Rialtas na hÉireann
Government of Ireland

Screening for Appropriate Assessment

Adoption of Rhododendron control measures within the Mweelrea/Sheeffry/Erriff Complex Special Area of Conservation in accordance with Regulation 42A EC (Birds and Natural) Habitats Regulations 2011-2021

Prepared by the Department of Housing, Local Government and Heritage
npws.ie

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1. Introduction

This determination on Screening for Appropriate Assessment (AA) has been made by the Ecological Assessment Unit (EAU) of the Department of Housing, Local Government and Heritage (DHLGH) in accordance with Regulation 42A(8) of the European Communities (Birds and Natural Habitats) Regulations 2011-2021 ('the 2011 Regulations").[1]

On the 26th January 2024, in accordance with the requirements of Regulation 42A(3) of the 2011-2021 Regulations, the Minister for Housing, Local Government and Heritage ('the Minister') furnished the EAU with a request for a Screening for Appropriate Assessment (AA) determination for proposed community-led control of Rhododendron ponticum within the Mweelrea/Sheeffry/Erriff Complex Special Area of Conservation (SAC) [Site Code: 001932]. Hereafter referred to as "the project".

The EAU have evaluated and analysed the information contained in the referred to above documents and location maps provided and carried out a determination. The purpose of this document is to provide a record and an audit trail of the EAU reasoned thinking in view of best scientific knowledge and the Conservation Objectives of European Sites.

[1] As inserted by Regulation 7 of the European Union (Birds and Natural Habitats) (Amendment).

2. Background

Pursuant to Regulation 42A(1) of the European Communities (Birds and Natural Habitats) Regulations, 2011 (S.I. 477 of 2011), a Screening for AA is required to be carried out on the project. AA is a process required under Article 6(3) of the EU Habitats Directive. Article 6(3) is transposed in Ireland by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), as amended, and by Part XAB of the Planning and Development Act, 2000, as amended.

All plans and projects which are not directly connected with or necessary to the management of a European Site, but which either individually or in combination with other plans or projects, are likely to have a significant effect on a “European Site”, require that an AA of these effects to determine if they will adversely affect the integrity of these sites. The proposed conservation measures are considered to fall under the requirements of AA as applied to all plans and projects.

The Screening for AA process scrutinises the plan or project to determine if there is potential for likely significant effects either individually or in combination with other plans or projects, on a European Site. European Sites are part of the Natura 2000 network and include those designated as Special Areas of Conservation (SAC), Candidate SACs (cSACs) or Special Protection Areas (SPA). This Screening for Appropriate Assessment describes the outcome of this analysis in respect of the project.

3. Legislation and Guidance

This section provides details on the adopted methodology with sources of guidance and information gathered to inform the preparation of the report.

3.1. Guidance and Data Sources

- Communication from the Commission on the precautionary principle. European Commission (2000);
- European Commission. (2001) Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites: Methodical Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC;
- European Commission. (2007) Guidance Document on Article 6(4) of the Habitats Directive 92/43/EEC;
- Department of Environment, Heritage and Local Government. (2010) Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities;
- Appropriate Assessment under Article 6 of the Habitats Directive; Guidance for Planning Authorities. Circular NPW 1/10 and PSSP 2/10;
- European Commission. (2018) Managing Natura 2000 Sites: The Provision of Article 6 of the Habitats Directive 92/43/EEC;
- Office of the Planning Regulator. (2021) Practice Note PN01 - AA Screening for Development Management;
- Official Journal of the European Union. (2021) Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (Volume 64; 2021/C 437/01);
- Higgins, G.T. (2008) Rhododendron ponticum: A guide to management on nature conservation sites. Irish Wildlife Manuals, No. 33. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin, Ireland; and,
- Monaco, A., and Genovesi, P. (2014) European Guidelines on Protected Areas and Invasive Alien Species, Council of Europe.

3.2. Assessment Methodology

This report is based on review of desktop data. Sources of information utilised for this report and accessed during March 2024 include the following:

- National Parks & Wildlife Service (NPWS) Designations Viewer[2]; and,
- National Biodiversity Data Centre (NBDC) Maps[3].

3.3. Legislative Background

According to the EU Habitats Directive (92/43/EEC) and the EU Birds Directive (79/409/EEC), Member States are required to establish a Natura 2000 network of sites of highest biodiversity importance for rare and threatened habitats and species across the EU.

