

**Waste Management and Bring Bank
facility at Údaras na Gaeltachta,
Derrybeg Industrial Estate**

**HABITATS DIRECTIVE ARTICLE 6
SCREENING ASSESSMENT**

December 2021



Chomhairle Chonase Dhun na nGall

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Appendix 1 – Natura 2000 Site Synopsis

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1.0 EXECUTIVE SUMMARY

This report contains a Screening for Appropriate Assessment for the Waste Management and Bring Bank facility at Údaras na Gaeltachta, Derrybeg Industrial Estate in accordance with the requirements of Article 6(3) and Article 6(4) of the EU Habitats Directive (92/43/EEC).

The project is unlikely to have a significant effect on any Natura 2000 site or qualifying interest due to the nature of the works and the separation distance between the works and the sites.

This report clearly determines that an Appropriate Assessment is not required.

2.0 INTRODUCTION

Article 6(3) and 6(4) of the Habitats Directive states the following:

6(3) – ‘Any **plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon**, either individually or in combination with other plans or projects, shall be subject to **appropriate assessment** of its implications for the site in view of the site’s **conservation objectives**. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the **competent national authorities** shall agree to the plan or project only after having ascertained that it will not adversely affect the **integrity of the site** concerned and, if appropriate, after having obtained the opinion of the general public’.

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

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

Appropriate Assessment process follows a four stage approach. The outcome of each successive stage determines whether a further stage in the process is required. Stages 1-2 deal with the main

requirements for assessment under Article 6(3). Stage 3 may be part of Article 6(3) or may be a necessary precursor to Stage 4. Stage 4 is the main derogation step in Article 6(4).

Appropriate Assessment process comprises of the following stages;

Stage 1 – Screening for Appropriate Assessment (AA)

Stage 2 – Appropriate Assessment (AA)

Stage 3 – Alternative Solutions

Stage 4 – Imperative Reasons of Overriding Public Interest (IROPI)/ Derogation.

Screening determines whether Appropriate Assessment (AA) is necessary by examining:

1. *‘whether a plan or project can be excluded from AA requirements because it is directly connected with or necessary to the management of the site, and’*
2. *‘the potential effects of a project or plan, either alone or in combination with other projects and plans, on a Natura 2000 site in view of its conservation objectives, and considering whether these effects will be significant’.*

Screening is an iterative process that involves consideration of the plan or project and its likely effects, and of the Natura 2000 sites and their ecological sensitivities, and the likely interaction of these. If the effects are deemed to be significant, potentially significant, or uncertain, or if the screening process becomes overly complicated, then the process must proceed to Stage 2 (AA).

3.0 DESCRIPTION OF PROJECT

Donegal County Council proposes to carry out development at the Údaras Industrial Estate in Derrybeg.

The proposed **Waste Management and Bring Bank Facility at Údaras na Gaeltachta, Derrybeg Industrial Estate** has been developed to formalise and standardise bring banks within the area.

This development seeks to provide a bring bank facility for recycling glass, cans and textiles and storage for waste prevention and management with appropriate access, parking, signage and fencing.

The project will be carried out in accordance with the drawings associated with this application and

will include:

- New concrete area on which to locate the bring banks and provide safe access for the public and service vehicles
- Fencing to the side and rear of bring bank
- Signage relating to access
- Storage unit for waste prevention and management in the Glenties Municipal District

4.0 NATURA 2000 SITES

The approach to screening follows guidance provided in the document 'Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities'.

1. Any Natura 2000 sites **within or adjacent** to the plan or project area.
 - There are no SAC or SPA sites within or adjacent to the proposed project.
2. Any Natura sites **within the likely zone of impact** of the plan or project. A distance of 15km is currently recommended in the case of plans, while for projects, the distance could be much less than 15km, and in some cases less than 100m, and must be evaluated on a case-by-case basis with reference to the nature, size and location of the project, and the sensitivities of the ecological receptors, and the potential for in combination effects. Due to the minor nature of the proposed works, and the fact that they do not significantly increase the paved surface area, likely surface water runoff or pollutants, it is considered that a zone of likely influence of 5km will be more than sufficient in this case. The following SAC or SPA sites are located within the likely zone of impact (5km) of the proposed project.
 - **West Donegal Coast Special Protected Area (Site Code 004150)**
 - **Gweedore Bay and Islands Special Area of Conservation (Site Code 001141)**
 - **Fawnboy Bog / Lough Nacung Special Area of Conservation (Site Code 000140)**
 - **Cloghernagore Bog and Glenveagh National Park SAC (Site Code 002047)**
 - **Derryveagh and Glendowan Mountains SPA (Site Code 004039)**

County Donegal has 72 Natura sites and together they cover a large area of the county. In particular, watercourses are frequently included within the Natura sites and contribute significantly to the environmental diversity throughout the county. Where a particular watercourse is not directly included within a Natura site then it may often discharge into a Natura site and thus has a direct connector to that site. The following Natura sites are located near the proposed works:

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- **West Donegal Coast Special Area of Conservation (Site Code 004150)**

The West Donegal Coast SPA comprises separate sections of the Co. Donegal coastline and extends from Muckros Head in the south, northwards to Slieve League, Malin Beg, Rocky Point, Glen Head, Slieve Tooley, Maghera, Loughros Point, Dunmore Head, Aran Island, Magheradrumman, Carrickfin, Carnboy, Bunbeg, Magheragallan, Lunniagh, as far as Carrick, to the south of Bloody Foreland. The site includes the high coast areas and sea cliffs of the mainland and Aran Island, the land adjacent to the cliff, areas of sand dunes/machair at Maghera, Mullaghderg, Braade/Carrickfin/Carnboy, Magheragallan and Lunniagh/Carrick, and also several areas further inland of the coast at Croaghmuckros and Slieve League, north of Glencolumbkille and south of Dunmore Head. A low-lying area of land on the coast at Bunbeg used by roosting Chough is also included. The high water mark forms the seaward boundary, except at Tormore Island where the adjacent sea area to a distance of 500 m from the cliff base is included. Most of the site is underlain by granite and quartzite, though various other, particularly metamorphic, rock types also occur; rocks of Carboniferous age are found at Muckros Head.

- **Gweedore Bay and Islands Special Area of Conservation (Site Code 001141)**

Gweedore Bay and Islands is an extensive coastal site situated between Burtonport in the south, Bloody Foreland in the north, near the towns of Derrybeg, Bunbeg and Annagary, and stretching eastwards to Bunaninver. It includes a large stretch of coastline, many islands (including Inishsirr, Inishmeane, Gola, Umfin, Inishfree Lower and parts of Cruit Island) and areas of marine water between the islands and the coast. The terrain is generally undulating with knolls of exposed rock. The site is underlain by Granodiorite, a basic igneous rock. Areas of machair and sand dunes occur in several places along the coast, and large areas of sandflats are exposed off the coast at low tide. The site is of great ecological interest and importance.

- **Fawnboy Bog / Lough Nacung Special Area of Conservation (Site Code 000140)**

This site is situated 2 km east of Gweedore and 1.2 km north-west of Dunlewy village in Co. Donegal. It lies at the western foothills of the spectacular Errigal Mountain. Geologically, the site is underlain by metamorphosed limestones and calcareous siltstones which outcrop to the east of the area. Several deep-seated east/west faults cut across the terrain which may

act as conduits for base-rich groundwater, accounting for the occurrence of calcicole species in the flora.

- **Cloghernagore Bog and Glenveagh National Park SAC (Site Code 002047)**

Cloghernagore Bog and Glenveagh National Park SAC is an exceptionally large inland site located in the centre of north-west Donegal. It includes a rich diversity of habitats and landscape features, including mountains, exposed rock and scree, blanket bogs, dry, wet and alpine heath, upland grassland, wet grassland, rivers, lakes, scrub and woodland. The Gweebarra fault bisects the area forming a long valley, orientated north-east to south-west, in which Lough Barra and Lough Veagh (Beagh) are situated. The area is generally mountainous, taking in most of the Derryveagh and Glendowan ranges and including the two highest mountains in Donegal, Errigal (751 m) and Slieve Snaght (678 m). Towards the centre-west of the site are the fine ice-carved cliffs of the Poisoned Glen and Bingorms, which contrast dramatically with the gently undulating expanses of blanket bog in the south-west and north-east of the site. The underlying rock is predominantly granite, with a few intrusive dykes. However, around Errigal the geology is more complex with bands of schists, quartzite, granodiorite and limestone occurring.

- **Derryveagh and Glendowan Mountains SPA (Site Code 004039)**

Derryveagh and Glendowan Mountains SPA is an extensive upland site in north-west Co. Donegal, comprising Glenveagh National Park, a substantial part of the Derryveagh and Glendowan Mountains and a number of the surrounding lakes. Much of the site is over 300 m above sea level, rising to a peak of 678 m at Slieve Snaght. The solid geology is predominantly quartzite. The substrate over much of site is peat, with blanket bog and heath comprising the principal habitats.

A Site Synopsis of the Natura 2000 sites identified in (2) above are attached in Appendix 1 of this report.

There are no works proposed within any of these sites.

Favourable conservation status of a habitat is achieved when its natural range, and area it covers within that range, is stable or increasing, and the ecological factors that are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and the conservation status of its typical species is favourable. The favourable conservation status of a species is achieved when population data on the

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

3. Natura 2000 sites **that are more than 15km** from the plan and project area depending on the likely impacts of the plan or project, and the sensitivities of the ecological receptors, bearing in mind the precautionary principle.
 - Due to the minor nature and scale of the works proposed it is considered that the works will not impact on any SAC or SPA sites that are more than 15km from the proposed project.

The project overview and location in relation to Natura 2000 sites are shown in Figure 4.0

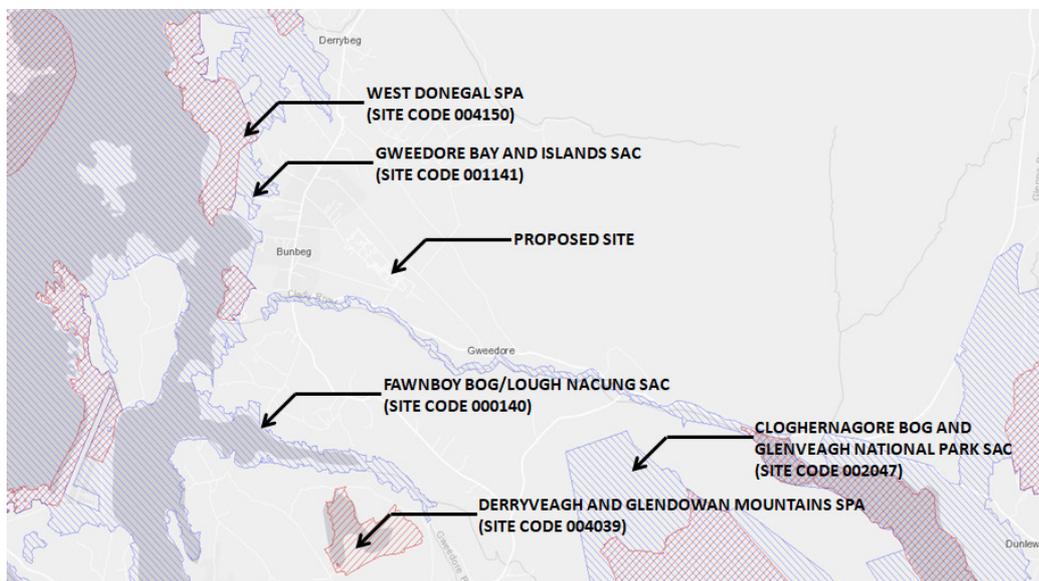


Figure 4.0 – Project overview of Natura 2000 sites identified.

(Source - <https://natura2000.eea.europa.eu/>)

4.1 CONSERVATION OBJECTIVES FOR NATURA 2000 SITES

Conservation objectives for the various SPA's and SAC's have been set by the National Parks and Wildlife Service. These objectives are generally to maintain or restore the favorable conservation status for habitats and species of community interest within the Natura sites. The specific conservation objectives for each site is listed below:

- **West Donegal Coast Special Protected Area (Site Code 004150)**

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species:

-
- Chough
 - Peregrine
 - Fulmar
 - Cormorant
 - Shag
 - Herring Gull
 - Kittiwake
 - Razorbill.

