

Natura Impact Statement

Proposed river maintenance works, Ros an Mhíl, Co.
Galway



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Appendix 1: Appropriate Assessment Screening Report

Appendix 2: Qualifying Interest Targets and Attributes

1 Introduction

1.1 Project Background

This report has been prepared by Oran Ecology on behalf of Galway County Council for the proposed river maintenance works at Ros an Mhíl, Co. Galway (ITM Grid Ref. X 497878 Y 725687).

The proposed project is not directly connected with, or necessary for, the management of any European site, therefore, the project has been subject to the Appropriate Assessment process. An Appropriate Assessment Screening Report (AASR) has been prepared and is provided in Appendix 1. The AASR identified European sites which significant effects could not be excluded. Therefore, a Natura Impact Statement (NIS) is required to allow the competent authority to complete an Appropriate Assessment, in accordance with the requirements of Article 6(3) of the Habitats Directive and Part XAB of the Planning and Development Act 2000, as amended.

In addition to the above legislation this report was prepared in accordance with the following European, national and DEHLG guidance documents on Appropriate Assessment:

- Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities. DoEHLG, 2009 and as amended 2010;
- DAFM 2019 Circular 08/2019 Appropriate Assessment
- Assessment of plans and projects significantly affecting Natura 2000 sites; Methodological Guidance on the provisions of Articles 6(3) and (4) of the Habitats Directive 92/43/EEC. European Commission, 2002;
- EC (2013) Interpretation Manual of European Union Habitats. Version EUR 28. European Commission,
- Directive 92/43/EEC, Office for Official Publications of the European Communities, Luxembourg. European Commission,
- EC (2018) Managing Natura 2000 sites. The provisions of Article 6 of the 'Habitats Directive' 92/43/EEC . European Commission,
- European Communities (2000) Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC, Office for Official Publications of the European Communities, Luxembourg. European Commission
- EC (2007) Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the commission. European Commission
- NRA (2009) Guidelines for Assessment of Ecological Impacts of National Roads Schemes, National Roads Authority, Dublin
- CIEEM (2018) Institute of Ecology and Environmental Management Guidelines for Ecological Impact Assessment

1.2 Legislative Context

Appropriate Assessment

The Habitats Directive 92/43/EEC provides legal protection for habitats and species of European importance. Articles 3 to 9 provide the legislative means to protect habitats and species of through the establishment and conservation of an EU-wide network of sites known as Natura 2000.

The Habitats Directive has been transposed into Irish law through the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477/2011) as amended and Part XAB of the Planning and Development Acts, 2000-2017. This requires that a consenting or competent authority undertake an Appropriate Assessment (AA) if a plan or project is likely to have the potential for significant effects on European Sites.

The obligation to undertake an AA derives from Article 6(3) and 6(4) of the Habitats Directive. Both involve a number of steps and tests that need to be applied in sequential order. Article 6(3) is concerned with the strict protection of sites, while Article 6(4) is the procedure for allowing derogation from this strict protection in certain restricted circumstances. An AA is a focused and detailed impact assessment of the implications of the plan or projects, alone and in combination with other plans and projects, on the integrity of a Natura 2000 site, in view of its conservation objectives. Assessments should be undertaken on the basis of best scientific evidence and methods.

Stages of Appropriate Assessment Process

There are four stages involved in the Appropriate Assessment process. The Department of Environment, Heritage and Local Government (DoEHLG) has issued a document entitled Appropriate Assessment of Plans and Projects in Ireland: guidance for planning authorities (2010), which outlines the details of these stages. This document states that it is the responsibility of the competent authority to undertake the AA. The assessment should be based on sufficient relevant information such as that submitted by the proponent of the plan.

Stage 1 - Screening

The first step in AA is Screening for an AA. This requires a description of the project, identification and description of relevant Natura 2000 sites, and an assessment of likely effects of the proposed project. The process identifies the likely impacts on a European Site (Natura 2000) of a project or plan, which is not directly connected to or necessary for the management of the site, either alone or in combination with other projects or plans, and considers whether these impacts are likely to be significant. If these are not deemed to be potentially significant, then there is no need to conduct a full AA. The Screening Stage is carried out to determine whether there is a requirement to proceed with a more detailed assessment and undertake Appropriate Assessment (Stage 2).

Stage 2 – Appropriate Assessment

Here, consideration needs to be given to the impact of the plan or project on the integrity of the Natura 2000 site(s), either alone or in-combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. This requires identification of the conservation objectives of relevant Natura 2000 site(s) that may be affected by the project. The type of impact should be identified. Additionally, where there may be adverse impacts, an assessment of the potential mitigation of those impacts is required.

Stage 3 - Assessment of Alternative Solutions

If the potential impacts are still considered to be significant or unknown after the Appropriate Assessment stage, then alternative ways of implementing the project are considered at this stage. If no alternative solutions are possible, then it is considered whether the project or plan may go ahead regardless, if imperative reasons of overriding public interest (IROPI) are found.

Stage 4 - Imperative Reasons of Overriding Public Interest (IROPI)

If significant negative impacts on the Natura 2000 site are unavoidable, and no alternative solutions may be found, then this stage involves the consideration of whether the project or plan may go ahead despite these effects, for 'imperative reasons of overriding public interest' (IROPI).

This report details Stage 2, the preparation of a NIS to allow the competent authority to carry out an Appropriate Assessment in accordance with current DoEHLG guidance.

1.3 Statement of Competency

This report and general ecological walkover survey was carried out by ecologist James Owens (B.Sc., M.Sc.). James has relevant academic qualifications and is a competent expert in the Appropriate Assessment process. He has seven years' experience working as an ecologist and has prepared Natura Impact Statements which has involved the assessment of hydrological impacts on numerous projects including OPW flood relief schemes, residential developments, local authority drainage projects and renewable energy developments.

2 Project Description

2.1 Site Location

The proposed project site is located adjacent to the Rossaveel GAA Pitch, in the townlands of Ros an Mhil and Derrough South, Co. Galway (ITM Grid Ref. X 497878 Y 725687). A site location map is provided in Figure 2.1.

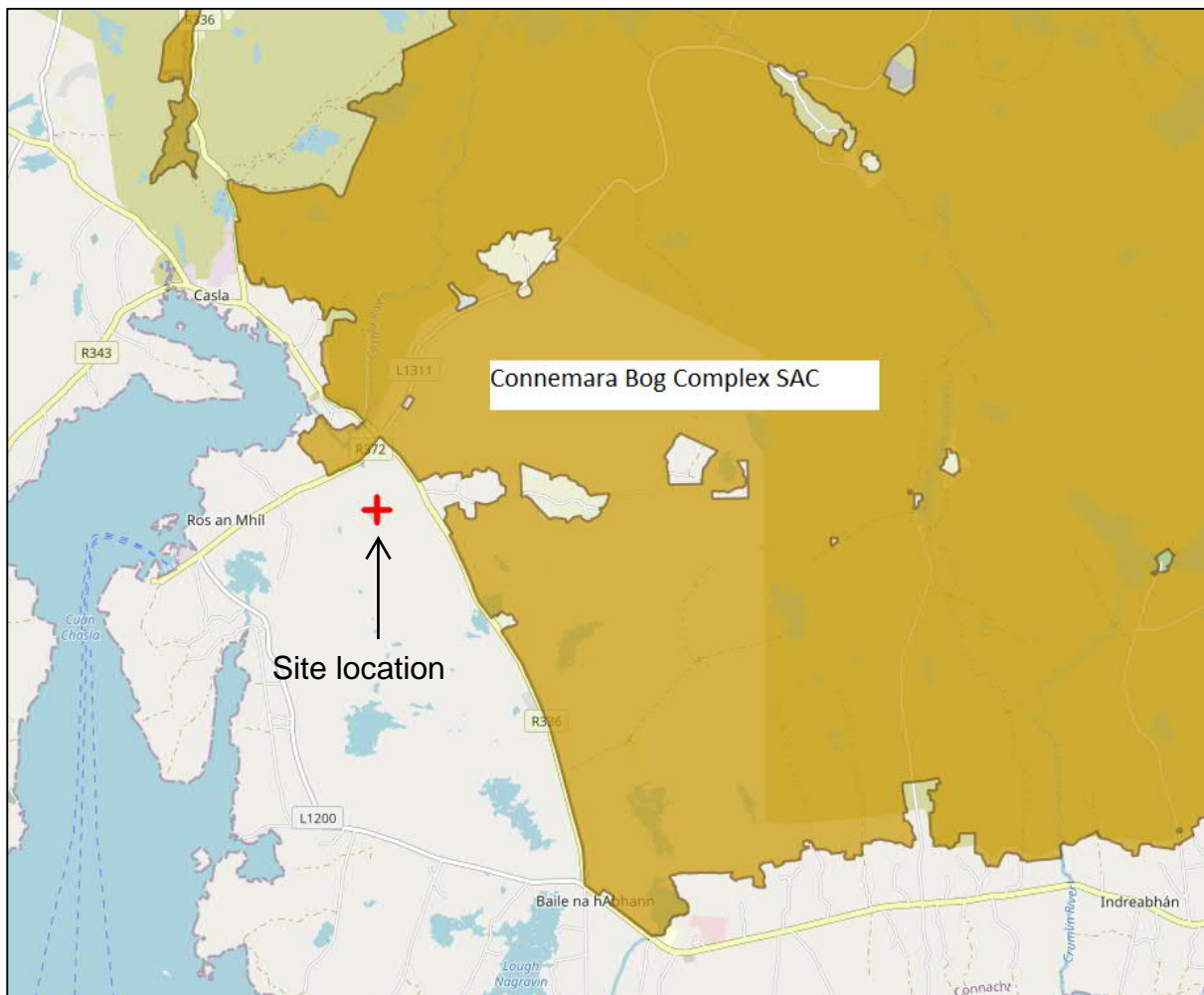


Figure 2.1 Site location

2.2 Characteristics of the Project

The proposed works will consist of the removal of vegetation and blockages along the stream which runs adjacent to the sports pitch. There may be a requirement for some works to take place immediately upstream and downstream of the pitch. This would cover a length of stream of 550m. The lower parts of a drainage ditch which runs along the southern boundary of the sports pitch and into the stream will also require some vegetation clearance works. The proposed works location are shown in Figure 2.2.