In Ireland, the Natura 2000 network of European sites comprises SACs, candidate SACs and SPAs.

SACs are selected for the conservation of Annex I habitats (including priority types which are in danger of disappearance) and Annex II species (other than birds). SPAs are selected for the conservation of Annex I birds and all migratory birds and their habitats. The Annex habitats and species, for which each site is selected, are the Qualifying Interests (QI) for SACs and Special Conservation Interests (SCI) for SPAs of each site. Conservation Objectives for the site are defined for these QI or SCI.

A key requirement of the Habitats Directive is that the effects of any plan or project, which is not directly connected with or necessary to the management of a European Site, but which alone, or in combination with, other plans or projects, are likely to have a significant effect on a European Site, should be assessed before any decision is made to allow that plan or project to proceed. The obligation to undertake a screening for AA, and if necessary, an AA, derives from Article 6(3) of the Habitats Directive and 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.

[2] National Parks & Wildlife Service Designation Viewer. Accessed at ArcGIS Web Application 08/03/2024

[3] National Biodiversity Data Centre Maps. Accessed at Maps - Biodiversity Maps (biodiversityireland.ie) 08/03/2024

Article 6(3) of the Habitats Directive states:

> "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 and 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 having ascertained that it will not adversely affect the integrity of the site concerned and if appropriate, after having obtained the opinion of the general public".

Article 6(4) states:

> "If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of 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."

The competent authority is required to carry out a screening for AA, and if necessary, an AA as required by Article 6(3) of the Habitats Directive. If the competent authority determines that the plan or project will adversely affect the integrity of a European site, it may only authorise that plan or project by following the Article 6(4) procedure.

The Article 6(3) and 6(4) procedures are outlined as follows:

Stage 1 - Screening for Appropriate Assessment – to assess, in view of best scientific knowledge, if the project or plan, individually or in combination with another plan or project is likely to have a significant effect on the Natura 2000 site.

Stage 2 - Appropriate Assessment – This is required if it cannot be excluded, on the basis of objective information, that the project or plan, individually or in combination with other plans or projects, will have a significant effect on a Natura 2000 site. The AA must include a final determination by the competent authority as to whether or not a proposed project would adversely affect the integrity of a Natura 2000 site. In order to reach a final determination, the competent authority must undertake examination, analysis and evaluation, followed by findings, conclusions and a final determination. The appropriate assessment must contain complete, precise and definitive findings and conclusions, and may not have lacunae or gaps.

Stage 3 – Assessment of alternative solutions - the process which examines alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 site.

Stage 4 - Assessment where no alternative solutions exist and where adverse impacts remain - an assessment of compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed.

Under Regulation 42A(1) of the European Communities (Birds and Natural Habitats) Regulations, 2011-2021 (S.I. 293 of 2021), the Ecological Assessment Unit is the competent authority in relation to screening for AA of projects and plans (such as the proposed conservation measures) which the Minister proposes to undertake or adopt.

4. Overview of the Project

The Mweelrea/Sheeffry/Erriff Complex SAC covers a large area of the scenic hills of south Co. Mayo. The western limit of the site is at Dooaghtry, south of Kinnadoohy. The southern margin is bounded by Killary Harbour and the Erriff River, including the corrie of Lough Glenawough. The Aille River forms the eastern limit, and to the north the boundary includes the main massifs of the Sheeffry Hills and the Mweelrea Mountains. Several river catchments are encompassed within the site, including the Bundorragha and Glenummera Rivers, as well as Fin Lough, Doo Lough and Glencullin Lough, the upper catchment of the Bunowen River and parts of the Derrycraff and Owenmore Rivers (Figure 1).

The Mweelrea/Sheeffry/Erriff Complex is an extremely large site containing a wide range of habitats, including many that are listed on Annex I of the E.U. Habitats Directive. Five of these are listed with priority status - blanket bog, petrifying springs, lagoons, machair and decalcified dune heath. The site supports populations of rare and threatened plants (mosses, liverworts, stoneworts, ferns and flowering plants) and animals (invertebrates, fish, birds and mammals). Overall it is of exceptional conservation interest and value.