- **Gweedore Bay and Islands Special Area of Conservation (Site Code 001141)**

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

- [1150] Coastal Lagoons*
- [1170] Reefs
- [1220] Perennial Vegetation of Stony Banks
- [1330] Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)
- [1410] Mediterranean Salt Meadows
- [2110] Embryonic Shifting Dunes
- [2120] Marram Dunes (White Dunes)
- [2130] Fixed Dunes (Grey Dunes)*
- [2140] Decalcified *Empetrum* Dunes*
- [2150] Decalcified Dune Heath*
- [2170] Dunes with Creeping Willow
- [2190] Humid Dune Slacks
- [21A0] Machairs*
- [3130] Oligotrophic to Mesotrophic Standing Waters
- [4030] Dry Heath
- [4060] Alpine and Subalpine Heaths
- [5130] Juniper Scrub
- [1065] Marsh Fritillary (*Euphydryas aurinia*)
- [1355] Otter (*Lutra lutra*)
- [1395] Petalwort (*Petalophyllum ralfsii*)
- [1833] Slender Naiad (*Najas flexilis*)

- **Fawnboy Bog / Lough Nacung Special Area of Conservation (Site Code 000140)**

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

- [4010] Wet Heath
- [7130] Blanket Bogs (Active)*
- [7150] Rhynchosporion Vegetation
- [1029] Freshwater Pearl Mussel (*Margaritifera margaritifera*)

- **Cloghernagore Bog and Glenveagh National Park Special Area of Conservation (Site Code 002047)**

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

- [3110] Oligotrophic Waters containing very few minerals
- [3260] Floating River Vegetation
- [4010] Wet Heath
- [4030] Dry Heath
- [4060] Alpine and Subalpine Heaths
- [6410] *Molinia* Meadows
- [7130] Blanket Bogs (Active)*
- [7150] Rhynchosporion Vegetation
- [91A0] Old Oak Woodlands
- [1029] Freshwater Pearl Mussel (*Margaritifera margaritifera*)
- [1106] Atlantic Salmon (*Salmo salar*)
- [1355] Otter (*Lutra lutra*)
- [1421] Killarney Fern (*Trichomanes speciosum*)

- **Derryveagh and Glendowan Mountains Special Protected Area (Site Code 004039)**

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species:

- Red-throated Diver,
- Merlin,
- Peregrine,

-
- Golden
 - Plover and
 - Dunlin.

5.0 ASSESSMENT OF LIKELY EFFECTS

Assessment of likely effects is the process of establishing whether the plan or project is likely to affect a Natura 2000 site or sites. It is based on a preliminary impact assessment using available information and data. This is followed by a determination of whether there is a risk that the effects identified could be significant.

If the effects are deemed to be significant, potentially significant, or uncertain, or if the screening process becomes overly complicated, then the process must proceed to Stage 2 (AA).

A preliminary impact assessment using available information and data was undertaken to establish whether the plan or project is likely to have an effect on a Natura 2000 site.

Examples of effects that are likely to be significant are:

- Any impact on an Annex I habitat.
- Causing reduction in the area of the habitat or Natura 2000 site.
- Causing direct or indirect damage to the physical quality of the environment (e.g. water quality and supply, soil compaction) in the Natura 2000 site.
- Causing serious or ongoing disturbance to species or habitats for which the Natura 2000 site is selected (e.g. increased noise, illumination and human activity).
- Causing direct or indirect damage to the size, characteristics or reproductive ability of populations on the Natura 2000 site.
- Interfering with mitigation measures put in place for other plans or projects.

It is concluded the subject project does not have any significant impact on identified Natura 2000 Sites, Appendix 2 contains an Assessment of Natura 2000 Sites identified at Section 4.0 above. No other plans or projects have been identified in respect of which combined effects with the subject project require consideration.

5.1 CUMULATIVE, DIRECT, INDIRECT, SHORT & LONG TERM EFFECTS

The development will not have a direct effect on any of the Natura 2000 sites identified near the proposed project. The development will not lead to loss of habitat, fragmentation or any impact on water resources.

The site is located in an industrial area in the town. The proposal is to install bring banks and storage for waste prevention and management with appropriate access, parking, signage and fencing. There will be no work carried out on greenfield sites.

There are 5 No. Natura 2000 sites identified near the site, none of these run through the site.

5.2 OTHER SPECIES - OTTER [1355] *LUTRA LUTRA*

The ecology of otters has been the subject of a project under the LIFE Nature programme of the European Commission, published by Life in UK Rivers. The study shows that otters require huge territories. Quantities of prey dictate numbers of otters and any factor that impacts on fish stock numbers can have significant impact. The food taken by otters has been the subject of a number of studies, and the main prey of the otter includes fish, frogs, crayfish and eels. Chemical vulnerability relates to prey (principally fish) and the possibility of contamination.

Otters are very mobile creatures and so have the potential to be present in the area. However they are also shy creatures and the works are within an urban area which will have a greater affect on their movements and makes their presence less likely.

Otters have been identified in the Site Synopsis for both the Gweedore Bay and Islands SAC (001141) and the West Donegal Coast SPA (004150) and the (002047), as these sites are more than 1.4km from the works it is extremely unlikely otters will be present near the works. The site will be checked for the presence of otter holts in advance of the works but it is extremely unlikely that any holts will be within the site as no watercourses are present. Given that the works will not affect the river and there shall be no restriction to otter's movements or their prey in the area, it is therefore considered extremely unlikely that the proposed works will have a significant effect on this species.

5.3 WETLAND BIRDS

The Fawnboy Bog / Lough Nacung SAC, Gweedore Bay and Islands SAC and the West Donegal Coast SPA are designated for a number of wintering wetland birds as listed in section 4.1. Given the separation between the works area and the areas of ornithological interest and that the works will be undertaken in a way that prevents accidental pollution of any watercourse, and then it is considered extremely unlikely that there will be a direct or indirect impact on the ornithological interest within the SPA as a result of the proposed works.

5.4 OTHER SPECIES AND LISTS IMPORTANT TO NOTE.

Within the Site Synopsis for the 5 sites there are a number of plants, birds and animals listed within the Red Data Book, The Flora (Protection) Order, 1999 & 2015, Annex I of the EU Birds Directive and within Annex II of the E.U. Habitats Directive. Although there are a number of plants, birds and animals to note, due to the nature of the works and the proximity to the SACs and SPA it is extremely unlikely that these works will have a direct or indirect impact on these plants, birds or animals.

5.5 PARTICULAR HABITATS

The SAC's identified have various habitats including:

- grasslands, streams, lakes and rock outcrops (000140),
- sand dunes, shingle banks, high exposed shores, boulders, stoney beaches, sand flats, lagoons, reef and dune grasslands (001141) and
- Atlantic blanket bog (002047).

The SPAs identified in a predominately vegetative sea cliff (0004150) and extensive bog and heath habitat (004039) .

The SACs and SPA are outside the site extents and therefore the project will not impact on these areas.

5.6 OTHER POLICIES, PLANS OR PROJECTS

There are no other works, policies, plans or projects known that would impact on any of the Natura 2000 sites identified. As the works are non intrusive in nature on the Natura 2000 sites, it is unlikely that the project will have any effect on these species.

6.0 CONCLUSION

Further to the above assessment of Natura 2000 sites (as detailed in Appendix 2) within the area of the proposed works it is considered that the project will have no adverse effect on the integrity or conservation objectives of any of the Natura 2000 sites. The screening process has been undertaken to identify the proximity of Natura sites to the proposed works. The process has considered the qualifying interests of these Natura 2000 sites and potential impacts arising from the proposed project. Because of the type of qualifying interest, the separation between construction sites and

Natura sites, the timing of the works, the controls in place, the environmental checks and the use of good site management practices it is considered extremely unlikely that the proposed works will have any significant impact on the integrity on any of the Natura sites.

The process has shown that it is extremely unlikely that there will be any significant negative effects on any Natura 2000 sites arising from the implementation of the project. It is also unlikely that there will be 'in combination' negative effects from any other plans or known developments.

In conclusion the Stage 1 screening for Appropriate Assessment has determined that the **Waste Management and Bring Bank Facility at Údaras na Gaeltachta, Derrybeg Industrial Estate** will not adversely impact in any significant manner on any Natura 2000 site and the qualifying interests or conservation objectives associated with them.

As such, it is concluded that Stage 2 Appropriate Assessment is not required.

7.0 REPORT ACCEPTANCE SHEET

The Habitats Directive Article 6 screening report has determined that the proposed **Management and Bring Bank Facility at Údaras na Gaeltachta, Derrybeg Industrial Estate** project is unlikely to have a significant effect on any Natura site.

Screening Report Prepared and Recommended By:

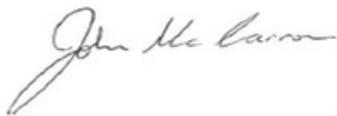


Karen Kane

A/Executive Engineer

Date: 14th December 2021

Screening Report Approved By:



John McCarron

Senior Executive Engineer

Date: 14th December 2021

Appendix 1 – Natura 2000 Site Synopsis

SITE NAME: WEST DONEGAL COAST SPA

SITE CODE: 004150

The West Donegal Coast SPA comprises separate sections of the Co. Donegal coastline and extends from Muckros Head in the south, northwards to Slieve League, Malin Beg, Rocky Point, Glen Head, Slieve Tooley, Maghera, Loughros Point, Dunmore Head, Aran Island, Magheradrumman, Carrickfin, Carnboy, Bunbeg, Magheragallan, Lunniagh, as far as Carrick, to the south of Bloody Foreland. The site includes the high coast areas and sea cliffs of the mainland and Aran Island, the land adjacent to the cliff, areas of sand dunes/machair at Maghera, Mullaghderg, Braade/Carrickfin/Carnboy, Magheragallan and Lunniagh/Carrick, and also several areas further inland of the coast at Croaghmuckros and Slieve League, north of Glencolumbkille and south of Dunmore Head. A low-lying area of land on the coast at Bunbeg used by roosting Chough is also included. The high water mark forms the seaward boundary, except at Tormore Island where the adjacent sea area to a distance of 500 m from the cliff base is included. Most of the site is underlain by granite and quartzite, though various other, particularly metamorphic, rock types also occur; rocks of Carboniferous age are found at Muckros Head.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Chough, Peregrine, Fulmar, Cormorant, Shag, Herring Gull, Kittiwake and Razorbill.

Vegetated sea cliffs are the predominant habitat of the site; these occur along its length and support a good variety of plant species typical of the habitat, including some rarities. The cliff tops support heath, blanket bog or coastal grassland. The northern section of the site includes several areas of machair. Apart from the sea cliffs and machair, the site includes areas of dry heath, wet heath, blanket bog, upland acid grassland, dense Bracken (*Pteridium aquilinum*), scrub, semi-improved and improved pasture grassland, fixed and mobile dune grassland, freshwater marsh, streams, oligotrophic lakes, bedrock shores and islets.

The site supports an important population of breeding Chough, a Red Data Book species that is listed on Annex I of the E.U. Birds Directive; 40 breeding pairs were recorded from the site in the 1992 survey and 58 in the 2002/03 survey. Concentrations of breeding pairs occur on the Glencolumbkille Peninsula, from Killybegs in the south to Loughros Beg Bay in the north and on Aran Island. On Aran the exposed maritime situation coupled with sheep grazing has resulted in large areas of short sward suitable for foraging Chough. Flocking activity is centred on some of the extensive sand dune systems present; flocks of 76, 22 and 40 birds were recorded at Carrick, Dooley and Sheskinmore respectively in October 2004. At Sheskinmore, which is included in a separate SPA, larger flocks of as many as 140 birds have been previously reported. Up to 40 birds have been recorded roosting at Glen Head near Glencolumbkille and feeding in that area during September 2004.

Flock birds feeding at Sheskinmore were roosting at nearby Dunmore Head during October 2004 and a communal roost site associated with dune feeding exists near Bunbeg, Gweedore within sight of the dunes at Magheragallan.

The site supports a nationally important Peregrine population (6 pairs in 2002). The site also holds nationally important populations of Fulmar (1,879 pairs), Cormorant (71 pairs in 1999 and 2006), Shag (86 pairs), Herring Gull (229 pairs), Kittiwake (1,037 pairs) and Razorbill (322 pairs). Other species that occur include Black Guillemot (155 individuals), Guillemot (366 pairs), Great Black-backed Gull (15 pairs) and Lesser Black-backed Gull (2 pairs) – all seabird data from 1999 except where indicated. The most important breeding seabird colony in the site is at Tormore Island, a small precipitous grassy sea stack rising to a peak of 139 m, on the north side of the Glencolumbkille Peninsula. Puffin has been recorded breeding on Tormore in the past, with an estimated 3,000 birds in 1970, though such high numbers are no longer considered to occur. Small groups of Barnacle Goose, also an E.U. Birds Directive Annex I species, occasionally graze on the sward on top of the stack. Twite and Ring Ouzel, both Red-listed species are also known to occur within the West Donegal Coast SPA.

The West Donegal Coast SPA contains nationally important breeding populations of Chough, Peregrine and six seabird species: Fulmar, Cormorant, Shag, Herring Gull, Kittiwake and Razorbill. The presence of Chough and Peregrine, species that are listed on Annex I of the E.U. Birds Directive, is of note.



Site Name: Gweedore Bay and Islands SAC

Site Code: 001141

Gweedore Bay and Islands is an extensive coastal site situated between Burtonport in the south, Bloody Foreland in the north, near the towns of Derrybeg, Bunbeg and Annagary, and stretching eastwards to Bunaninver. It includes a large stretch of coastline, many islands (including Inishirrer, Inishmeane, Gola, Umfin, Inishfree Lower and parts of Cruit Island) and areas of marine water between the islands and the coast. The terrain is generally undulating with knolls of exposed rock. The site is underlain by Granodiorite, a basic igneous rock. Areas of machair and sand dunes occur in several places along the coast, and large areas of sandflats are exposed off the coast at low tide. The site is of great ecological interest and importance.

