ros	Lough Forbes Complex
28	002110	Galway/Ros	Corliskea/Trien/Cloonfelliv Bog
29	000297	Galway/Mayo	Lough Corrib
30	000440	Ros/LD/WM	Lough Ree
31	000595	Roscommon	Callow Bog
32	002298	Mayo/Ros/Sligo	River Moy
33	002331	Kildare	Mouds Bog



Ref	SAC Site Code	Location	SAC Site Name
34	002332	Laois	Coolrain Bog
35	002333	Laois	Knockacoller Bog
36	002336	Westmeath	Carn Park Bog
37	002337	Westmeath	Crosswood Bog
38	002338	Roscommon	Drumalough Bog
39	002339	Roscommon	Ballynamona Bog and Corkip Lough
40	002340	Meath/Westmeath	Moneybeg and Clareisland Bogs
41	002341	Longford	Ardagullion Bog
42	002342	Meath/Westmeath	Mount Hevey Bog
43	002343	Clare	Tullaher Lough and Bog
44	002346	Longford	Brown Bog
45	002347	Galway	Camderry Bog
46	002348	Longford	Clooneen Bog
47	002349	Roscommon	Corbo Bog
48	002350	Galway	Curraghlehannagh Bog
49	002351	Kerry	Moanveanlagh Bog
50	002352	Galway	Monivea Bog
51	002353	Tipperary	Redwood Bog
52	002354	Roscommon	Tullaghanrock Bog
53	002356	Galway	Ardgraique Bog

### 1.2.1.2 National Heritage Area (NHA) Raised Bogs

In addition to the 53 bogs designated as SACs, other raised bogs have been designated as National Heritage Areas (NHAs) under the Wildlife Amendment Act, 2000 (No. 38 of 2000). Between 2003 and 2005, 75 raised bogs were designated covering some 23,000 hectares located mainly in the midlands. These sites were made statutory instruments as part of an undertaking in relation to EU EIA case C39296. While these sites are not regulated under the Habitats Directive, the Environmental Impact Assessment (EIA) Directive (85/337/EEC) does apply. While the focus of the Draft National Raised Bog SAC Management Plan is the management of SAC raised bogs, the NHA raised bogs are relevant as they were assessed during the development of the draft plan and programme of measures in terms of their potential to provide compensatory habitat to offset SAC raised bog area lost since designation.

### 1.2.1.3 Other Raised Bogs of Potential Conservation Value

In addition to the SAC and NHA raised bogs, there are many undesignated bogs which are considered to be of potential conservation value. A number of these bogs were assessed during the development

of the draft plan and programme of measures in terms of their potential to provide compensatory habitat to offset SAC raised bog area lost since designation.

### **1.2.2 Threats to raised bogs**

Raised bogs are wetland ecosystems and so the main threats to their welfare arise from any actions that drain water from the bog and dry them out. The main threats include:

- Drainage of raised bog habitat or surrounding wetland habitats;
- Peat harvesting and turf cutting;
- Planting of commercial forestry;
- Burning; and
- Other damaging human activities such as water abstraction from groundwater and quarrying which can have a significant impact on the raised bogs by lowering the regional groundwater level.

All of these damaging operations can compromise the hydrological integrity of a raised bog leading to the lowering of the water table which can cause the bog to shrink, crack, deform, collapse or burst. Such actions can result in peat being exposed to air as the water levels drop and the dead plants in the peat start to decompose, releasing carbon dioxide and other gases into the atmosphere. These changes to the structure of the raised bog result in the loss of the unique raised bog ecology.

Tackling raised bog ecosystem degradation requires an understanding of the root causes leading to a change in a bog's hydrological regime. Introducing drains on the high bog not only results in water being rapidly transported off the bog surface, but also can result in increased topographic gradients on the bog surface as the peat compresses due to a lowering of the water table. In areas where topographic gradients are increased, water flows away much more rapidly resulting in unsuitable hydrological conditions for active raised bog.

Drains at the bog margins can also have significant impacts. Raised bogs develop by infilling waterlogged basins, leading to a hydrological equilibrium with surrounding inorganic deposits. High water levels (heads) in the peat, and lower levels in the inorganic deposits underlying the bog (substrate), result in natural downward seepage of bog water. Vertical seepage is proportional to the difference in water level between both units and is influenced by the permeability of the substrate. Small differences in water level and/or a low permeability substrate usually mean that this loss is small.

Cutting and draining peat around bog margins disturbs the natural hydrological equilibrium. The degree of disturbance depends both on the permeability of substrate materials and how deep marginal

drains have been cut. Marginal drains that do not cut through the peat base have limited impact on water levels in the deposits underlying the bog. This results in small declines in substrate water levels, leading to minor increases in vertical water loss. Impacts to the bog ecosystem occur mainly in the vicinity of marginal drains.

By contrast, where drains cut through the peat substrate water levels can decline substantially, resulting in significant increases in vertical water loss. This can cause ecological impacts over a wide area, even at significant distances from drains. Substrate permeability determines the degree of water loss and the extent of ecological damage, with impacts being greater with more permeable materials.

### **1.2.3 Requirement for a National Management Plan for Raised Bog SACs**

The European Commission commenced infringement action against Ireland in 2011 for alleged failures to adhere to the Habitats Directive (relating to the regulation of turf-extraction from its SACs) and the EIA Directive (relating to turf-cutting on bogs designated as Natural Heritage Areas (NHAs) under domestic legislation). The Draft National Raised Bog SAC Management Plan has been developed as part of the Government's approach to addressing these infringement proceedings. Its development was recommended by Mr Justice John Quirke in his report following the February 2012 Peatlands Forum which he chaired, a recommendation that was accepted by the Irish Government at its meeting in March 2012. The Raised Bog Conservation Study ([www.raisedbogconservation.com](http://www.raisedbogconservation.com)) was established to inform scientific and technical aspects of the development of the plan. The Government's response also included the establishment of an independently chaired Peatlands Council in April 2011 to ensure that stakeholders had an opportunity to engage with each other and with the relevant State authorities, so that all parties could reach a shared understanding of the challenges involved and work together to address what is a complex issue. In establishing the Peatlands Council, the Government asked that it would assist in drafting a National Peatlands Strategy. A draft of the Strategy has been published for public consultation along with the draft plan and SEA Environmental Report. The draft plan was itself produced as one element of the implementation of the Peatlands Strategy which aims to agree principles on how decisions are reached concerning the future use and management of Ireland's peatlands.

## **1.3 APPROPRIATE ASSESSMENT PROCESS**

According to European Commission methodological guidance document: Managing Natura 2000 sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC (2001), referred to as MN2000, the assessment requirements of Article 6 establish a stage-by-stage approach as follows:

**Stage 1 - Screening for a likely significant effect:** An initial assessment of the project or plan's effect on a European site(s). If it cannot be concluded that there will be no significant effect upon a European site, an AA is required.

**Stage 2 - Appropriate Assessment (Natura Impact Statement or NIS):** 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 the 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 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.

Each stage determines whether a further stage in the process is required. If, for example, the conclusions at the end of Stage One are that there will be no significant impacts on the Natura 2000 site, there is no requirement to proceed further.

## 1.4 CONSULTATION

The AA process has been discussed at steering group meetings of the Raised Bog Conservation Study as well as at Peatlands Council meetings during the period of the development of the draft plan. Comments, recommendations and feedback from the stakeholders at these meetings have fed into all stages of the assessment.

Consultation letters issued to relevant statutory consultees in relation to the Strategic Environmental Assessment (SEA) Screening Statement and SEA Scoping Report under the SEA Directive (2001/42/EC) incorporated details of the AA process and invited consultees to submit any relevant information pertinent to both the SEA and the AA processes.

The AA Screening Statement was available in hard copy at NPWS head office, 7 Ely Place, Dublin 2, and at NPWS regional offices, during a phase of non-statutory public consultation associated with the SEA Scoping Report which took place between 1<sup>st</sup> September and 1<sup>st</sup> October 2013.

This Natura Impact Statement has been made available with the Draft Raised Bog SAC Management Plan and SEA Environmental Report and stakeholders have been notified by letter. It is available on the NPWS website ([www.npws.ie](http://www.npws.ie)), the Department website ([www.ahg.gov.ie](http://www.ahg.gov.ie)) and the Raised Bog Conservation Study website ([www.raisedbogconservationstudy.com](http://www.raisedbogconservationstudy.com)). It is also available in hard copy at NPWS head office, 7 Ely Place, Dublin 2, and at NPWS regional offices, during office hours until Friday 18 April 2014. The Department is also consulting on a Draft Peatlands Strategy and a review of Natural Heritage Area (NHA) raised bogs.

Written submissions are invited on the suite of documents until Friday 18th April 2014.

Submissions can be sent directly to the Department:

Email: [peatlandssubmissions@ahg.gov.ie](mailto:peatlandssubmissions@ahg.gov.ie)

Address: Peatlands Policy Unit, Department of Arts, Heritage and the Gaeltacht, 7 Ely Place, Dublin 2.

or via the Raised Bog Conservation Study:

Email: [info@raisedbogconservation.com](mailto:info@raisedbogconservation.com)

Address: Raised Bog Conservation Study, RPS Consulting Engineers, Unit 33, Innovation Works, National Technology Park, Limerick.

Submissions should be sent to one or the other and not both and to either the postal address or the email address.

## 2 STAGE I - APPROPRIATE ASSESSMENT SCREENING

In complying with the obligations under Article 6(3), and in line with the relevant guidance, this screening document has been structured according to a stage by stage approach as follows:

The **Screening Stage** includes:

- Site location and description of the plan;
- Identification and initial screening of Natura 2000 sites for potential negative effects;
- Screening conclusion.

### 2.1 SITE LOCATION AND DESCRIPTION OF THE PLAN

The purpose of the National Raised Bog SAC Management Plan is to set out Ireland's approach to the conservation and management of its Raised Bog SACs, as well as to address the needs and rights of turf-cutters and land owners affected by the conservation and management measures. The plan is valid for a six year period, during which the plan will be reviewed in terms of its success in achieving its objectives. Further planning cycles will follow.

#### 2.1.1 Aims of the Draft Plan

The Draft National Raised Bog SAC Management Plan has two broad aims:

- Conservation and Management of Raised Bog SACs

Ireland has nominated 53 sites as Raised Bog SACs under the EU Habitats Directive and is required under the directive to put in place measures to protect these sites from deterioration. The aim of the plan is to provide clarity to all parties regarding how these sites will be managed and restored into the future in co-operation with land-owners and local communities and in keeping with legal obligations under the directive.

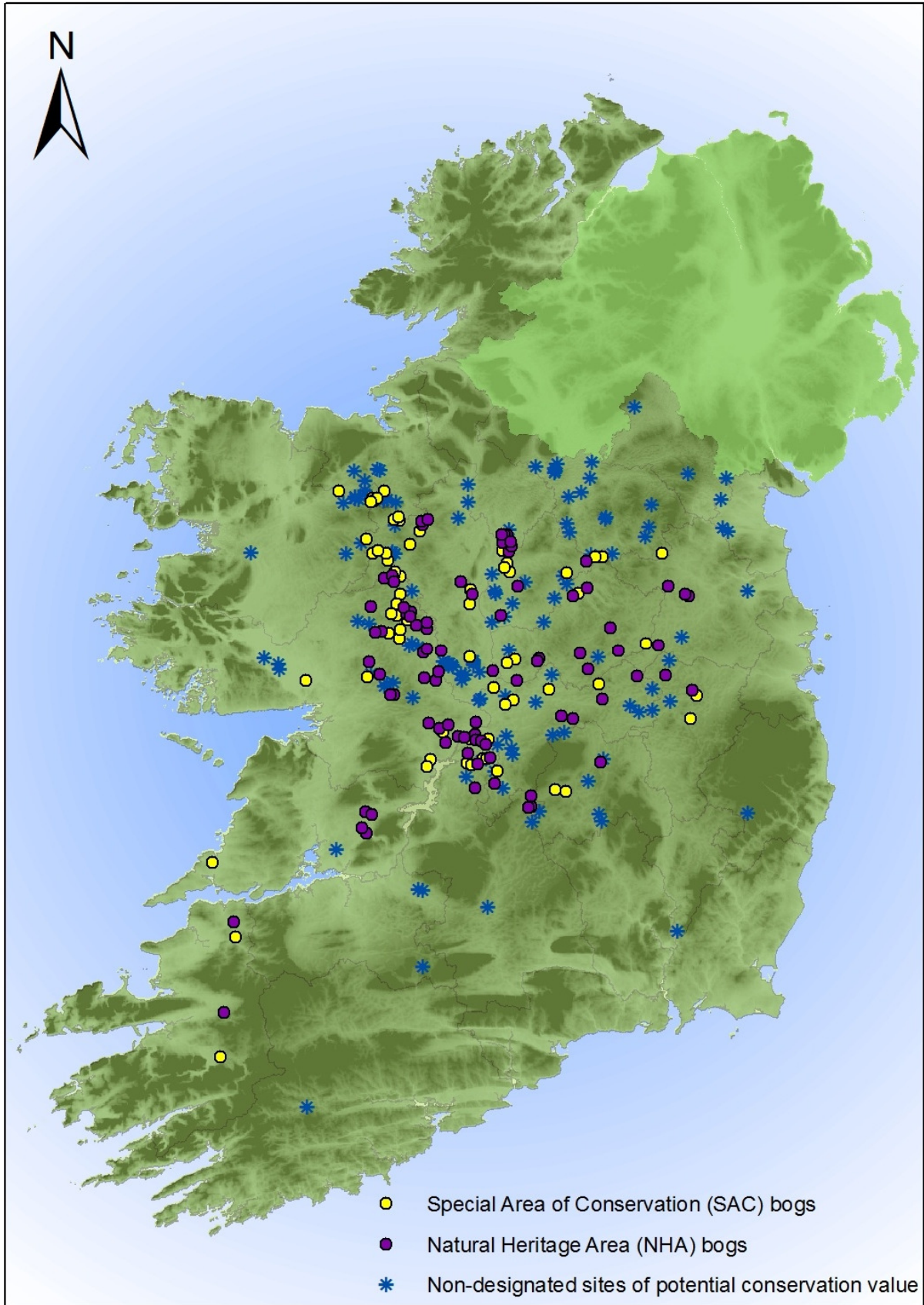
- Addressing the needs of Turf-Cutters & Land-Owners

The plan also aims to set out how the needs of those who depend on these bogs will be addressed where it has been necessary to curtail activities for conservation purposes. The needs of affected turf-cutters' are being, and will be, largely addressed through compensation or relocation. The concerns and interests of land-owners within and around these sites will also be addressed, through the putting in place of site-specific management and restoration plans for each raised bog SAC in consultation with them and in keeping with the requirements of the plan. The site-specific plans can also be used to explore how the restoration and management of these sites

can benefit local communities through their use as amenity areas, for education, and as a focus for conservation.

### **2.1.2 Review of the Raised Bog Network**

A key part of the development of the draft plan was a comprehensive scientific review (ecological and eco-hydrological assessments) of Ireland's remaining raised bogs of potential conservation value to quantify the extent of the damage and loss that has been sustained. Over 270 sites were examined in detail, including the 53 raised bog SACs, the 75 NHA raised bog sites, and more than 140 additional non-designated sites which are deemed to be of conservation potential. The current condition of Ireland's raised bog network was established, and the area of raised bog damaged and lost since designation was quantified through comparison with past assessments. This enabled conservation objectives to be set and a programme of conservation measures to achieve these objectives to be proposed. The draft plan also outlines the options available to address the rights and needs of those affected by the proposed conservation measures (specifically turf-cutters and land owners). The bogs included in the review are illustrated in Figure 2.1.



**Figure 2.1** Ireland's raised bog network



### 2.1.3 Conservation Objectives

The national conservation objective outlined in the draft plan is **to restore the favourable conservation status of active raised bog in Ireland.**

For habitats listed in the Habitats Directive, Article 1 of the Directive provides a definition of favourable conservation status as follows:

“The **conservation status** of a natural habitat will be taken as “**favourable**” when:

its natural **range** and **areas** it covers within that range, is **stable or increasing**, and

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, and

the **conservation status** of its **typical species** is **favourable**.

The draft plan identifies targets to achieve its conservation objective both nationally and in relation to the SAC network as a whole. It does not identify objectives or targets on a site-by-site basis. Site-specific objectives and targets will be established in site-specific restoration and management plans which will be developed during 2014-15. National and SAC network targets have been set in relation to overall area, range (distribution), structure (physical components of the bogs) and function (ecological processes taking place in the bogs). The area objectives (targets) are outlined in Table 2.1.