Rhododendron is widely recognised as one of the most problematic non-native invasive species currently threatening Irish biodiversity, particularly our native woodlands. By forming extensive, single species stands it effectively excludes native plant communities from their natural habitats. Increased awareness of its detrimental impacts, coupled with the discovery that it can act as a host for the plant pathogen *Phythopthera ramorum*, has recently lead to an urgent requirement for Rhododendron removal all across Ireland.

The project proposes to develop a multi-actor community-led pilot project, which seeks to develop local capacity to implement habitat restoration actions in Mweelrea/Sheeffry/Erriff Complex SAC. It builds on a successful preliminary project based in the Bundorragha catchment in Co. Mayo in 2022. Although the primary focus will be Rhododendron control, a training module for further peatland restoration methods will also be developed. The project also intends to have a trained work crew undertake Rhododendron re-treatment of circa 221 hectares of lands within the Erriff and Bundoragha Catchments and treatment of circa 40 hectares of previously untreated land within the townlands of Knockeen, Derrygarve More, Srahwee, Derrygarve Beg and Cregganabaun

4.1. Purpose

Native to South-west Europe and southwest Asia, Rhododendron is a large evergreen shrub with leathery leaves, purple to pink flowers and solid stems forming into a trunk when mature. Rhododendron spreads by both suckers and seed. Each flower head can produce between three thousand and seven thousand small seeds which can remain viable in the soil for several years. Larger plants can produce several million seeds per year. The small seeds are dispersed up to 100 metres by wind and water under favourable open conditions.

Once Rhododendron has invaded an area, few native plants survive. In woodlands, only those trees which manage to grow above the level of the Rhododendron canopy will persist. When such trees die, they cannot be replaced because seedlings cannot become established under the lightless canopy. At this point, the Rhododendron completely dominates the area and stands accumulate into thick dense patches.

Potentially toxic chemicals, particularly 'free' phenols, occur in significant quantities in the tissues of Rhododendron, such that foliage is unpalatable to vertebrates (therefore not naturally suppressed through grazing or browsing), and few insects feed on the plant. Another potentially major impact of Rhododendron is its effect on native tree species, notably Oak (*Quercus*) and nursery stock through the fungus-like pathogens *Phytophthora ramorum* and *P. kernoviae*, which are harboured by Rhododendron.

The importance of the threat of invasive alien species is reflected in a suite of international, European and national policy and legislation.

Habitats Directive (Article 6.2) obliges Member States to take appropriate steps to avoid the deterioration of natural habitats and the significant disturbance of the species for which a site has been designated. In this context 'taking appropriate steps' means for the Minister to adopt the necessary legal and/or contractual measures to make sure that the deterioration of the natural habitats for which the Twelve Bens/Garraun Complex Special Area of Conservation has been designated is avoided.

In September 2011, comprehensive regulations which address deficiencies in Irish law implementing the EU Birds and Habitats Directives were signed into law. The European Communities (Birds and Natural Habitats) Regulations 2011 contain important new provisions to address the problem of invasive species. A black list of unwanted species is set out in the Regulations. It will be an offence without a licence, to release or allow to disperse or escape, to breed, propagate, import, transport, sell or advertise such species. Two regulations that deal specifically with these scheduled lists of species are:

Regulation 49: Prohibition on introduction and dispersal of certain species.

The Conference of the Parties to the Convention on Biological Diversity (CBD) at their tenth meeting set out a Strategic Plan for Biodiversity with 20 headline targets for 2020 organized under five strategic goals. The mission of the Strategic Plan is to —take effective and urgent action to halt the loss of biodiversity in order to ensure that by 2020 ecosystems are resilient and continue to provide essential services.

> *Target 9 states: By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment*.

On September 29th, 2014, the European Council adopted a Regulation on the prevention and management of the introduction and spread of invasive alien species [1143/2014]. The Regulation, that is a binding legal tool for all Member States, entered into force January 1st 2015. The Regulation lays down rules to prevent, minimise and mitigate the adverse impacts of the introduction and spread, both intentional and unintentional, of invasive alien species on biodiversity and the related ecosystem services, as well as other adverse impact on human health or the economy.

On 25th January 2024, Ireland's 4th National Biodiversity Action Plan (NBAP), for the period 2023-2030 was launched with 5 objectives. The plan aims to deliver the transformative changes required to the ways in which we value and protect nature. The 4th NBAP has been developed with the support, advice and input of the interdepartmental Biodiversity Working Group and the independent Biodiversity Forum. Objective 2 focuses on invasive species management.