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

- [1150] Coastal Lagoons*
- [1170] Reefs
- [1220] Perennial Vegetation of Stony Banks
- [1330] Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)
- [1410] Mediterranean Salt Meadows
- [2110] Embryonic Shifting Dunes
- [2120] Marram Dunes (White Dunes)
- [2130] Fixed Dunes (Grey Dunes)*
- [2140] Decalcified Empetrum Dunes*
- [2150] Decalcified Dune Heath*
- [2170] Dunes with Creeping Willow
- [2190] Humid Dune Slacks
- [21A0] Machairs*
- [3130] Oligotrophic to Mesotrophic Standing Waters
- [4030] Dry Heath
- [4060] Alpine and Subalpine Heaths
- [5130] Juniper Scrub
- [1065] Marsh Fritillary (*Euphydryas aurinia*)
- [1355] Otter (*Lutra lutra*)
- [1395] Petalwort (*Petalophyllum ralfsii*)
- [1833] Slender Naiad (*Najas flexilis*)

Machair grasslands are frequent within this site, being most extensive at Derrybeg, Bunlack, Carnboy, Kincaslough and west of Keadew. Machair occupies the central area of the tombolo joining Carnboy to the mainland and supports a species-rich vegetation, with hummocky areas colonised by Marram (*Ammophila arenaria*), Thrift (*Armeria maritima*), Sea Campion (*Silene vulgaris* subsp. *maritima*) and Common Sorrel (*Rumex acetosa*), and flat areas between the hummocks with a grassy vegetation dominated by a variety of grass species and with an abundance of small herbs. The vegetation of the other areas of machair in the site is broadly similar.

Sand dunes are frequently found in association with machair. Embryonic dunes are well represented, with particularly good examples to be found at Magheraclogher and to the west of Keadew strand. Lyme Grass (*Leymus arenarius*), Sand Couch (*Elymus farctus*) and Sand Sedge (*Carex arenaria*) are characteristic species of the embryonic dunes. The embryonic dunes often merge with white dunes dominated by Marram.

Fixed dunes are frequent throughout the site, with some of the best examples occurring at Lunniagh, to the north of Mullaghderg Lough, Gola Island and Cruit Island. The habitat is normally found behind the embryonic and/or Marram dunes, and these dunes can reach a height of 20 m or more. Important species of the habitat include Red Fescue (*Festuca rubra*), Lady's Bedstraw (*Galium verum*), Marram, Pyramidal Orchid (*Anacamptis pyramidalis*), Burnet Rose (*Rosa pimpinellifolia*), Common Bird's-foot-trefoil (*Lotus corniculatus*), Wild Carrot (*Daucus carota*) and Wild Thyme (*Thymus praecox*). The most frequent and conspicuous bryophytes are *Tortula ruraliformis*, *Homalothecium lutescens* and *Rhytidiadelphus squarrosus*. At least three separate populations of the Red Data Book plant Hoary Whitlowgrass (*Draba incana*) have been recorded growing in this habitat. Another unusual species associated with the habitat is the diminutive fern, Moonwort (*Botrychium lunaria*), a nationally scarce plant species.

Fixed dunes with heath vegetation, including a specific type with Crowberry (*Empetrum nigrum*), are a feature of the site. This habitat has developed on thin, well-drained sandy soils often with outcropping rock, along the contact zone between dune grassland and coastal heath. At certain sites the habitats have developed in areas where sand is blown up onto coastal heath by strong onshore winds. This mixing of sand and peat soils result in the co-occurrence of dune grassland species such as Red Fescue, Common Birds'-foot-trefoil, Burnet Rose and Wild Thyme, with dry heath species such as Heather (*Calluna vulgaris*), Bell Heather (*Erica cinerea*), Heath-grass (*Danthonia decumbens*), Slender St. John's-wort (*Hypericum pulchrum*) and Tormentil (*Potentilla erecta*). Crowberry is an occasional species.

Also associated with the dune systems are dune slacks. These occur in both small, seasonally flooded depressions interspersed between areas of high fixed dune and as well as in more extensive flat areas. Creeping Willow (*Salix repens*) is a characteristic species, and is often accompanied by a range of wetland species, including Common Bent (*Agrostis stolonifera*), Marsh Bedstraw (*Galium palustre*), Silverweed (*Potentilla anserina*), Marsh Pennywort (*Hydrocotyle vulgaris*), Marsh Cinquefoil (*Potentilla palustris*), Trailing Tormentil (*Potentilla anglica*) and Autumn Hawkbit (*Leontodon autumnalis*), as well as a range of small sedge species (e.g. *Carex demissa*, *Carex nigra* and *Carex flacca*). Species typical of well-drained dune grassland occur in the drier areas of the slacks.

At several areas within this site shingle bank vegetation is well represented. Of particular note is a stretch from Port ui Chuirean to Bunabinver, and an area at Port bun an Inbhir. These are highly exposed shores, with boulder and stony beaches which are unvegetated in some parts but have a well-developed flora in other parts, including stabilized zones with lichens. Species present include Spear-leaved Orache (*Atriplex prostrata*), Thrift, Common Scurvygrass

(*Cochlearia officinalis*), Red Fescue, Buck's-horn Plantain (*Plantago coronopus*), Silverweed, Curled Dock (*Rumex crispus*), Sea Campion and Sea Mayweed (*Matricaria maritima*). The rare Sea Pea (*Lathyrus japonicus*), a species protected under the Flora (Protection) Order, 2015, has been recorded from the site.

The largest area of saltmarsh at the site occurs in the shallow bay north of Derrybeg. A substantial area of Mediterranean salt meadow, dominated by Sea Rush (*Juncus maritimus*), occurs where the Cathleen river enters Derrybeg bay. Other species present include Red Fescue, Creeping Bent (*Agrostis stolonifera*), Sea Arrowgrass (*Triglochin maritima*), Common Scurvygrass, Sea-milkwort (*Glaux maritima*) and, unusually, Purple Moor-grass (*Molinia caerulea*) and Black Bog-rush (*Schoenus nigricans*).

Atlantic salt meadow occurs as two separate areas; one located behind the relatively sheltered headland of Keadew Point, the second located in the south-eastern or uppermost part of Keadew Strand inlet. Both sections of saltmarsh are characterised by the presence of the large intertidal sand flats that occupy much of the inlet. The most frequent species is Sea Milkwort, although its abundance is variable. Pioneer vegetation is dominated by Common Saltmarsh-grass (*Puccinellia maritima*), although smaller abundances of Thrift, Sea Plantain (*Plantago maritima*) and Glasswort (*Salicornia* spp.) also occur. This pioneer vegetation is highly dynamic and it is likely that the vegetation is regularly reshaped with changes in extent of the saltmarsh and embryonic dunes. Low marsh vegetation is typically characterised by species such as Sea Aster (*Aster tripolium*), Thrift, Common Scurvy-Grass, Sea Plantain and Sea Arrow-Grass (*Triglochin maritimum*), with Distant Sedge (*Carex distans*), Extended Sedge (*Carex extensa*) and Saltmarsh Rush (*Juncus gerardii*). One notable species is Flat Saltmarsh sedge (*Blysmus rufus*), an occasional component of the upper marsh, in vegetation transitional to the sand dune habitats.

The site has at least two lagoons. Kincas Lough, which lies opposite Cruit Island, is a saline lake lagoon with a sluiced artificial outlet. Seawater enters on most tides but the lake also receives large volumes of freshwater from small streams and the channel which drains from Lough Mullagher to the north. Moorlagh, which lies just south of Annagary, is a saline lake lagoon with an artificial barrier formed by a causeway and road bridge, with a natural outlet modified by sluices. Seawater enters on most tides but large streams enter from the south. A range of typical lagoonal plants occur, including the charophyte *Chara aspera*, Tasselweed (*Ruppia cirrhosa*), Saltmarsh Flat-rush, and the green alga *Chaetomorpha linum*. The number of faunal species present is quite high but many of these are species which can move easily between marine and freshwater systems and may not be resident species. However, four lagoonal specialists have been recorded, i.e. *Jaera nordmanni*, *J. ischiosetosa* (both Order Isopoda), *Neomysis integer* (Order Mysida) and *Cordylophora caspia* (a hydrozoan, Phylum Cnidaria).

Reef communities occur along much of the rocky shore from the Rutland area (where fine examples have been documented) to Bloody Foreland.

Areas of dry heath are common along the exposed rocky shores of this site which are not dominated by sand-dunes or related habitats. Typically, areas of heath occur interspersed between rocks outcrops and patches of acid grassland vegetation. However, the habitat may occasionally occur as a mosaic with dune grassland, giving rise to a species-rich mixture of plants, such as at Rinnalea Point north of Kincaslough. The typical species encountered in the habitat are Heather (often dominant), Bell Heather, Cross-leaved Heath (*Erica tetralix*), Purple Moor-grass, Tormentil and Mat-grass (*Nardus stricta*). Locally, more unusual species such as Bearberry (*Arctostaphylos uva-ursi*) and Crowberry can occur, indicating the presence of

alpine/subalpine heath, while in other areas the habitat forms a mosaic with heath dominated by Juniper (*Juniperus communis*).

The lakes at this site are good examples of oligotrophic lakes, of which Mullaghderg Lough is the largest and most interesting. Typical plant species present include Water Lobelia (*Lobelia dortmanna*), Pipewort (*Eriocaulon aquaticum*) and Quillwort (*Isoetes lacustris*). The Annex II aquatic species Slender Naiad (*Najas flexilis*) occurs in at least one of the lakes. This species is listed in the Flora (Protection) Order, 2015.

The site includes many other coastal habitats, i.e. areas of sandflats, saltmarsh, sandy beaches, boulder beaches, rocky foreshore and sea cliffs, inlets, bays, open marine water, reefs, islets, brackish water lakes/inlets and Sea Buckthorn (*Hippophae rhamnoides*) scrub, amongst others. This diverse site also includes areas of grassland, lakes, freshwater marsh, cut-away bog and Sessile Oak (*Quercus petraea*) woodland.

The site is notable for the presence of a number of rare plants species, including Slender Naiad, mentioned above, and Petalwort (*Petalophyllum ralfsii*), both of which are listed on Annex II of the E.U. Habitats Directive. Scarce bryophytes recorded from the site include *Distichium inclinatum* and *Rhodobryum roseum*. Also found on the site is Small-white Orchid (*Pseudorchis albida*), a species protected under the Flora (Protection) Order, 2015, and the threatened, Red Data Book species, Hoary Whitlowgrass.

Otters are present at this site and are considered to be common and breeding. Otter is listed on Annex II of the E.U. Habitats Directive. The Marsh Fritillary (*Euphydryas aurinia*), an Annex II and red-listed butterfly (VU), is present in several parts of the SAC. There is a long-established population centred on the heaths and dune grasslands of Cruit Island and it is also recorded from Inishsirrer and Inishmeane. It may also occur in other localities in habitats with its foodplant Devil's-bit Scabious (*Succisa pratensis*). Cruit Island is considered one of the richest butterfly sites in western Donegal. There have been records of 21 species including the additional red listed and near threatened species Small Blue (*Cupido minimus*), Dark Green Fritillary (*Argynnis aglaja*), Grayling (*Hipparchia semele*) and Small Heath (*Coenonympha pamphilus*).

The habitats in the SAC support a notable assemblage of bees especially bumblebees which are increasingly confined to large areas of flower-rich habitat. The red-listed and near threatened species *Bombus rupestris*, *Bombus campestris*, *Bombus ruderarius*, *Bombus lapidarius* and *Bombus muscorum* have all been recorded. The small solitary bee *Colletes floralis* is also recorded from several sites within the SAC. This is red listed in Ireland and in Europe and the Irish population is considered globally highly significant. Records of terrestrial and freshwater molluscs from the following red listed and near threatened species include *Helicella itala*, *Radix auricularia*, *Vertigo antivertigo*, *Vertigo pygmaea* and *Vertigo substriata*.

Many of the islands in the site are used by breeding seabirds (e.g. Common Gull, Herring Gull, Black-headed Gull, Lesser Black-backed Gull, Common Tern and Arctic Tern). All but the latter species also breed at Mullaghderg Lough. In 1995, 18 pairs of Common Tern and 28 pairs of Arctic Tern were recorded. Cormorant, Shag and Storm Petrel also use some of the islands in the site. Barnacle Goose winter on islands in the bay, with more than 300 individuals recorded in some years, e.g. 388 in spring 1994. Choughs are found in many areas of the site, e.g. on Cruit Island and Gola Island - a total of 6 pairs of Chough bred within the site in 1992. Nationally important numbers of Long-tailed Duck occur in Inishfree Bay, with an average maximum of 53 individuals over the five year period 1994/95-1998/99. An important population of Great Northern Diver also occurs in Inishfree Bay (average maximum of 36 individuals). The site has

important populations of breeding waders, especially on the machairs. In a 1996 survey, the following were recorded: Oystercatcher 23 pairs, Ringed Plover 7 pairs, Lapwing 43 pairs, Dunlin 6 pairs and Redshank 5 pairs. Several of the bird species that use the site are listed on Annex I of the E.U. Birds Directive, i.e. Barnacle Goose, Chough, Great Northern Diver, Storm Petrel and the tern species.

The sand dunes and areas of machair on the site are particularly vulnerable to being overused for recreational activities and to unfavourable grazing regimes. Machair is best maintained as an open, evenly-grazed sward. A number of caravan sites are found on the margins of the site. Removal of sand and seaweed occurs at several locations, while some areas of saltmarsh are being reclaimed.