The works will mainly consist of the removal of gorse bushes which currently overhang parts of the stream. In addition, any vegetation build-up or obstructions in the channel will also be removed. Works will be carried out by a mini digger and operatives with chainsaws.



Figure 2.2 The proposed works area shown in red

3 Characteristics of the Baseline Environment

3.1 Desk Study

The following sources were consulted for the desk study

- EPA map viewer on water quality in the area
- NBDC Protected Species Data

3.1.1 Water Quality

The Rossaveal stream is part of the CASHLA 010 river waterbody which has a Water Framework Directive (WFD) Status 2013-2018 of 'Good'. The waterbody has a risk rating of 'At risk'. The nearest EPA water quality sampling point (Station code: RS31C010100) is located downstream on the Cashla River at Cashla Bridge. The most recent Q-value for the station is 3 corresponding to a status of 'Good' and was assessed in 2021.

3.1.2 Qualifying Interest Habitats

NPWS GIS spatial data and the site-specific Conservation Objectives document for the Connemara Bog Complex SAC were reviewed with regard to the screened-in QI habitats. A summary of the information of the habitats is given below.

Water courses of plain to montane levels with the *Ranunculus fluitantis* and *Callitriche-Batrachion* vegetation [3260]

No mapped areas of this habitat were recorded downstream of the proposed works area. As per the detailed CO's for the SAC, little is known about the distribution of the habitat and its sub-types in the site and therefore could potentially occur downstream.

3.1.3 National Biodiversity Data Centre

A search of the NBDC database was carried out for records of otter in hectad L92, where the study site is located. The results of the search are shown in Table 3.1. The NBDC map viewer was also reviewed for records of otter within the proposed development site and no records were returned for the species within or adjacent to the proposed development site.

Table 3.1 - NBDC records for otter (*Lutra lutra*)

| Species Name | Scientific Name | Conservation Status |
|--------------|--------------------|---|
| Otter | <i>Lutra lutra</i> | Protected Species: EU Habitats Directive; Annex II Protected Species: EU Habitats Directive; Annex V Protected Species; Wildlife Acts |

3.2 Field Survey

A multi-disciplinary walkover survey of the proposed development site was undertaken in accordance with *Ecological Surveying Techniques for Protected Flora & Fauna during the Planning of National Road Schemes* (NRA, 2008) to provide baseline information on the site. All habitats within the site were categorised in accordance with *A Guide to Habitats in Ireland* (Fossitt, 2000). The survey was conducted on the 4th of October 2022 and all habitats were readily identifiable at the time of the survey. The survey also included a search for invasive species listed under the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011). A survey for otter was also conducted during the ecological walkover survey.

3.2.1 Habitats

A list of the habitats recorded at the site is provided in Table 3.2.

Table 3.2 Fossitt (2000) habitat categories recorded at the site

| Habitat | Fossitt Code |
|---------------------------|--------------|
| Depositing/lowland rivers | FW2 |
| Eroding/upland rivers | FW1 |
| Scrub | WS1 |
| Amenity grassland | GA2 |
| Dry heath | HH1 |
| Wet heath | HH3 |
| Drainage ditches | FW4 |

The stream which runs adjacent to the GAA pitch was approximately 2-3m wide and consisted of glide habitat for most of its length, with a small section in its upper reaches categorised as riffle and pool (Plate 2.1). The river had a high flow at the time of the survey and consisted of a peaty substrate for most of its length with cobble and boulder present where riffle and pool habitat occurred. Most of the stream was therefore categorised as Depositing/lowland rivers (FW2) and the small area where riffle and pool occurred was categorised as Eroding/upland rivers (FW1). Riparian gorse (*Ulex europaeus*) Scrub (WS1) occurred along sections of the stream with gorse branches hanging into the stream channel. The GAA pitch was categorised as Amenity grassland (GA2) and the remainder of the stream was bordered by Wet heath (HH3) and Dry heath (HH1) habitat. Wet heath (HH3) was categorised by purple moor-grass (*Molinia caerulea*), ling (*Calluna vulgaris*) and bog myrtle (*Myrica gale*). Dry heath (HH1) was characterised by western gorse (*Ulex galli*) and (*Erica cinerea*). A small Drainage ditch (FW4) formed the southern boundary of the GAA pitch and flowed into the stream. The drain was 0.5m wide and contained a moderate flow of water at the time of the survey (Plate 2.2).

A number of small Rhododendron plants were recorded adjacent to the stream. Rhododendron is listed under the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011).



Plate 2.1 Depositing/lowland river (FW2) with adjacent gorse Scrub (WS1)



Plate 2.2 Drainage ditch (FW4) at southern end of the sports pitch

3.2.2 Otter

An otter survey was undertaken as part of the ecological walkover survey. No signs of otter such as spraints, holts, couches or slides were recorded.

4 Conclusions of the Appropriate Assessment Screening Report

The Appropriate Assessment screening report identified the potential for the proposed development to result in significant effects on the following European Sites:

- Connemara Bog Complex SAC [002034]

4.1 Qualifying Interests (QIs)/Special Conservation Interests (SCI) with the Potential to Be Adversely Effected

The following section identifies any potential pathways for effect on each of the individual QIs of the Connemara Bog Complex SAC [002034]. Where no such pathways are identified for any particular QI/SCI, no further assessment is required. Where, following consultation of the Conservation Objectives of the site (as viewed on the 7th July 2023), potential pathways for effect are identified, an assessment of the potential effects is undertaken in Section 5.

4.1.1 Connemara Bog Complex SAC [002034]

The QIs of the Connemara Bog Complex SAC [002034] for which pathways for effect as a result of the proposed development which were identified in the Appropriate Assessment Screening Report (AASR) are listed below.

The proposed development site is located entirely outside the boundary of the European Site and therefore there is no potential for direct effects.

The Rossaveal stream for which the works are proposed provides a surface water connection with the European site 318m downstream of the proposed works area. The proposed works will involve minor vegetation clearance on a relatively short length of the stream and significant siltation related effects are not anticipated. Due to the nature and scale and short duration of the works, an extensive pollution event is not anticipated. However, there is the potential for localised pollution in the event of a hydrocarbon spillage from machinery. The following QIs have the potential to be affected as a result of a deterioration of surface water quality;

- *Salmo salar* (Salmon) [1106]
- *Lutra lutra* (Otter) [1355]
- Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation [3260]

Salmon utilise the Cashla River system which the stream being assessed is connected to. Although no gravel areas suitable for spawning salmonids was identified at the proposed works area, it is possible the salmon migrate further upstream. The proposed works area is also within the commuting distance of otter associated with the SAC. The following QIs have the potential to be affected as a result of a disturbance/displacement;

- *Salmo salar* (Salmon) [1106]
- *Lutra lutra* (Otter) [1355]

The proposed project consists of the removal of vegetation from the stream channel. Therefore, adverse effects during the operational phase are not anticipated.

5 Assessment of Potential Adverse Effects

5.1 Conservation Objectives

The QIs for which the potential for effects were identified in the AASR are assessed in light of their Conservation Objectives which are presented in Table 5.1. Detailed SSCO are available Connemara Bog Complex SAC [002034] and the Targets and Attributes for each relevant QI were reviewed and considered in the assessment and are included as Appendix 2.

Table 5.1 Qualifying Interest and Conservation Objectives for Connemara Bog Complex SAC

| Qualifying Interest | Generic Conservation Objective (Version 1.0, 2015) | Relevant Attributes |
|---|--|--|
| Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation [3260] | To maintain the favourable conservation condition of Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation in the Connemara Bog Complex SAC | Substratum composition, Water quality and Vegetation composition |
| <i>Salmo salar</i> (Salmon) [1106] | To restore the favourable conservation condition of Salmon in the Connemara Bog Complex SAC | Adult spawning fish, Salmon fry abundance, Out-migrating smolt abundance, Number and distribution of redds and Water quality |
| <i>Lutra lutra</i> (Otter) [1355] | To maintain the favourable conservation condition of Otter in the Connemara Bog Complex SAC | Couching sites and holts, Fish biomass available |

5.2 Assessment of Potential Effects and Mitigation

5.2.1 Direct Effects

The proposed development site is located entirely outside the boundaries of the European sites. No potential for direct effects has been identified on the Connemara Bog Complex SAC [002034].