> *Action 1D5 states that NPWS will continue to support Local Authorities biodiversity projects through the LBAF, which includes action on invasive alien species, throughout the lifetime of this Plan*.

> *Outcome 2H includes actions related to Invasive alien species (IAS) are controlled and managed on an all-island basis to reduce the harmful impact they have on biodiversity and measures are undertaken to tackle the introduction and spread of new IAS to the environment.*

5. Project Description

Treatment: The only herbicide to be used is glyphosate. The most appropriate herbicide currently available for Rhododendron ponticum control is *Roundup™ Biactive (≡ Roundup™ Probiactive)*. Stem treatment will be the method used whereby a solution of glyphosate will be applied to the cut or broken stems of the plant. Please refer to "*Rhododendron ponticum*: A guide to management on nature conservation sites" Irish Wildlife Manuals, No. 33 for additional guidance.

- Removal of plants less than 20cm in height: Plants will be pulled manually ensuring all root stock is fully removed from the ground and all associated earth is fully shaken off;
- Removal of plants greater than 20cm in height: For plants with a stem diameter of less than 2cm the stem can be broken at the base ensuring that the stem is not fully severed and a 14% solution of glyphosate (6 parts water to 1 part glyphosate) can be manually applied to the broken area. For plants with stem diameter greater than 2cm, a notch will be cut with a hatchet from two sides of each stem and the solution of 14% herbicide manually applied;
- No Foliar Spraying: Foliar spraying is not permitted, ensuring no potential hydrological pathway exists during the course of Rhododendron clearance;
- Contractor Materials: Storage of materials and refilling of equipment for Rhododendron clearance will be off site and in a secure location. All materials used for the treatment of Rhododendron will be removed from the areas on completion of works; and,
- Retreatment and Regrowth: While it may take as long as up to 7 months for the herbicide to take full effect and for the plants to fully die, the treated areas will be inspected by NPWS staff and trained personnel to ensure correct methodologies are being applied by visual inspection of treated plants.
    - Where following visual inspection it is deemed that the Rhododendron plants in the area have not all been eradicated these will be effectively retreated within six months.
    - All cleared sites in an area where seed input is ongoing will require ongoing management so that re-infestation from seed is not allowed to succeed.
    - The project must regular and systematic follow-up as required to deal with re-growth and seedling germination within the defined management areas.

- As long as an external seed source remains, repeated systematic sweeps through the site will be required, to prevent newly established plants from reaching flowering age and setting seed.

The Project Manager will liaise with Regional NPWS staff to ensure that surveys and up to date field data informs the roll out of the control project. Elements of the project are required to take place during the bird nesting season (1st March- 31st August inclusive). There is provision for, notwithstanding anything contained in Section 40 of the Wildlife Act 1976-2023 (prohibits the cutting, grubbing, burning or other destruction of vegetation growing on “any land not then cultivated” between 1st March and 31st August annually), the authorisation for the destruction of vegetation comprising the species of flora that the Minister considers poses a threat to the objectives of the Birds Directive or the Habitats Directive under Regulation 49(13) of the European Communities (Birds and Natural Habitats) 2011 - 2021. The Project Manager and/or a NPWS Authorised Officer will ensure this work is undertaken under licence and that the project can progress (access, route and egress) in compliance with Section 22 and Section 23 of those Acts prior to works (where applicable).

The Project Manager will ensure best practice guidance on correct invasive and non-native species control procedures are adhered to. Work will be reviewed by the Project Manager and/or a NPWS Authorised Officer at regular intervals to ensure that correct procedures are being followed.

6. Part 1: Necessary conservation measures

Answer these questions if the activity is “directly connected with or necessary to the management of the site”. Otherwise go to Part 2.

a). List the European site(s) and the relevant Conservation Objectives (include version number of the Conservation Objective).

Mweelrea/Sheeffry/Erriff Complex SAC [Site code: 001932].

NPWS (2017) Conservation Objectives: Mweelrea/Sheeffry/Erriff Complex SAC 001932. Version 1. Accessed 8th March 2024.