**Table 2.1 Raised bog network status, trends and targets**

Bog Habitat	Resource	1994	2012	Change	Target
		(ha)	(ha)	(ha)	(ha)
Active Raised Bog (ARB)	SAC network	1,940	1,210	-730	2,590
	NHA network	490	284	-206	
	Non Designated Sites	200	145	-55	
	<b>National Network</b>	<b>2,630</b>	<b>1,639</b>	<b>-991</b>	<b>3,600</b>
Degraded Raised Bog (DRB)	SAC network	650	1,200	+550	
	NHA network	520	410	-110	
	Non Designated Sites	625	520	-105	
	<b>National Network</b>	<b>1,795</b>	<b>2,130</b>	<b>+335</b>	
High Bog	SAC network	10,740	10,515	-225	
	NHA network	7,790	7,480	-310	

### Raised Bog SAC network targets

The target of achieving 2,590 ha of active raised bog in the SAC network is derived by summing the areas of active and degraded raised bog in the SAC network at the time of designation in 1994. There is currently 1,210 ha of active raised bog in the SAC network, plus 1,200 of degraded raised bog which can be restored to active using the measures outlined in this plan. However, this still leaves a shortfall of 180 ha and this must be provided by the designation of compensatory habitat into the SAC network. A target of replacing 225 ha of permanently lost high bog within the SAC network has also been set.

### National network target

The target of achieving 3,600 ha of active raised bog in the national network is derived by summing the areas of active and degraded raised bog in the current SAC and NHA networks at the time of designation in 1994. There is currently a total of 1,500 ha of active raised bog in the SAC and new NHA networks, plus 1,675 of degraded raised bog which can be restored to active using the measures outlined in this plan. In addition 195 ha of active and degraded raised bog will be provided by the designation of a small number of additional SACs as compensatory habitat into the SAC network. However, this still leaves a shortfall of 230 ha. Achieving this target will require restoration of a portion of the cut-over bog as well as restoration of degraded bog.

## **2.1.4 Potential Measures to Achieve Conservation Objectives**

Potential measures to **protect and restore** existing and additional SAC bogs and to **replace** lost habitat by identifying additional sites are summarised below.

### **2.1.4.1 Protection and Restoration Measures**

Potential measures outlined in the draft plan to restore raised bog to active can be divided into two broad categories:

**Preventative measures** against habitat loss including cessation of the following activities:

- Drainage of raised bog habitat or surrounding wetland habitats;
- Peat harvesting and turf cutting;
- Planting of commercial forestry;
- Burning; and
- Other damaging human activities such as water abstraction from groundwater and quarrying which can have a significant impact on the raised bogs by lowering the regional groundwater level.

**Engineered (active intervention) measures** including:

- Drain blockage on high bog;
- Drain blockage in marginal areas;
- Removal of forest plantations;
- Marginal dams;
- Bunding on high bogs; and
- High bog and cut-over bog excavation/re-profiling.

#### 2.1.4.2 Replacement Measures

A scientific assessment of the NHA bogs and non-designated raised bog sites which are considered to be of potential conservation value was undertaken to identify the most suitable sites to replace the losses of active raised bog habitat and high bog areas within the SAC network and to enhance the national network. The sites were ranked based on how they scored under a range of environmental, technical and socio-economic criteria in order to identify the sites with:

- the best existing environmental standing (described by area, range, habitat, structure and function);
- the best future potential (described by restorable habitat area and the likelihood of restoration measures being effective); and
- the most socially appropriate (described by factors which indicate how readily the site can be designated and restored and what wider social benefits might be brought) alongside the most economically advantageous investment (described by how much habitat is supported by a unit of investment in the site).

However, when using the analysis to determine the most suitable sites to replace the losses of active raised bog habitat and high bog areas within the SAC network, only the environmental and technical criteria were applied as SAC site selection excludes socio-economic considerations.

#### 2.1.5 Proposed Programme of Conservation Measures

Table 2.2 summarises the proposed programme of conservation measures outlined in the draft plan.

**Table 2.2** Summary of Proposed Programme of Conservation Measures

Measure	Where	When	Who
1. Protection and Restoration of current SAC network entailing: <ul style="list-style-type: none"> <li>• Preventative measures (cessation of damaging activities</li> </ul>	Current SAC bogs	2014-2020	DAHG (NPWS)

Measure	Where	When	Who
including drainage, peat harvesting and turf cutting, planting of commercial forestry, fires etc); and <ul style="list-style-type: none"> <li>Restoration measures (drain blockage in both open and overgrown drains, coupled with forestry plantation clearance).</li> <li>Note: Detailed restoration and management plans for each SAC will be developed during 2014-15.</li> </ul>			
2. Additional Raised Bog Selection and Restoration to Fulfil SAC Area Objectives.	Compensatory sites	2014-2020	DAHG (NPWS)
3. Demonstration Project – Rewetting of Cutover Bog to restore the high bog and to evaluate the rewetting of a proportion of the cutover bog.	Clara Bog	2014-2017	DAHG (NPWS)
4. EU LIFE Proposal and Project implementation.	Selected SACs	2014-2020	DAHG (NPWS)
5. Support for other conservation works – making funding available to individuals and organisations to carry out approved restoration works.	Selected Sites	2014-2020	DAHG (NPWS)
6. Mid-cycle Review of the National Raised Bogs SAC Plan.	National	2017	DAHG (NPWS)
7. Preparation of Second National Raised Bogs SAC Plan.	National	2020	DAHG (NPWS)
8. Review of the NHA Network Designation Status (additional NHAs and de-designation of sites of low conservation value).	Current and new NHA Networks	2014	DAHG (NPWS)
9. Preparation of a national Raised Bog NHA Management Plan	<b>New</b> NHA Network	2014-2016	DAHG (NPWS)

Measure	Where	When	Who
and site specific NHA Restoration and Implementation Plans affording protection and restoration measures akin to those in the SAC Network with supporting Code of Practice and Guidance Documents.			
10. Raised Bogs Education and Awareness Programme and engagement and consultation with local communities.	National	2014-2020	DAHG (NPWS)
11. Raised Bogs Monitoring Programme.	National	2014-2020	DAHG (NPWS)
12. Habitats Regulations implementation to prevent damaging activities.	National	Ongoing	DAHG (NPWS)
13. Environmental Impact Assessment Regulations and Environmental Liabilities implementation to prevent damaging activities.	National	Ongoing	DAHG (NPWS)
14. Ensure legislative and policy linkage to other plans and programmes including River Basin Management Plans and Catchment Flood Risk Management Plans.	National	Ongoing	DAHG (NPWS)

The draft plan does not describe the location or extent of works at any of the sites. This level of detail will be included in the site-specific restoration and management plans which will be developed during 2014-15.

## 2.2 BRIEF DESCRIPTION OF THE NATURA 2000 SITES

This section describes the Natura 2000 sites within a 15 km radius of the Raised Bogs SACs. A 15 km buffer zone has been chosen as a best practice precautionary measure, to ensure that all potentially affected Natura 2000 sites are included in the screening process, and is in line with *Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities*

produced by the Department of the Environment, Heritage and Local Government. It is considered that this buffer area is sufficient to bring all of the receptors sensitive to the types of measures proposed in the draft plan into this assessment as per the screening rationale described in Section 2.3.

### **2.2.1 Natura 2000 Sites Potentially Affected by the Plan**

Natura 2000 sites within 15 km of the 53 Raised Bog SAC sites are listed in Appendix A. This list includes the 53 Raised Bog SACs themselves as some of them have features and qualifying interests other than raised bog that could be impacted by implementation of the plan, for example, species such as Red Grouse and Vertigo and some bird species could be adversely affected by some of the measures proposed in the plan.

## **2.3 SCREENING ASSESSMENT**

The Raised Bog SAC Management Plan is directly connected with or necessary to the management of Natura 2000 sites. However it was concluded that Appropriate Assessment of the draft plan should be undertaken alongside Strategic Environmental Assessment (SEA) due to the potential for impacts to other qualifying interests or features, apart from raised bog, either at the Raised Bog SACs themselves or at other Natura 2000 sites in the vicinity.

### **2.3.1 Initial Screening Exercise**

Many of the Natura 2000 sites that are within the 15 km buffer area surrounding the Raised Bog SAC sites can be screened out at this stage of the process because there is no connectivity between the proposed measures and the qualifying interests of the Natura 2000 sites or because it is obvious that the conservation objectives of the site's qualifying interests will not be undermined despite a connection, for example, undertaking an education and awareness campaign at a bog would not undermine the requirements of bird species at an adjoining SPA.

#### **SAC Sites**

SAC sites can be screened out for one or a combination of the following reasons.

- There is no hydrological connection linking an SAC site's qualifying interests to the areas where measures will be implemented.
- Where the qualifying features of the SACs are not susceptible to impacts from the measures due to distance and/or their qualifying interests and/or their very nature.

#### **SPA Sites**

The screening of SPA sites has been informed by the biological assessment of 13 bird species in the Raised Bog Birds Group of BirdWatch Ireland in their Action Plan for Raised Bog Birds (O'Connell, 2011). This group comprises Whooper Swan, Greenland White-fronted Goose, Red Grouse, Hen

Harrier, Merlin, Lapwing, Snipe, Curlew, Common Sandpiper, Redshank, Short-eared Owl, Skylark and Grasshopper Warbler.

Drain blocking will result in better quality raised bog which will assist the conservation objectives of these species. However, people and machinery on the ground blocking drains can cause disturbance if undertaken in the most sensitive season. Also, in relation to removal of forestry a potential impact pathway may be present if a species which uses plantation is a feature species of a SPA site within a certain range. To help determine the range of the potential impact, the Scottish Natural Heritage guidance on SPA connectivity has been used to inform this screening assessment.

Table 2.3 outlines the rationale for screening SPA sites out of the assessment during this initial screening exercise.

**Table 2.3** Initial screening rationale

Species	Ecological Requirement	Potential Effects & Rationale
Whooper Swan, Greenland White-fronted Goose, Hen Harrier and Merlin	Raised bog habitat listed as being part of the ecological requirement for the continued success of this species in Ireland.	Drain blocking will result in better quality raised bog which will assist the conservation objectives of these species. However, people on the ground inserting drains can cause disturbance so the works need to be planned for the right season. Screen <b>in</b> SPAs designated for Whooper Swan, Greenland White-fronted Goose, Hen Harrier and Merlin which occur within 10km of a raised bog SAC or compensation site. Otherwise screen <b>out</b> .
Merlin	Nest predominantly on the edge of plantation woodland, adjacent to moorland.	In relation to forestry removal, screen <b>in</b> SPAs designated for this species within <b>5km</b> of a raised bog SAC or compensation site. Otherwise screen <b>out</b> .
Hen Harrier	Breed in the uplands where they nest on the ground.	In relation to forestry removal, screen <b>in</b> SPAs designated for

Species	Ecological Requirement	Potential Effects & Rationale
	Disperse to lower altitudes in winter when they are more likely to be encountered roosting & feeding on raised bogs.	this species within <b>10km</b> of a raised bog SAC or compensation site. Otherwise screen <b>out</b> .

The table in Appendix A lists the SACs and SPAs within 15 km of the SAC bogs and details why they have been screened in or out during this initial screening based on the rationale described above.

## 2.4 SCREENING CONCLUSION

The first stage of the Habitats Directive Assessment process, screening, was completed in compliance with the relevant European Commission and national guidelines.

The potential impacts associated with the implementation of the plan measures have been considered in the context of the Natura 2000 sites, their Qualifying Interests and conservation objectives.

It is concluded that the proposed plan, as it stands:

- is directly connected to, and necessary for, the management of a Natura 2000 site;
- and
- may have significant effects, alone or in combination with other plans and projects, on the qualifying interests of some of the 53 Raised Bog SACs;
- may have significant effects, alone or in combination with other plans and projects, on the qualifying interests of other SACs and of SPAs;
- a number of Natura 2000 sites have however been screened out of further assessment as there is no connectivity or likely impacts.

Therefore, adopting the precautionary approach, it is concluded that Stage 2 (Appropriate Assessment) must be carried out.



## 3 STAGE 2 - APPROPRIATE ASSESSMENT

### 3.1 INTRODUCTION TO STAGE 2

This stage of the assessment process considers the impacts that the proposed plan will have on the integrity of Natura 2000 sites.

EC guidance (MN2000) states that the integrity of a site involves its ecological functions and the decision as to whether it is adversely affected should focus on, and be limited to, the site's conservation objectives which relate to the qualifying interests of the sites. Qualifying interests and conservation objectives for the Natura 2000 sites are listed in Table 3.1.

This stage of the Appropriate Assessment includes;

- **Impact Prediction** - the potential impacts of a plan or project are identified and their likelihood to impact on the integrity of the Natura 2000 network is assessed.
- **Mitigation Measures** - mitigation measures are identified in relation to the adverse effects that the project or plan is likely to cause.

### 3.2 STEP ONE – IMPACT PREDICTION

A 'source – pathway – receptor' approach has been applied for this assessment:

- The 'source' relates to the measures outlined in the Draft National Raised Bog SAC Management Plan which have the potential to negatively impact Natura 2000 sites i.e. the cessation, restoration and replacement measures.
- The 'receptors' are the Natura 2000 sites that came through the initial screening, including the raised bog SAC sites themselves.
- The 'pathways' by which the measures can impact the Natura 2000 sites include through hydrological pathways and through movement and habitat requirements of species. There are also direct impacts at the raised bog SAC sites themselves.

#### 3.2.1 Likely impacts

The main impacts of the cessation, restoration and replacement measures outlined in the Draft Plan will be positive in that they will ultimately lead towards the achievement of the national conservation objective outlined in the plan of restoring the favourable conservation status of active raised bog in Ireland. They will result in improvements to the overall area, range (distribution), structure (physical components of the bogs) and function (ecological processes taking place in the bogs) of the raised bog network in Ireland and will lead to the restoration of bog to active raised bog.

However, the cessation, restoration and replacement measures outlined in the Draft Plan are likely, over time, to lead to ecological changes that may affect species of flora and fauna, including birds, that use sites in their degraded state. Likely impacts associated with the measures include:

- Increasing water levels due to drain blocking may directly impact on requirements for ling heather (*Calluna vulgaris*) which can have an indirect impact on Red Grouse species as they feed almost exclusively on this plant.
- Changes to hydrology or land use and land management practices due to drain blocking and the cessation of damaging activities may directly impact on the requirements of Devil's-bit Scabious (*Succisa pratensis*). This could have indirect impacts on the Marsh Fritillary butterfly for which this plant is an essential habitat component.
- Changes to hydrology on the Raised Bog SAC sites due to drain blocking can directly impact the micro-habitat structure that supports the *Vertigo* snail. As this snail is barely 2mm in height, even very minor topographical changes and changes in subsurface layers can indirectly impact on this species.
- Increased water levels due to drain blocking, as well as land use changes, can result in change to habitat cover.
- Changes to hydrology or land use and land management practices can result in disturbance and loss of bird habitat (including feeding and breeding grounds) in or adjacent to the Raised Bog SACs. Five of the 53 designated SAC raised bogs are also designated SPAs for birds. These are: All Saints Bog; Ballykenny-Fisherstown Bog; Bellanagare Bog; Garriskil Bog; and Mongan Bog.
- Impacts to water quality could result from drain blocking at the construction phase, including loss of suspended sediments and organic matter to waters which can have indirect impacts on habitats and species - though these impacts are likely to be short term and temporary.
- Deforestation at the construction phase could lead to negative impacts in relation to acidification of local watercourses, increased organic matter loss and changes to the water chemistry which can have indirect impacts on habitats and species.
- Construction phase impacts associated with the use of heavy plant machinery could result in habitat loss and compaction at the micro-habitat level as well as impacts to site hydrology and the interaction between the acrotelm and the catotelm.

Details of some of the main sensitive species which could be affected are given in the below information box.

### Vertigo

The *Vertigo* whorl snails grow to less than 3mm in height, and most are less than 2mm as full adults. There are eight species of *Vertigo* living in Ireland, none are common and some are very rare. Six of the eight *Vertigo* species are considered to be threatened in Ireland, including the three whorl snails that are protected under Annex II of the Habitats and Species Directive, *Vertigo geyeri*, *V. angustior* and *V. moulinsiana* (Byrne *et al.*, 2009). All three are rare, cryptic snails, and are stringent in their requirement of even hydrogeological conditions. The specific requirements and micro-habitats of each species are different but all are sensitive to changes in drainage, grazing management and disturbance. All *Vertigo* species live to approximately 18 months, and so they are essentially annual animals, with the requirement to reproduce each year to replace themselves. All *Vertigo* species are opportunistic breeders, and juveniles can be found at most times of the year, but reproduction is concentrated during particularly humid conditions, in particular in the autumn breeding event of *Vertigo moulinsiana*. More details of the species' life histories can be found in Speight *et al.* (2003).