5.2.1.1 Deterioration of Water Quality

The proposed works will involve minor vegetation clearance and significant siltation related effects are not anticipated. Due to the nature and scale and short duration of the works, an extensive pollution event is not anticipated. However, there is the potential for localised pollution in the event of a hydrocarbon spillage during works from leaks or spills.

Water pollution has the potential to adversely affect supporting habitat for the QI species, identified in the sections above, in the absence of mitigation.

The following QIs have the potential to be adversely affected;

- Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation [3260]
- *Salmo salar* (Salmon) [1106]

- *Lutra lutra* (Otter) [1355]

5.2.1.1.1 MITIGATION

The following proposed mitigation measures have been included as part of the proposed development to ensure that, in view of the European sites' conservation objectives and beyond any scientific doubt, the proposed development will not adversely affect the integrity of the European sites concerned.

The project design (Section 2.2) and the following mitigation measures, have been designed to protect water quality and prevent adverse effects on the QIs/SCIs of the European sites.

- A construction site compound will be established at the Rossaveal sports facility and located 50m minimum distance away from watercourses. The site compound will be secured and all fuels, machinery and materials will be stored in this defined area.
- Any material taken out of the river will be removed from the site and no stockpiles of material will be made within 50m of the watercourse.
- A suitably sized excavator will be used for the work.
- Refuelling will only be undertaken by dedicated trained and competent personnel and within the site compound.
- Fuel, oils and lubricants will be stored in a bunded area
- Plant will be inspected daily for leaks and emissions
- Spill-kits and drip trays will be kept on-site at all times.
- Waste oils and hydraulic fluids will be collected in leak-proof containers and removed from the site for licenced disposal or recycling.

5.2.1.2 Disturbance/Displacement

The site of the proposed development is located within the foraging and commuting range of otter associated with the Connemara Bog Complex SAC. A dedicated otter survey was undertaken at the site and no signs of otter were recorded from the proposed development site. Otter are crepuscular in nature and are unlikely to utilise the stream for commuting or foraging during the day while the work is taking place. In addition, any works will be small scale and short-term in duration, lasting only a few days. Although no evidence of otter was recorded during the ecological survey, there is the potential for otter to utilise the stream for commuting and foraging or for holts or couches to have been established in the intervening time period since the survey.

The stream where the proposed works are proposed does not offer suitable spawning habitat for salmon. However, the Costello and Fermoy sea trout and salmon fishery comprises the Casla River and a series of lakes and therefore there is the potential that the Rossaveal stream is used by migrating salmon. If the works are carried out during the times when salmon are moving upstream or downstream there is the potential for disturbance/displacement effects to occur.

The following QIs have the potential to be adversely affected;

- *Salmo salar* (Salmon) [1106]
- *Lutra lutra* (Otter) [1355]

5.2.1.2.1 MITIGATION: CONSTRUCTION PHASE

The following proposed mitigation measures have been included as part of the proposed development to ensure that, in view of the European sites' conservation objectives and beyond any scientific doubt, the proposed development will not adversely affect the integrity of the European sites concerned.

The following mitigation measures, have been designed to limit disturbance and prevent adverse effects on the QIs of the European site.

- A pre-commencement otter survey will be undertaken in accordance with the guidelines set out in NRA/TII (2008) Guidelines for the Treatment of Otters Prior to the Construction of National Road Schemes. A derogation licence will be required from NPWS should a holt be found.
- All construction plant and equipment to be used on-site will be modern equipment and will comply with the European Communities (Construction Plant and Equipment) (Permissible Noise Levels) Regulations, 1988 (as amended).
- Regular maintenance of plant will be carried out in order to minimise noise emissions;
- Machines will be turned off during periods when they are not in use;
- Work hours will be confined to daylight hours.
- Inland Fisheries Ireland will be notified prior to commencing works. The timing of instream works will be restricted to July to September inclusive.

5.2.1.3 Invasive Species

Rhododendron was recorded along the stream and the proposed works could result in the spread of the plant further which could cause excessive shading of the stream channel or the destabilisation of riparian habitat leading to increased siltation.

The following QIs have the potential to be adversely affected;

- *Lutra lutra* (Otter) [1355]
- Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation [3260]
- *Salmo salar* (Salmon) [1106]

5.2.1.3.1 MITIGATION: CONSTRUCTION PHASE

The following proposed mitigation measures have been included as part of the proposed development to ensure that, in view of the European sites' conservation objectives and beyond any scientific doubt, the proposed development will not adversely affect the integrity of the European sites concerned.

The following mitigation measures, have been designed to prevent the spread of invasive species and prevent adverse effects on the QIs of the European site.

- Prior to the commencement of works, a suitably qualified ecologist will mark where Rhododendron plants occur along the channel with marking tape and these areas will be made known to the contractor.
- Areas where Rhododendron occurs will be avoided by machinery. If this is not possible the stems will be cut back close to the ground.
- Cut material will be stacked away from the river in the sports facility car park.
- The remaining stumps and root balls should be dug out using an excavator removing all viable roots with the excavator or manually and brought to the sports facility car park.
- As much soil as possible should be knocked off the root system and the roots should be turned upside down to expose the roots to the air and to allow rain to wash off remaining soil.
- Stumps should then be removed from the site to be burnt or left in situ upside down.

- Good construction site hygiene will be employed to prevent the introduction and spread of problematic invasive alien plant species (e.g. Rhododendron etc.) by thoroughly washing vehicles prior to entering and leaving any site.

5.2.2 Assessment of Residual Effects

The incorporation of mitigation measures in the sections above will protect the QIs of the SAC for which pathways for effect were identified and ensure there will be no residual effects on the Connemara Bog Complex SAC. Therefore, there is no possibility of the project itself individually having an adverse effect on the integrity of the European Site.

6 Cumulative and In-combination Effects

The proposed development was considered in combination with other plans and projects in the area that could result in cumulative effects on European Sites.

A search of the online planning system for Galway County Council for existing, proposed and approved projects recent planning applications was undertaken on the 07/07/2023. Refused, withdrawn and incomplete information applications were not included in the assessment. The following planning applications were returned within the past five years for the town land of Rossaveel;

- PI. Ref. 18547 - For refurbishment of existing slipway to improve low tide access. Raising and widening of slipway deck and the addition of a berthing face. Extension of existing rubble mound breakwater and re-grading of rock revetment to provide further protection of the small draft Harbour
- PI. Ref. 19746 - A dhéanamh ag an suíomh seo ag Ionad Iascaigh Cuain Ros an Mhíl. Saoráidí Fónais a thógáil don chaladh bád ag lárionad chuan isacaigh Ros an Mhíl ina mbeidh saoráidí leasa ar leibhéal bunurláir agus oifig riaracháin ar leibhéal an chéad urláir chomh maith leis na fosheirbhísi gaolmhara ar fad
- PI. Ref 191378 - consisting of the construction, operation and decommissioning of one 10m high telecommunication mast, including a small concrete foundation and the installation of underground ducting for power and communication cables to/from the electrical substation building for the wind turbine development
- PI. Ref 21300 - For the a new small craft harbour, reclamation of foreshore and dredging of a new small craft harbour basin at Rossaveel Fishery Harbour Centre, Rossaveel, Co. Galway..
- PI. Ref 22365 – chun athraithe a dheanamh don phlean le haghaidh an Teach Cónaithe agus don phlean le haghaidh Garáiste a thógáil a bhí ceadaithe faoi Uimhir Thagartha 21/973. Spás urláir comhlán na n-oibreacha beartaithe: Teach: 98 sqm, Garáiste: 88 sqm
- PI. Ref 22448 - le 1. síneadh a chur le foirgneamh atá ag Coláiste Chamuis ar an suíomhcheana féin- is é sin 4 sheomra ranga nua, Oifig do phríomhoide, pasáiste/ spás cúrsaíochta, seomraí stórais, cistin agus seomra bia. 2. Athruithe ar na háiseanna leithris chun 10 ciúbanna leithris aonghnéasacha agus 2 chiúb leithris foirne. 3. Síneadh a chur le teach cónaithe atá ar an suíomh cheana féin- is é sin 8 sheomra codalta don bhfoireann. 4. soláthar painéil fótvoltach ar dhíon an síneadh ar an bhfiirgneamh scoile atá faoi iarratas. 5. páirceáil, seirbhísí agus gach obair láithreáin a bhaineann leis obair seo
- PI. Ref 22448 - for the reclamation of a waterlogged area to the south of the Department of Agriculture, Food and the Marine's public car park
- PI. Ref 2360373 - Is éard a bheidh san fhorbairt seo ná forhalla gaoithe 6 sqm a thógáil os comhair an Ionaid Iascaigh Cuain atá ann faoi láthair agus athruithe a dhéanamh ar an rochtain rampa.