Available at: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO001932.pdf

Qualifying Interests

Geyer's Whorl Snail *Vertigo geyeri* [1013]

Narrow-mouthed Whorl Snail *Vertigo angustior* [1014]

Freshwater Pearl Mussel *Margaritifera margaritifera* [1029]

Salmon *Salmo salar* [1106]

Coastal lagoons* [1150]

Annual vegetation of drift lines [1210]

Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]

Otter *Lutra lutra* [1355]

Petalwort *Petalophyllum ralfsii* [1395]

Mediterranean salt meadows (Juncetalia maritimi) [1410]

Slender Naiad *Najas flexilis* [1833]

Embryonic shifting dunes [2110]

Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) [2120]

Atlantic decalcified fixed dunes (Calluno-Ulicetea)* [2150]

Dunes with *Salix* ssp. *argentea* (Salicion arenariae) [2170]

Machairs (* in Ireland) [21A0]

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 Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]

Northern Atlantic wet heaths with *Erica tetralix* [4010]

European dry heaths [4030]

Alpine and Boreal heaths [4060]

Juniperus communis formations on heaths or calcareous grasslands [5130]

Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]

Blanket bogs (* if active bog) [7130]

Transition mires and quaking bogs [7140]

Depressions on peat substrates of the Rhynchosporion [7150]

Petrifying springs with tufa formation (Cratoneurion)* [7220]

Alkaline fens [7230]

Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) [8110]

Calcareous rocky slopes with chasmophytic vegetation [8210]

Siliceous rocky slopes with chasmophytic vegetation [8220]

Conservation Objectives for Qualifying Interests.

Coastal lagoons [1150]

To maintain the favourable conservation condition of Coastal lagoons* in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Habitat area.
- Habitat distribution.
- Salinity regime.
- Hydrological regime.
- Barrier: connectivity between lagoon and sea.
- Water quality: Chlorophyll *a*.
- Water quality: Molybdate Reactive Phosphorus (MRP).
- Water quality: Dissolved Inorganic Nitrogen (DIN).
- Depth of macrophyte colonisation.
- Typical plant species.
- Typical animal species.
- Negative indicator species.

Annual vegetation of drift lines [1210]

To maintain the favourable conservation condition of Annual vegetation of drift lines in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Habitat area.
- Habitat distribution.
- Physical structure: functionality and sediment supply.
- Vegetation structure: zonation.
- Vegetation composition: typical species and sub-communities.
- Vegetation composition: negative indicator species.

Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]

To restore the favourable conservation condition of Atlantic salt meadows (Glauco-Puccinellietalia maritimae) in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Habitat area.
- Habitat distribution.
- Physical structure: sediment supply.
- Physical structure: creeks and pans.
- Physical structure: flooding regime.
- Vegetation structure: zonation.
- Vegetation structure: vegetation height.
- Vegetation structure: vegetation cover.
- Vegetation composition: typical species and sub-communities.
- Vegetation composition: negative indicator species - *Spartina anglica.*

Mediterranean salt meadows (Juncetalia maritimi) [1410]

To restore the favourable conservation condition of Mediterranean salt meadows (Juncetalia maritimi) in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Habitat area.
- Habitat distribution.
- Physical structure: sediment supply.
- Physical structure: creeks and pans.
- Physical structure: flooding regime.
- Vegetation structure: zonation.
- Vegetation structure: vegetation height.
- Vegetation structure: vegetation cover.
- Vegetation composition: typical species and sub-communities

- Vegetation composition: negative indicator species - *Spartina anglica.*

Embryonic shifting dunes [2110]

To maintain the favourable conservation condition of Embryonic shifting dunes in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Habitat area.
- Habitat distribution.
- Physical structure: functionality and sediment supply.
- Vegetation structure: zonation.
- Vegetation composition: plant health of foredune grasses.
- Vegetation composition: typical species and sub-communities.
- Vegetation composition: negative indicator species.

Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) [2120]

To maintain the favourable conservation condition of Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Habitat area.
- Habitat distribution.
- Physical structure: functionality and sediment supply.
- Vegetation structure: zonation.
- Vegetation composition: plant health of dune grasses.
- Vegetation composition: typical species and sub-communities.
- Vegetation composition: negative indicator species.