*Vertigo* species require very stable hydrogeological conditions, but must also have the benefit of slight variation such that in extreme wet years, the snail can move up into drier but still suitable *Vertigo* habitat, and in extreme drought years there is habitat that will remain saturated. Thus there are micro-habitat niches that are sub-optimal during normal conditions, but essential for survival during extreme conditions. Although it seems logical to assume that every site would benefit from being of consistent optimal habitat, in fact some suboptimal habitat (both on the slightly dry and the slightly wet side of optimal) is essential in order to provide refugia to the snail in extreme conditions.

In a micro-habitat structure that supports a snail that is barely 2mm high, minor topographical changes and small changes in subsurface layers and interaction with the groundwater can be substantial.

### Marsh Fritillary

This attractive butterfly is the only Irish insect listed on Annex II. It is a colonial butterfly with most individuals remaining in discrete patches of habitat. The adults have a short flight period in May and June and, as they do not wander far from where they emerged, can easily be overlooked. The best time to survey for the species is in September and October when the caterpillars can be found within silken webs on the leaves of the foodplant. Colonies can occur in a wide variety of habitats including sand dunes, calcareous grassland, fens, bogs and upland heaths and grasslands. The presence of its foodplant Devil's-bit Scabious, *Succisa pratensis* is an essential habitat component and any land use or land management changes need to consider impacts to *Succisa pratensis* and knock-on impacts to Marsh Fritillary.

The Marsh Fritillary is still widespread in Ireland, but knowledge of its precise distribution is hampered by lack of information on the location of occupied sites and little long-term monitoring. The population of the butterfly fluctuates enormously in a cyclical manner. Colonies need a sufficient area of habitat so that the species can survive natural habitat change and the effect of parasites. Individual sites are

thought to exist as part of a network of neighbouring sites that are used periodically as conditions permit. If the habitat patch is large enough, colonies may persist for many years.

### Red Grouse

Globally, grouse populations are represented by 18 recognised species and around 130 subspecies (Watson & Moss, 2008). In Ireland and Britain, the Red Grouse *Lagopus lagopus scoticus* (a subspecies of the Willow Grouse *Lagopus lagopus*) is endemic and it is closely associated with peatland habitats with reasonable heather cover (Lance, 1972, Watson, 1979b). Their range has been affected by many land use changes, particularly in the last 100 years (Allen et al., 2005, Davies, 2005). These changes have caused much fragmentation of grouse habitats and fractured populations that were once extensive over much of Ireland's bogs and heaths (Sharrock, 1976). Given the estimated decline in Red Grouse extent in the Republic of Ireland (Gibbons et al., 1993), it is of concern that important areas of grouse habitat continue to be lost or damaged by activities such as peat extraction, afforestation, drainage, conversion to grassland through blanket burning, overgrazing (particularly by sheep), and development pressures associated with the erection of wind turbines, communications masts and associated infrastructures. The patchiness of much of the remaining grouse habitat in Ireland is unlikely to benefit populations and may lead to lower average densities of grouse (Watson & Moss, 2008).

As our only native species of grouse, the Red Grouse has suffered from a serious decline in range (purported to be as high as 70% in the Republic) in the past 50 years and as a result it was added to the Irish Red List of Birds of Conservation Concern in 1999 (Newton et al., 1999), where it remains (Lynas et al., 2007).

The Red Grouse is associated with specific habitat types, namely heaths, blanket bogs and raised bogs (Cramp & Simmons, 1980). Its diet is almost exclusively ling heather (*Calluna vulgaris*) (Jenkins et al., 1963, Lance & Mahon, 1974, Finnerty et al., 2007) and therefore its distribution is restricted to peatland habitats that have heather. Historically, the Red Grouse was among the most characteristic birds of Ireland's bogs given its unique association with these habitats and heather where it spends its entire life cycle (Watson & O'Hare, 1979). A recent survey of peatland birds in Ireland confirmed this association. Blanket bog (atlantic and montane) was the first choice for Red Grouse with a weaker preference for areas with high densities of heather cover (Bracken et al., 2008). Another recent study in Ireland found no birds on mountain blanket bog sites with less than 25% heather cover (O'Connell, 2008) mirroring previous studies (Lance, 1972). Grouse populations in Ireland occur at lower densities than in Britain, particularly on the more nutrient poor western blanket bogs (Watson & O'Hare, 1973), although national abundance data across regions or habitats has been lacking up to now.

Raised bog, that has not been totally exploited for peat or that is old cutover with regenerating heather, can support good numbers of Red Grouse in suitable areas with highest counts of nine birds recorded in a 1km square in east Galway. However, the majority (98%) of the national population is now confined to blanket bog and heath.

Therefore any activity on Raised Bog sites where red-grouse is currently present that impacts on the conditions requirements for ling heather (*Calluna vulgaris*) will impact directly on the population of Red Grouse on these sites. Such potential impacting activities include raising water levels to or close to the ground.

### **3.2.2 Assessment of impacts**

As the exact locations and extent of the measures is not known at this time, it is not possible to quantify the level of impact at each site or cumulatively. In a case such as this, a precautionary approach must be adopted and therefore it is assumed that each Raised Bog SAC site, including the compensatory sites when they are identified, will be subject to some degree of drain blocking and forest clearance as part of restoration works and it is assumed that the impacts could be significant.

### **3.3 STEP TWO – MITIGATION MEASURES**

For the purposes of this report “mitigation measures” are considered to be *“those measures which aim to minimise, or even cancel, the negative impacts on a site that are likely to arise as a result of the implementation of a plan or project. These measures are an integral part of the specifications of a plan or project”*. (Guidance document on Article 6(4) of the Habitats Directive 92/43/EEC, January 2007).

It is noted that site-level appropriate assessment will be carried out in relation to the site-specific restoration and management plans being developed during 2014-15. At this time, it is recommended that:

1. During the development of the site-specific restoration and management plans, and accompanying site specific AA, the potential for impacts on other habitats and species which are qualifying interests within Natura 2000 sites be further investigated, and, if the need arises, appropriate mitigation be recommended. Tensions may arise between the conservation requirements of individual qualifying interests whereby measures necessary for the conservation of one could adversely impact on the status of another. In such instances, the NPWS will develop a protocol to identify the appropriate response in view of site and national conservation priorities. In addition, the restoration of a bog to active raised bog is likely, over time, to lead to ecological changes that may in turn affect species of flora and fauna that use the site in its degraded state. In the process of restoration these changes will be monitored and the impacts on habitats and species of conservation interest, both at site level and nationally, will be tracked, so that any significant negative long term impacts at site or national level can be addressed by appropriate mitigation measures in view of the site and national conservation priorities.
2. Site-specific AA should be undertaken at the compensatory sites as well as the raised bog SACs;
3. Site-specific AA should be undertaken by a suitably qualified ecologist, supplemented as necessary by additional expertise, using the best scientific evidence and methods;

4. Site-specific AA should identify the nature, extent and significance of likely impacts and recommend detailed site-specific mitigation measures to ensure that impacts to qualifying features and interests of Natura 2000 sites are avoided or minimized to the point that they do not affect the integrity of Natura 2000 sites.

Mitigation measures which should be considered at site-level include:

- Avoid undertaking works at unsuitable times, for example, during bird nesting or breeding season.
- Avoid impacting on other habitat types closely associated with raised bog, for example, Rhynchosporion depressions.
- Take all necessary precautions to avoid impacts associated with the construction phase.
- Establish appropriate buffer zones around existing *Vertigo* populations in order to protect factors on which the site depends including the hydrological and ecological environment. The buffers should be established with reference to hydrological data for the site. In the absence of this data, a minimum 50 metre buffer is recommended or as determined with national experts.
- Establish appropriate buffer zones around turloughs or sink holes to ensure that the works do not impact on surface water that can interact with the hydrogeological regime and groundwater quality.

### **3.4 ASSESSMENT OF IN-COMBINATION EFFECTS WITH OTHER PLANS OR PROJECTS**

Article 6(3) of the Habitats Directive requires that in-combination effects with other plans or projects are considered. The purpose of this review is to take into consideration the policy and legislative framework within which the plan is being developed. It is a key part of the process as it ensures plans or projects are captured that would not trigger a likely significant effect on their own.

Appendix B outlines other plans and projects which are relevant to the National Raised Bog SAC Management Plan and assesses the way the objectives outlined within them impact in isolation, or in combination with each other, on the Natura 2000 network. The review includes county-level, national, and European plans and projects. It does not include more localised plans and projects as the draft plan is itself a strategic national plan and the exact locations and extent of the measures being proposed are not known. When more detailed measures information becomes available in the site-specific restoration and management plans being produced during 2014-15, a more informed assessment of in-combination effects with other plans and projects can be made on a case-by-case basis and any necessary mitigation to ensure that there are no resulting adverse effects can be proposed.

### **3.5 ASSESSMENT TABLES**

Table 3.1 provides an assessment of the likely adverse impacts of the measures outlined in the draft plan on each of the Natura 2000 sites that came through the Stage 1 Screening process. Table 3.1 also proposes mitigation that should be undertaken during the next phase of the process i.e. the development of site-specific restoration and management plans and accompanying appropriate assessments. It does not include the detail of the mitigation that might be proposed in the site-specific plans and appropriate assessments.

Table 3.2 is an overall summary table.

**Table 3.1** Assessment table

Site ID	Site Name	Area (ha)	Conservation Objective: To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:	Distance (km)		Assessment	Mitigation
				Direct	Hydrological		
000566	All Saints Bog and Esker SAC	369.68	<ul style="list-style-type: none"> <li>Active raised bogs</li> <li>Degraded raised bogs still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> <li>Bog woodland</li> <li>Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco Brometalia</i>)(*important orchid sites)</li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions and bog woodland, which are habitats closely associated with raised bog, is unlikely to be affected. Grasslands can be sensitive to changes in land use.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
002341	Ardagullion Bog SAC	117.33	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
002356	Ardgraique Bog SAC	183.54	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
000641	Ballyduff/Clonfinane Bog SAC	269.57	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> <li>Bog woodland</li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions and bog woodland, which are habitats closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
000391	Ballynafagh Bog SAC	156.46	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).



Site ID	Site Name	Area (ha)	Conservation Objective: To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:	Distance (km)		Assessment	Mitigation
				Direct	Hydrological		
001387	Ballynafagh Lake SAC	53.71	<ul style="list-style-type: none"> <li>Alkaline fens</li> <li><i>Euphydryas aurinia</i></li> <li><i>Vertigo moulinsiana</i></li> </ul>	250m	840m	Any alteration to hydrology can impact on the micro-habitat structure that supports the Vertigo snail. Similarly changes to hydrology or land use/land management practice may impact on requirements for Devil's-bit Scabious ( <i>Succisa pratensis</i> ) which is an essential habitat component for the Marsh Fritillary butterfly. The integrity of alkaline fen is unlikely to be affected.	Investigate the impact on qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
002339	Ballynamona Bog and Corkip Lough SAC	244.78	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> <li>Turloughs</li> <li>Bog woodland</li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions and bog woodland, which are habitats closely associated with raised bog, is unlikely to be affected. Turloughs may be affected if there is a hydrological connection.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
000231	Barroughter Bog SAC	174.02	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
000592	Bellangare Bog SAC	1,207.60	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> <li><i>Euphydryas aurinia</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected. Changes to hydrology or land use/land management practice may impact on requirements for Devil's-bit Scabious ( <i>Succisa pratensis</i> ) which is an essential habitat component for the Marsh Fritillary	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).

Site ID	Site Name	Area (ha)	Conservation Objective: To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:	Distance (km)		Assessment	Mitigation
				Direct	Hydrological		
						butterfly.	
002346	Browne Bog SAC	76.68	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
000595	Callow Bog SAC	617.92	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> <li><i>Euphydryas aurinia</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected. Changes to hydrology or land use/land management practice may impact on requirements for Devil's-bit Scabious ( <i>Succisa pratensis</i> ) which is an essential habitat component for the Marsh Fritillary butterfly.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
002347	Camderry Bog SAC	280.72	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
002336	Carn Park Bog SAC	247.89	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog.	None required.
000597	Carrowbehy/Caher Bog SAC	343.83	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> <li><i>Euphydryas aurinia</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions which is closely associated with raised bog, is unlikely to be affected. Changes to hydrology or land use/land	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).

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				Direct	Hydrological		
						management practice may impact on requirements for Devil's-bit Scabious ( <i>Succisa pratensis</i> ) which is an essential habitat component for the Marsh Fritillary butterfly.	
001242	Carrownagappul Bog SAC	487.43	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
001625	Castlesampson Esker SAC	218.35	<ul style="list-style-type: none"> <li>Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco Brometalia</i>)(*important orchid sites)</li> <li>Turloughs</li> </ul>	1.5km	1.74km	Turloughs may be affected of there is a hydrological connection. Grasslands can be sensitive to changes in land use.	Investigate the impact on qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
000572	Clara Bog SAC	836.54	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Bog woodland</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> <li>Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco Brometalia</i>)(*important orchid sites)</li> <li><i>Euphydryas aurinia</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, and bog woodland, which are habitats closely associated with raised bog, is unlikely to be affected. Changes to hydrology or land use/land management practice may impact on requirements for Devil's-bit Scabious ( <i>Succisa pratensis</i> ) which is an essential habitat component for the Marsh Fritillary butterfly. Grasslands can be sensitive to changes in land use.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
000600	Cloonchambers Bog SAC	348.21	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> <li><i>Euphydryas aurinia</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected. Changes	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).

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				Direct	Hydrological		
						to hydrology or land use/land management practice may impact on requirements for Devil's-bit Scabious ( <i>Succisa pratensis</i> ) which is an essential habitat component for the Marsh Fritillary butterfly.	
002348	Clooneen Bog SAC	215.03	<ul style="list-style-type: none"> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> <li>Bog woodland</li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of bog woodland, which are habitats closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
000248	Cloonmoylan Bog SAC	554.43	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> <li>Bog woodland</li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions and bog woodland, which are habitats closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
000614	Cloonshanville Bog SAC	225.77	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Bog woodland</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions and bog woodland, which are habitats closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
002332	Coolraine Bog SAC	145.96	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
002349	Corbo Bog SAC	206.76	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific

Site ID	Site Name	Area (ha)	Conservation Objective: To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:	Distance (km)		Assessment	Mitigation
				Direct	Hydrological		
						integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected.	restoration and management plans (see mitigation measure no.1 in Section 3.3).
002110	Corliskea/Trien/Cloonfeiv Bog SAC	722.92	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Bog woodland</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions and bog woodland, which are habitats closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
002337	Crosswood Bog SAC	206.61	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog.	None required.
002350	Curraglehanagh Bog SAC	278.23	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
000604	Derrinea Bog SAC	86.19	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
002338	Drumalough Bog SAC	278.89	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
000575	Ferbane Bog SAC	153.08	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions,	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see

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				Direct	Hydrological		
						which is closely associated with raised bog, is unlikely to be affected.	mitigation measure no.1 in Section 3.3).
000497	Flughany Bog SAC	231.09	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the Rhynchosporion</li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
000679	Garriskil Bog SAC	324.81	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the Rhynchosporion</li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
000647	Kilcarren-Firville Bog SAC	676.67	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the Rhynchosporion</li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
000006	Killyconny Bog (Cloghbally) SAC	191.23	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog.	None required.
000285	Kilsallagh Bog SAC	279.73	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the Rhynchosporion</li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
002333	Knockacoller Bog SAC	130.40	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the Rhynchosporion</li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).

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				Direct	Hydrological		
000296	Lisnageeragh Bog and Ballinastack Turlough SAC	455.50	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> <li>Turloughs</li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected. Turloughs may be affected if there is a hydrological connection.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
000297	Lough Corrib SAC	25,233.82	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp</li> <li>Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>)</li> <li>Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in British Isles</li> <li>Alkaline fens</li> <li>Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i></li> <li>Limestone pavements</li> <li>Bog woodland</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> <li><i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinia caeruleae</i>)</li> <li>Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco Brometalia</i>)(*important orchid sites)</li> <li>Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation</li> <li>Petrifying springs with tufa formation (<i>Cratoneurion</i>)</li> <li><i>Petromyzon marinus</i></li> <li><i>Salmo salar</i></li> <li><i>Lampetra planeri</i></li> <li><i>Austropotamobius pallipes</i></li> <li><i>Margaritifera margaritifera</i></li> <li><i>Rhinolophus hipposideros</i></li> <li><i>Lutra lutra</i></li> <li><i>Drepanocladus vernicosus</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of the following habitats is unlikely to be affected: alkaline fens and calcareous fens (no dependency on raised bogs); <i>Rhynchosporion</i> depressions and bog woodland (closely associated with raised bog). Limestone pavements, oak woods, meadows, grasslands, petrifying springs could be affected by changes to site hydrology. Oligotrophic and oligo-mesotrophics waters, as well as freshwater species, could be affected by changes to site hydrology and water quality. Otter habitat and requirements are unlikely to be affected. Grasslands can be sensitive to changes in land use.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).