The following planning applications were returned within the past five years for the townland of Derroogh South;

- PI Ref 191208 - chun teach nua cónaithe a thógáil chomh maith garáiste nua agus le córás searachais nua. Spás urláir comhlán na n-oibreacha beartaithe: Teach - 254.9 sqm, Garáiste - 54 sqm
- PI Ref 2324 - chun Garáiste chomh maith le gach obair láithreáin, an thógáil. Spás urláir comhlán na n-oibreacha beartaithe: 60 sqm

The following other plans and projects that were considered in the assessment;

- The Galway County Development Plan 2022-2028 was also reviewed and considered as part of this assessment. The review focused on policies and objectives that relate to Natura 2000 sites.

After the assessment of impacts was undertaken in Section 5.1, no pathways for effect were identified after the design and mitigation of the proposed project were identified when the project is considered individually. In the review of other plans and projects described above, no additional pathways for effect on European sites were identified as a result of those plans or projects. Neither was there any potential for additional effects resulting from the combination of the various projects and plans in association with the proposed development.

No potentially adverse cumulative and/or in-combination disturbance or pollution effects on any of the QIs has been identified with regard to the proposed project.

7 Conclusion

The NIS has assessed all identified potential pathways for effect in relation to the proposed development on Connemara Bog Complex SAC.

It is objectively concluded, in light of the above objective scientific information, that, when the mitigation measures outlined in Section 5.2.1 are implemented, the project, individually or in combination with other plans and projects, will not have an adverse effect on the integrity of Connemara Bog Complex SAC, in view of their conservation objectives and in view of best scientific knowledge.

8 Bibliography

Birds Directive (2009/47/EC) – http://ec.europa.eu/environment/naturelegislation/birdsdirective/index_en.htm

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Appendix 1: Appropriate Assessment Screening Report

Appropriate Assessment Screening Report

Proposed river maintenance works, Ros an Mhíl, Co.
Galway



Document Details

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Client: Galway County Council

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1 Introduction

1.1 Project Background

This report has been prepared by Oran Ecology on behalf of Galway County Council for the proposed river maintenance works at Ros an Mhíl, Co. Galway (ITM Grid Ref. X 497878 Y 725687).

This report has been prepared to provide the necessary information to allow the competent authority to conduct an Article 6(3) Screening for Appropriate Assessment of the proposed development. This Appropriate Assessment Screening report (AASR) has been prepared in accordance with the provisions of the Habitats Directive 92/43/EEC and the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477/2011).

The proposed project is not directly connected with, or necessary for, the management of any European Site, therefore, the project has been subject to the Appropriate Assessment process.

In addition to the above legislation, this report was prepared in accordance with the following European, national and DEHLG guidance documents on Appropriate Assessment:

- Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities. DoEHLG, 2009;
- DAFM 2019 Circular 08/2019 Appropriate Assessment
- Assessment of plans and projects significantly affecting Natura 2000 sites; Methodological Guidance on the provisions of Articles 6(3) and (4) of the Habitats Directive 92/43/EEC. European Commission, 2002;
- EC (2013) Interpretation Manual of European Union Habitats. Version EUR 28. European Commission,
- Directive 92/43/EEC, Office for Official Publications of the European Communities, Luxembourg. European Commission,
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- EC (2007) Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the commission. European Commission
- NRA (2009) Guidelines for Assessment of Ecological Impacts of National Roads Schemes, National Roads Authority, Dublin
- CIEEM (2018) Institute of Ecology and Environmental Management Guidelines for Ecological Impact Assessment

1.2 Legislative Context

Appropriate Assessment

The Habitats Directive 92/43/EEC provides legal protection for habitats and species of European importance. Articles 3 to 9 provide the legislative means to protect habitats and species through the establishment and conservation of an EU-wide network of sites known as Natura 2000. The Habitats Directive has been transposed into Irish law through the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477/2011) as amended and Part XAB of the Planning and Development Acts, 2000-2017. This requires that a consenting or competent authority undertake an Appropriate Assessment (AA) if a plan or project is likely to have the potential for significant effects on European Sites.

The obligation to undertake an AA derives from Article 6(3) and 6(4) of the Habitats Directive. Both involve a number of steps and tests that need to be applied in sequential order. Article 6(3) is concerned with the strict protection of sites, while Article 6(4) is the procedure for allowing derogation from this strict protection in certain restricted circumstances. An AA is a focused and detailed impact assessment of the implications of the plan or projects, alone and in combination with other plans and projects, on the integrity of a Natura 2000 site, in view of its conservation objectives. Assessments should be undertaken on the basis of best scientific evidence and methods.

Stages of Appropriate Assessment Process

There are four stages involved in the Appropriate Assessment process. The Department of Environment, Heritage and Local Government (DoEHLG) has issued a document entitled *Appropriate Assessment of Plans and Projects in Ireland: guidance for planning authorities (2009)*, which outlines the details of these stages. This document states that it is the responsibility of the competent authority to undertake the AA. The assessment should be based on sufficient relevant information such as that submitted by the proponent of the plan.

Stage 1 - Screening

The first step in AA is Screening for an AA. This requires a description of the project, identification and description of relevant Natura 2000 sites, and an assessment of likely effects of the proposed project. The process identifies the likely impacts on a European Site (Natura 2000) of a project or plan, which is not directly connected to or necessary for the management of the site, either alone or in combination with other projects or plans, and considers whether these impacts are likely to be significant. If these are not deemed to be potentially significant, then there is no need to conduct a full AA. The Screening Stage is carried out to determine whether there is a requirement to proceed with a more detailed assessment and undertake Appropriate Assessment (Stage 2).

Stage 2 – Appropriate Assessment

Here, consideration needs to be given to the impact of the plan or project on the integrity of the Natura 2000 site(s), either alone or in-combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. This requires identification of the conservation objectives of relevant Natura 2000 site(s) that may be affected by the project. The type

of impact should be identified. Additionally, where there may be adverse impacts, an assessment of the potential mitigation of those impacts is required.

Stage 3 - Assessment of Alternative Solutions

If the potential impacts are still considered to be significant or unknown after the Appropriate Assessment stage, then alternative ways of implementing the project are considered at this stage. If no alternative solutions are possible, then it is considered whether the project or plan may go ahead regardless, if imperative reasons of overriding public interest (IROPI) are found.

Stage 4 - Imperative Reasons of Overriding Public Interest (IROPI)

If significant negative impacts on the Natura 2000 site are unavoidable, and no alternative solutions may be found, then this stage involves the consideration of whether the project or plan may go ahead despite these effects, for 'imperative reasons of overriding public interest' (IROPI).

1.2.1 Screening Assessment

This report details Stage 1, the preparation of an AASR to provide the competent authority with the information necessary for them to determine whether an Appropriate Assessment is required, in accordance with current DoEHLG (2010) guidance and follows the following steps;

- Determination if the project is directly connected with or necessary to the management of a European site.
- Description of the project.
- Assessment of potential source-pathway-receptor models to determine relevant zones of influence.
- Description of the baseline environment within relevant zones of influence.
- Identification of any links with European sites (defined as 'relevant' European sites) having regard for their Conservation Objectives.
- The use of Screening matrices to determine if Likely Significant Effects (LSEs) could arise due to the links with European sites having regard for:
 - Source-pathway-receptor models and zones of influence;
 - Known distribution and ranges of QI;
 - Likely ranging behaviours of mobile QIs and SCIs beyond their European sites; and,
 - Potential in-combination effects with other plans or projects.
- Conclusion of the assessment with a Screening Statement.

The assessment is informed by a field survey and desk study undertaken in September and October 2022. The assessment in this report is considered in the absence of any mitigation measures.

The following sources were used to gather information;

- Review of online web-mappers: NPWS, EPA, Water Framework Directive and Geohive
- Review of NPWS Conservation Objectives, Site Synopses and Natura Standard Data Forms
- Review of EU Habitats Directive Article 17 Reports (2019, 2013, 2007)
- Review of other plans and projects within the area

1.3 Statement of Competency

This report and general ecological walkover survey were carried out by ecologist James Owens (B.Sc., M.Sc.) who has relevant academic qualifications and is a competent expert in the Appropriate

Assessment process. James has six years' experience as an ecologist and has prepared numerous Appropriate Assessment Screening Reports for residential developments, renewable energy developments and forestry licences.

2 Project Description

2.1 Site Location

The proposed project site is located adjacent to the Rossaveel GAA Pitch, in the townlands of Ros an Mhil and Derrough South, Co. Galway (ITM Grid Ref. X 497878 Y 725687). A site location map is provided in Figure 2.1.