The site is of high ecological value for the occurrence of a wide range of coastal habitats, including areas of well-developed machair, sand dunes and shingle banks. It contains seventeen habitats that are listed, five with priority status, on Annex I of the E.U. Habitats Directive and, as such, is of considerable conservation significance. The presence of populations of three E.U. Habitats Directive Annex II species and of several E.U. Birds Directive Annex I species adds significantly to the overall importance of the site



Site Name: Fawnboy Bog / Lough Nacung Special Area of Conservation

Site Code: 000140

This site is situated 2 km east of Gweedore and 1.2 km north-west of Dunlewy village in Co. Donegal. It lies at the western foothills of the spectacular Errigal Mountain. Geologically, the site is underlain by metamorphosed limestones and calcareous siltstones which outcrop to the east of the area. Several deep-seated east/west faults cut across the terrain which may act as conduits for base-rich groundwater, accounting for the occurrence of calcicole species in the flora.

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

[4010] Wet Heath
[7130] Blanket Bogs (Active)*
[7150] Rhynchosporion Vegetation
[1029] Freshwater Pearl Mussel (*Margaritifera margaritifera*)

The site is of conservation importance primarily for its blanket bog. The bog occurs in association with wet heath, rock outcrop and a number of oligotrophic (nutrient-poor) lakes. The most extensive tract of blanket bog occurs to the east of Lough Nacung where it covers a gently undulating terrain of low ridges, wet slopes and small valleys. The bog expanse is dominated by Heather (*Calluna vulgaris*), Purple Moor-grass (*Molinia caerulea*), Black Bog-rush (*Schoenus nigricans*) and low hummocks of the bog mosses *Sphagnum papillosum*, *S. capillifolium* and *S. subnitens*. Inter-connecting bog pool systems occur, with typical pool, lawn and hummock communities supporting a wide range of bog mosses (e.g. *S. cuspidatum*, *S. auriculatum*, *S. palustre*, *S. capillifolium*, *S. papillosum*, *S. subnitens*, *S. magellanicum*, *S. imbricatum* and *S. fuscum*). Vascular plants such as Bog Sedge (*Carex limosa*), Common Cottongrass (*Eriophorum angustifolium*), Lesser Bladderwort (*Utricularia minor*), sundews (*Drosera* spp.), Bogbean (*Menyanthes trifoliata*), Black Bog-rush, Purple Moor-grass, Heather and Bog-myrtle (*Myrica gale*) are also found here. The vegetation of the wet lawns and pools, especially where extensive quaking areas occur, is representative of Rhynchosporion, though this habitat can also be found in cutover areas which have not been disturbed for some time.

A number of flush communities are found in association with the bog. One type is dominated by Purple Moor-grass and Sharp-flowered Rush (*Juncus acutiflorus*), with Heath Wood-rush (*Luzula multiflora*), Bogbean, Bog-myrtle, Marsh Violet (*Viola palustris*) and a dense carpet of mosses such as *S. capillifolium*, *Polytrichum commune*,

Hylocomium splendens and *Rhytidiadelphus squarrosus*. Another more calcareous flush type supports Black Bog-rush, Bog-myrtle, scattered Common Reed (*Phragmites australis*) and a range of sedges (*C. lasiocarpa*, *C. lepidocarpa*, *C. dioica*, *C. hostiana*, *C. rostrata*, *C. paniculata* and *C. limosa*).

Wet heath occurs on the sloping ground to the east and south of the site where the peat is thin, as well as in small patches throughout the blanket bog. This is usually dominated by Cross-leaved Heath (*Erica tetralix*), although the rare Mackay's Heath (*E. mackaiana*), a Red Data Book species, occurs in abundance amongst heath vegetation along the southern side of Lough Nacung and is dotted throughout the heath away from the lake shore. The hybrid between these species, *E. x stuartii*, also occurs here.

Along the Clady River, and at sections along the margins of Lough Nacung, scrub dominated by gorse (*Ulex* sp.) and willow (*Salix* spp.) occurs in mosaic with wet grassland and patches of bog/heath. Scrub/woodland is also found adjacent to a stream that flows into Lough Nacung, including such species as Alder (*Alnus glutinosa*), Rowan (*Sorbus aucuparia*), Eared Willow (*S. aurita*) and Gorse (*U. europaeus*). The rare Lemon-scented Fern (*Oreopteris limbosperma*) occurs in this wood. Lough Nacung itself is notable for the occurrence of the aquatic plant Pillwort (*Pilularia globulifera*), a legally protected plant under the Flora (Protection) Order, 1999.

The site supports a population of Pearl Mussel (*Margaritifera margaritifera*), a species listed under Annex II of the E.U. Habitats Directive.

The site is sometimes used as a feeding ground by the flock of Greenland White-fronted Goose based around Dunfanaghy. Lough Nacung is suitable breeding habitat for the very localised Red-Throated Diver. Both of these birds are Annex I species under the E.U. Birds Directive.

The Irish Hare is present on the site. This species is legally protected under the Wildlife Act, 1976, and is a Red Data Book species.

Land use at the site consists of peat cutting, which may pose a threat to the quality of the blanket bog. Grazing, mainly by sheep, also occurs. An electric power station and dam have been installed between Loughs Nacung Upper and Lower. Small scale quarrying is carried out around the edge of the site. Afforestation is quite extensive outside the site boundary.

In summary, this site is of conservation interest for the occurrence of intact lowland blanket bog, Rhynchosporion vegetation and good quality wet heath. The presence of several notable plant and animal species adds to the value of the site, particularly the Pearl Mussel, Mackay's Heath, Pillwort and Greenland White-fronted Goose.

SITE NAME: CLOGHERNAGORE BOG AND GLENVEAGH NATIONAL PARK SAC

SITE CODE: 002047

Cloghernagore Bog and Glenveagh National Park SAC is an exceptionally large inland site located in the centre of north-west Donegal. It includes a rich diversity of habitats and landscape features, including mountains, exposed rock and scree, blanket bogs, dry, wet and alpine heath, upland grassland, wet grassland, rivers, lakes, scrub and woodland. The Gweebarra fault bisects the area forming a long valley, orientated north-east to south-west, in which Lough Barra and Lough Veagh (Beagh) are situated. The area is generally mountainous, taking in most of the Derryveagh and Glendowan ranges and including the two highest mountains in Donegal, Errigal (751 m) and Slieve Snaght (678 m). Towards the centre-west of the site are the fine ice-carved cliffs of the Poisoned Glen and Bingorms, which contrast dramatically with the gently undulating expanses of blanket bog in the south-west and north-east of the site. The underlying rock is predominantly granite, with a few intrusive dykes. However, around Errigal the geology is more complex with bands of schists, quartzite, granodiorite and limestone occurring.

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

[3110] Oligotrophic Waters containing very few minerals
[3260] Floating River Vegetation
[4010] Wet Heath
[4030] Dry Heath
[4060] Alpine and Subalpine Heaths
[6410] Molinia Meadows
[7130] Blanket Bogs (Active)*
[7150] Rhynchosporion Vegetation
[91A0] Old Oak Woodlands
[1029] Freshwater Pearl Mussel (<i>Margaritifera margaritifera</i>)
[1106] Atlantic Salmon (<i>Salmo salar</i>)
[1355] Otter (<i>Lutra lutra</i>)
[1421] Killarney Fern (<i>Trichomanes speciosum</i>)

Atlantic blanket bog is the dominant habitat of interest, with much of it being relatively unspoilt. Indeed, the area around Cloghernagore constitutes the most extensive blanket bog system remaining in the north-west of Ireland. Overall, there Version date: 28.11.2013 2 of 5 002047_Rev13.Doc are excellent examples of several types of blanket bog including Highland Bog (Cashelnagor and Dunlewy Far), Lowland Bog (Cloghernagore and Glenveagh Bridge), Domed Valley Bog (Derrybeg and Calabber Valley), Headwater Bog (Crockastoller and Carrickatimpan Mountain) and blanket bog apparently in the early stages of formation (Attinadague).

The blanket bog vegetation is relatively uniform and typically dominated by Purple Moor-grass (*Molinia caerulea*), Heather (*Calluna vulgaris*), Black Bog-rush (*Schoenus nigricans*), Deergrass (*Scirpus cespitosus*) and Common Cottongrass (*Eriophorum angustifolium*), with areas of Bog-myrtle (*Myrica gale*) also occurring.

A number of features indicative of well-developed blanket bog are found at the site. The pool systems found are typically colonised by bog moss species such as *Sphagnum auriculatum* and *S. cuspidatum*, Lesser Bladderwort (*Utricularia minor*), Bogbean (*Menyanthes trifoliata*) and sedges (e.g. *Carex panicea* and *C. limosa*), with Great Sundew (*Drosera anglica*) occurring around the margins. Hummocks of *Sphagnum* species (including *S. capillifolium*, *S. imbricatum* and *S. papillosum*) and other mosses such as *Leucobryum glaucum* and *Racomitrium lanuginosum* are found, as are flushed areas with *Sphagnum* species such as *S. auriculatum* var. *inundatum* and *S. magellanicum*, Common Reed (*Phragmites australis*), rushes (*Juncus acutiflorus* and *J. effusus*) or sedges (*Carex echinata*, *C. rostrata* and *C. demissa*). There are also quaking flats of mosses (*Campylopus atrovirens*, *C. brevopilus*, *Pleurozia purpurea* and *Sphagnum* spp.) with sedges (e.g. *Carex lasiocarpa*), and shallow, infilling lakes with associated *Sphagnum* scrubs and sedge swards. The vegetation described for the pool areas and wet quaking flats is representative of *Rhynchosporion* vegetation.

A number of scarce or only locally-occurring vascular plant species have been recorded from bogs on the site. These include a hybrid Sundew, *Drosera anglica* x *D. rotundifolia* (*Drosera* x *obovata*), Whorled Caraway (*Carum verticillatum*), Bearberry (*Arctostaphylos uva-ursi*), Cranberry (*Vaccinium oxycoccos*) and, in a gorge, Cowberry (*Vaccinium vitis-idaea*). Lower plants of note include several mosses (*Sphagnum fuscum*, *S. contortum*, *S. recurvum* var. *tenue*, *S. molle*, *Calliergon stramineum* and *Polytrichum longisetum*) and lichens (*Cladonia parasitica*, *C. gracilis*, *C. bellidiflora*, *C. cervicornis* subsp. *verticillata*, *C. digitata*, *Peltigera hymenea*, *Sphaerophorus fragilis*, *Usnea fragilescens* and *Umbilicaria polyrrhiza*).

Wet heath occurs at this site in an intimate mosaic with blanket bog, and the vegetation of the two habitat types intergrades. This occurs particularly on the lower slopes of hills, where deep lowland blanket peat meets shallower peat on the flanks of hills. Dry heath occurs at this site on slopes above 300 m. Heather and Bell Heather (*Erica cinerea*) are common, while species such as Gorse (*Ulex europaeus*) and Western Gorse (*U. gallii*) are thought to be relatively uncommon. Other species present include Common Bent (*Agrostis capillaris*), Velvet Bent (*A. canina*), Heath-grass (*Danthonia decumbens*) and Sheep's-fescue (*Festuca ovina*).

Subalpine heath is found at this site on very thin, peaty soils with some bare rock evident. The community is typically dominated by Heather and Bilberry (*Vaccinium* Version date: 28.11.2013 3 of 5 002047_Rev13.Doc myrtillus). Crowberry (*Empetrum nigrum*) is also found on some of the higher mountain slopes. Other species of note in this habitat are Tormentil (*Potentilla erecta*) and the moss *Racomitrium lanuginosum*. Juniper (*Juniperus communis*) and Bearberry are occasional on mountain summits.

The site includes many rivers and streams, containing, or fringed by plants such as Water Horsetail (*Equisetum fluviatile*), Lesser Spearwort (*Ranunculus flammula*), pondweeds (*Potamogeton natans*, *P. polygonifolius*), sedges (*Carex* spp.) and rushes (*Juncus* spp). By one river the locally-occurring Lemon-scented Fern (*Oreopteris limbosperma*) is found. In some areas gorges have been cut by streams, and here fragments of deciduous woodland remain. These are characterised by Aspen (*Populus tremula*), Rowan (*Sorbus aucuparia*), oak (*Quercus petraea* and *Q. robur*) and willow (*Salix* spp.).

An area of semi-natural deciduous woodland occurs on the steeply sloping eastern side of Glenveagh. The dominant trees are Sessile Oak (*Quercus petraea*), Downy Birch (*Betula pubescens*) and Rowan, with Hazel (*Corylus avellana*) occurring frequently. Holly (*Ilex aquifolium*) occurs in the understorey. Rhododendron (*Rhododendron ponticum*) has invaded much of the woodland and adjacent hillsides. Other species present include Yew (*Taxus baccata*), Juniper and, near Lough Veagh, the scarce Rock Whitebeam (*Sorbus rupicola*). Within the woodland the lower plant community is well-developed with liverworts, including *Frullania tamarisci*, growing on the tree trunks. This is replaced as an epiphyte in damper areas by Wilson's Filmy-fern (*Hymenophyllum wilsonii*). Of particular note is the presence of the scarcer Tonbridge Filmy-fern (*H. tunbrigense*). The woodlands are also notable for the presence of two rare species of Myxomycete fungus, namely *Licea gloeoderma* and *Physarum vernum*, the former in its only known Irish site.

Molinia meadow at the site is characterised by a co-dominance of Purple Moor-grass, Soft Rush (*Juncus effusus*), Sharp-flowered Rush (*J. acutiflorus*) and Conglomerate Rush (*J. conglomeratus*). The habitat occurs in areas that are subject to occasional flooding. Other species recorded include Water Horsetail, Marsh Speedwell (*Veronica scutellata*), Silverweed (*Potentilla anserina*), Marsh Ragwort (*Senecio aquaticus*), Cuckooflower (*Cardamine pratensis*), Marsh Cinquefoil (*Potentilla palustris*) and Marsh Pennywort (*Hydrocotyle vulgaris*).