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				Direct	Hydrological		
			<ul style="list-style-type: none"> <li><i>Najas flexilis</i></li> </ul>				
001818	Lough Forbes Complex SAC	1,333.89	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Natural eutrophic lakes with Magnopotamion or Hydrocharition-type vegetation</li> <li>Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>)</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected. Changes to hydrology and water quality could impact lakes and alluvial forests at the site.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
000301	Lough Lurteen Bog/Glenamaddy Turlough SAC	1,162.12	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Turloughs</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected. Turloughs may be affected if there is hydrological connectivity.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
000440	Lough Ree SAC	14,354.08	<ul style="list-style-type: none"> <li>Degraded raised bog still capable of natural regeneration</li> <li>Natural eutrophic lakes with Magnopotamion or Hydrocharition-type vegetation</li> <li>Alkaline fens</li> <li>Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in British Isles</li> <li>Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco Brometalia</i>)(*important orchid sites)</li> <li>Bog woodland</li> <li>Limestone pavements</li> <li><i>Lutra lutra</i></li> </ul>	0	0	Active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, bog woodland, which are habitats closely associated with raised bog, is unlikely to be affected. Alkaline fens are unlikely to be affected. Turloughs and limestone pavements may be affected if there is a hydrological connection. Oak woods and lakes may be affected by changes to hydrology. Otter habitat and requirements are unlikely to be affected. Grasslands can be sensitive to changes in land use.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
002165	Lower River Shannon SAC	68,300.01	<ul style="list-style-type: none"> <li>Estuaries</li> <li>Mudflats and sandflats not covered by seawater at low tide</li> <li>Coastal lagoons</li> </ul>	300m	1.8	Many of these habitat types could potentially be affected by changes to site hydrology, water quality or land use.	Investigate the impact on qualifying habitats and species at the site during the development of site-specific



Site ID	Site Name	Area (ha)	Conservation Objective: To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:	Distance (km)		Assessment	Mitigation
				Direct	Hydrological		
			<ul style="list-style-type: none"> <li>• Vegetated sea cliffs of the Atlantic and Baltic coasts</li> <li>• Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>)</li> <li>• Mediterranean salt meadows (<i>Juncetalia maritimi</i>)</li> <li>• Large shallow inlets and bays</li> <li>• Perennial vegetation of stony banks</li> <li>• Sandbanks which are slightly covered by sea water all the time</li> <li>• Reefs</li> <li>• Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinia caerulea</i>)</li> <li>• Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>)</li> <li>• <i>Salicornia</i> and other annuals colonizing mud and sand</li> <li>• Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation</li> <li>• <i>Lampetra fluviatilis</i></li> <li>• <i>Lampetra planeri</i></li> <li>• <i>Petromyzon marinus</i></li> <li>• <i>Salmo salar</i></li> <li>• <i>Margaritifera margaritifera</i></li> <li>• <i>Tursiops truncatus</i></li> <li>• <i>Lutra lutra</i></li> </ul>			Freshwater species could be affected by changes to site hydrology and water quality. Otter habitat and requirements are unlikely to be affected.	restoration and management plans (see mitigation measure no.1 in Section 3.3).
002351	Moanveanlagh Bog SAC	214.73	<ul style="list-style-type: none"> <li>• Active raised bog</li> <li>• Degraded raised bog still capable of natural regeneration</li> <li>• Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
002340	Moneybeg and Clareisland Bogs SAC	364.29	<ul style="list-style-type: none"> <li>• Active raised bog</li> <li>• Degraded raised bog still capable of natural regeneration</li> <li>• Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
000580	Mongan Bog SAC	207.83	<ul style="list-style-type: none"> <li>• Active raised bog</li> <li>• Degraded raised bog still capable of natural regeneration</li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the	Investigate the impact on other qualifying habitats and species at the site during

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			<ul style="list-style-type: none"> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>			area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected.	the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
002352	Monivea Bog SAC	286.68	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
002331	Mouds Bog SAC	591.20.	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
002342	Mount Hevey Bog SAC	483.79	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
000581	Moyclare Bog SAC	129.86	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
001776	Pilgrim's Road Esker SAC	69.73	<ul style="list-style-type: none"> <li>Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco Brometalia</i>)(*important orchid sites)</li> </ul>	0	0	Grasslands can be sensitive to changes in land use.	Investigate the impact on qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
000582	Raheenmore Bog SAC	210.01	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the	Investigate the impact on other qualifying habitats and species at the site during

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			<ul style="list-style-type: none"> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>			area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected.	the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
002353	Redwood Bog SAC	555.04	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
002298	River Moy SAC	15,386.63	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Old sessile oak woods with Ilex and Blechnum in British Isles</li> <li>Alkaline fens</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> <li>Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>); <i>Salmo salar</i>; <i>Petromyzon marinus</i>;</li> <li><i>Lampetra planeri</i>; <i>Austropotamobius pallipes</i>; <i>Lutra lutra</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely related to raised bog, is unlikely to be affected. Changes to site hydrology, water quality and land use could affect other habitats at the site as well as freshwater species.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
000326	Shankhill West Bog SAC	136.37	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
000585	Sharavogue Bog SAC	223.43	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
000382	Sheheree (Ardagh) Bog SAC	17.08	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog.	None required
002354	Tullaghanrock Bog SAC	103.93	<ul style="list-style-type: none"> <li>Active raised bog</li> </ul>	0	0	The area of active raised bog should	Investigate the impact on other qualifying

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			<ul style="list-style-type: none"> <li>Degraded raised bog still capable of natural regeneration</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>			increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions, which is closely associated with raised bog, is unlikely to be affected.	habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
002343	Tullaheer Lough and Bog SAC	469.18	<ul style="list-style-type: none"> <li>Active raised bog</li> <li>Degraded raised bog still capable of natural regeneration</li> <li>Transition mires and quaking bogs</li> <li>Depressions on peat substrates of the <i>Rhynchosporion</i></li> </ul>	0	0	The area of active raised bog should increase with a related decrease in the area of degraded raised bog. The integrity of <i>Rhynchosporion</i> depressions and transitions mires and quaking bogs, which are habitats associated with raised bog, is unlikely to be affected.	Investigate the impact on other qualifying habitats and species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
004097	River Suck Callows SPA	3,182.03	<ul style="list-style-type: none"> <li>Whooper Swan (<i>Cygnus cygnus</i>)</li> <li>Wigeon (<i>Anas penelope</i>)</li> <li>Golden Plover (<i>Pluvialis apricaria</i>)</li> <li>Lapwing (<i>Vanellus vanellus</i>)</li> <li>Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>)</li> <li>Wetlands &amp; Waterbirds</li> </ul>	0	170m	Greenland White-fronted Goose, Hooper Swan and Lapwing have a raised bog habitat requirement and are within range.	Investigate the impact on qualifying species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
004045	Glen Lough SPA	82.10	<ul style="list-style-type: none"> <li>Whooper Swan (<i>Cygnus cygnus</i>)</li> </ul>	5.7km	11.3km	Whooper Swan has a raised bog habitat requirement and is within range.	Investigate the impact on qualifying species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
004139	Lough Croan Turlough SPA	151.33	<ul style="list-style-type: none"> <li>Shoveler (<i>Anas clypeata</i>)</li> <li>Golden Plover (<i>Pluvialis apricaria</i>)</li> <li>Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>)</li> <li>Wetlands &amp; Waterbirds</li> </ul>	5.5km	No hydrological connection	Greenland White-fronted Goose has a raised bog habitat requirement and is within range.	Investigate the impact on qualifying species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
004140	Four Roads Turlough SPA	99.64	<ul style="list-style-type: none"> <li>Golden Plover (<i>Pluvialis apricaria</i>)</li> <li>Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>)</li> <li>Wetlands &amp; Waterbirds</li> </ul>	5.5km	No hydrological connection	Greenland White-fronted Goose has a raised bog habitat requirement and is within range.	Investigate the impact on qualifying species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
004160	Slieve Bloom Mountains SPA	21,770.72	<ul style="list-style-type: none"> <li>Hen Harrier (<i>Circus cyaneus</i>)</li> </ul>	1.7km	2.8km	Hen Harrier has a raised bog habitat requirement and is within range.	Investigate the impact on qualifying species at the site during the

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							development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
004043	Lough Derravaragh SPA	1,130.58	<ul style="list-style-type: none"> <li>Whooper Swan (<i>Cygnus cygnus</i>)</li> <li>Pochard (<i>Aythya ferina</i>)</li> <li>Tufted Duck (<i>Aythya fuligula</i>)</li> <li>Coot (<i>Fulica atra</i>)</li> <li>Wetlands &amp; Waterbirds</li> </ul>	1.7km	2.4km	Whooper Swan has a raised bog habitat requirement and is within range. Changes to the hydrology of the SAC raised bogs would impact on its habitat within the SPA.	Investigate the impact on qualifying species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
004098	Owenduff/Nephin Complex SPA	25,703.81	<ul style="list-style-type: none"> <li>Merlin (<i>Falco columbarius</i>)</li> <li>Golden Plover (<i>Pluvialis apricaria</i>)</li> <li>Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>)</li> </ul>	1.4km	2.7km	Greenland White-fronted Goose and Merlin have a raised bog habitat requirement and are within range.	Investigate the impact on qualifying species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
004228	Lough Conn and Lough Cullin SPA	6,460.34	<ul style="list-style-type: none"> <li>Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>)</li> <li>Tufted Duck (<i>Aythya fuligula</i>)</li> <li>Common Gull (<i>Larus canus</i>)</li> <li>Common Scoter (<i>Melanitta nigra</i>)</li> <li>Wetlands &amp; Waterbirds</li> </ul>	0	0	Greenland White-fronted Goose has a raised bog habitat requirement and is within range.	Investigate the impact on qualifying species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
004077	River Shannon and River Fergus Estuaries SPA	32,260.39	<ul style="list-style-type: none"> <li>Cormorant (<i>Phalacrocorax carbo</i>)</li> <li>Whooper Swan (<i>Cygnus cygnus</i>)</li> <li>Light-bellied Brent Goose (<i>Branta bernicla hrota</i>)</li> <li>Shelduck (<i>Tadorna tadorna</i>)</li> <li>Wigeon (<i>Anas penelope</i>)</li> <li>Teal (<i>Anas crecca</i>)</li> <li>Pintail (<i>Anas acuta</i>)</li> <li>Shoveler (<i>Anas clypeata</i>)</li> <li>Scaup (<i>Aythya marila</i>)</li> <li>Ringed Plover (<i>Charadrius hiaticula</i>)</li> <li>Golden Plover (<i>Pluvialis apricaria</i>)</li> <li>Grey Plover (<i>Pluvialis squatarola</i>)</li> <li>Lapwing (<i>Vanellus vanellus</i>)</li> <li>Knot (<i>Calidris canutus</i>)</li> <li>Dunlin (<i>Calidris alpina</i>)</li> <li>Black-tailed Godwit (<i>Limosa limosa</i>)</li> <li>Bar-tailed Godwit (<i>Limosa lapponica</i>)</li> </ul>	0	0	Several species have a raised bog habitat requirement (Whooper Swan, Lapwing, Redshank, Curlew) and are within range.	Investigate the impact on qualifying species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).

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			<ul style="list-style-type: none"> <li>• Curlew (<i>Numenius arquata</i>)</li> <li>• Redshank (<i>Tringa totanus</i>)</li> <li>• Greenshank (<i>Tringa nebularia</i>)</li> <li>• Black-headed Gull (<i>Chroicocephalus ridibundus</i>)</li> <li>• Wetlands &amp; Waterbirds</li> </ul>				
004031	Inner Galway Bay SPA	13,269.22	<ul style="list-style-type: none"> <li>• Great Northern Diver (<i>Gavia immer</i>)</li> <li>• Cormorant (<i>Phalacrocorax carbo</i>)</li> <li>• Grey Heron (<i>Ardea cinerea</i>)</li> <li>• Light-bellied Brent Goose (<i>Branta bernicla hrota</i>)</li> <li>• Wigeon (<i>Anas penelope</i>)</li> <li>• Teal (<i>Anas crecca</i>)</li> <li>• Shoveler (<i>Anas clypeata</i>)</li> <li>• Red-breasted Merganser (<i>Mergus serrator</i>)</li> <li>• Ringed Plover (<i>Charadrius hiaticula</i>)</li> <li>• Golden Plover (<i>Pluvialis apricaria</i>)</li> <li>• Lapwing (<i>Vanellus vanellus</i>)</li> <li>• Dunlin (<i>Calidris alpina</i>)</li> <li>• Bar-tailed Godwit (<i>Limosa lapponica</i>)</li> <li>• Curlew (<i>Numenius arquata</i>)</li> <li>• Redshank (<i>Tringa totanus</i>)</li> <li>• Turnstone (<i>Arenaria interpres</i>)</li> <li>• Black-headed Gull (<i>Chroicocephalus ridibundus</i>)</li> <li>• Common Gull (<i>Larus canus</i>)</li> <li>• Sandwich Tern (<i>Sterna sandvicensis</i>)</li> <li>• Common Tern (<i>Sterna hirundo</i>)</li> <li>• Wetlands &amp; Waterbirds</li> </ul>	0	0	Several species have a raised habitat bog requirement (Lapwing, Redshank, Curlew) and are within range.	Investigate the impact on qualifying species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
004036	Killala Bay/Moy Estuary SPA	3,203.39	<ul style="list-style-type: none"> <li>• Ringed Plover (<i>Charadrius hiaticula</i>)</li> <li>• Golden Plover (<i>Pluvialis apricaria</i>)</li> <li>• Grey Plover (<i>Pluvialis squatarola</i>)</li> <li>• Sanderling (<i>Calidris alba</i>)</li> <li>• Dunlin (<i>Calidris alpina</i>)</li> <li>• Bar-tailed Godwit (<i>Limosa lapponica</i>)</li> <li>• Curlew (<i>Numenius arquata</i>)</li> <li>• Redshank (<i>Tringa totanus</i>)</li> <li>• Wetlands &amp; Waterbirds</li> </ul>	0	0	Several species have a raised habitat bog requirement (Redshank, Curlew) and are within range.	Investigate the impact on qualifying species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).

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004103	All Saints Bog SPA	322.78	<ul style="list-style-type: none"> <li>Greenland White-fronted Goose</li> </ul>	0	0	Species has a raised bog habitat requirement and is within range.	Investigate the impact on qualifying species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
004101	Ballykenny-Fisherstown Bog SPA	1,353.15	<ul style="list-style-type: none"> <li>Greenland White-fronted Goose</li> </ul>	0	0	Species has a raised habitat bog requirement and is within range. Changes to the hydrology of the SAC raised bogs would impact on its habitat within the SPA.	Investigate the impact on qualifying species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
004105	Bellanagare Bog SPA	1234.32	<ul style="list-style-type: none"> <li>Greenland White-fronted Goose</li> </ul>	0	0	Species has a raised bog habitat requirement and is within range. Changes to the hydrology of the SAC raised bogs would impact on its habitat within the SPA.	Investigate the impact on qualifying species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
004137	Dovegrove Callows SPA	124.56	<ul style="list-style-type: none"> <li>Greenland White-fronted Goose</li> </ul>	3km	No hydrological connections	Species has a raised bog habitat requirement and is within range.	Investigate the impact on qualifying species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
004102	Garriskil Bog SPA	324.10	<ul style="list-style-type: none"> <li>Greenland White-fronted Goose</li> </ul>	0	0	Species has a raised bog habitat requirement and is within range. Changes to the hydrology of the SAC raised bogs would impact on its habitat within the SPA.	Investigate the impact on qualifying species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
004042	Lough Corrib SPA	18,642.51	<ul style="list-style-type: none"> <li>Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>)</li> <li>Gadwall (<i>Anas strepera</i>)</li> <li>Shoveler (<i>Anas clypeata</i>)</li> <li>Pochard (<i>Aythya ferina</i>)</li> <li>Tufted Duck (<i>Aythya fuligula</i>)</li> <li>Common Scoter (<i>Melanitta nigra</i>)</li> <li>Hen Harrier (<i>Circus cyaneus</i>)</li> <li>Coot (<i>Fulica atra</i>)</li> <li>Golden Plover (<i>Pluvialis apricaria</i>)</li> <li>Black-headed Gull (<i>Chroicocephalus ridibundus</i>)</li> </ul>	0	0	Greenland White-fronted Goose and Hen Harrier have a raised habitat bog requirement and are within range. There is no hydrological connection to the wetland area.	Investigate the impact on qualifying species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).