Atlantic decalcified fixed dunes (Calluno-Ulicetea) [2150]

To maintain the favourable conservation condition of Atlantic decalcified fixed dunes (Calluno-Ulicetea)* in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Habitat area.
- Habitat distribution.
- Physical structure: functionality and sediment supply.
- Vegetation structure: zonation.
- Vegetation structure: bare ground.
- Vegetation composition: sward height.
- Vegetation composition: typical species and sub-communities.
- Vegetation composition: negative indicator species.
- Vegetation composition: scrub/trees.

Dunes with Salix repens ssp. argentea (Salicion arenariae) [2170]

To maintain the favourable conservation condition of Dunes with *Salix repens* ssp. *argentea* (*Salix arenariae*) in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Habitat area.
- Habitat distribution.
- Physical structure: functionality and sediment supply.
- Vegetation structure: zonation.
- Vegetation structure: bare ground.
- Vegetation structure: vegetation height.
- Vegetation composition: typical species and sub-communities.
- Vegetation composition: cover and height of *Salix repens*.
- Vegetation composition: negative indicator species.
- Vegetation composition: scrub/trees.

Machairs (* in Ireland) [21A0]

To restore the favourable conservation condition of Machairs (* in Ireland) in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Habitat area.
- Habitat distribution.
- Physical structure: functionality and sediment supply.
- Physical structure: hydrological and flooding regime.
- Vegetation structure: zonation.
- Vegetation structure: bare ground.
- Vegetation structure: sward height.
- Vegetation composition: typical species and sub-communities.
- Vegetation composition: negative indicators species.
- Vegetation composition: scrub/trees.
- Vegetation composition: bryophytes.

Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110]

To maintain the favourable conservation condition of Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Habitat area.
- Habitat distribution.
- Typical species.
- Vegetation composition: characteristic zonation.
- Vegetation distribution: maximum depth.
- Hydrological regime: water level fluctuations.
- Lake substratum quality.

- Water quality: transparency.
- Water quality: nutrients.
- Water quality: phytoplankton biomass.
- Water quality: phytoplankton composition.
- Water quality: attached algal biomass.
- Water quality: macrophyte status.
- Acidification status.
- Water colour.
- Dissolved organic carbon (DOC).
- Turbidity.
- Fringing habitat: area.

Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea [3130]

To maintain the favourable conservation condition of Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Habitat area.
- Habitat distribution.
- Typical species.
- Vegetation composition: characteristic zonation.
- Vegetation distribution: maximum depth.
- Hydrological regime: water level fluctuation.
- Lake substratum quality.
- Water quality: transparency.
- Water quality: nutrients.
- Water quality: phytoplankton biomass.

- Water quality: phytoplankton composition.
- Water quality: attached algal biomass.
- Water quality: macrophyte status.
- Acidification status.
- Water colour.
- Dissolved organic carbon (DOC).
- Turbidity.
- Fringing habitat: area.

Natural dystrophic lakes and ponds [3160]

To maintain the favourable conservation condition of Natural dystrophic lakes and ponds in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes

- Habitat area.
- Habitat distribution.
- Typical species.
- Vegetation composition: characteristic zonation.
- Vegetation distribution: maximum depth.
- Hydrological regime: water level fluctuations.
- Lake substratum quality.
- Water quality: transparency.
- Water quality: nutrients.
- Water quality: phytoplankton biomass.
- Water quality: phytoplankton composition.
- Water quality: attached algal biomass.
- Water quality: macrophyte status.
- Acidification status.

- Water colour.
- Dissolved organic carbon (DOC).
- Turbidity.
- Fringing habitat: area.

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

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

- Habitat area.
- Habitat distribution.
- Hydrological regime: river flow.
- Hydrological regime: groundwater discharge.
- Substratum composition: particle size range.
- Water quality.
- Typical species.
- Floodplain connectivity: area.
- Riparian habitat: area and condition.

Northern Atlantic wet heaths with *Erica tetralix* [4010]

To restore the favourable conservation condition of Northern Atlantic wet heaths with *Erica tetralix* in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Habitat area.
- Habitat distribution.
- Ecosystem function: soil nutrients.
- Community diversity.