There are several large oligotrophic lakes on the site, including Lough Barra, Lough Veagh and Lough Altan. Aquatic plant species found include Water Lobelia (*Lobelia dortmanna*), Shoreweed (*Littorella uniflora*) and Bulbous Rush (*Juncus bulbosus*). Lough Veagh also contains two quillwort species (*Isoetes lacustris* and *I. echinospora*), the latter of which is a locally-occurring species. Some of the smaller lakes also contain the scarce species Pipewort (*Eriocaulon aquaticum*).

Many scarce plants have been recorded from cliffs and gullies, mainly around Slieve Snaght and the Poisoned Glen. These include Brittle Bladder-fern (*Cystopteris fragilis*), Alpine Clubmoss (*Diphasiastrum alpinum*), Stiff Sedge (*Carex bigelowii*), Mountain Sorrel (*Oxyria digyna*) and Irish Spurge (*Euphorbia hyberna*). Purple Saxifrage Version date: 28.11.2013 4 of 5 002047_Rev13.Doc (*Saxifraga oppositifolia*) and Alpine Saw-wort (*Saussurea alpina*) have also been recorded from this area, along with a more recent sighting of Killarney Fern (*Trichomanes speciosum*). These are all rare species which are listed in the Irish Red Data Book, the latter also being legally protected under the Flora (Protection) Order, 1999, and listed on Annex II of the E.U. Habitats Directive.

Three other rare Red Data Book plant species have been recorded within the site: Bird Cherry (*Prunus padus*), Small-white Orchid (*Pseudorchis albida*) and Heath Cudweed (*Omalotheca sylvatica*). The two last-named are legally protected under the Flora (Protection) Order, 1999.

The area is also of considerable zoological value. Mammal interest includes the largest herd of Red Deer in Ireland, along with Badgers, Otters, Irish Hares and Stoats.

Lough Veagh contains Arctic Char, a fish species that was once widespread but is now rare in most places. It is listed as vulnerable in the Irish Red Data Book. The Owencarrow and Lackagh River systems support a good population of Atlantic Salmon, a species listed on Annex II of the E.U. Habitats Directive. Brown Trout also occur. Common Lizard has been recorded from the site. The site supports populations of Freshwater Pearl Mussel, a rare species that is listed on Annex II of the E.U. Habitats Directive.

A number of important bird species are represented at this site, with several which are listed in the Red Data Book, and a number listed on Annex I of the E.U. Birds Directive. Those which breed within the area include Red-throated Diver, Golden Plover, Merlin and Peregrine. A small flock of Greenland White-fronted Goose, also listed on Annex I of the E.U. Birds Directive, feed on some of the bogs in winter. The Red Data Book species Goosander and Wood Warbler both breed on the site. Generally, the woodlands are favoured by Siskin, Tree Creepers and Redstarts, while Meadow Pipits, Red Grouse, Ravens, Snipe and Dunlin are among the birds found on the moorland.

One of the major land uses at this site is conservation management. The site contains the whole of the Glenveagh National Park along with two Statutory Nature Reserves, Lough Barra Bog and Meenachullion Bog. Grazing by sheep and deer is common and in a few places the bogs have suffered from over-grazing and poaching. Grazing has also prevented woodland regeneration. Annual deer culls take place to control numbers and the main herd is kept within the confines of the National Park by a 45 km-long deer fence. Invasion by Rhododendron has been a particular problem within the National Park, where it has choked areas of woodland and covered adjacent hillsides. A removal programme is in progress and the threat from this species has been considerably reduced. Peat cutting, both by hand and machine, has caused damage to some bogs in the site. Turbary and afforestation are the main threats to this habitat, with erosion and burning also having an impact. Version date: 28.11.2013 5 of 5 002047_Rev13.Doc

The site is of great scientific and conservation value, particularly for the large areas of excellent, little-damaged blanket bog it contains, including the largest intact area of blanket bog in north-west Ireland. It also includes good quality examples of seminatural deciduous woodland, heath, oligotrophic lakes and inland cliffs. The importance of the site is increased by the presence of a wide range of plant and animal species, including many rare or threatened Red Data Book species, and several that are listed on Annex II of the E.U. Habitats Directive or Annex I of the E.U. Birds Directive.

SITE NAME: DERRYVEAGH AND GLENDOWAN MOUNTAINS SPA

SITE CODE: 004039

Derryveagh and Glendowan Mountains SPA is an extensive upland site in north-west Co. Donegal, comprising Glenveagh National Park, a substantial part of the Derryveagh and Glendowan Mountains and a number of the surrounding lakes. Much of the site is over 300 m above sea level, rising to a peak of 678 m at Slieve Snaght. The solid geology is predominantly quartzite. The substrate over much of site is peat, with blanket bog and heath comprising the principal habitats.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Red-throated Diver, Merlin, Peregrine, Golden Plover and Dunlin.

This site is one of only a few locations where Red-throated Diver breed in Ireland and the birds also use a number of lakes within the site for feeding. A survey in 2010 recorded 6 pairs at the site. The extensive bog and heath habitats provide excellent foraging habitat for both Peregrine (5-6 pairs in 2002) and Merlin (estimated 6-11 pairs). Peregrine nest on the crags and cliffs, whilst Merlin nest in the heather or in old crows' nests in trees. The site is very important for breeding Golden Plover and Dunlin (subsp. *schinzii*) with 18 and 5 pairs respectively recorded in 2002.

Red Grouse is also widespread on the bogs and Ring Ouzel, a rare species of the uplands, breeds sparingly, with at least 2 pairs recorded in a 2002 survey. Several pairs of Whinchat, a scarce Irish species, breed within the site. Goosander is also a regular visitor to the lakes, though breeding within the site has not been proved. Snowy Owl has also attempted to breed within the site - a clutch of eggs was laid but these did not hatch. Wood Warbler is present annually, with perhaps three pairs occurring. Redstart has bred on at least one occasion but there have been few sightings in recent years and it is not known if breeding occurs regularly.

Glenveagh National Park is the central location for the Golden Eagle re-introduction programme, which commenced in 2000. With time, this species may become successfully re-established as a breeding species in Ireland.

The site is of high ornithological importance with nationally important breeding populations of five species. Of particular note is that five of the species that occur regularly are listed on Annex I of the E.U. Birds Directive, i.e. Red-throated Diver, Peregrine, Merlin, Golden Plover and Dunlin (subsp. *schinzii*). A large proportion of Lough Barra Bog, a Ramsar Convention site and a Statutory Nature Reserve, is within the Derryveagh and Glendowan Mountains SPA.

Appendix 2 –Assessment of Natura 2000 Sites

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Propos	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
<p>Site Name: West Donegal Coast SPA</p> <p>Site Code: 004150</p> <p>The West Donegal Coast SPA comprises separate sections of the Co. Donegal coastline and extends from Muckros Head in the south, northwards to Slieve League, Malin Beg, Rocky Point, Glen Head, Slieve Tooley, Maghera, Loughros Point, Dunmore Head, Aran Island, Magheradrumman, Carrickfin, Carnboy, Bunbeg, Magheragallan, Lunniagh, as far as Carrick, to the south of Bloody Foreland. The site includes the high coast areas and sea cliffs of the mainland and Aran Island, the land adjacent to the cliff, areas of sand dunes/machair at Maghera, Mullaghderg, Braade/Carrickfin/Carnboy, Magheragallan and Lunniagh/Carrick, and also several areas further inland of the coast at Croghmuckros and Slieve League, north of Glencolumbkille and south of Dunmore Head. A low-lying area of land on the coast at Bunbeg used by roosting Chough is also included. The high water mark forms the seaward boundary, except at Tormore Island where the adjacent sea area to a distance of 500 m from the cliff base is included. Most of the site is underlain by granite and quartzite, though various other, particularly metamorphic, rock types also occur; rocks of Carboniferous age are found at Muckros Head.</p>	<p>The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Chough, Peregrine, Fulmar, Cormorant, Shag, Herring Gull, Kittiwake and Razorbill.</p> <p>Vegetated sea cliffs are the predominant habitat of the site; these occur along its length and support a good variety of plant species typical of the habitat, including some rarities. The cliff tops support heath, blanket bog or coastal grassland. The northern section of the site includes several areas of machair. Apart from the sea cliffs and machair, the site includes areas of dry heath, wet heath, blanket bog, upland acid grassland, dense Bracken (<i>Pteridium aquilinum</i>), scrub, semi-improved and improved pasture grassland, fixed and mobile dune grassland, freshwater marsh, streams, oligotrophic lakes, bedrock shores and islets.</p> <p>The site supports an important population of breeding Chough, a Red Data Book species that is listed on Annex I of the E.U. Birds Directive; 40 breeding pairs were recorded from the site in the 1992 survey and 58 in the 2002/03 survey. Concentrations of breeding pairs occur on the Glencolumbkille Peninsula, from Killybegs in the south to Loughros Beg Bay in the north and on Aran Island. On Aran the exposed maritime situation coupled with sheep grazing has resulted in large areas of short sward suitable for foraging Chough.</p>	<p>The only risk factor is the entry of pollutants into the Clady River upstream of the SPA. This is unlikely due to the separation distance between the site and the river.</p> <p>This will be negated though controls which will be put in place prior to construction.</p> <p>These controls will include storage and mixing of materials/chemicals in a safe area located away from waters. All workers will be made aware of the presence of the habitat as part of their site induction.</p>	<ul style="list-style-type: none"> • The predominant habitat of the SPA is a vegetative sea cliff. • Proposal is to install a Waste Management and Bring Bank Facility at Udaras na Gaeltachta, as detailed above. • With the controls in place as described likely impact on the SPA is unlikely. <p>Consideration: Scheme does not impact the SPA.</p>	<ul style="list-style-type: none"> • There are no other works planned for the area. • The works do not constitute a major change in the land use of the area. <p>Consideration: Scheme does not have a cumulative impact on the SPA.</p>	<p>Consideration: The scheme does not have a significant impact on the Natura 2000 Site. This is due to the separation distance between the works and the qualifying interests contained in the SPA and controls that will be in place during construction.</p>

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Propos	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
	<p>Flocking activity is centred on some of the extensive sand dune systems present; flocks of 76, 22 and 40 birds were recorded at Carrick, Dooley and Sheskinmore respectively in October 2004. At Sheskinmore, which is included in a separate SPA, larger flocks of as many as 140 birds have been previously reported. Up to 40 birds have been recorded roosting at Glen Head near Glencolumbkille and feeding in that area during September 2004.</p>	<p>Contractor to ensure solids are removed from any surface water prior to discharge into storm drains, this to be ensured by keeping a tidy organised site with areas clearly marked for mixing chemicals and by regularly sweeping approach roads to and within the site.</p> <p>Bunds to be in place in the event of a spillage to minimise impact.</p>			

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
<p>Site Name: Gweedore Bay and Islands SAC</p> <p>Site Code: 001141</p> <p>Gweedore Bay and Islands is an extensive coastal site situated between Burtonport in the south, Bloody Foreland in the north, near the towns of Derrybeg, Bunbeg and Annagary, and stretching eastwards to Bunaninver. It includes a large stretch of coastline, many islands (including Inishsirr, Inishmeane, Gola, Umfin, Inishfree Lower and parts of Cruit Island) and areas of marine water between the islands and the coast. The terrain is generally undulating with knolls of exposed rock. The site is underlain by Granodiorite, a basic igneous rock. Areas of machair and sand dunes occur in several places along the coast, and large areas of sandflats are exposed off the coast at low tide. The site is of great ecological interest and importance.</p> <p>The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):</p> <ul style="list-style-type: none"> • [1150] Coastal Lagoons* • [1170] Reefs • [1220] Perennial Vegetation of Stony Banks 	<p>Machair grasslands are frequent within this site, being most extensive at Derrybeg, Bunlack, Carnboy, Kincaslough and west of Keadew. Machair occupies the central area of the tombolo joining Carnboy to the mainland and supports a species-rich vegetation, with hummocky areas colonised by Marram (<i>Ammophila arenaria</i>), Thrift (<i>Armeria maritima</i>), Sea Campion (<i>Silene vulgaris</i> subsp. <i>maritima</i>) and Common Sorrel (<i>Rumex acetosa</i>), and flat areas between the hummocks with a grassy vegetation dominated by a variety of grass species and with an abundance of small herbs. The vegetation of the other areas of machair in the site is broadly similar.</p> <p>Sand dunes are frequently found in association with machair. Embryonic dunes are well represented, with particularly good examples to be found at Magheraclogher and to the west of Keadue strand. Lyme Grass (<i>Leymus arenarius</i>), Sand Couch (<i>Elymus farctus</i>) and Sand Sedge (<i>Carex arenaria</i>) are characteristic species of the embryonic dunes. The embryonic dunes often merge with white dunes dominated by Marram.</p>	<p>Site is extensive and primarily vulnerable to effects of surrounding agricultural activities and urban residential and industrial development.</p> <p>The only risk factor is the entry of pollutants into the drainage network and particularly nutrient pollution of waters. This will be negated though controls which will be put in place prior to construction.</p>	<ul style="list-style-type: none"> • The habitat of the SAC includes sand dunes, shingle banks, high exposed shores, boulders, stoney beaches, sand flats, lagoons, reef and dune grasslands. • Proposal is to install a Waste Management and Bring Bank Facility at Udaras na Gaeltachta, as detailed above. • With the controls in place as described likely impact on the SAC is unlikely. <p>Consideration: Scheme does not impact the SAC.</p>	<ul style="list-style-type: none"> • There are no other works planned for the area. • The works do not constitute a major change in the land use of the area. <p>Consideration: Scheme does not have a cumulative impact on the SAC.</p>	<p>Consideration: The scheme does not have a significant impact on the Natura 2000 Site. This is due to the separation distance between the works and the qualifying interests contained in the SAC and controls that will be in place during construction.</p>