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			<ul style="list-style-type: none"> <li>Common Gull (<i>Larus canus</i>)</li> <li>Common Tern (<i>Sterna hirundo</i>)</li> <li>Arctic Tern (<i>Sterna paradisaea</i>)</li> <li>Wetlands</li> </ul>				
004048	Lough Gara SPA	1,688.55	<ul style="list-style-type: none"> <li>Whooper Swan (<i>Cygnus cygnus</i>)</li> <li>Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>)</li> </ul>	0	0	Species have a raised bog habitat requirement and are well within range. Changes to the hydrology of the SAC raised bogs may impact on their habitat within the SPA.	Investigate the impact on qualifying species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
004046	Lough Iron SPA	933.75	<ul style="list-style-type: none"> <li>Whooper Swan (<i>Cygnus cygnus</i>)</li> <li>Wigeon (<i>Anas penelope</i>)</li> <li>Teal (<i>Anas crecca</i>)</li> <li>Shoveler (<i>Anas clypeata</i>)</li> <li>Coot (<i>Fulica atra</i>)</li> <li>Golden Plover (<i>Pluvialis apricaria</i>)</li> <li>Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>)</li> <li>Wetlands &amp; Waterbirds</li> </ul>	5km	3.7km	Whooper Swan and Greenland White-fronted Goose have a raised bog habitat requirement and are within range. Changes to the hydrology of the SAC raised bogs may impact on their habitat within the SPA.	Investigate the impact on qualifying species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
004064	Lough Ree SPA	12,353.32	<ul style="list-style-type: none"> <li>Whooper Swan (<i>Cygnus cygnus</i>)</li> <li>Wigeon (<i>Anas penelope</i>)</li> <li>Teal (<i>Anas crecca</i>)</li> <li>Mallard (<i>Anas platyrhynchos</i>)</li> <li>Shoveler (<i>Anas clypeata</i>)</li> <li>Tufted Duck (<i>Aythya fuligula</i>)</li> <li>Common Scoter (<i>Melanitta nigra</i>)</li> <li>Goldeneye (<i>Bucephala clangula</i>)</li> <li>Little Grebe (<i>Tachybaptus ruficollis</i>)</li> <li>Coot (<i>Fulica atra</i>)</li> <li>Golden Plover (<i>Pluvialis apricaria</i>)</li> <li>Lapwing (<i>Vanellus vanellus</i>)</li> <li>Common Tern (<i>Sterna hirundo</i>)</li> <li>Wetland</li> </ul>	0	0	Whooper Swan and Lapwing have a raised bog habitat requirement and are well within range.	Investigate the impact on qualifying species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
004168	Slieve Aughty Mountains SPA	59,461.37	<ul style="list-style-type: none"> <li>Hen Harrier (<i>Circus cyaneus</i>)</li> <li>Merlin (<i>Falco columbarius</i>)</li> </ul>	0	0	Hen Harrier and Merlin have a raised bog habitat requirement and are within range. Changes to the hydrology of the SAC raised bogs would impact on its	Investigate the impact on qualifying species at the site during the development of site-specific restoration and management plans (see mitigation



Site ID	Site Name	Area (ha)	Conservation Objective: To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:	Distance (km)		Assessment	Mitigation
				Direct	Hydrological		
						habitat within the SPA.	measure no.1 in Section 3.3).
004086	River Little Brosna Callows SPA	1,100.44	<ul style="list-style-type: none"> <li>Whooper Swan (<i>Cygnus cygnus</i>)</li> <li>Wigeon (<i>Anas penelope</i>)</li> <li>Teal (<i>Anas crecca</i>)</li> <li>Pintail (<i>Anas acuta</i>)</li> <li>Shoveler (<i>Anas clypeata</i>)</li> <li>Golden Plover (<i>Pluvialis apricaria</i>)</li> <li>Lapwing (<i>Vanellus vanellus</i>)</li> <li>Black-tailed Godwit (<i>Limosa limosa</i>)</li> <li>Black-headed Gull (<i>Chroicocephalus ridibundus</i>)</li> <li>Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>)</li> <li>Wetlands &amp; Waterbirds</li> </ul>	0	0	Whooper Swan, Greenland White-fronted Goose and Lapwing have a raised bog habitat requirement and are within range. Changes to the hydrology of the SAC raised bogs may impact on their habitat within the SPA.	Investigate the impact on qualifying species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
004017	Mongan Bog SPA	129.38	<ul style="list-style-type: none"> <li>Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>)</li> </ul>	0	0	Greenland White-fronted Goose has a raised bog habitat requirement and is within range.	Investigate the impact on qualifying species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
004096	Middle Shannon Callows SPA	5,758.51	<ul style="list-style-type: none"> <li>Whooper Swan (<i>Cygnus cygnus</i>)</li> <li>Wigeon (<i>Anas penelope</i>)</li> <li>Corncrake (<i>Crex crex</i>)</li> <li>Golden Plover (<i>Pluvialis apricaria</i>)</li> <li>Lapwing (<i>Vanellus vanellus</i>)</li> <li>Black-tailed Godwit (<i>Limosa limosa</i>)</li> <li>Black-headed Gull (<i>Chroicocephalus ridibundus</i>)</li> <li>Wetlands &amp; Waterbirds</li> </ul>	0	0	Whooper Swan and Lapwing have a raised bog habitat requirement and are within range.	Investigate the impact on qualifying species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).
004038	Killarney National Park SPA		<ul style="list-style-type: none"> <li>Merlin (<i>Falco columbarius</i>)</li> <li>Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>)</li> </ul>	400m		Merlin and Greenland White-fronted Geese have a raised bog habitat requirement and are within range.	Investigate the impact on qualifying species at the site during the development of site-specific restoration and management plans (see mitigation measure no.1 in Section 3.3).

**Table 3.2** Summary of Potential Impacts of the Plan on Natura 2000 Sites

Site Name	Direct Impacts (short/long term)	Indirect (short/long term)	Resource Requirements	Emissions	Construction, Operation, Decommissioning	Cumulative
53 Raised Bog SAC sites	Potential effects on other qualifying interests		N	N	Loss and disturbance of habitat	Potential for cumulative effects
All Saints Bog SPA	Potential effects on birds with requirements for raised bog habitat		N	N	N	Potential for cumulative effects
Ballykenny-Fisherstown Bog SPA	Potential effects on birds with requirements for raised bog habitat		N	N	N	Potential for cumulative effects
Ballynafagh Lake SAC	N	Potential effects on sensitive species	N	N	N	Potential for cumulative effects
Bellanagare Bog SPA	Potential effects on birds with requirements for raised bog habitat		N	N	N	Potential for cumulative effects
Castlesampson Esker SAC	N	Potential effects on sensitive habitats	N	N	N	Potential for cumulative effects
Dovegrove Callows SPA	N	Potential effects on birds with requirements for raised bog habitat	N	N	N	Potential for cumulative effects

Site Name	Direct Impacts (short/long term)	Indirect (short/long term)	Resource Requirements	Emissions	Construction, Operation, Decommissioning	Cumulative
Lough Corrib SPA	N	Potential effects on birds with requirements for raised bog habitat	N	N	N	Potential for cumulative effects
Lough Derravaragh SPA	N	Potential effects on birds with requirements for raised bog habitat	N	N	N	Potential for cumulative effects
Lough Gara SPA	N	Potential effects on birds with requirements for raised bog habitat	N	N	N	Potential for cumulative effects
Lough Iron SPA	N	Potential effects on birds with requirements for raised bog habitat	N	N	N	Potential for cumulative effects
Lough Ree SPA	N	Potential effects on birds with requirements for raised bog habitat	N	N	N	Potential for cumulative effects

Site Name	Direct Impacts (short/long term)	Indirect (short/long term)	Resource Requirements	Emissions	Construction, Operation, Decommissioning	Cumulative
Mongan Bog SPA	Potential effects on birds with requirements for raised bog habitat		N	N	N	Potential for cumulative effects
Middle Shannon Callows SPA	N	Potential effects on birds with requirements for raised bog habitat	N	N	N	Potential for cumulative effects
Killarney National Park SPA	N	Potential effects on birds with requirements for raised bog habitat	N	N	N	Potential for cumulative effects
Pilgrim's Road Esker SAC	N	Potential effects on sensitive habitats	N	N	N	Potential for cumulative effects
River Little Brosna Callows SPA	N	Potential effects on birds with requirements for raised bog habitat	N	N	N	Potential for cumulative effects
River Suck Callows SPA	N	Potential effects on birds with requirements for raised bog habitat	N	N	N	Potential for cumulative effects

Site Name	Direct Impacts (short/long term)	Indirect (short/long term)	Resource Requirements	Emissions	Construction, Operation, Decommissioning	Cumulative
Glen Lough SPA	N	Potential effects on birds with requirements for raised bog habitat	N	N	N	Potential for cumulative effects
Lough Croan Turlough SPA	N	Potential effects on birds with requirements for raised bog habitat	N	N	N	Potential for cumulative effects
Four Roads Turlough SPA	N	Potential effects on birds with requirements for raised bog habitat	N	N	N	Potential for cumulative effects
Slieve Bloom Mountains SPA	N	Potential effects on birds with requirements for raised bog habitat	N	N	N	Potential for cumulative effects
Lough Derravaragh SPA	N	Potential effects on birds with requirements for raised bog habitat	N	N	N	Potential for cumulative effects

Site Name	Direct Impacts (short/long term)	Indirect (short/long term)	Resource Requirements	Emissions	Construction, Operation, Decommissioning	Cumulative
Owenduff/Nephin Complex SPA	N	Potential effects on birds with requirements for raised bog habitat	N	N	N	Potential for cumulative effects
Lough Conn and Lough Cullin SPA	N	Potential effects on birds with requirements for raised bog habitat	N	N	N	Potential for cumulative effects
River Shannon and River Fergus Estuaries SPA	N	Potential effects on birds with requirements for raised bog habitat	N	N	N	Potential for cumulative effects
Inner Galway Bay SPA	N	Potential effects on birds with requirements for raised bog habitat	N	N	N	Potential for cumulative effects
Killala Bay/Moy Estuary SPA	N	Potential effects on birds with requirements for raised bog habitat	N	N	N	Potential for cumulative effects

Site Name	Direct Impacts (short/long term)	Indirect (short/long term)	Resource Requirements	Emissions	Construction, Operation, Decommissioning	Cumulative
River Little Brosna Callows SPA	N	Potential effects on birds with requirements for raised bog habitat	N	N	N	Potential for cumulative effects
Slieve Aughty Mountains SPA	N	Potential effects on birds with requirements for raised bog habitat	N	N	N	Potential for cumulative effects
Lower River Shannon SAC	N	Potential effects on sensitive habitats and species	N	N	N	Potential for cumulative effects
Garriskil Bog SPA	Potential effects on birds with requirements for raised bog habitat		N	N	N	Potential for cumulative effects

## **4 APPROPRIATE ASSESSMENT CONCLUSION**

### **4.1 INTEGRATION OF APPROPRIATE ASSESSMENT AND THE PLAN**

Appropriate Assessment of the Draft Raised Bog SAC Management Plan has been incorporated into the plan-making process and has informed the Plan at all stages with changes being made as necessary to minimise potential for impacts to Natura 2000 sites as well as to maximize potential positive effects. Initial reviews of the proposed high-level programme of conservation measures within the plan indicated that there is a risk of adverse effects on the integrity of Natura 2000 sites unless appropriate mitigation is applied. The approach to mitigation within this Natura Impact Statement clearly indicates that the measures will be subject to individual site-specific Appropriate Assessment during 2014-15 in relation to site-specific restoration and management plans, and in full compliance with Article 6(3) and (4) of the Habitats Directive, to ensure that the measures undertaken will not have an adverse effect on the integrity of a Natura 2000 site.

### **4.2 CONCLUSION AND STATEMENT**

The likely impacts to the integrity of the Natura 2000 network that could arise from the conservation measures proposed in the Draft Plan have been examined. The Draft Plan has fully integrated the findings of the AA throughout. The implementation of the measures in the Draft Plan will not have any significant adverse effects upon the integrity of any Natura 2000 site within or adjacent to the Raised Bog SACs provided the mitigation identified during the site-level Appropriate Assessments being carried out during 2014-15 is implemented.

The full process from Stage 1 to Stage 4 of the AA will continue to be relevant and to be applied during the six year planning cycle. It is the responsibility of National Parks and Wildlife Service (NPWS) in implementing the Plan to consider the findings of this AA and to ensure that the implementation of the Plan will not have a significant adverse impact on Natura 2000 sites.



## REFERENCES

Council Directive 2001/42/EC on the assessment of the affects of certain plans and programmes on the environment

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

Council Directive 2009/147/EC on the conservation of wild birds

DEHLG (2009) Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities.

EC (2000) Managing Natura 2000 sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC

SNH (2012) Guidance for Assessing Connectivity with Special Protection Areas (SPAs). Scottish, Natural Heritage, Inverness.

O'Connell, P. (2011) Action Plan for Raised Bog Birds in Ireland 2011-2020. BirdWatch Ireland's Group Action Plans for Irish Birds. BirdWatch Ireland, Kilcoole, Co. Wicklow

# **APPENDIX A**

## **Initial Screening Exercise**

## Initial Screening Table

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
All Saints Bog and Esker SAC	000566	All Saints Bog and Esker SAC	In	Precautionary
	000216	River Shannon Callows SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000919	Ridge Road, SW of Rapemills SAC	Out	Upstream of bog with no hydrological connection.
	002353	Redwood Bog SAC	Out	4km d/s with no hydrological connection.
	004058	Lough Derg (Shannon) SPA	Out	14km u/s. No species with a requirement for raised bog habitat.
	004086	River Little Brosna Callows SPA	In	Within range of Whooper Swan and Greenland White-fronted Goose.
	004096	Middle Shannon Callows SPA	In	5km d/s, within range of Whooper Swan.
	004097	River Suck Callows SPA	Out	14km u/s, outside of range of Whooper Swan.
	004103	All Saints Bog SPA	In	Within range of Greenland White-fronted Goose
	004137	Dovegrove Callows SPA	In	Within range of Greenland White-fronted Goose
	000641	Ballyduff/Clonfinane Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002236	Island Fen SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000647	Kilcarren-Firville Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
	002147	Lisduff Fen SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	001683	Liskeenan Fen SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002241	Lough Derg, North-East Shore SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000581	Moyclare Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000585	Sharavogue Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Ardagullion Bog SAC	002341	Ardagullion Bog SAC	In	Precautionary
	004043	Lough Derravaragh SPA	In	10km distant, within range of Whooper Swan.
	004045	Glen Lough SPA	In	8km distant, within range of Whooper Swan.
	004046	Lough Iron SPA	Out	11km distant, outside of range of Whooper Swan and Greenland White-fronted Goose
	004047	Lough Owl SPA	Out	14km distant. No species with a requirement for raised bog habitat.
	000688	Lough Owl SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
	004061	Lough Kinale and Derragh Lough SPA	Out	7.6km distant. No species with a requirement for raised bog habitat.
	004065	Lough Sheelin SPA	Out	11 km distant. No species with a requirement for raised bog habitat.
	004102	Garriskil Bog SPA	In	7 km distant, within range of Greenland White-fronted Goose
	000679	Garriskil Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002340	Moneybeg and Clareisland Bog SAC	Out	11 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Ardgraique Bog SAC	002356	Ardgraique Bog SAC	In	Precautionary
	000216	River Shannon Callows SAC	Out	6km d/s. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000231	Barroughter Bog SAC	Out	10km from Ardgraique Bog site with >25km hydrological connection.
	000248	Cloonmoylan Bog SAC	Out	13km distant with no hydrological connection.
	000319	Pollnaknockaun Wood Nature Reserve SAC	Out	14.5 km distant with no hydrological connection.
	000647	Kilcareren-Firville Bog SAC	Out	No hydrological connection.
	001313	Rosturra Wood SAC	Out	13 km distant with no hydrological connection.
	002213	Glenloughaun Esker SAC	Out	13 km distant with no hydrological connection.
	002241	Lough Derg, North-East Shore SAC	Out	10km distant with >25km hydrological connection.