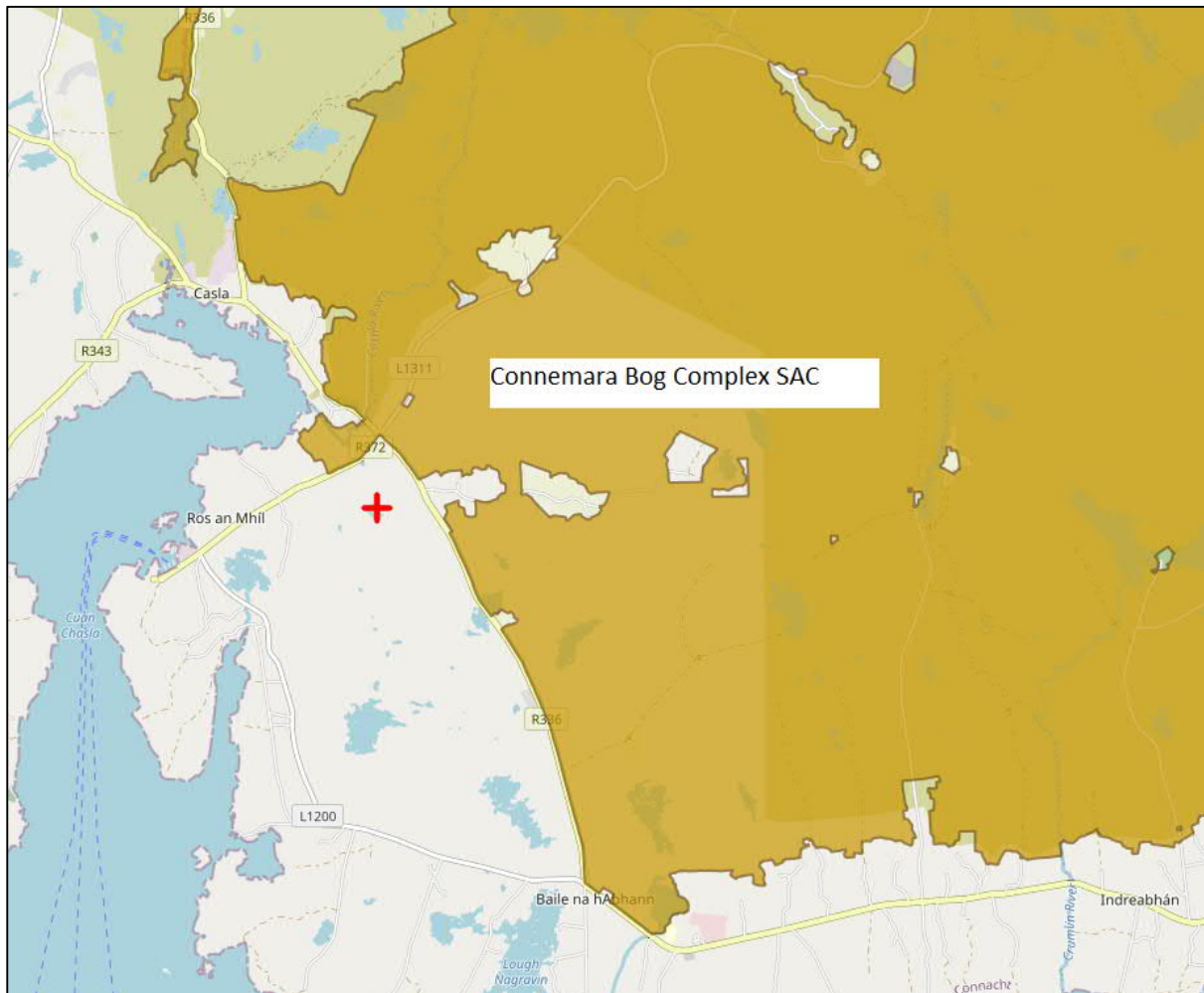


Figure 2.1 Site location

2.2 Characteristics of the Project

The proposed works will consist of the removal of vegetation and blockages along the stream which runs adjacent to the sports pitch. There may be a requirement for some works to take place immediately upstream and downstream of the pitch. This would cover a length of stream of 550m. The lower parts of a drainage ditch which runs along the southern boundary of the sports pitch and into the stream will also require some vegetation clearance works. The proposed works location are shown in Figure 2.2.

The works will mainly consist of the removal of gorse bushes which currently overhang parts of the stream. In addition, any vegetation build-up or obstructions in the channel will also be removed. Works will be carried out by a mini digger and operatives with chainsaws.



Figure 2.2 The proposed works area shown in red

2.3 Summary of the Receiving Environment

A general ecological walkover survey was carried out in accordance with *Ecological Surveying Techniques for Protected Flora & Fauna during the Planning of National Road Schemes* (NRA, 2008) on the 04/10/2022. All habitats were readily identifiable at the time of the survey. The stream which runs adjacent to the GAA pitch was approximately 2-3m wide and consisted of glide habitat for most of its length, with a small section in its upper reaches categorised as riffle and pool (Plate 2.1). The river had a high flow at the time of the survey and consisted of a peaty substrate for most of its length with cobble and boulder present where riffle and pool habitat occurred. Most of the stream was therefore categorised as Depositing/lowland rivers (FW2) and the small area where riffle and pool occurred was categorised as Eroding/upland rivers (FW1). Riparian gorse (*Ulex europaeus*) Scrub (WS1) occurred along sections of the stream with gorse branches hanging into the stream channel. The GAA pitch was categorised as Amenity grassland (GA2) and the remainder of the stream was bordered by Wet heath (HH3) and Dry heath (HH1) habitat. Wet heath (HH3) was categorised by purple moor-grass (*Molinia caerulea*), ling (*Calluna vulgaris*) and bog myrtle (*Myrica gale*). Dry heath (HH1) was characterised by western gorse (*Ulex galli*) and (*Erica cinerea*). A small Drainage ditch (FW4) formed the southern boundary of the GAA pitch and flowed into the stream. The drain was 0.5m wide and contained a moderate flow of water at the time of the survey (Plate 2.2).

A number of small Rhododendron plants were recorded adjacent to the stream. Rhododendron is listed under the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011).

An otter survey was undertaken as part of the ecological walkover survey. No signs of otter such as spraints, holts, couches or slides were recorded.



Plate 2.1 Depositing/lowland river (FW2) with adjacent gorse Scrub (WS1)



Plate 2.2 Drainage ditch (FW4) at southern end of the sports pitch

3 Identifying European Sites within the likely Zone of Impact of the Proposed Development

Table 3.1 lists all European sites within the Likely Zone of Influence and provides an assessment on the potential for likely significant effects as a result of the proposed development on the Qualifying Interests (QIs)/Special Conservation Interests (SCIs) of each European Site. European sites within 15km of the proposed development were taken to be within the Likely Zone of Influence, following Appropriate Assessment of Plans and Projects in Ireland: guidance for planning authorities (DoEHLG, 2009). Sites outside the 15km zone were also considered but no connectivity was identified.

The potential for significant effects to occur from the proposed development on European sites was assessed using the source-pathway-receptor model. This conceptual model is a standard tool in environmental assessment. In order for an effect to occur, all three elements of this mechanism must be in place. The absence or removal of one of the elements of the mechanism means there is no likelihood for the effect to occur. In the context of the proposed works, the model comprises:

- Source (s) – e.g. sediment run-off from proposed works;
- Pathway (s) – e.g. drains and streams connecting to a European site;
- Receptor (s) – Qualifying habitats and species of European sites.

If the potential for significant effects to occur on a European site is identified, then further assessment is required. Effects are considered in light of the conservation objectives of the Annex I habitats and Annex II species for which each European site is designated.

The assessment takes into consideration any likely direct or indirect effects of the proposed development on European sites, both alone and in-combination with other plans and projects, with regard to the following criteria: size and scale, land-take, distance from the European site or key features of the site, resource requirements, emissions, excavation requirements, transportation requirements and duration of construction, operation and decommissioning. The assessment does not take into account any measures intended to avoid or reduce any harmful effects of the proposed development on European sites. The following resources were consulted to inform the assessment;

- NPWS site synopsis, Natura standard data forms and conservation objectives for the relevant European sites with potential source-receptor-pathways to the proposed development; and
- EPA hydrological catchment data (www.epa.ie)
- Geological Survey of Ireland (GSI) data (www.gsi.ie)

A map showing European Sites within 15km of the proposed development is shown in Figure 3.1.