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
<ul style="list-style-type: none"> • [1330] Atlantic salt meadows (<i>Glaucopuccinellietalia maritimae</i>) • [1410] Mediterranean Salt Meadows • [2110] Embryonic Shifting Dunes • [2120] Marram Dunes (White Dunes) • [2130] Fixed Dunes (Grey Dunes)* • [2140] Decalcified Empetrum Dunes* • [2150] Decalcified Dune Heath* • [2170] Dunes with Creeping Willow • [2190] Humid Dune Slacks • [21A0] Machairs* • [3130] Oligotrophic to Mesotrophic Standing Waters • [4030] Dry Heath • [4060] Alpine and Subalpine Heaths • [5130] Juniper Scrub • [1065] Marsh Fritillary (<i>Euphydryas aurinia</i>) • [1355] Otter (<i>Lutra lutra</i>) • [1395] Petalwort (<i>Petalophyllum ralfsii</i>) • [1833] Slender Naiad (<i>Najas flexilis</i>) 	<p>Fixed dunes are frequent throughout the site, with some of the best examples occurring at Lunniagh, to the north of Mullaghderg Lough, Gola Island and Cruit Island. The habitat is normally found behind the embryonic and/or Marram dunes, and these dunes can reach a height of 20 m or more. Important species of the habitat include Red Fescue (<i>Festuca rubra</i>), Lady's Bedstraw (<i>Galium verum</i>), Marram, Pyramidal Orchid (<i>Anacamptis pyramidalis</i>), Burnet Rose (<i>Rosa pimpinellifolia</i>), Common Bird's-foot-trefoil (<i>Lotus corniculatus</i>), Wild Carrot (<i>Daucus carota</i>) and Wild Thyme (<i>Thymus praecox</i>). The most frequent and conspicuous bryophytes are <i>Tortula ruraliformis</i>, <i>Homalothecium lutescens</i> and <i>Rhytidiadelphus squarrosus</i>. At least three separate populations of the Red Data Book plant Hoary Whitlowgrass (<i>Draba incana</i>) have been recorded growing in this habitat. Another unusual species associated with the habitat is the diminutive fern, Moonwort (<i>Botrychium lunaria</i>), a nationally scarce plant species.</p> <p>Fixed dunes with heath vegetation, including a specific type with Crowberry (<i>Empetrum nigrum</i>), are a feature of the site.</p>				

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	<p>This habitat has developed on thin, well-drained sandy soils often with outcropping rock, along the contact zone between dune grassland and coastal heath. At certain sites the habitats have developed in areas where sand is blown up onto coastal heath by strong onshore winds. This mixing of sand and peat soils result in the co-occurrence of dune grassland species such as Red Fescue, Common Birds'-foot-trefoil, Burnet Rose and Wild Thyme, with dry heath species such as Heather (<i>Calluna vulgaris</i>), Bell Heather (<i>Erica cinerea</i>), Heath-grass (<i>Danthonia decumbens</i>), Slender St. John's-wort (<i>Hypericum pulchrum</i>) and Tormentil (<i>Potentilla erecta</i>). Crowberry is an occasional species.</p> <p>Also associated with the dune systems are dune slacks. These occur in both small, seasonally flooded depressions interspersed between areas of high fixed dune and as well as in more extensive flat areas. Creeping Willow (<i>Salix repens</i>) is a characteristic species, and is often accompanied by a range of wetland species, including Common Bent (<i>Agrostis stolonifera</i>), Marsh Bedstraw (<i>Galium palustre</i>), Silverweed (<i>Potentilla anserina</i>),</p>				

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	<p>Marsh Pennywort (<i>Hydrocotyle vulgaris</i>), Marsh Cinquefoil (<i>Potentilla palustris</i>), Trailing Tormentil (<i>Potentilla anglica</i>) and Autumn Hawkbit (<i>Leontodon autumnalis</i>), as well as a range of small sedge species (e.g. <i>Carex demissa</i>, <i>Carex nigra</i> and <i>Carex flacca</i>). Species typical of well-drained dune grassland occur in the drier areas of the slacks.</p> <p>At several areas within this site shingle bank vegetation is well represented. Of particular note is a stretch from Port ui Chuirean to Bunabinver, and an area at Port bun an Inbhir. These are highly exposed shores, with boulder and stony beaches which are unvegetated in some parts but have a well-developed flora in other parts, including stabilized zones with lichens. Species present include Spear-leaved Orache (<i>Atriplex prostrata</i>), Thrift, Common Scurvygrass (<i>Cochlearia officinalis</i>), Red Fescue, Buck's-horn Plantain (<i>Plantago coronopus</i>), Silverweed, Curled Dock (<i>Rumex crispus</i>), Sea Campion and Sea Mayweed (<i>Matricaria maritima</i>). The rare Sea Pea (<i>Lathyrus japonicus</i>), a species protected under the Flora (Protection) Order, 2015, has been recorded from the site.</p> <p>The largest area of saltmarsh at the site occurs in the shallow bay north of Derrybeg. A substantial area of Mediterranean salt meadow, dominated by Sea Rush (<i>Juncus maritimus</i>), occurs where the Cathleen river enters Derrybeg bay.</p>				

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
	<p>Other species present include Red Fescue, Creeping Bent (<i>Agrostis stolonifera</i>), Sea Arrowgrass (<i>Triglochin maritima</i>), Common Scurvygrass, Sea-milkwort (<i>Glaux maritima</i>) and, unusually, Purple Moor-grass (<i>Molinia caerulea</i>) and Black Bog-rush (<i>Schoenus nigricans</i>).</p> <p>Atlantic salt meadow occurs as two separate areas; one located behind the relatively sheltered headland of Keadew Point, the second located in the south-eastern or uppermost part of Keadew Strand inlet. Both sections of saltmarsh are characterised by the presence of the large intertidal sand flats that occupy much of the inlet. The most frequent species is Sea Milkwort, although its abundance is variable. Pioneer vegetation is dominated by Common Saltmarsh-grass (<i>Puccinellia maritima</i>), although smaller abundances of Thrift, Sea Plantain (<i>Plantago maritima</i>) and Glasswort (<i>Salicornia</i> spp.) also occur. This pioneer vegetation is highly dynamic and it is likely that the vegetation is regularly reshaped with changes in extent of the saltmarsh and embryonic dunes. Low marsh vegetation is typically characterised by species such as Sea Aster (<i>Aster tripolium</i>), Thrift, Common Scurvy-Grass, Sea Plantain and Sea Arrow-Grass (<i>Triglochin maritimum</i>), with Distant Sedge (<i>Carex distans</i>), Extended Sedge (<i>Carex extensa</i>) and Saltmarsh Rush (<i>Juncus gerardii</i>).</p>				

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
	<p>One notable species is Flat Saltmarsh sedge (<i>Blysmus rufus</i>), an occasional component of the upper marsh, in vegetation transitional to the sand dune habitats.</p> <p>The site has at least two lagoons. Kincas Lough, which lies opposite Cruit Island, is a saline lake lagoon with a sluiced artificial outlet. Seawater enters on most tides but the lake also receives large volumes of freshwater from small streams and the channel which drains from Lough Mullaghderg to the north. Moorlagh, which lies just south of Annagary, is a saline lake lagoon with an artificial barrier formed by a causeway and road bridge, with a natural outlet modified by sluices. Seawater enters on most tides but large streams enter from the south. A range of typical lagoonal plants occur, including the charophyte <i>Chara aspera</i>, Tasselweed (<i>Ruppia cirrhosa</i>), Saltmarsh Flat-rush, and the green alga <i>Chaetomorpha linum</i>. The number of faunal species present is quite high but many of these are species which can move easily between marine and freshwater systems and may not be resident species. However, four lagoonal specialists have been recorded, i.e. <i>Jaera nordmanni</i>, <i>J. ischiosetosa</i> (both Order Isopoda), <i>Neomysis integer</i> (Order Mysida) and <i>Cordylophora caspia</i> (a hydrozoan, Phylum Cnidaria).</p> <p>Reef communities occur along much of the rocky shore from the Rutland area (where fine examples have been documented) to Bloody Foreland.</p>				

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
	<p>Areas of dry heath are common along the exposed rocky shores of this site which are not dominated by sand-dunes or related habitats. Typically, areas of heath occur interspersed between rocks outcrops and patches of acid grassland vegetation. However, the habitat may occasionally occur as a mosaic with dune grassland, giving rise to a species-rich mixture of plants, such as at Rinnalea Point north of Kincaslough. The typical species encountered in the habitat are Heather (often dominant), Bell Heather, Cross-leaved Heath (<i>Erica tetralix</i>), Purple Moor-grass, Tormentil and Mat-grass (<i>Nardus stricta</i>). Locally, more unusual species such as Bearberry (<i>Arctostaphylos uva-ursi</i>) and Crowberry can occur, indicating the presence of alpine/subalpine heath, while in other areas the habitat forms a mosaic with heath dominated by Juniper (<i>Juniperus communis</i>).</p> <p>The lakes at this site are good examples of oligotrophic lakes, of which Mullaghderg Lough is the largest and most interesting. Typical plant species present include Water Lobelia (<i>Lobelia dortmanna</i>), Pipewort (<i>Eriocaulon aquaticum</i>) and Quillwort (<i>Isoetes lacustris</i>). The Annex II aquatic species Slender Naiad (<i>Najas flexilis</i>) occurs in at least one of the lakes. This species is listed in the Flora (Protection) Order, 2015.</p>				

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
	<p>The site includes many other coastal habitats, i.e. areas of sandflats, saltmarsh, sandy beaches, boulder beaches, rocky foreshore and sea cliffs, inlets, bays, open marine water, reefs, islets, brackish water lakes/inlets and Sea Buckthorn (<i>Hippophae rhamnoides</i>) scrub, amongst others. This diverse site also includes areas of grassland, lakes, freshwater marsh, cut-away bog and Sessile Oak (<i>Quercus petraea</i>) woodland.</p> <p>The site is notable for the presence of a number of rare plants species, including Slender Naiad, mentioned above, and Petalwort (<i>Petalophyllum ralfsii</i>), both of which are listed on Annex II of the E.U. Habitats Directive. Scarce bryophytes recorded from the site include <i>Distichium inclinatum</i> and <i>Rhodobryum roseum</i>. Also found on the site is Small-white Orchid (<i>Pseudorchis albida</i>), a species protected under the Flora (Protection) Order, 2015, and the threatened, Red Data Book species, Hoary Whitlowgrass.</p> <p>Otters are present at this site and are considered to be common and breeding. Otter is listed on Annex II of the E.U. Habitats Directive. The Marsh Fritillary (<i>Euphydryas aurinia</i>), an Annex II and red-listed butterfly (VU), is present in several parts of the SAC. There is a long-established population centred on the heaths and dune grasslands of Cruit Island and it is also recorded from Inishsirrer and Inishmeane.</p>				

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	<p>It may also occur in other localities in habitats with its foodplant Devil's-bit Scabious (<i>Succisa pratensis</i>). Cruit Island is considered one of the richest butterfly sites in western Donegal. There have been records of 21 species including the additional red listed and near threatened species Small Blue (<i>Cupido minimus</i>), Dark Green Fritillary (<i>Argynnis aglaja</i>), Grayling (<i>Hipparchia semele</i>) and Small Heath (<i>Coenonympha pamphilus</i>).</p> <p>The habitats in the SAC support a notable assemblage of bees especially bumblebees which are increasingly confined to large areas of flower-rich habitat. The red-listed and near threatened species <i>Bombus rupestris</i>, <i>Bombus campestris</i>, <i>Bombus ruderarius</i>, <i>Bombus lapidarius</i> and <i>Bombus muscorum</i> have all been recorded. The small solitary bee <i>Colletes floralis</i> is also recorded from several sites within the SAC. This is red listed in Ireland and in Europe and the Irish population is considered globally highly significant. Records of terrestrial and freshwater molluscs from the following red listed and near threatened species include <i>Helicella itala</i>, <i>Radix auricularia</i>, <i>Vertigo antivertigo</i>, <i>Vertigo pygmaea</i> and <i>Vertigo substriata</i>.</p>				