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
	002353	Redgewood Bog SAC	Out	No hydrological connection
	004058	Lough Derg (Shannon) SPA	Out	9 km distant. No species with a requirement for raised bog habitat.
	004086	River Little Brosna Callows SPA	In	7 km distant, within range of Whooper Swan and Greenland White-fronted Goose
	004096	Middle Shannon Callows SPA	In	6 km distant, within range of Whooper Swan
	004097	River Suck Callows SPA	Out	12 km distant, outside range of Whooper Swan
	004168	Slieve Aughty Mountains SPA	Out	14 km distant, outside range of Merlin and Hen Harrier
Ballyduff/Clonfinane Bog SAC	000641	Ballyduff/Clonfinane Bog SAC	In	Precautionary
	000585	Sharavogue Bog SAC	Out	4.7 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000647	Kilcarren-Firville Bog SAC	Out	2 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	001683	Liskeenan Fen SAC	Out	4.5 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	004058	Lough Derg (Shannon) SPA	Out	8 km distant. No species with a requirement for raised bog habitat.
	004086	River Little Brosna Callows SPA	In	4.5 km distant, within range of Whooper Swan and Greenland White-fronted Goose
	004103	All Saints Bog SPA	In	6 km distant, outside range of Merlin, within range of Greenland White-fronted Goose
	004137	Dovegrove Callows SPA	In	4.7 km distant, within range of Greenland White-fronted Goose

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
	000566	All Saints Bog and Esker SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002236	Island Fen SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002147	Lisduff Fen SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002241	Lough Derg, North-East Shore SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	004096	Middle Shannon Callows SPA	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002353	Redwood Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000919	Ridge Road, SW of Rapemills SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000216	River Shannon Callows SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
Ballynafagh Bog SAC	000391	Ballynafagh Bog SAC	In	Precautionary
	001387	Ballynafagh Lake SAC	In	Qualifying features may be affected.
	000925	The Long Derries, Edenderry SAC	Out	13.5 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002331	Mouds Bog SAC	Out	7.5 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000396	Pollardstown Fen SAC	Out	10.5 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Ballynamona Bog and Corrkip Lough SAC	002339	Ballynamona Bog and Corrkip Lough SAC	In	Precautionary
	001625	Castlesampson Esker SAC	In	Due to being in the immediate proximity, qualifying features may be affected.
	004017	Mongan Bog SPA	Out	14 km distant, outside range of Greenland White-fronted Goose
	004064	Lough Ree SPA	In	6 km distant, within range of Whooper Swan and Greenland White-fronted Goose
	004096	Middle Shannon Callows SPA	In	8.3 km distant, within range of Greenland White-fronted Goose, Whooper Swan and Hen Harrier
	004097	River Suck Callows SPA	In	7.2 km, within range of Whooper Swan
	004139	Lough Croan Turlough SPA	In	6 km distant, within range of Greenland White-fronted Goose
	004140	Four Roads Turlough SPA	Out	10.5 km distant, outside range of Greenland White-fronted Goose



SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
	000611	Lough Funshinagh SAC	Out	6 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002214	Killeglan Grassland SAC	Out	5.5 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002337	Crosswood Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	001637	Four Roads Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000609	Lisduff Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000610	Lough Croan Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000440	Lough Ree SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000580	Mongan Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
	001776	Pilgrim's Road Esker SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000216	River Shannon Callows SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Barroughter Bog SAC	000231	Barroughter Bog SAC	In	Precautionary
	000248	Cloonmoylan Bog SAC	Out	Located upstream with no hydrological connection.
	000261	Derrycrag Wood Nature Reserve SAC	Out	4.7 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000319	Pollnacknockaun wood Nature Reserve SAC	Out	3.6 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	001313	Rosturra Wood SAC	Out	1.8 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002241	Lough Derg, North-East Shore SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	004058	Lough Derg (Shannon) SPA	Out	No species with a requirement for raised bog habitat
	004096	Middle Shannon Callows SPA	In	6 km distant, within range of Whooper Swan
	004168	Slieve Aughty Mountains SPA	In	Within range of Hen Harrier and Merlin
	002356	Ardgraique Bog SAC	Out	Given the characteristics of the proposed conservation

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
				works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000647	Kilcarren-Firville Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000308	Loughatorick South Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000216	River Shannon Callows SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Bellanagare Bog SAC	000592	Bellanagare Bog SAC	In	Precautionary
	000614	Cloonshanville Bog SAC	Out	3 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	004048	Lough Gara SPA	In	7 km distant, within range of Greenland White-fronted Goose and Whooper Swan
	004105	Bellanagare Bog SPA	In	Within range of Greenland White-fronted Goose
	002354	Tullaghanrock Bog SAC	Out	8.7 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000595	Callow Bog SAC	Out	6.5 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
	000597	Carrowbehy/Caher Bog SAC	Out	10.8 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002338	Drumalough Bog SAC	Out	6.2 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002110	Corliskea/Trien/Cloonfelliv Bog SAC	Out	9 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000612	Mullygollan Turlough SAC	Out	9.2 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000607	Errit Lough SAC	Out	13.8 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000604	Derrinea Bog SAC	Out	14km km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000600	Cloonchambers Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Brown Bog SAC	002346	Brown Bog SAC	In	Precautionary
	001818	Lough Forbes Complex SAC	Out	No hydrological connection.
	002348	Clooneen Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
				adverse impacts on the conservation interest of the site are foreseen
	004101	Ballykenny-Fisherstown Bog SPA	In	Within range of Merlin and Whooper Swan
	000448	Fortwilliam Turlough SAC	Out	14 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	004064	Lough Ree SPA	Out	10.8 km distant, outside range of Whooper Swan
Callow Bog SAC	000595	Callow Bog SAC	In	Precautionary
	002354	Tullaghanrock Bog SAC	In	Due to being in the immediate proximity, qualifying features may be affected.
	004048	Lough Gara SPA	In	Within range of Greenland White-fronted Goose and Whooper Swan
	004105	Bellanagare Bog SPA	In	Within range of Whooper Swan
	000592	Bellanagare Bog SAC	Out	6.6 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000614	Cloonshanville Bog SAC	Out	6.5 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002298	River Moy SAC	Out	9.2 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002338	Drumalough Bog SAC	Out	12.5 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
	001899	Cloonakillina Lough SAC	Out	11 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000497	Flughany Bog SAC	Out	9 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	001656	Bricklieve Mountains and Keishcorran SAC	Out	14 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000600	Cloonchambers Bog SAC	Out	14 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000597	Carrowbehy/Caher Bog SAC	Out	14 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	001571	Urlaur Lakes SAC	Out	14.8 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000604	Derrinea Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000492	Doocastle Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
Camderry Bog SAC	002347	Camderry Bog SAC	In	Precautionary
	000301	Lough Lurgeen Bog/Glenamaddy Turlough SAC	Out	1.8 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002350	Curraglehanagh Bog SAC	Out	2 km distant with no hydrological connection.
	004097	River Suck Callows SPA	In	8.2 km distant, within range of Whooper Swan
	004140	Four Roads Turlough SPA	Out	13 km distant, outside range of Greenland White-fronted Goose
	001637	Four Roads Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002110	Corliskea/Trien/Cloonfelliv Bog SAC	Out	14.7 km distant with no hydrological connection.
	000285	Kilsallagh Bog SAC	Out	8 km distant with no hydrological connection.
	000295	Lisnageeragh Bog and Ballinastack Turlough SAC	Out	8.9 km distant with no hydrological connection.
	000297	Lough Corrib SAC	Out	10.5 km distant with no hydrological connection.
	000326	Shankill West Bog SAC	Out	6.3 km distant with no hydrological connection.
	001242	Carrownagappul Bog SAC	Out	5.5 km distant with no hydrological connection.
	000588	Ballinturly Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000609	Lisduff Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
Carn Park Bog SAC	002336	Carn Park Bog SAC	In	Precautionary
	000440	Lough Ree SAC	Out	4.1 km distant with no hydrological connection.
	002337	Crosswood Bog SAC	Out	1.4 km distant with no hydrological connection.
	004017	Mongan Bog SPA	Out	12.3km, outside range of Greenland White-fronted Goose and Whooper Swan
	004064	Lough Ree SPA	In	4.1km distant, within range of Greenland White-fronted Goose and Whooper Swan
	004096	Middle Shannon Callows SPA	In	6.4km distant, within range of Greenland White-fronted Goose and Whooper Swan
	000572	Clara Bog SAC	Out	14.5 km distant with no hydrological connection.
	000575	Ferbane Bog SAC	Out	14.3 km distant with no hydrological connection.
	002313	Ballymore Fen SAC	Out	13.4 km distant with no hydrological connection.
	001625	Castlesampson Esker SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000576	Fin Lough (Offaly) SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000580	Mongan Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	001776	Pilgrim's Road Esker SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
000216	River Shannon Callows SAC	Out	Given the characteristics of the proposed conservation	



SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
				works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Carrowbehy/Caher Bog SAC	000597	Carrowbehy/Caher Bog SAC	In	Precautionary
	000600	Cloonchambers Bog SAC	Out	3 km from bog site with no hydrological connection
	000604	Derrinea Bog SAC	Out	3.4 km from bog site with no hydrological connection
	000607	Errit Lough SAC	Out	1.2 km from bog site with no hydrological connection
	001571	Urlaur Lakes SAC	Out	4.9 km from bog site with no hydrological connection
	002338	Drumalough Bog SAC	Out	600 m from bog site with no hydrological connection
	004105	Bellanagare Bog SPA	Out	11.3 km distant, outside range of Greenland White-fronted Goose
	000592	Bellangare Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000595	Callow Bog SAC	Out	14.3 km from bog site with no hydrological connection
	002354	Tullaghanrock Bog SAC	Out	14.1 km from bog site with no hydrological connection
	002110	Corliskea/Trien/Cloonfelliv Bog SAC	Out	8.5 km from bog site with no hydrological connection
	002296	Williamstown Turlough SAC	Out	12 km from bog site with no hydrological connection
	000255	Croaghill Turlough SAC	Out	10.2 km from bog site with no hydrological connection
	002298	River Moy SAC	Out	7.6 km from bog site with no hydrological connection
	000218	Coolcam Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
000297	Lough Corrib SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the	

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
				site are foreseen
Carrownapappul Bog SAC	001242	Carrownagappul Bog SAC	In	Precautionary
	000326	Shankill West Bog SAC	Out	2.3 km from bog site with no hydrological connection
	002350	Curraghlehannagh Bog SAC	Out	1.2 km from bog site with no hydrological connection
	004097	River Suck Callows SPA	In	9.8 km distant, within range of Whooper Swan
	004140	Four Roads Turlough SPA	Out	4.5 km from bog site with no hydrological connection
	001637	Four Roads Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002347	Camderry Bog SAC	Out	5.4 km from bog site with no hydrological connection
	000301	Lough Lurleen Bog/Glenamaddy Turlough SAC	Out	5.8 km from bog site with no hydrological connection
	000285	Killsallagh Bog SAC	Out	14.5 km from bog site with no hydrological connection
	000297	Lough Corrib SAC	Out	11.5 km from bog site with no hydrological connection
	000295	Levally Lough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
000296	Lisnageeragh Bog and Ballinastack Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen	
Clara Bog SAC	000572	Clara Bog SAC	In	Precautionary
	000571	Charleville Wood SAC	Out	5.9 km from bog site with no hydrological connection
	000575	Ferbane Bog SAC	Out	11.5 km from bog site with no hydrological connection
	001831	Split Hills and Long Hill Esker SAC	Out	9.7 km from bog site with no hydrological connection

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
	002336	Carn Park Bog SAC	Out	14.8 km from bog site with no hydrological connection
Cloonchambers Bog SAC	000600	Cloonchambers Bog SAC SAC	In	Precautionary
	000597	Carrowbehy/Caher Bog SAC	Out	2.9 km from bog site with no hydrological connection
	002110	Corliskea/Trien/Cloonfelliv Bog SAC	Out	3.32 km from bog site with no hydrological connection
	002338	Drumalough Bog SAC	Out	1 km from bog site with no hydrological connection
	004105	Bellanagare Bog SPA	In	6.5 km distant, distant, within range of Greenland White-fronted Goose
	000592	Bellanagare Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000595	Callow Bog SAC	Out	14.2 km from bog site with no hydrological connection
	000614	Cloonshanville Bog SAC	Out	14.9 km from bog site with no hydrological connection
	000612	Mullygollan Turlough SAC	Out	14.6 km from bog site with no hydrological connection
	000301	Lough Lurgeen Bog/Glenamaddy Turlough SAC	Out	14.5 km from bog site with no hydrological connection
	000297	Lough Corrib SAC	Out	11.9 km from bog site with no hydrological connection
	002298	River Moy SAC	Out	12.4 km from bog site with no hydrological connection
	001571	Urlaur Lakes SAC	Out	10.6 km from bog site with no hydrological connection
	000604	Derrinea Bog SAC	Out	9.4 km from bog site with no hydrological connection
	000607	Errit Lough SAC	Out	7.2 km from bog site with no hydrological connection
	000285	Kilsallagh Bog SAC	Out	11.8 km from bog site with no hydrological connection
	000218	Coolcam Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
	000255	Croaghill Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000296	Lisnageeragh Bog and Ballinastack Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002354	Tullaghanrock Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002296	Williamstown Turloughs SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Clooneen Bog SAC	002348	Clooneen Bog SAC	In	Precautionary
	001818	Lough Forbes Complex SAC	In	Qualifying features may be affected.
	004064	Lough Ree SPA	Out	14.7 km distant, outside range of Greenland White-fronted Goose and Whooper Swan
	004101	Ballykenny-Fisherstown Bog SPA	In	Within range of Greenland White-fronted Goose
	002346	Brown Bog SAC	Out	6.6 km from bog site with no hydrological connection
	001626	Annaghmore Lough (Roscommon) SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000440	Lough Ree SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
Cloonmoylan Bog SAC	000248	Cloonmoylan Bog SAC	In	Precautionary
	000231	Barroughter Bog SAC	In	Due to close proximity, qualifying features may be affected.
	000261	Derrycrag Wood Nature Reserve SAC	Out	1.3 km from bog site with no hydrological connection
	000319	Pollnaknockaun Wood Nature Reserve SAC	Out	1.2 km from bog site with no hydrological connection
	001313	Rosturra Wood SAC	Out	160 m from bog site with no hydrological connection
	002241	Lough Derg, North-East Shore SAC	Out	1.5 km from bog site with no hydrological connection
	004058	Lough Derg (Shannon) SPA	Out	650m, distant, no species with a raised bog requirement
	004096	Middle Shannon Callows SPA	In	7.8 km distant, within range of Greenland White-fronted Goose and Whooper Swan and Hen Harrier
	004168	Slieve Aughty Mountains SPA	In	Within range of Hen Harrier and Merlin
	002356	Ardgraique Bog SAC	Out	12.4 km from bog site with no hydrological connection
	002126	Pollagoona Bog SAC	Out	12.1 km from bog site with no hydrological connection
	000308	Loughatorick South Bog SAC	Out	7.7 km from bog site with no hydrological connection
	000647	Kilcarren-Firville Bog SAC	Out	13 km from bog site with no hydrological connection
	000216	River Shannon Callows SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Cloonshanville Bog SAC	000614	Cloonshanville Bog SAC	In	Precautionary
	000592	Bellangare Bog SAC	Out	2.9 km from bog site. No hydrological connection
	004048	Lough Gara SPA	In	4.3 km distant, within range of Greenland White-fronted Goose and Whooper Swan
	004105	Bellanagare Bog SPA	In	2.3 km distant, within range of Greenland White-fronted Goose

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
	000600	Cloonchambers Bog SAC	Out	14.6 km from bog site. No hydrological connection.
	002338	Drumalough Bog SAC	Out	14 km from bog site. No hydrological connection.
	000612	Mullygollan Turlough SAC	Out	11.6 km from bog site. No hydrological connection.
	000595	Callow Bog SAC	Out	6.2 km from bog site. No hydrological connection.
	002354	Tullaghanrock Bog SAC	Out	8.5 km from bog site. No hydrological connection.
Coolrain Bog SAC	002332	Coolrain Bog SAC	In	Precautionary
	002162	River Barrow and River Nore SAC	Out	1.5 km distant with no hydrological connection
	002333	Knockacoller Bog SAC	In	Within range of Hen Harrier
	004160	Slieve Bloom Mountains SPA	In	Within range of Hen Harrier
	000412	Slieve Bloom Mountains SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	004233	River Nore SPA	Out	No species with a requirement for raised bog habitat
Corbo Bog SAC	002349	Corbo Bog SAC	In	Precautionary
	000440	Lough Ree SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	004064	Lough Ree SPA	In	Within range of Greenland White-fronted Goose and Whooper Swan
	0040997	River Suck Callows SPA	Out	14km distant, outside range of Whooper Swan
	004101	Ballykenny-Fisherstown SPA	In	Within range of Greenland Merlin and Whooper Swan
	001818	Lough Forbes Complex SAC	Out	13 km distant no hydrological link between two sites.
	001626	Annaghmore Lough (Roscommon) SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
				site are foreseen
	000588	Ballinturly Turlough SAC	Out	11.6 km distant no hydrological link between two sites.
	000448	Fortwilliam Turlough SAC	Out	7.6 km distant no hydrological link between two sites.
Corliskea/Trien/Cloonfelliv Bog SAC	002110	Corliskea/Trien/Cloonfelliv Bog SAC	In	Precautionary
	000285	Kilsallagh Bog SAC	Out	4.8 km distant with no direct hydrological connection.
	000600	Cloonchambers Bog SAC	Out	3.3 km distant with no direct hydrological connection.
	004105	Bellanagare Bog SPA	In	9 km distant, within range of Greenland White-fronted Goose
	000592	Bellangare Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002347	Camderry Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000597	Carrowbehy/Caher Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000218	Coolcam Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000255	Croaghill Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002338	Drumalough Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
				adverse impacts on the conservation interest of the site are foreseen
	000607	Errit Lough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000296	Lisnageeragh Bog and Ballinastack Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000297	Lough Corrib SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000301	Lough Lurgeen Bog/Glenamaddy Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000612	Mullygollan Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002296	Williamstown Turloughs SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Crosswood Bog SAC	002337	Crosswood Bog SAC	In	Precautionary
	000216	River Shannon Callows SAC	Out	2.8 km distant. Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000440	Lough Ree SAC	Out	3.5 km distant with no direct hydrological connection.



SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
	002336	Carn Park Bog SAC	Out	1.4 km distant with no direct hydrological connection.
	000580	Mongan Bog SAC	Out	9.5 km distant with no direct hydrological connection.
	004017	Mongan Bog SPA	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	004064	Lough Ree SPA	In	Within range of Greenland White-fronted Goose
	004096	Middle Shannon Callows SPA	In	Within range of Whooper Swan
	002339	Ballynamona Bog and Corkip Lough SAC	Out	13 km distant with no direct hydrological connection.
	001625	Castlesampson Esker SAC	Out	14.6 km distant with no direct hydrological connection.
	000581	Moyclare Bog SAC	Out	14.5 km distant with no direct hydrological connection.
	000575	Ferbane Bog SAC	Out	12.9 km distant with no direct hydrological connection.
	000576	Fin Lough SAC	Out	11 km distant with no direct hydrological connection.
	001776	Pilgrim's Road Esker SAC	Out	8.7 km distant with no direct hydrological connection.
Curraglehanagh Bog SAC	002350	Curraglehanagh Bog SAC	In	Precautionary
	000301	Lough Lurgeen Bog/Glenamaddy Turlough SAC	Out	2.2 km distant with no direct hydrological connection.
	000326	Shankill West Bog SAC	Out	2.9 km distant with no direct hydrological connection.
	001242	Carrownagappul Bog SAC	Out	1.5 km distant with no direct hydrological connection.
	002347	Camderry Bog SAC	Out	2 km distant with no direct hydrological connection.
	004097	River Suck callows SPA	Out	10.5 km distant, outside range of Whooper Swan
	004140	Four Roads Turlough SPA	Out	14.7 km distant, outside range of Greenland White-fronted Goose
	001637	Four Roads Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
				site are foreseen
	000297	Lough Corrib SAC	Out	10.3 km distant with no direct hydrological connection.
	000285	Kilsallagh Bog SAC	Out	10.5 km distant with no direct hydrological connection.
	000295	Lisnageeragh Bog and Ballinastack Turlough SAC	Out	6.8 km distant with no direct hydrological connection.
	000295	Levally Lough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Derrinea Bog SAC	000604	Derrinea Bog SAC SAC	In	Precautionary
	000597	Carrowbehy/Caher Bog SAC	Out	3.5 km distant with no direct hydrological connection.
	000607	Errit Lough SAC	Out	Upstream with no direct hydrological connection.
	001571	Urlaur Lakes SAC	Out	7 km distant with no direct hydrological connection.
	002338	Drumalough Bog SAC	Out	5.1 km distant with no direct hydrological connection.
	004048	Lough Gara SPA	Out	14.7 km distant, outside range of Greenland White-fronted Goose and Whooper Swan
	004105	Bellanagare Bog SPA	Out	14 km distant, within range of Greenland White-fronted Goose
	000592	Bellanagare Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002298	River Moy SAC	Out	8 km distant with no direct hydrological connection.
	000595	Callow Bog SAC	Out	12 km distant with no direct hydrological connection.
	002354	Tullaghanrock Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
Drumalough Bog SAC	002338	Drumalough Bog SAC	In	Precautionary
	000597	Carrowbehy/Caher Bog SAC	Out	1 km distant with no direct hydrological connection.
	000600	Cloonchambers Bog SAC	Out	1 km distant with no direct hydrological connection.
	000607	Derrinea Bog SAC	Out	5.1 km distant with no direct hydrological connection.
	002338	Errit Lough SAC	Out	No direct hydrological connection.
	004048	Lough Gara SPA	Out	14.3 km distant, outside range of Greenland White-fronted Goose and Whooper Swan
	004105	Bellanagare Bog SPA	In	6.3 km distant, within range of Greenland White-fronted Goose
	000592	Bellanagare Bog SAC	Out	6.3 km distant with no direct hydrological connection.
	000614	Cloonshanville Bog SAC	Out	14 km distant with no direct hydrological connection.
	002298	River Moy SAC	Out	10 km distant with no direct hydrological connection.
	001571	Urlaur Lakes SAC	Out	6.5 km distant with no direct hydrological connection.
	002110	Corliskea/Trien/Cloonfolliv Bog SAC	Out	6 km distant with no direct hydrological connection.
	000595	Callow Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000218	Coolcam Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000255	Croaghill Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
000285	Kilsallagh Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential	

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
				adverse impacts on the conservation interest of the site are foreseen
	000297	Lough Corrib SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002354	Tullaghanrock Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002296	Williamstown Turloughs SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Ferbane Bog SAC	000575	Ferbane Bog SAC	In	Precautionary
	000581	Moyclare Bog SAC	Out	2 km distant with no direct hydrological connection.
	004017	Mongan Bog SPA	In	7.9 km distant, within range of Greenland White-fronted Goose
	004096	Middle Shannon Callows SPA	In	8.3 km distant, within range of Greenland White-fronted Goose and Whooper Swan
	004097	River Suck Callows SPA	In	Within range of Whooper Swan
	002337	Crosswood Bog SAC	Out	12 km distant with no direct hydrological connection.
	002336	Carn Park Bog SAC	Out	14.1 km distant with no direct hydrological connection.
	000572	Clara Bog SAC	Out	11.7 km distant with no direct hydrological connection.
	001776	Pilgrim's Road Esker SAC	Out	7.1 km distant with no direct hydrological connection.
	000576	Fin Lough SAC	Out	7.2 km distant with no direct hydrological connection.
	000580	Mongan Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
				site are foreseen
	000216	River Shannon Callows SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Flughany Bog SAC	000497	Flughany Bog SAC	In	Precautionary
	000492	Dooastle Turlough SAC	Out	2.3 km distant with no direct hydrological connection.
	001899	Cloonakillina Lough SAC	Out	315 m distant with no direct hydrological connection.
	002298	River Moy SAC	Out	1.6 km distant with no direct hydrological connection.
	004048	Lough Gara SPA	In	8.6 km distant, within range of Greenland White-fronted Goose and Whooper Swan
	001656	Brickliw mts. And Keishcorran SAC	Out	9.1 km distant with no direct hydrological connection.
	000637	Turloughmore Bog SAC	Out	8 km distant with no direct hydrological connection.
	000636	Templehouse and Cloonaleigha SAC	Out	6.3 km distant with no direct hydrological connection.
	000595	Callow Bog SAC	Out	9.7 km distant with no direct hydrological connection.
	002354	Tullaghanrock Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Garriskil Bog SAC	000679	Garriskil Bog SAC	In	Precautionary
	000688	Lough Owel SAC	Out	4.5 km distant with no direct hydrological connection.
	004043	Lough Derravaragh SPA	In	Within range of Greenland White-fronted Goose and Whooper Swan
	004045	Glen Lough SPA	Out	6 km from Garriskil bog with no hydrological link between the two sites.
	004046	Lough Iron SPA	In	Within range of Greenland White-fronted Goose and Whooper Swan

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
	004047	Lough Owel SPA	Out	4.5 km distant, no species with a requirement for raised bog habitat.within range of Greenland White-fronted Goose
	004061	Lough Kinale and Derragh Lough SPA	Out	11.6 km distant. No species with requirements for raised bog
	004065	Lough Sheelin SPA	Out	14.5 km distant. No species with requirements for raised bog
	004102	Garriskil Bog SPA	In	Within range of Merlin
	002340	Moneybed and Clarelsland SAC	Out	14 km distant with no direct hydrological connection.
	002356	Ardagullion Bog SAC	Out	7 km distant with no direct hydrological connection.
	000692	Scragh Bog SAC	Out	8.4 km distant with no direct hydrological connection.
	002121	Lough Lene SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	001810	White Lough, Ben Loughs and Lough Doo SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Kilcarren-Firville Bog SAC	000647	Kilcarren-Firville Bog SAC	In	Precautionary
	000216	River Shannon Callows SAC	Out	4.7 km distant with no direct hydrological connection.
	000641	Ballyduff/Clonfinane Bog SAC	Out	2 km distant with no direct hydrological connection.
	001683	Liskeenan Fen SAC	Out	1.9 km distant with no direct hydrological connection.
	002241	Lough Derg, North-Est Shore SAC	Out	1.6 km distant with no direct hydrological connection.
	004058	Lough Derg (Shannon) SPA	Out	2 km distant, no species with a raised bog requirement
	004086	River Little Brosna Callows SPA	In	6.5 km distant, within range of Greenland White-fronted Goose and Whooper Swan

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
	004096	Middle Shannon Callows SPA	In	4.7 distant, within range of Greenland White-fronted Goose and Whooper Swan Hen Harrier
	004103	All Saints Bog SPA	In	8.7 km distant, within range of Greenland White-fronted Goose and Merlin
	000566	All Saints Bog and Esker SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	004137	Dovegrove Callows SPA	In	9 km distant, within range of Greenland White-fronted Goose
	004168	Slieve Aughty Mountains SPA	Out	15.5 km distant, outside range of Hen Harrier and Merlin
	000248	Cloonmoylan Bog SAC	Out	13 km distant with no direct hydrological connection.
	002356	Ardgraique Bog SAC	Out	13 km distant with no direct hydrological connection.
	002353	Redwood Bog SAC	Out	6.9 km distant with no direct hydrological connection.
	000585	Sharavogue Bog SAC	Out	8.2 km distant with no direct hydrological connection.
	000231	Barroughter Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002147	Lisduff Fen SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000919	Ridge Road, SW of Rapemills SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	001313	Rosturra Wood SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
				adverse impacts on the conservation interest of the site are foreseen
Killyconny Bog (Cloghbally) SAC	000006	Killyconny Bog (Cloghbally) SAC	In	Precautionary
	002299	River Boyne and River Blackwater SAC	Out	2.5 km distant with no direct hydrological connection.
	004232	River Boyne and River Blackwater SPA	Out	5km d/s. No species requiring raised bog habitat.
Kilsallagh Bog SAC	000285	Kilsallagh Bog SAC	In	Precautionary
	000295	Lisnageeragh Bog and Ballinastack Turlough SAC	Out	1.4 km distant with no direct hydrological connection.
	000301	Lough Lurgen Bog/Glenamaddy Turlough SAC	Out	4.5 km distant with no direct hydrological connection.
	002110	Corliskea/Trien/Cloonfelliv Bog SAC	Out	4.6 km distant with no direct hydrological connection.
	004097	River Suck Callows SPA	Out	13 km distant, outside range of Whooper Swan
	002347	Camderry Bog SAC	Out	84.5 km distant with no direct hydrological connection.
	001242	Carrownagappul Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000600	Cloonchambers Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000218	Coolcam Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
000255	Croaghill Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen	



SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
	002350	Curraglehanagh Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002338	Drumalough Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000297	Lough Corrib SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000326	Shankill West Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002296	Williamstown Turloughs SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Knockacoller Bog SAC	002333	Knockacoller Bog SAC	In	Precautionary
	002162	River Barrow and River Nore SAC	In	Qualifying features may be affected.
	002332	Coolrain Bog SAC	Out	No direct hydrological connection between two sites.
	004160	Slieve Bloom Mountains SPA	In	Within range of Hen Harrier
	000412	Slieve Bloom Mountains SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	004233	River Nore SPA	Out	No species with a requirement for raised bog habitat
Lisnageeragh Bog and	000296	Lisnageeragh Bog and Ballinastack	In	Precautionary

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
Ballinastack Turlough SAC		Turlough SAC		
	000285	Kilsallagh Bog SAC	Out	1.3 km distant with no direct hydrological connection.
	000301	Lough Lurgeen Bog/Glenamaddy Turlough SAC	Out	350 m distant with no direct hydrological connection.
	004097	River Suck Callows SPA	Out	12 km distant, outside range of Whooper Swan
	000600	Cloonchambers Bog SAC	Out	14.5 km from site but no hydrological connection
	002296	Williamstown Turlough SAC	Out	6.8 km from site but no hydrological connection
	000255	Croghill Turlough SAC	Out	7 km from site but no hydrological connection
	000297	Lough Corrib SAC	Out	6 km from site but no hydrological connection
	002347	Camderry Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	001242	Carrownagappul Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000218	Coolcam Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
002110	Corliskea/Trien/Cloonfelliv Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen	
002350	Curraglehanagh Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen	

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
	000295	Levally Lough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000326	Shankill West Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Lough Corrib SAC	000297	Lough Corrib SAC	In	Precautionary
	004042	Lough Corrib SPA	In	Qualifying features may be affected - Greenland White-fronted Goose and Hen Harrier.
	004031	Inner Galway Bay SPA	In	6.6 km distant, within range of Lapwing, Redshank and Curlew
	004142	Cregganna Marsh SPA	Out	11.6 km distant, outside range of Greenland White-fronted Goose
	000268	Galway Bay Complex SAC	Out	6.6 km from site but no hydrological connection
	001271	Gortnandarragh Limestone Pavement SAC	Out	11.6 km from site but no hydrological connection
	001312	Ross Lake and Woods SAC	Out	10 km distant with no direct hydrological connection.
	002034	Connemara Bog Complex SAC	Out	13.2 km distant with no direct hydrological connection.
Lough Forbes Complex SAC	001818	Lough Forbes Complex SAC	In	Precautionary
	002346	Brown Bog SAC	Out	No direct hydrological connection.
	002348	Clooneen Bog SAC	In	Due to being in immediate proximity, qualifying features may be affected.
	004064	Lough Ree SPA	In	8.9 km distant, within range of Greenland White-fronted Goose
	004101	Ballykenny-Fisherstown Bog SPA	In	Qualifying features may be affected – Greenland White-fronted Goose.