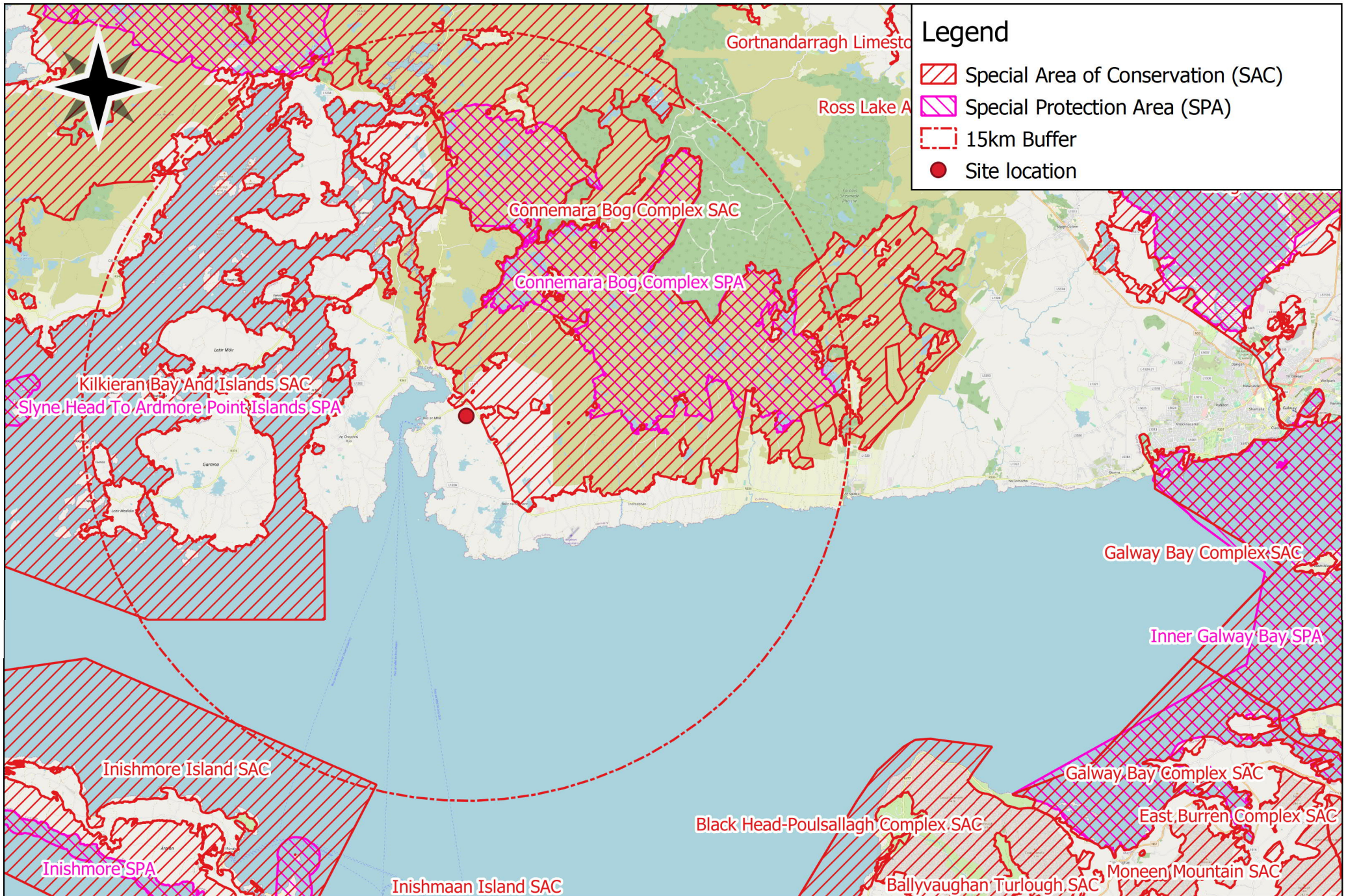


Figure 3.1. Designated Sites within 15km Created By: James Owens Date: 21/10/2022 Scale: 1:325,000

0 5 10 km

Table 3.1 Assessment of Sites Within the Likely Zone of Influence

| European Site, Code and Distance from the Proposed Development | Qualifying Interest(s)(QI's) / Special Conservation Interest(s)(SCIs) (* indicates Priority Annex I Habitats) as reviewed on the 07/07/2023 | Zone of Likely Influence Screening | Possibility for Likely Significant Effects |
|---|---|---|--|
| Connemara Bog Complex SAC [002034] 0.3 km (318m surface water distance) | <ul style="list-style-type: none"> • Coastal lagoons [1150] • Reefs [1170] • Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] • Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea [3130] • Natural dystrophic lakes and ponds [3160] • Water courses of plain to montane levels with the Ranuncion fluitantis and Callitricho-Batrachion vegetation [3260] • Northern Atlantic wet heaths with Erica tetralix [4010] • European dry heaths [4030] • Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] • Blanket bogs (* if active bog) [7130] • Transition mires and quaking bogs [7140] • Depressions on peat substrates of the Rhynchosporion [7150] • Alkaline fens [7230] • Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] • Euphydryas aurinia (Marsh Fritillary) [1065] • Salmo salar (Salmon) [1106] • Lutra lutra (Otter) [1355] • Najas flexilis (Slender Naiad) [1833] | <p>The proposed development site is located entirely outside the boundary of the European Site and therefore there is no potential for direct effects.</p> <p>The stream for which the works are proposed is named as Rossaveel and part of the IE_WE_31C010100 waterbody and is part of the Cashla_SC_10 sub catchment. The European site is located 318m downstream of the proposed works area.</p> <p>The proposed development is located over 200m from the European site and therefore there is no potential for effects on the following terrestrially dependent QI habitats;</p> <ul style="list-style-type: none"> • Northern Atlantic wet heaths with Erica tetralix [4010] • European dry heaths [4030] • Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] • Blanket bogs (* if active bog) [7130] • Transition mires and quaking bogs [7140] • Depressions on peat substrates of the Rhynchosporion [7150] • Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] <p>Alkaline fens [7230] do not occur downstream of the proposed works site and the nature and scale of the project are such that effects on groundwater affecting the QI elsewhere in the SAC are not anticipated.</p> <p>The following surface water dependent habitats and species do not occur downstream of the proposed works and therefore no pathway for effect was identified;</p> | Yes |

| | | | |
|--|--|---|--|
| | | <ul style="list-style-type: none"> • Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) [3110] • Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or <i>Isoeto-Nanojuncetea</i> [3130] • Natural dystrophic lakes and ponds [3160] • <i>Najas flexilis</i> (Slender Naiad) [1833] <p>As per the detailed Conservation Objectives (NPWS, 2015), Coastal lagoons [1150] and Reefs [1170] have not been mapped downstream of the proposed works in Cashla Bay but are mapped elsewhere in the SAC. Due to distance, nature and scale of the proposed works, effects on the QI's are not anticipated.</p> <p>Occasional devil's bit scabious (the food plant of marsh fritillary) was recorded adjacent to the proposed works area, most of which consist of gorse or rank purple moor-grass, and no significant areas of the plant were observed. The proposed works will be concentrated on the stream channel and will be short-term in duration. In addition, as the stream is prone to flooding, it is unlikely that devil's bit scabious adjacent to the stream provides optimal habitat for marsh fritillary. Therefore, the potential for effects on the QI are not anticipated. Due to distance, the QI species where it occurs within the SAC will not be affected.</p> <p>Salmon utilise the Cashla River system which the stream being assessed is connected to. Although no gravel areas suitable for spawning salmonids was identified at the proposed works area, it is possible the salmon migrate further upstream. Therefore, the potential for disturbance/displacement exists.</p> <p>The proposed works area is within the commuting distance of otter. No signs of otter were recorded during the ecological walkover survey. However, the potential for disturbance to otter still exists.</p> | |
|--|--|---|--|

| | | | |
|--|---|--|-----------|
| | | <p>The proposed works will involve minor vegetation clearance and significant siltation related effects are not anticipated. Due to the nature and scale and short duration of the works, an extensive pollution event is not anticipated. However, there is the potential for localised pollution in the event of a hydrocarbon spillage. Therefore for there is the potential for pollution related effects on the following QI's;</p> <ul style="list-style-type: none"> • Salmo salar (Salmon) [1106] • Lutra lutra (Otter) [1355] • Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation [3260] <p>Further assessment is therefore required.</p> | |
| <p>Kilkieran Bay and Islands SAC [002111]</p> <p>3.3km</p> | <ul style="list-style-type: none"> • Mudflats and sandflats not covered by seawater at low tide [1140] • Coastal lagoons [1150] • Large shallow inlets and bays [1160] • Reefs [1170] • Atlantic salt meadows (<i>Glaucopuccinellietalia maritimae</i>) [1330] • Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] • Machairs (* in Ireland) [21A0] • Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or <i>Isoeto-Nanojuncetea</i> [3130] • Lowland hay meadows (<i>Alopecurus pratensis</i>, <i>Sanguisorba officinalis</i>) [6510] • <i>Lutra lutra</i> (Otter) [1355] • <i>Phoca vitulina</i> (Harbour Seal) [1365] • <i>Najas flexilis</i> (Slender Naiad) [1833] | <p>The proposed development site is located entirely outside the boundary of the European Site and therefore there is no potential for direct effects.</p> <p>The proposed works is separated from the SAC by Cashla Bay and the sea. Due to the distance, nature and scale of the works, effects on marine QI habitats and species are not anticipated.</p> <p>No surface water connectivity between the proposed works site and the European site exists. Therefore, no pathway for effect was identified with regard to surface water dependent QI habitats or species.</p> <p>No surface water connection between the proposed works area and SAC exists and the coastal distance is over 10km. It is not anticipated that the proposed works will result in disturbance to otter.</p> <p>The proposed development site is located over 3km from the SAC. No potential pathway for effect was identified with regard to the QI terrestrial habitats for which the SAC is designated.</p> | <p>No</p> |