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
	<p>Many of the islands in the site are used by breeding seabirds (e.g. Common Gull, Herring Gull, Black-headed Gull, Lesser Black-backed Gull, Common Tern and Arctic Tern). All but the latter species also breed at Mullaghderg Lough. In 1995, 18 pairs of Common Tern and 28 pairs of Arctic Tern were recorded. Cormorant, Shag and Storm Petrel also use some of the islands in the site. Barnacle Goose winter on islands in the bay, with more than 300 individuals recorded in some years, e.g. 388 in spring 1994. Choughs are found in many areas of the site, e.g. on Cruit Island and Gola Island - a total of 6 pairs of Chough bred within the site in 1992. Nationally important numbers of Long-tailed Duck occur in Inishfree Bay, with an average maximum of 53 individuals over the five year period 1994/95-1998/99. An important population of Great Northern Diver also occurs in Inishfree Bay (average maximum of 36 individuals). The site has important populations of breeding waders, especially on the machairs. In a 1996 survey, the following were recorded: Oystercatcher 23 pairs, Ringed Plover 7 pairs, Lapwing 43 pairs, Dunlin 6 pairs and Redshank 5 pairs. Several of the bird species that use the site are listed on Annex I of the E.U. Birds Directive, i.e. Barnacle Goose, Chough, Great Northern Diver, Storm Petrel and the tern species.</p>				

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
	<p>The sand dunes and areas of machair on the site are particularly vulnerable to being overused for recreational activities and to unfavourable grazing regimes. Machair is best maintained as an open, evenly-grazed sward. A number of caravan sites are found on the margins of the site. Removal of sand and seaweed occurs at several locations, while some areas of saltmarsh are being reclaimed.</p> <p>The site is of high ecological value for the occurrence of a wide range of coastal habitats, including areas of well-developed machair, sand dunes and shingle banks. It contains seventeen habitats that are listed, five with priority status, on Annex I of the E.U. Habitats Directive and, as such, is of considerable conservation significance. The presence of populations of three E.U. Habitats Directive Annex II species and of several E.U. Birds Directive Annex I species adds significantly to the overall importance of the site.</p>				

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
<p>Site Name: Fawnboy Bog / Lough Nacung SAC Site Code: 000140</p> <p>This site is situated 2 km east of Gweedore and 1.2 km north-west of Dunlewy village in Co. Donegal. It lies at the western foothills of the spectacular Errigal Mountain. Geologically, the site is underlain by metamorphosed limestones and calcareous siltstones which outcrop to the east of the area. Several deep-seated east/west faults cut across the terrain which may act as conduits for base-rich groundwater, accounting for the occurrence of calcicole species in the flora.</p> <p>The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):</p> <ul style="list-style-type: none"> • [4010] Wet Heath • [7130] Blanket Bogs (Active)* • [7150] Rhynchosporion Vegetation • [1029] Freshwater Pearl Mussel (<i>Margaritifera margaritifera</i>) 	<p>The site is of conservation importance primarily for its blanket bog. The bog occurs in association with wet heath, rock outcrop and a number of oligotrophic (nutrient-poor) lakes. The most extensive tract of blanket bog occurs to the east of Lough Nacung where it covers a gently undulating terrain of low ridges, wet slopes and small valleys. The bog expanse is dominated by Heather (<i>Calluna vulgaris</i>), Purple Moor-grass (<i>Molinia caerulea</i>), Black Bog-rush (<i>Schoenus nigricans</i>) and low hummocks of the bog mosses <i>Sphagnum papillosum</i>, <i>S. capillifolium</i> and <i>S. subnitens</i>. Inter-connecting bog pool systems occur, with typical pool, lawn and hummock communities supporting a wide range of bog mosses (e.g. <i>S. cuspidatum</i>, <i>S. auriculatum</i>, <i>S. palustre</i>, <i>S. capillifolium</i>, <i>S. papillosum</i>, <i>S. subnitens</i>, <i>S. magellanicum</i>, <i>S. imbricatum</i> and <i>S. fuscum</i>). Vascular plants such as Bog Sedge (<i>Carex limosa</i>), Common Cottongrass (<i>Eriophorum angustifolium</i>), Lesser Bladderwort (<i>Utricularia minor</i>), sundews (<i>Drosera</i> spp.), Bogbean (<i>Menyanthes trifoliata</i>), Black Bog-rush, Purple Moor-grass, Heather and Bog-myrtle (<i>Myrica gale</i>) are also found here. The vegetation of the wet lawns and pools, especially where extensive quaking areas occur, is representative of Rhynchosporion, though this habitat can also be found in cutover areas which have not been disturbed for some time.</p>	<p>Site is extensive and primarily vulnerable to effects of surrounding agricultural activities and urban residential and industrial development.</p> <p>The only potential risk factor is the entry of pollutants into the drainage network and particularly nutrient pollution of waters. This will be negated through controls which will be put in place prior to construction.</p> <p>These controls will include storage and mixing of materials/chemicals in a safe area located away from waters.</p>	<ul style="list-style-type: none"> • The habitat of the SAC includes grassland, streams, lakes and rock outcrops. • Proposal is to install a Waste Management and Bring Bank Facility at Údaras na Gaeltachta, as detailed above. • The SAC is located outside the site extents. With the controls in place as described likely impact on the SAC is unlikely. <p>Consideration: Scheme does not impact the SAC.</p>	<ul style="list-style-type: none"> ▪ There are no other works planned for the area. ▪ The works do not constitute a major change in the land use of the area. <p>Consideration: Scheme does not have a cumulative impact on the SAC.</p>	<p>Consideration: The scheme does not have a significant impact on the Natura 2000 Site. This is due to the separation distance between the works and the qualifying interests contained in the SAC and controls that will be in place during construction.</p>

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
	<p>A number of flush communities are found in association with the bog. One type is dominated by Purple Moor-grass and Sharp-flowered Rush (<i>Juncus acutiflorus</i>), with Heath Wood-rush (<i>Luzula multiflora</i>), Bogbean, Bog-myrtle, Marsh Violet (<i>Viola palustris</i>) and a dense carpet of mosses such as <i>S. capillifolium</i>, <i>Polytrichum commune</i>, Version date: 24.07.2013 2 of 2 000140_Rev13.Doc <i>Hylocomium splendens</i> and <i>Rhytidiadelphus squarrosus</i>. Another more calcareous flush type supports Black Bog-rush, Bog-myrtle, scattered Common Reed (<i>Phragmites australis</i>) and a range of sedges (<i>C. lasiocarpa</i>, <i>C. lepidocarpa</i>, <i>C. dioica</i>, <i>C. hostiana</i>, <i>C. rostrata</i>, <i>C. paniculata</i> and <i>C. limosa</i>).</p> <p>Wet heath occurs on the sloping ground to the east and south of the site where the peat is thin, as well as in small patches throughout the blanket bog. This is usually dominated by Cross-leaved Heath (<i>Erica tetralix</i>), although the rare Mackay's Heath (<i>E. mackaiana</i>), a Red Data Book species, occurs in abundance amongst heath vegetation along the southern side of Lough Nacung and is dotted throughout the heath away from the lake shore. The hybrid between these species, <i>E. x stuartii</i>, also occurs here.</p>				

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
	<p>Along the Clady River, and at sections along the margins of Lough Nacung, scrub dominated by gorse (<i>Ulex</i> sp.) and willow (<i>Salix</i> spp.) occurs in mosaic with wet grassland and patches of bog/heath. Scrub/woodland is also found adjacent to a stream that flows into Lough Nacung, including such species as Alder (<i>Alnus glutinosa</i>), Rowan (<i>Sorbus aucuparia</i>), Eared Willow (<i>S. aurita</i>) and Gorse (<i>U. europaeus</i>). The rare Lemon-scented Fern (<i>Oreopteris limbosperma</i>) occurs in this wood. Lough Nacung itself is notable for the occurrence of the aquatic plant Pillwort (<i>Pilularia globulifera</i>), a legally protected plant under the Flora (Protection) Order, 1999.</p> <p>The site supports a population of Pearl Mussel (<i>Margaritifera margaritifera</i>), a species listed under Annex II of the E.U. Habitats Directive.</p> <p>The site is sometimes used as a feeding ground by the flock of Greenland White-fronted Goose based around Dunfanaghy. Lough Nacung is suitable breeding habitat for the very localised Red-Throated Diver. Both of these birds are Annex I species under the E.U. Birds Directive.</p> <p>The Irish Hare is present on the site. This species is legally protected under the Wildlife Act, 1976, and is a Red Data Book species.</p>				

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
	<p>Land use at the site consists of peat cutting, which may pose a threat to the quality of the blanket bog. Grazing, mainly by sheep, also occurs. An electric power station and dam have been installed between Loughs Nacung Upper and Lower. Small scale quarrying is carried out around the edge of the site. Afforestation is quite extensive outside the site boundary.</p> <p>In summary, this site is of conservation interest for the occurrence of intact lowland blanket bog, Rhynchosporion vegetation and good quality wet heath. The presence of several notable plant and animal species adds to the value of the site, particularly the Pearl Mussel, Mackay's Heath, Pillwort and Greenland White-fronted Goose.</p>				

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
<p>Site Name: Cloghernagore Bog and Glenveagh National Park SAC Site Code: 002047</p> <p>Cloghernagore Bog and Glenveagh National Park SAC is an exceptionally large inland site located in the centre of north-west Donegal. It includes a rich diversity of habitats and landscape features, including mountains, exposed rock and scree, blanket bogs, dry, wet and alpine heath, upland grassland, wet grassland, rivers, lakes, scrub and woodland. The Gweebarra fault bisects the area forming a long valley, orientated north-east to south-west, in which Lough Barra and Lough Veagh (Beagh) are situated. The area is generally mountainous, taking in most of the Derryveagh and Glendowan ranges and including the two highest mountains in Donegal, Errigal (751 m) and Slieve Snaght (678 m). Towards the centre-west of the site are the fine ice-carved cliffs of the Poisoned Glen and Bingorms, which contrast dramatically with the gently undulating expanses of blanket bog in the south-west and north-east of the site. The underlying rock is predominantly granite, with a few intrusive dykes. However, around Errigal the geology is more complex with bands of schists, quartzite, granodiorite and limestone occurring.</p> <p>The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):</p>	<p>Atlantic blanket bog is the dominant habitat of interest, with much of it being relatively unspoilt. Indeed, the area around Cloghernagore constitutes the most extensive blanket bog system remaining in the north-west of Ireland. Overall, there are excellent examples of several types of blanket bog including Highland Bog (Cashelnagor and Dunlewy Far), Lowland Bog (Cloghernagore and Glenveagh Bridge), Domed Valley Bog (Derrybeg and Calabber Valley), Headwater Bog (Crockastoller and Carrickatimpan Mountain) and blanket bog apparently in the early stages of formation (Attinadague).</p> <p>The blanket bog vegetation is relatively uniform and typically dominated by Purple Moor-grass (<i>Molinia caerulea</i>), Heather (<i>Calluna vulgaris</i>), Black Bog-rush (<i>Schoenus nigricans</i>), Deergrass (<i>Scirpus cespitosus</i>) and Common Cottongrass (<i>Eriophorum angustifolium</i>), with areas of Bog-myrtle (<i>Myrica gale</i>) also occurring.</p> <p>A number of features indicative of well-developed blanket bog are found at the site. The pool systems found are typically colonised by bog moss species such as <i>Sphagnum auriculatum</i> and <i>S. cuspidatum</i>, Lesser Bladderwort (<i>Utricularia minor</i>), Bogbean (<i>Menyanthes trifoliata</i>) and sedges (e.g. <i>Carex panicea</i> and <i>C. limosa</i>), with Great Sundew (<i>Drosera anglica</i>) occurring around the margins. Hummocks of <i>Sphagnum</i> species (including <i>S. capillifolium</i>, <i>S. imbricatum</i> and <i>S. papillosum</i>) and other mosses such</p>	<p>Site is extensive and primarily vulnerable to effects of surrounding agricultural activities and urban residential and industrial development.</p> <p>The only risk factor is the entry of pollutants into the drainage network and particularly nutrient pollution of waters. This will be negated though controls which will be put in place prior to construction.</p>	<p>The habitat of the SAC includes atlantic and blanket bog.</p> <ul style="list-style-type: none"> Proposal is to install a Waste Management and Bring Bank Facility at Udaras na Gaeltachta, as detailed above. With the controls in place as described likely impact on the SAC is unlikely. <p>Consideration: Scheme does not impact the SAC.</p>	<ul style="list-style-type: none"> There are no other works planned for the area. The works do not constitute a major change in the land use of the area. <p>Consideration: Scheme does not have a cumulative impact on the SAC.</p>	<p>Consideration: The scheme does not have a significant impact on the Natura 2000 Site. This is due to the separation distance between the works and the qualifying interests contained in the SAC and controls that will be in place during construction.</p>