- Vegetation composition: cross-leaved heath.
- Vegetation composition: positive indicator species.
- Vegetation composition: lichens and bryophytes.
- Vegetation composition: ericoid species and crowberry.
- Vegetation composition: dwarf shrub species.
- Vegetation composition: negative indicator species.
- Vegetation composition: non-native species.
- Vegetation composition: native trees and shrubs.
- Vegetation composition: bracken.
- Vegetation composition: soft rush.
- Vegetation structure: *Sphagnum* condition.
- Vegetation structure: signs of browsing.
- Vegetation structure: burning.
- Physical structure: disturbed bare ground.
- Physical structure: drainage.
- Indicators of local distinctiveness.

European Dry Heaths [4030]

To restore the favourable conservation condition of European dry heaths in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Habitat area.
- Habitat distribution.
- Ecosystem function: soil nutrients.
- Community diversity.
- Vegetation composition: lichens and bryophytes.
- Vegetation composition: positive indicators species.

- Vegetation composition: cover of positive indicator species.
- Vegetation composition: dwarf shrub composition.
- Vegetation composition: negative indicator species.
- Vegetation composition: non-native species.
- Vegetation composition: native trees and shrubs.
- Vegetation composition: bracken.
- Vegetation composition: soft rush.
- Vegetation structure: senescent ling.
- Vegetation structure: signs of browsing.
- Vegetation structure: burning.
- Vegetation structure: growth phases of ling.
- Physical structure: disturbed bare ground.
- Indicators of local distinctiveness.

Alpine and Boreal heaths [4060]

To restore the favourable conservation condition of Alpine and Boreal heaths in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Habitat area.
- Habitat distribution.
- Ecosystem function: soil nutrients.
- Community diversity.
- Vegetation composition: lichens and bryophytes.
- Vegetation composition: positive indicators species.
- Vegetation composition: dwarf shrub species.
- Vegetation composition: negative indicator species.
- Vegetation composition: non-native species.

- Vegetation structure: signs of grazing.
- Vegetation structure: signs of browsing.
- Vegetation structure: burning.
- Physical structure: disturbed bare ground.
- Indicators of local distinctiveness.

Juniperus communis formations on heaths or calcareous grasslands [5130]

To maintain the favourable conservation condition of *Juniperus communis* formations on heaths or calcareous grasslands in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Habitat area.
- Habitat distribution.
- Juniper population size.
- Vegetation composition: typical species.
- Vegetation of composition: negative indicator species.
- Vegetation structure: cone-bearing plants.
- Vegetation structure: seedling recruitment.
- Vegetation structure: dead juniper.

Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]

To maintain the favourable conservation condition of Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Habitat area.
- Habitat distribution.
- Ecosystem function: soil nutrients.

- Community diversity.
- Vegetation composition: number of positive indicator species.
- Vegetation composition: cover of positive indicator species.
- Vegetation composition: non-native species.
- Vegetation structure: height/flowering.
- Vegetation structure: grazing.
- Physical structure: disturbed bare ground
- Indicators of local distinctiveness

Blanket bogs (* if active bog) [7130]

To restore the favourable conservation condition of Blanket bogs (* if active bog) in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Habitat area.
- Habitat distribution.
- Ecosystem function: soil nutrients.
- Ecosystem function: peat formation.
- Ecosystem function: hydrology.
- Community diversity.
- Vegetation composition: positive indicator species.
- Vegetation composition: lichens and bryophytes.
- Vegetation composition: potential dominant species.
- Vegetation composition: negative indicator species.
- Vegetation composition: non-native species.
- Vegetation composition: native trees and shrubs.
- Vegetation structure: *Sphagnum* condition.
- Vegetation structure: signs of browsing.

- Vegetation structure: burning.
- Physical structure: disturbed bare ground.
- Physical structure: drainage.
- Physical structure: erosion.
- Indicators of local distinctiveness.

Transition mires and quaking bogs [7140]

To restore the favourable conservation condition of Transition mires and quaking bogs in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Habitat area.
- Habitat distribution.
- Ecosystem function: soil nutrients.
- Community diversity.
- Vegetation composition: number of positive indicator species.
- Vegetation composition: number of core positive indicator species.
- Vegetation composition: cover of positive indicator species.
- Vegetation composition: negative indicator species.
- Vegetation composition: non-native species.
- Vegetation structure: height.
- Physical structure: disturbed bare ground.
- Physical structure: drainage.
- Indicators of local distinctiveness.