| | | | |
|--|---|--|----|
| | | <p>Due to distance from the SAC, the nature and scale of the proposed works, no potential for effects are anticipated with regard to groundwater influenced QI habitats.</p> <p>No pathway for indirect effects between the proposed project and the designated site exists. No potential for significant effects have been identified with regard to the proposed works.</p> | |
| <p>Connemara Bog Complex SPA [004181]</p> <p>4.2km</p> | <ul style="list-style-type: none"> • Cormorant (<i>Phalacrocorax carbo</i>) [A017] • Merlin (<i>Falco columbarius</i>) [A098] • Golden Plover (<i>Pluvialis apricaria</i>) [A140] • Common Gull (<i>Larus canus</i>) [A182] | <p>The proposed development site is located entirely outside the boundary of the European Site and therefore there is no potential for direct effects.</p> <p>The proposed works area consists of a small stream and is adjacent to a sports field which is utilised regularly. Due to the duration, nature and scale of the proposed works and the lack of suitable supporting habitat at the site, no disturbance/displacement effects are anticipated.</p> <p>No pathway for indirect effects between the proposed project and the designated site exists. No potential for significant effects have been identified with regard to the proposed works.</p> | No |
| <p>Inishmore Island SAC [000213]</p> <p>14.6km</p> | <ul style="list-style-type: none"> • Coastal lagoons [1150] • Reefs [1170] • Perennial vegetation of stony banks [1220] • Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] • Embryonic shifting dunes [2110] • Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] • Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] • Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>) [2170] • Humid dune slacks [2190] • Machairs (* in Ireland) [21A0] • European dry heaths [4030] • Alpine and Boreal heaths [4060] | <p>The proposed development site is located entirely outside the boundary of the European Site and therefore there is no potential for direct effects.</p> <p>The proposed works is separated from the SAC by Cashla Bay and the sea. Due to the distance, nature and scale of the works, effects on marine QI habitats are not anticipated.</p> <p>The proposed development site is located over 14km from the SAC. No potential pathway for effect was identified with regard to the QI terrestrial habitats and species for which the SAC is designated.</p> <p>No pathway for indirect effects between the proposed project and the designated site exists. No potential for significant effects have been identified with regard to the proposed works.</p> | No |

| | | | |
|--|--|--|--|
| | <ul style="list-style-type: none"> • Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] • Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) [6510] • Limestone pavements [8240] • Submerged or partially submerged sea caves [8330] • Vertigo angustior (Narrow-mouthed Whorl Snail) [1014] | | |
|--|--|--|--|

3.1 In-combination Assessment

The potential for the proposed project to result in significant effects on Connemara Bog Complex SAC [002034] was identified in the previous section and therefore, the proposed development also has the potential to result in cumulative effects on that site. An in-combination assessment for Connemara Bog Complex SAC [002034] will be included in the NIS.

The proposed development was considered in combination with other plans and projects in the area that could result in cumulative effects on the European sites for which no potential for significant effects were identified in Table 3.1.

A search of the online planning system for Galway County Council for existing, proposed and approved projects recent planning applications was undertaken on the 07/07/2023. Refused, withdrawn and incomplete information applications were not included in the assessment. The following planning applications were returned within the past five years for the townland of Rossaveel;

- PI. Ref. 18547 - For refurbishment of existing slipway to improve low tide access. Raising and widening of slipway deck and the addition of a berthing face. Extension of existing rubble mound breakwater and re-grading of rock revetment to provide further protection of the small draft Harbour
- PI. Ref. 19746 - A dhéanamh ag an suíomh seo ag Ionad Iascaigh Cuain Ros an Mhíl. Saoráidí Fónais a thógáil don chaladh bád ag lárionad chuan isacaigh Ros an Mhíl ina mbeidh saoráidí leasa ar leibhéal bunurláir agus oifig riaracháin ar leibhéal an chéad urláir chomh maith leis na fosheirbhísi gaolmhara ar fad
- PI. Ref 191378 - consisting of the construction, operation and decommissioning of one 10m high telecommunication mast, including a small concrete foundation and the installation of underground ducting for power and communication cables to/from the electrical substation building for the wind turbine development
- PI. Ref 21300 - For the a new small craft harbour, reclamation of foreshore and dredging of a new small craft harbour basin at Rossaveel Fishery Harbour Centre, Rossaveel, Co. Galway..
- PI. Ref 22365 – chun athraithe a dheanamh don phlean le haghaidh an Teach Cónaithe agus don phlean le haghaidh Garáiste a thógáil a bhí ceadaithe faoi Uimhir Thagartha 21/973. Spás urláir comhlán na n-oibreacha beartaithe: Teach: 98 sqm, Garáiste: 88 sqm
- PI. Ref 22448 - le 1. síneadh a chur le foirgneamh atá ag Coláiste Chamuis ar an suíomhcheana féin- is é sin 4 sheomra ranga nua, Oifig do phríomhoide, pasáiste/ spás cúrsaíochta, seomraí stórais, cistin agus seomra bia. 2. Athruithe ar na háiseanna leithris chun 10 ciúbanna leithris aonghnéasacha agus 2 chiúb leithris foirne. 3. Síneadh a chur le teach cónaithe atá ar an suíomh cheana féin- is é sin 8 sheomra codalta don bhfoireann. 4. soláthar painéil fótvoltach ar dhíon an síneadh ar an bhfiirgneamh scoile atá faoi iarratas. 5. páirceáil, seirbhísi agus gach obair láithreáin a bhaineann leis obair seo
- PI. Ref 22448 - for the reclamation of a waterlogged area to the south of the Department of Agriculture, Food and the Marine's public car park
- PI. Ref 2360373 - Is éard a bheidh san fhorbairt seo ná forhalla gaoithe 6 sqm a thógáil os comhair an Ionaid Iascaigh Cuain atá ann faoi láthair agus athruithe a dhéanamh ar an rochtain rampa.

The following planning applications were returned within the past five years for the townland of Derroogh South;

- PI Ref 191208 - chun teach nua cónaithe a thógáil chomh maith garáiste nua agus le córás searachais nua. Spás urláir comhlán na n-oibreacha beartaithe: Teach - 254.9 sqm, Garáiste - 54 sqm
- PI Ref 2324 - chun Garáiste chomh maith le gach obair láithreáin, an thógáil. Spás urláir comhlán na n-oibreacha beartaithe: 60 sqm

The following other plans and projects that were considered in the assessment;

- The Galway County Development Plan 2022-2028 was also reviewed and considered as part of this assessment. The review focused on policies and objectives that relate to Natura 2000 sites.

No pathway for significant effects was identified in relation to the screened-out European sites as a result of the proposed project when considered on its own. In the review of other plans and projects described above, no additional pathways for effect on the screened-out European sites were identified as a result of those plans or projects. Neither was there any potential for additional effects resulting from the combination of the various projects and plans in association with the proposed development on the screen-out European sites.

4 Conclusion and Screening Statement

The proposed project in the townlands of Ros a Mhíl and Derrough South, Co. Galway is not located within any European site. The Appropriate Assessment Screening considered potential effects which may arise as a result of the proposed project.

Following the screening process, it can be concluded that there is no likelihood of the proposed project as detailed above having a significant effect, individually or in-combination, on the following European sites, based on the evidence and assessment provided in this report:

- Kilkieran Bay and Islands SAC [002111]
- Connemara Bog Complex SPA [004181]
- Inishmore Island SAC [000213]

It cannot be excluded beyond reasonable scientific doubt, in consideration of best scientific knowledge and on the basis of objective information, in view of the relevant conservation objectives, either alone or in-combination with other plans or projects, that the proposed project will not result in significant effects on the following European sites;

- Connemara Bog Complex SAC [002034]

Therefore, an Appropriate Assessment is required in accordance with Article 6(3) of the European Habitats Directive (92/43/EEC) and an Natura Impact Statement (NIS) will be prepared to inform the AA.

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Appendix 2: Site-Specific Conservation Objectives Extracts