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
<ul style="list-style-type: none"> • [3110] Oligotrophic Waters containing very few minerals • [3260] Floating River Vegetation • [4010] Wet Heath • [4030] Dry Heath • [4060] Alpine and Subalpine Heaths • [6410] <i>Molinia</i> Meadows • [7130] Blanket Bogs (Active)* • [7150] Rhynchosporion Vegetation • [91A0] Old Oak Woodlands • [1029] Freshwater Pearl Mussel (<i>Margaritifera margaritifera</i>) • [1106] Atlantic Salmon (<i>Salmo salar</i>) • [1355] Otter (<i>Lutra lutra</i>) • [1421] Killarney Fern (<i>Trichomanes speciosum</i>) 	<p>other mosses such as <i>Leucobryum glaucum</i> and <i>Racomitrium lanuginosum</i> are found, as are flushed areas with <i>Sphagnum</i> species such as <i>S. auriculatum</i> var. <i>inundatum</i> and <i>S. magellanicum</i>, Common Reed (<i>Phragmites australis</i>), rushes (<i>Juncus acutiflorus</i> and <i>J. effusus</i>) or sedges (<i>Carex echinata</i>, <i>C. rostrata</i> and <i>C. demissa</i>). There are also quaking flats of mosses (<i>Campylopus atrovirens</i>, <i>C. brevopilus</i>, <i>Pleurozia purpurea</i> and <i>Sphagnum</i> spp.) with sedges (e.g. <i>Carex lasiocarpa</i>), and shallow, infilling lakes with associated <i>Sphagnum</i> scrubs and sedge swards. The vegetation described for the pool areas and wet quaking flats is representative of Rhynchosporion vegetation.</p> <p>A number of scarce or only locally-occurring vascular plant species have been recorded from bogs on the site. These include a hybrid Sundew, <i>Drosera anglica</i> x <i>D. rotundifolia</i> (<i>Drosera</i> x <i>obovata</i>), Whorled Caraway (<i>Carum verticillatum</i>), Bearberry (<i>Arctostaphylos uva-ursi</i>), Cranberry (<i>Vaccinium oxycoccos</i>) and, in a gorge, Cowberry (<i>Vaccinium vitis-idaea</i>). Lower plants of note include several mosses (<i>Sphagnum fuscum</i>, <i>S. contortum</i>, <i>S. recurvum</i> var. <i>tenuis</i>, <i>S. molle</i>, <i>Calliergon stramineum</i> and <i>Polytrichum longisetum</i>) and lichens (<i>Cladonia parasitica</i>, <i>C. gracilis</i>, <i>C. bellidiflora</i>, <i>C. cervicornis</i> subsp. <i>verticillata</i>, <i>C. digitata</i>, <i>Peltigera hymenaea</i>, <i>Sphaerophorus fragilis</i>, <i>Usnea fragilesceus</i> and <i>Umbilicaria polyrrhiza</i>).</p>				

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
	<p>Wet heath occurs at this site in an intimate mosaic with blanket bog, and the vegetation of the two habitat types intergrades. This occurs particularly on the lower slopes of hills, where deep lowland blanket peat meets shallower peat on the flanks of hills. Dry heath occurs at this site on slopes above 300 m. Heather and Bell Heather (<i>Erica cinerea</i>) are common, while species such as Gorse (<i>Ulex europaeus</i>) and Western Gorse (<i>U. gallii</i>) are thought to be relatively uncommon. Other species present include Common Bent (<i>Agrostis capillaris</i>), Velvet Bent (<i>A. canina</i>), Heath-grass (<i>Danthonia decumbens</i>) and Sheep's-fescue (<i>Festuca ovina</i>).</p> <p>Subalpine heath is found at this site on very thin, peaty soils with some bare rock evident. The community is typically dominated by Heather and Bilberry (<i>Vaccinium myrtillus</i>). Crowberry (<i>Empetrum nigrum</i>) is also found on some of the higher mountain slopes. Other species of note in this habitat are Tormentil (<i>Potentilla erecta</i>) and the moss <i>Racomitrium lanuginosum</i>. Juniper (<i>Juniperus communis</i>) and Bearberry are occasional on mountain summits.</p> <p>The site includes many rivers and streams, containing, or fringed by plants such as Water Horsetail (<i>Equisetum fluviatile</i>), Lesser Spearwort (<i>Ranunculus flammula</i>), pondweeds (<i>Potamogeton natans</i>, <i>P. polygonifolius</i>), sedges (<i>Carex</i> spp.) and rushes (<i>Juncus</i> spp.).</p>				

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
	<p>By one river the locally-occurring Lemon-scented Fern (<i>Oreopteris limbosperma</i>) is found. In some areas gorges have been cut by streams, and here fragments of deciduous woodland remain. These are characterised by Aspen (<i>Populus tremula</i>), Rowan (<i>Sorbus aucuparia</i>), oak (<i>Quercus petraea</i> and <i>Q. robur</i>) and willow (<i>Salix</i> spp.).</p> <p>An area of semi-natural deciduous woodland occurs on the steeply sloping eastern side of Glenveagh. The dominant trees are Sessile Oak (<i>Quercus petraea</i>), Downy Birch (<i>Betula pubescens</i>) and Rowan, with Hazel (<i>Corylus avellana</i>) occurring frequently. Holly (<i>Ilex aquifolium</i>) occurs in the understorey. Rhododendron (<i>Rhododendron ponticum</i>) has invaded much of the woodland and adjacent hillsides. Other species present include Yew (<i>Taxus baccata</i>), Juniper and, near Lough Veagh, the scarce Rock Whitebeam (<i>Sorbus rupicola</i>). Within the woodland the lower plant community is well-developed with liverworts, including <i>Frullania tamarisci</i>, growing on the tree trunks. This is replaced as an epiphyte in damper areas by Wilson's Filmy-fern (<i>Hymenophyllum wilsonii</i>). Of particular note is the presence of the scarcer Tonbridge Filmy-fern (<i>H. tunbrigense</i>). The woodlands are also notable for the presence of two rare species of Myxomycete fungus, namely <i>Licea gloeoderma</i> and <i>Physarum vernum</i>, the former in its only known Irish site.</p>				

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
	<p><i>Molinia</i> meadow at the site is characterised by a co-dominance of Purple Moor-grass, Soft Rush (<i>Juncus effusus</i>), Sharp-flowered Rush (<i>J. acutiflorus</i>) and Conglomerate Rush (<i>J. conglomeratus</i>). The habitat occurs in areas that are subject to occasional flooding. Other species recorded include Water Horsetail, Marsh Speedwell (<i>Veronica scutellata</i>), Silverweed (<i>Potentilla anserina</i>), Marsh Ragwort (<i>Senecio aquaticus</i>), Cuckooflower (<i>Cardamine pratensis</i>), Marsh Cinquefoil (<i>Potentilla palustris</i>) and Marsh Pennywort (<i>Hydrocotyle vulgaris</i>).</p> <p>There are several large oligotrophic lakes on the site, including Lough Barra, Lough Veagh and Lough Altan. Aquatic plant species found include Water Lobelia (<i>Lobelia dortmanna</i>), Shoreweed (<i>Littorella uniflora</i>) and Bulbous Rush (<i>Juncus bulbosus</i>). Lough Veagh also contains two quillwort species (<i>Isoetes lacustris</i> and <i>I. echinospora</i>), the latter of which is a locally-occurring species. Some of the smaller lakes also contain the scarce species Pipewort (<i>Eriocaulon aquaticum</i>).</p> <p>Many scarce plants have been recorded from cliffs and gullies, mainly around Slieve Snaght and the Poisoned Glen. These include Brittle Bladder-fern (<i>Cystopteris fragilis</i>), Alpine Clubmoss (<i>Diphasiastrum alpinum</i>), Stiff Sedge (<i>Carex bigelowii</i>), Mountain Sorrel (<i>Oxyria digyna</i>) and Irish Spurge (<i>Euphorbia hyberna</i>).</p>				

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
	<p>Purple Saxifrage (<i>Saxifraga oppositifolia</i>) and Alpine Saw-wort (<i>Saussurea alpina</i>) have also been recorded from this area, along with a more recent sighting of Killarney Fern (<i>Trichomanes speciosum</i>). These are all rare species which are listed in the Irish Red Data Book, the latter also being legally protected under the Flora (Protection) Order, 1999, and listed on Annex II of the E.U. Habitats Directive.</p> <p>Three other rare Red Data Book plant species have been recorded within the site: Bird Cherry (<i>Prunus padus</i>), Small-white Orchid (<i>Pseudorchis albida</i>) and Heath Cudweed (<i>Omalotheca sylvatica</i>). The two last-named are legally protected under the Flora (Protection) Order, 1999.</p> <p>The area is also of considerable zoological value. Mammal interest includes the largest herd of Red Deer in Ireland, along with Badgers, Otters, Irish Hares and Stoats.</p> <p>Lough Veagh contains Arctic Char, a fish species that was once widespread but is now rare in most places. It is listed as vulnerable in the Irish Red Data Book. The Owencarrow and Lackagh River systems support a good population of Atlantic Salmon, a species listed on Annex II of the E.U. Habitats Directive. Brown Trout also occur. Common Lizard has been recorded from the site. The site supports populations of Freshwater Pearl Mussel, a rare species that is listed on Annex II of the E.U. Habitats Directive.</p>				

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
	<p>A number of important bird species are represented at this site, with several which are listed in the Red Data Book, and a number listed on Annex I of the E.U. Birds Directive. Those which breed within the area include Red-throated Diver, Golden Plover, Merlin and Peregrine. A small flock of Greenland White-fronted Goose, also listed on Annex I of the E.U. Birds Directive, feed on some of the bogs in winter. The Red Data Book species Goosander and Wood Warbler both breed on the site. Generally, the woodlands are favoured by Siskin, Tree Creepers and Redstarts, while Meadow Pipits, Red Grouse, Ravens, Snipe and Dunlin are among the birds found on the moorland.</p> <p>One of the major land uses at this site is conservation management. The site contains the whole of the Glenveagh National Park along with two Statutory Nature Reserves, Lough Barra Bog and Meenachullion Bog. Grazing by sheep and deer is common and in a few places the bogs have suffered from over-grazing and poaching. Grazing has also prevented woodland regeneration. Annual deer culls take place to control numbers and the main herd is kept within the confines of the National Park by a 45 km-long deer fence. Invasion by Rhododendron has been a particular problem within the National Park, where it has choked areas of woodland and covered adjacent hillsides. A removal programme is in progress and the threat from this species has been considerably reduced.</p>				

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
	<p>Peat cutting, both by hand and machine, has caused damage to some bogs in the site. Turbary and afforestation are the main threats to this habitat, with erosion and burning also having an impact.</p> <p>The site is of great scientific and conservation value, particularly for the large areas of excellent, little-damaged blanket bog it contains, including the largest intact area of blanket bog in north-west Ireland. It also includes good quality examples of semi-natural deciduous woodland, heath, oligotrophic lakes and inland cliffs. The importance of the site is increased by the presence of a wide range of plant and animal species, including many rare or threatened Red Data Book species, and several that are listed on Annex II of the E.U. Habitats Directive or Annex I of the E.U. Birds Directive.</p>				

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
<p>Site Name: Derryveagh and Glendowan Mountain SPA</p> <p>Site Code: 004039</p> <p>Derryveagh and Glendowan Mountains SPA is an extensive upland site in north-west Co. Donegal, comprising Glenveagh National Park, a substantial part of the Derryveagh and Glendowan Mountains and a number of the surrounding lakes. Much of the site is over 300 m above sea level, rising to a peak of 678 m at Slieve Snaght. The solid geology is predominantly quartzite. The substrate over much of site is peat, with blanket bog and heath comprising the principal habitats.</p> <p>The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species:</p> <ul style="list-style-type: none"> • Red-throated Diver, • Merlin, • Peregrine, • Golden Plover and • Dunlin. 	<p>This site is one of only a few locations where Red-throated Diver breed in Ireland and the birds also use a number of lakes within the site for feeding. A survey in 2010 recorded 6 pairs at the site. The extensive bog and heath habitats provide excellent foraging habitat for both Peregrine (5-6 pairs in 2002) and Merlin (estimated 6-11 pairs). Peregrine nest on the crags and cliffs, whilst Merlin nest in the heather or in old crows' nests in trees. The site is very important for breeding Golden Plover and Dunlin (subsp. <i>schinzii</i>) with 18 and 5 pairs respectively recorded in 2002.</p> <p>Red Grouse is also widespread on the bogs and Ring Ouzel, a rare species of the uplands, breeds sparingly, with at least 2 pairs recorded in a 2002 survey. Several pairs of Whinchat, a scarce Irish species, breed within the site. Goosander is also a regular visitor to the lakes, though breeding within the site has not been proved. Snowy Owl has also attempted to breed within the site - a clutch of eggs was laid but these did not hatch. Wood Warbler is present annually, with perhaps three pairs occurring. Redstart has bred on at least one occasion but there have been few sightings in recent years and it is not known if breeding occurs regularly.</p>	<p>The only risk factor is the entry of pollutants into the Clady River upstream of the SPA. This is unlikely due to the separation distance between the site and the river.</p> <p>This will be negated though controls which will be put in place prior to construction.</p>	<ul style="list-style-type: none"> • The predominant habitat of the SPA is extensive bog and heath. • Proposal is to install a Waste Management and Bring Bank Facility at Udaras na Gaeltachta, as detailed above. • With the controls in place as described likely impact on the SPA is unlikely. <p>Consideration: Scheme does not impact the SPA.</p>	<ul style="list-style-type: none"> • There are no other works planned for the area. • The works do not constitute a major change in the land use of the area. <p>Consideration: Scheme does not have a cumulative impact on the SPA.</p>	<p>Consideration: The scheme does not have a significant impact on the Natura 2000 Site. This is due to the separation distance between the works and the qualifying interests contained in the SPA and controls that will be in place during construction.</p>

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
	<p>Glenveagh National Park is the central location for the Golden Eagle re-introduction programme, which commenced in 2000. With time, this species may become successfully re-established as a breeding species in Ireland.</p> <p>The site is of high ornithological importance with nationally important breeding populations of five species. Of particular note is that five of the species that occur regularly are listed on Annex I of the E.U. Birds Directive, i.e. Red-throated Diver, Peregrine, Merlin, Golden Plover and Dunlin (subsp. <i>schinzii</i>). A large proportion of Lough Barra Bog, a Ramsar Convention site and a Statutory Nature Reserve, is within the Derryveagh and Glendowan Mountains SPA.</p>				