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
	002349	Corbo Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000448	Fortwilliam Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000440	Lough Ree SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Lough Lurgeen Bog/Glenamaddy Turlough SAC	000301	Lough Lurgeen Bog/Glenamaddy Turlough SAC	In	Precautionary
	000285	Kilsallagh Bog SAC	Out	4.5 km from site but no hydrological connection
	000296	Lisnageeragh Bog and Ballinastack Turlough SAC	Out	350 m from site but no hydrological connection
	000297	Lough Corrib SAC	Out	3.7 km from site but no hydrological connection
	002347	Camderry Bog SAC	Out	1.8 km distant with no direct hydrological connection.
	002350	Curraglehanagh Bog SAC	Out	2.1 km from site but no hydrological connection
	004097	River Suck Callows SPA	Out	12.5 km distant, within range of Whooper Swan
	001242	Carrownagappul Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000218	Coolcam Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
002110	Corliskea/Trien/Cloonfelliv Bog SAC	Out	Given the characteristics of the proposed conservation	

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
				works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000255	Croaghill Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000295	Levally Lough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000326	Shankill West Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002296	Williamstown Turloughs SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Lough Ree SAC	000440	Lough Ree SAC	In	Precautionary
	000448	Fortwilliam Turlough SAC	Out	4.3 km from site but no hydrological connection
	002349	Corbo Bog SAC	Out	2.5 km from site but no hydrological connection
	004064	Lough Ree SPA	In	Qualifying features may be affected – Whooper Swan and lapwing
	004097	River Suck Callows SPA	In	9.4 km distant, within range of Greenland White-fronted Goose and Whooper Swan
	004139	Lough Croan Turlough SPA	Out	13 km distant, outside range of Greenland White-fronted Goose and Whooper Swan
	004140	Four Roads Turlough SPA	Out	13 km distant, within range of Greenland White-fronted Goose

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
	000588	Ballinturly Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	001637	Four Roads Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000609	Lisduff Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000610	Lough Croan Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000611	Lough Funshinagh SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Moanveanlagh Bog SAC	002351	Moanveanlagh Bog SAC	In	Precautionary
	002165	Lower River Shannon SAC	In	Due to close proximity, qualifying features may be affected.
	004077	River Shannon and River Fergus Estuaries SPA	Out	10 km from site with no hydrological connection.
	004161	Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA	Out	3.5 km from site with no direct hydrological connection.
Moneybeg and Clareisland Bogs SAC	002340	Moneybeg and Clareisland Bogs SAC	In	Precautionary
	004043	Lough Derravaragh SPA	Out	11.4 km distant, outside range of Greenland White-fronted Goose and Whooper Swan

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
	004061	Lough Kinale and Derragh Lough SPA	Out	No species requiring raised bog habitat
	004065	Lough Sheelin SPA	Out	No species requiring raised bog habitat
	000679	Garriskil Bog SPA	Out	14 km distant, outside range of Greenland White-fronted Goose
	002356	Ardagullion Bog SAC	Out	10.9 km from site with no hydrological connection.
	004102	Garriskil Bog SAC	Out	14.2 km from site with no hydrological connection.
	002120	Lough Bane and Lough Glass SAC	Out	11.5 km from site with no hydrological connection.
	001810	White Lough, Ben Lough and Lough Doo SAC	Out	9.1 km from site with no hydrological connection.
	002121	Lough Lene SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Mongan Bog SAC	000580	Mongan Bog SAC	In	Precautionary
	000216	River Shannon Callows SAC	Out	7.6 km from site with no direct hydrological connection
	000576	Fin Lough (Offaly) SAC	Out	250 m distant with no direct hydrological connection.
	001776	Pilgrim's Road Esker SAC	In	Qualifying features may be affected.
	004017	Mongan Bog SPA	In	Qualifying features may be affected.
	004064	Lough Ree SPA	Out	11.1 km distant, outside range of Greenland White-fronted Goose and Whooper Swan
	004096	Middle Shannon Callows SPA	In	Qualifying features may be affected.
	004097	River Suck Callows SPA	In	7.5 km distant, within range of Whooper Swan
	002337	Crosswood Bog SAC	Out	9.3 km from site with no direct hydrological connection
	002336	Carn Park Bog SAC	Out	12 km from site with no direct hydrological connection
	000581	Moyclare Bog SAC	Out	6.6 km from site with no direct hydrological connection
	000575	Ferbane Bog SAC	Out	8 km from site with no direct hydrological connection

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
	002339	Ballynamona Bog and Corkip Lough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	001625	Castlesampson Esker SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000440	Lough Ree SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Monivea Bog SAC	002352	Monivea Bog SAC	In	Precautionary
	000297	Lough Corrib SAC	In	Qualifying features may be affected.
	004089	Rahasane Turlough SPA	Out	14.3 km distant, outside range of Greenland White-fronted Goose and Whooper Swan
	000322	Rahasane Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Mouds Bog SAC	002331	Mouds Bog SAC	In	Precautionary
	000396	Pollardstown Fen SAC	Out	1.2 km from site with no hydrological connection
	000391	Ballynafagh Bog SAC	Out	7.5 km distant with no direct hydrological connection.
	001387	Ballynafagh Lake SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002161	River Barrow and River Nore SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the



SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
				site are foreseen
	000925	The Long Derries, Edenderry SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Mount Hevey Bog SAC	002342	Mount Hevey Bog SAC	In	Precautionary
	002299	River Boyne and River Blackwater SAC	Out	No hydrological connection between the two sites
	004232	River Boyne and River Blackwater SPA	Out	1.7 km distant. No species with a requirement for raised bog
Moyclare Bog SAC	000581	Moyclare Bog SAC	In	Precautionary
	000575	Ferbane Bog SAC	Out	2 km distant with no direct hydrological connection.
	004017	Mongan Bog SPA	In	6.6 km distant, within range of Greenland White-fronted Goose
	004086	River Little Brosna Callows SPA	Out	14.6 km distant, outside range of Greenland White-fronted Goose and Whooper Swan
	004096	Middle Shannon Callows SPA	In	5.4 km distant, outside range of Greenland White-fronted Goose and Whooper Swan and Hen Harrier
	004097	River Suck Callows SPA	In	10.5 km distant, within range of Whooper Swan.
	004103	All Saints Bog SPA	Out	12.7 km distant, outside range of Greenland White-fronted Goose and Merlin
	002337	Crosswood Bog SAC	Out	14.4 km distant with no direct hydrological connection.
	000566	All Saints Bog and Esker SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000572	Clara Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
				site are foreseen
	000576	Fin Lough (Offaly) SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000580	Mongan Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	001776	Pilgrim's Road Esker SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000919	Ridge Road, SW of Rapemills SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000216	River Shannon Callows SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Raheenmore Bog SAC	000571	Charleville Wood SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000572	Clara Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000685	Lough Ennell SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
				site are foreseen
	004044	Lough Ennell SPA	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000582	Raheenmore Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	001831	Split Hills and Long Hill Esker SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Redwood Bog SAC	002353	Redwood Bog SAC	In	Precautionary
	00216	River Shannon Callows SAC	In	Qualifying features may be affected.
	000566	All Saints Bog and Esker SAC	Out	3.8 km distant with no direct hydrological connection.
	004058	Lough Derg (Shannon) SPA	In	8.5 km distant, no species with a raised bog requirement
	004086	River Little Brosna Callows SPA	In	Within range of Greenland White-fronted Goose and Whooper Swan
	004096	Middle Shannon Callows SPA	In	Within range of Greenland White-fronted Goose and Whooper Swan and Hen Harrier
	004097	River Suck Callows SPA	Out	11.5 km distant, outside range of Whooper Swan
	004103	All Saints Bog SPA	In	Within range of Greenland White-fronted Goose and Merlin
	004137	Dovegrove Callows SPA	In	8.2 km distant, within range of Greenland White-fronted Goose
	000647	Kilcarren-Firville Bog SAC	Out	6.8 km distant with no direct hydrological connection.
000641	Ballyduff/Clonfinane Bog SAC	Out	6.9 km distant with no direct hydrological connection.	

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
	002356	Ardgraique Bog SAC	Out	8.8 km distant with no direct hydrological connection.
	001683	Liskeenan Fen SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002241	Lough Derg, North-East Shore SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000919	Ridge Road, SW of Rapemills SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000585	Sharavogue Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
River Moy SAC	002298	River Moy SAC	In	Precautionary
	000492	Doocastle Turlough SAC	Out	3.7 km distant with no direct hydrological connection.
	000497	Flughany Bog SAC	Out	1.8 km distant with no direct hydrological connection.
	001899	Cloonakilina Lough SAC	Out	1.2 km distant with no direct hydrological connection.
	004036	Killala Bay/Moy Estuary SPA	In	3.4 km distant, within range of Redshank and Curlew
	004048	Lough Gara SPA	Out	10.5 km distant, outside range of Greenland White-fronted Goose and Whooper Swan
	004051	Lough Carra SPA	Out	4.6 km distant, no species with a requirement for raised bog
	004065	Lough Mask SPA	Out	5.5 km distant, no species requiring raised bog habitat
	004098	Owenduff/Nephin Complex SPA	In	5.9 km distant, within range of Greenland White-fronted Goose and Whooper Swan

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
	004129	Ballysadare Bay SPA	Out	11.5 km distant, outside range of Greenland White-fronted Goose
	004228	Lough Conn and Lough Cullin SPA	In	3.0 km distant, within range of Greenland White-fronted Goose
	001656	Bricklieve Mountains & Keishcorran SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000595	Callow Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000604	Derrinea Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000633	Lough Hoe Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000634	Lough Nabrickkeagh Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002006	Ox Mountains Bogs SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000636	Templehouse and Cloonacleigha Loughs SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
	002354	Tullaghanrock Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000637	Turloughmore (Sligo) SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	001571	Urlaur Lakes SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Shankill West Bog SAC	000326	Shankill West Bog SAC	In	Precautionary
	001242	Carrownagappul Bog SAC	Out	2.2 distant with no direct hydrological connection.
	002350	Curraghlehanagh Bog SAC	Out	Downstream with no direct hydrological connection.
	004097	River Suck Callows SPA	Out	14.6 km distant, outside range of and Whooper Swan
	000297	Lough Corrib SAC	Out	6.4 km distant with no direct hydrological connection.
	000301	Lough Lurgheen Bog/Glenamaddy Turlough SAC	Out	5.3 km distant with no direct hydrological connection.
	002347	Camderry Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000285	Kilsallagh Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000295	Levally Lough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
				site are foreseen
	000296	Lisnageeragh Bog and Ballinastack Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Sharavogue Bog SAC	000585	Sharavogue Bog SAC	In	Precautionary
	000641	Ballyduff/Clonfinane Bog SAC	Out	4.6 distant with no direct hydrological connection.
	002147	Lisduff Fen SAC	Out	3.1 distant with no direct hydrological connection.
	004058	Lough Derg (Shannon) SPA	Out	13.5 km distant, no species with a raised bog requirement
	004086	River Little Brosna Callows SPA	In	9.7 km distant, within range of Greenland White-fronted Goose and Whooper Swan
	004103	All Saints Bog SPA	In	10.8 km distant, within range of Greenland White-fronted Goose
	004137	Dovegrove Callows SPA	Out	7.3 km distant, within range of Greenland White-fronted Goose and Whooper Swan
	004160	Slieve Bloom Mountains SPA	In	10 km distant, outside range of Hen Harrier
	002236	Island Fen SAC	Out	7.2 km distant with no direct hydrological connection.
	000566	All Saints Bog and Esker SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000647	Kilcarren-Firville Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	001683	Liskeenan Fen SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
				site are foreseen
	002241	Lough Derg, North-East Shore SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002353	Redwood Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000919	Ridge Road, SW of Rapemills SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000412	Slieve Bloom Mountains SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Sheheree (Ardagh) Bog SAC	000382	Sheheree (Ardagh) Bog SAC	In	Precautionary
	000365	Killarney National Park, Macgillicuddy's Reek and Caragh River Catchment SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	004038	Killarney National Park SPA	In	400 m distant, within range of Merlin and Greenland White-fronted Goose
	002170	Blackwater River (Cork/Waterford) SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000343	Castlemaine Harbour SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen



SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
	002041	Old Domestic Building, Curraglass Wood SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Tullaghanrock Bog SAC	002354	Tullaghanrock Bog SAC	In	Precautionary
	000595	Callow Bog SAC	In	Qualifying features may be affected.
	004048	Lough Gara SPA	In	Within range of Greenland White-fronted Goose and Whooper Swan
	000592	Bellangare Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	004105	Bellangare Bog SPA	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000597	Carrowbehy/Caher Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	001899	Cloonakillina Lough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000600	Cloonchambers Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000614	Cloonshanville Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
				site are foreseen
	000604	Derrinea Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000492	Doocastle Turlough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002338	Drumalough Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000607	Errit Lough SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	000497	Flughany Bog SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	002298	River Moy SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
	001571	Urlaur Lakes SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen
Tullaheer Lough and Bog SAC	002343	Tullaheer Lough and Bog SAC	In	Precautionary
	002165	Lower River Shannon SAC	Out	2.4 km from site with no direct hydrological connection.

SAC Bog Name	Code	Sites within 15 km buffer	Screened in/out	Rationale
	002250	Carrowmore Dune SAC	Out	3.7 km from site with no direct hydrological connection.
	002264	Kilkee Reefs SAC	Out	2.5 km from site with no direct hydrological connection.
	004077	River Shannon and River Fergus Estuaries SPA	In	2.4 km distant, within range of Whooper Swan, Lapwing, Redshank and Curlew
	004114	Illauonearaun SPA	Out	11.6 km distant, no species with raised bog requirements
	004182	Mid-Clare Coast SPA	Out	4km u/s, no species with raised bog requirements
	001021	Carrowmore Point to Spanish Point and Islands SAC	Out	Given the characteristics of the proposed conservation works, and its distance from the SAC, no potential adverse impacts on the conservation interest of the site are foreseen

# **APPENDIX B**

## **Assessment of In-combination Effects**

Scale	Plan	Summary of Objectives	Possible impacts from plan or project?	Is there a risk of significant “in combination” effects from plan or project?
National	Peatlands Strategy	To guide the approach to peatlands management and conservation in the future, taking into account current and potential uses of this key resource.	Yes, potential impacts may arise due to requirements for land use change which can affect Natura 2000 sites.	Yes. Though objectives for Raised Bog SACs are the same, the Peatlands Strategy relates to all peatlands in Ireland.
Regional	EU Water Framework Directive (2000/60/EC) River Basin Management Plans	The RBMPs sets targets for water bodies to achieve at least good status by 2015 and no deterioration in water body status.	Yes, potential impacts may arise due to changes to water quality and quantity which can affect Natura 2000 sites.	Yes, both plan’s programmes of measures affect hydrology and water quality which can affect Natura 2000 sites.
Regional	EU Floods Directive (2007/60/EC) Flood Risk Management Plans	The FRMPs aim to manage flood risk at specified Areas for Further Assessment (AFAs) which are generally settlements.	Yes, measures to manage flood risk will include physical measures (such as walls and embankments) which will impact hydrology and potentially water quality and can affect Natura 2000 sites.	No, the zones of impact of the FRMP measures will not overlap or interact with the Raised Bog SAC Management Plan programme of measures.
National	EU Nitrates Directive (91/676/EEC)	The NAP aims to protect waters from pollution from nitrates arising from agriculture.	Yes, changes in land use and management can effect Natura 2000 sites.	Yes, both affect land use and management which can affect Natura 2000 sites.

Scale	Plan	Summary of Objectives	Possible impacts from plan or project?	Is there a risk of significant “in combination” effects from plan or project?
	Nirates Action Programme			
National	Action Plan for Raised Bog Birds in Ireland (2011 to 2020)	Aims to identify appropriate measures to protect the raised bog bird group	Yes, conservation measures could affect other qualifying interests.	Yes, both include conservation measures which could affect other qualifying interests.
National	National Spatial Strategy (2002 to 2020)	Objectives of the NSS are to achieve a better balance of social, economic and physical development across Ireland, supported by more effective planning.	Yes, changes in land use and management can effect Natura 2000 sites.	Yes, both affect land use and management which can affect Natura 2000 sites.
National	National Biodiversity Strategy and Action Plan	The strategy and action plan aim to prevent and eliminate the causes of biodiversity loss and maintain and enhance current levels of biodiversity	No negative impacts should arise	No
National	National Development Plan (2007 to 2013)	The NDP aims to promote more balanced spatial and economic development.	Yes, changes in land use and management can effect Natura 2000 sites.	Yes, both affect land use and management which can affect Natura 2000 sites.
National	National Climate Change Strategy	Aims to ensure Ireland meets its objectives under the Kyoto	Positive impact from reduced use of fossil fuel but expansion of	Yes, both affect land use and management

Scale	Plan	Summary of Objectives	Possible impacts from plan or project?	Is there a risk of significant “in combination” effects from plan or project?
	(2007 to 2012)	Protocol	forestry and energy crops could impact if not undertaken sensitively. Changes to agriculture management could also impact.	which can affect Natura 2000 sites.
National	Our Sustainable Future: a Framework for Sustainable Development in Ireland	Medium to long term framework for advancing sustainable development and the green economy in Ireland	Yes, changes in land use and management can effect Natura 2000 sites.	Yes, both affect land use and management which can affect Natura 2000 sites.
National	Growing for the Future – A Strategic Plan for the Forest Sector in Ireland	Strategic plan for the development of the forestry sector in Ireland	Yes, if forestry is planted on or in the vicinity of the sites.	Yes, both affect land use and management which can affect Natura 2000 sites.
National	Heritage and Biodiversity Plans	Aim to protect and enhance heritage and biodiversity value	Yes, changes in land use and management can effect Natura 2000 sites.	Yes, both affect land use and management which can affect Natura 2000 sites.
Regional	Freshwater Pearl Mussel Sub Plans	Aim to protect the habitat and requirements of the FWPM	Yes, potential impacts may arise due to changes to water quality and quantity, or land use and management, which can affect	Yes, both plan’s programmes of measures affect hydrology and water quality, or land use and management, which can affect Natura 2000 sites.

Scale	Plan	Summary of Objectives	Possible impacts from plan or project?	Is there a risk of significant “in combination” effects from plan or project?
			Natura 2000 sites.	
Regional	Regional Planing Guidelines	Give effect to national planning policy	Yes, changes in land use and management can effect Natura 2000 sites.	Yes, both affect land use and management which can affect Natura 2000 sites.
Regional	County Development Plans	May have objectives in relation to raised bogs in their jurisdictional areas	Yes, changes in land use and management can effect Natura 2000 sites.	Yes, both affect land use and management which can affect Natura 2000 sites.