3260 Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation

To maintain the favourable conservation condition of Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation in Connemara Bog Complex SAC, which is defined by the following list of attributes and targets:

| Attribute | Measure | Target | Notes |
|--|-------------------|---|--|
| Habitat area | Kilometres | Area stable or increasing, subject to natural processes | Selection of this SAC for 3260 used a broad interpretation and little is known of the distribution of high conservation value sub-types. Rivers and streams are widespread and abundant in the SAC (see map 7). Note: rooted macrophytes should be absent or trace (<5% cover) in freshwater pearl mussel (<i>Margaritifera margaritifera</i>) habitat. The SAC overlaps with three <i>Margaritifera</i> sensitive areas: Owenriff (priority SAC catchment), Knock and Ballynahinch/Recess (see map 7). Mussels occur within the SAC in the Derrygauna River (tributary of the Owenriff), and the Owentooey and Recess Rivers. Within the Owenriff catchment, the freshwater pearl mussel (1029) conservation objective for Lough Corrib SAC (000297) takes precedence, because the mussel requires environmental conditions close to natural background levels |
| Habitat distribution | Occurrence | No decline, subject to natural processes | The description of 3260 is broad, from upland bryophyte/macroalgal dominated river stretches, to lowland depositing rivers with pondweeds and starworts (EC, 2013), and further study is needed of Irish sub-types and their conservation value. As noted above, little is known about the distribution of the habitat and its sub-types in the site. Heuff (1987) surveyed the Vougheen Stream, the outflow from Lough Cam (both in Roundstone Blanket Bog) and the Owenboliska. Rivers in the SAC are, naturally, very nutrient-poor, with five High Status sites on four rivers noted by Ni Chathain et al. (2013). Rivers and streams can be peaty and slow-flowing in flat blanket bog, and spatey, often with cascades, in more sloping areas. They are frequently base-poor, but <i>Margaritifera</i> rivers tend to have base-rich influences. See Williams (2009) and DEHLG (2010) for information on macrophytes in the Owenriff catchment |
| Hydrological regime: river flow | Metres per second | Maintain appropriate hydrological regimes | Any high conservation value sub-types in the site will be associated with natural hydrology. A natural flow regime is required for both plant communities and channel geomorphology to be in favourable condition, exhibiting typical dynamics for the river type (Hatton-Ellis and Grieve, 2003). For many of the sub-types of this habitat, high flows are required to maintain the substratum necessary for the characteristic species. Flow variation can be particularly important, with high and flood flows being critical to the hydromorphology. Peatlands can also have slow-flowing or ponded streams and rivers, with biotic communities likely to resemble those in associated lakes |
| Hydrological regime: groundwater discharge | Metres per second | Maintain appropriate hydrological regimes | The groundwater contribution to rivers in the SAC is likely to be small, owing to the geology and dominance of blanket peat soils. Even small groundwater contributions, however, can significantly alter the hydrochemistry, particularly where there is basic bedrock (e.g. lake marbles or the Metagabbro Suite) and/or subsoils |

| | | | |
|---|-------------|--|--|
| Substratum composition: particle size range | Millimetres | Maintain appropriate substratum particle size range, quantity and quality, subject to natural processes | Although many of the high conservation value sub-types are dominated by coarse substrata, for certain sub-types, notably tidal forms, fine substrata are required. Peat is a common substratum in gently sloping rivers within the site. The size and distribution of particles is largely determined by the river flow. The chemical composition (particularly minerals and nutrients) of the substratum is also important. The quality of finer sediment particles is a notable driver for rooted plant communities |
| Water quality | Various | Maintain appropriate water quality to support the natural structure and functioning of the habitat | The specific targets may vary among sub-types. The rivers within the SAC are considered to be naturally very nutrient poor and, therefore, to typically require Water Framework Directive high status, in terms of nutrient and oxygenation standards, and EQRs (Ecological Quality Ratios) for macroinvertebrates and phytobenthos |
| Vegetation composition: typical species | Occurrence | Typical species of the relevant habitat sub-type should be present and in good condition | The sub-types of this habitat are poorly understood and their typical species have not yet been fully defined. The typical species may include higher plants, bryophytes, macroalgae and microalgae, and invertebrates. The only known Irish sites for <i>Luronium natans</i> are in the SAC, and although generally considered to be a lake species, it has been found in two streams (Rich et al., 1995; Curtis et al., 2012). The status of <i>Luronium natans</i> in Ireland is currently uncertain, as it is unclear whether it is native to these sites, or was introduced (Preston and Croft, 2001). The uncommon pondweed hybrid, <i>Potamogeton x sparganiiifolius</i> is known from the Owenmore (Ballynahinch) River (Preston et al., 1991) |
| Floodplain connectivity: area | Hectares | Area of active floodplain at, and upstream of the habitat, necessary to support all sub-types of the habitat, should be maintained | River connectivity with the floodplain is important for the functioning of this habitat. Channels with a naturally functioning floodplain are better able to maintain habitat and water quality (Hatton-Ellis and Grieve, 2003). Floodplain connectivity is particularly important in terms of sediment sorting and nutrient deposition. High conservation value rivers are intimately connected to floodplain habitats and function as important wildlife corridors, connecting otherwise isolated or fragmented habitats in the wider countryside (Hatton-Ellis and Grieve, 2003) |
| Riparian habitat: area | Hectares | Maintain the area and condition of fringing habitats necessary to support the habitat and its sub-types | Riparian habitats, including those along lake fringes, even where they do not form part of a natural floodplain, are an integral part of the structure and functioning of river systems. Fringing habitats can contribute to the aquatic food web (e.g. allochthonous matter such as leaf fall), provide habitat (refuge and resources) for certain life-stages of fish, birds and aquatic invertebrates, assist in the settlement of fine suspended material, protect banks from erosion and contribute to nutrient cycling. Shade may also be important in suppressing algal growth in enriched rivers and moderating temperatures. Equally, fringing habitats are dependent on rivers/lakes, particularly their water levels, and support wetland communities and species of conservation concern |

Conservation Objectives for : Connemara Bog Complex SAC [002034]

1106 Salmon *Salmo salar*

To restore the favourable conservation condition of Atlantic Salmon in Connemara Bog Complex SAC, which is defined by the following list of attributes and targets:

| Attribute | Measure | Target | Notes |
|----------------------------------|--|--|--|
| Distribution: extent of anadromy | percentage of river accessible | 100% of river channels down to second order accessible from estuary | Artificial barriers block salmon's upstream migration, thereby limiting species to lower stretches and restricting access to spawning areas. There are no barriers to migration on the Cashla system. A new proposed regional water supply scheme below Glenicmurrin Lake will have a fish pass incorporated. On the Owenboliska River, there is a fish pass in place at the water regulating sluice below Boliska Lake. There are no barriers to migration on the Owenmore system |
| Adult spawning fish | Number | Conservation Limit (CL) for each system consistently exceeded | A conservation limit is defined by the North Atlantic Salmon Conservation Organisation (NASCO) as "the spawning stock level that produces long-term average maximum sustainable yield as derived from the adult to adult stock and recruitment relationship". The target is based on the Standing Scientific Committee of the National Salmon Commission's annual model output of CL attainment levels. See SSC (2015). Stock estimates are either derived from direct counts of adults (rod catch, fish counter) or indirectly by fry abundance counts. The Owenmore and Cashla rivers are currently exceeding CL while the Owenboliska is below CL |
| Salmon fry abundance | Number of fry/5 minutes electrofishing | Maintain or exceed 0+ fry mean catchment-wide abundance threshold value. Currently set at 17 salmon fry/5 minutes sampling | Target is threshold value for rivers currently exceeding their conservation limit (CL) |
| Out-migrating smolt abundance | Number | No significant decline | Smolt abundance can be negatively affected by a number of impacts such as estuarine pollution, predation and sea lice (<i>Lepeophtheirus salmonis</i>). Marine salmon farming takes place in the estuary of the Owenmore River |
| Number and distribution of redds | Number and occurrence | No decline in number and distribution of spawning redds due to anthropogenic causes | Salmon spawn in clean gravels. The habitat for salmon is good in the Owenmore and Cashla catchments and improvements in spawning areas and input of gravel has been ongoing in both catchments. Funding has been approved for habitat improvement works in the upper reaches of the Owenboliska system |
| Water quality | EPA Q value | At least Q4 at all sites sampled by EPA | Q values based on triennial water quality surveys carried out by the Environmental Protection Agency (EPA) |

Conservation Objectives for : Connemara Bog Complex SAC [002034]

1355 Otter *Lutra lutra*

To maintain the favourable conservation condition of Otter in Connemara Bog Complex SAC, which is defined by the following list of attributes and targets:

| Attribute | Measure | Target | Notes |
|--|----------------------------------|---|---|
| Distribution | Percentage positive survey sites | No significant decline | Measure based on standard otter survey technique. FCS target, based on 1980/81 survey findings, is 88% in SACs. Current range estimated at 93.6% (Reid et al., 2013) |
| Extent of terrestrial habitat | Hectares | No significant decline. Area mapped and calculated as 2194.8ha | No field survey. Areas mapped to include 10m terrestrial buffer along shoreline (above HWM and along river banks) identified as critical for otters (NPWS, 2007) |
| Extent of marine habitat | Hectares | No significant decline. Area mapped and calculated as 139.0ha | No field survey. Area mapped based on evidence that otters tend to forage within 80m of the shoreline (HWM) (NPWS, 2007; Kruuk, 2006) |
| Extent of freshwater (river) habitat | Kilometres | No significant decline. Length mapped and calculated as 564.0km | River length calculated on the basis that otters will utilise freshwater habitats from estuary to headwaters (Chapman and Chapman, 1982) |
| Extent of freshwater (lake/lagoon) habitat | Hectares | No significant decline. Area mapped and calculated as 3908.6ha | No field survey. Area mapped based on evidence that otters tend to forage within 80m of the shoreline (NPWS, 2007) |
| Couching sites and holts | Number | No significant decline | Otters need lying up areas throughout their territory where they are secure from disturbance (Kruuk, 2006; Kruuk and Moorhouse, 1991) |
| Fish biomass available | Kilograms | No significant decline | Broad diet that varies locally and seasonally, but dominated by fish, in particular salmonids, eels and sticklebacks in freshwater (Bailey and Rochford, 2006; Reid et al., 2013) and wrasse and rockling in coastal waters (Kingston et al., 1999) |