Depressions on peat substrates of the Rhynchosporion [7150]

To restore the favourable conservation condition of Depressions on peat substrates of the Rhynchosporion in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Habitat area.
- Habitat distribution.
- Ecosystem function: soil nutrients.
- Vegetation composition: positive indicator species.
- Vegetation composition: *Rynchospora* spp.
- Vegetation composition: potential dominant species.
- Vegetation composition: negative indicator species.
- Vegetation composition: non-native species.
- Vegetation composition: native trees and shrubs.
- Vegetation structure: *Sphagnum* condition.
- Vegetation structure: signs of browsing.
- Vegetation structure: burning.
- Physical structure: disturbed bare ground.
- Physical structure: drainage.
- Physical structure: erosion.
- Indicators of local distinctiveness.

Petrifying springs with tufa formation (Cratoneurion) [7220]

To maintain the favourable conservation condition of Petrifying springs with tufa formation (Cratoneurion)* in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Habitat area.
- Habitat distribution.
- Hydrological regime: height of water table; water flow.

- Water quality: nitrate level.
- Water quality: phosphate level.
- Vegetation composition: positive indicator species.
- Vegetation composition: negative indicator species.
- Vegetation structure: sward height.
- Physical structure: trampling/dung.

Alkaline fens [7230]

To restore the favourable conservation condition of Alkaline fens in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Habitat area.
- Habitat distribution.
- Ecosystem function: soil nutrients.
- Ecosystem function: peat formation.
- Ecosystem function: hydrology.
- Ecosystem function: water quality.
- Community diversity.
- Vegetation composition: number of positive indicator species (brown mosses).
- Vegetation composition: number of positive indicator species (vascular plants).
- Vegetation composition: cover of positive indicator species.
- Vegetation composition: negative indicator species.
- Vegetation composition: non-native species.
- Vegetation composition: native trees and shrubs.
- Vegetation composition: soft rush and common reed cover.
- Vegetation structure: height.

- Physical structure: disturbed bare ground.
- Physical structure: drainage.
- Physical structure: tufa formations.
- Indicators of local distinctiveness.

Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) [8110]

To restore the favourable conservation condition of Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Habitat area.
- Habitat distribution.
- Ecosystem function: soil nutrients.
- Vegetation composition: lichens and bryophytes.
- Vegetation composition: negative indicator species.
- Vegetation composition: non-native species.
- Vegetation composition: positive indicator species.
- Vegetation composition: grass species and dwarf shrubs.
- Vegetation composition: bracken, native trees and shrubs.
- Vegetation structure: grazing and browsing.
- Vegetation structure: disturbance.
- Indicators of local distinctiveness.

Calcareous rocky slopes with chasmophytic vegetation [8210]

To maintain the favourable conservation condition of Calcareous rocky slopes with chasmophytic vegetation in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Habitat area.
- Habitat distribution.
- Ecosystem function: soil nutrients.
- Vegetation composition: positive indicator fern and *Saxifraga* species.
- Vegetation composition: positive indicator species.
- Vegetation composition: non-native species.
- Vegetation composition: bracken, native trees and shrubs.
- Vegetation structure: grazing and browsing.
- Indicators of local distinctiveness.

Siliceous rocky slopes with chasmophytic vegetation [8220]

To restore the favourable conservation condition of Siliceous rocky slopes with chasmophytic vegetation in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Habitat area.
- Habitat distribution.
- Ecosystem function: soil nutrients.
- Vegetation composition: positive indicator species.
- Vegetation composition: non-native species.
- Vegetation composition: bracken, native trees and shrubs.
- Vegetation structure: grazing and browsing.
- Indicators of local distinctiveness.

Geyer's Whorl Snail *Vertigo geyeri* [1013]

To maintain the favourable conservation condition of Geyer's Whorl Snail in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Distribution: occupied sites.
- Occurrence in suitable habitat.
- Habitat quality: soil wetness.
- Habitat area.

Narrow-mouthed Whorl Snail *Vertigo angustior* [1014]

To maintain the favourable conservation condition of Narrow-mouthed Whorl Snail in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Distribution: occupied sites.
- Occurrence in suitable habitat.
- Habitat quality: optimal soil wetness.
- Habitat extent.

Freshwater Pearl Mussel *Margaritifera margaritifera* [1029]

To restore the favourable conservation condition of Freshwater Pearl Mussel in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Distribution.
- Population size.
- Population structure: recruitment.
- Population structure: adult mortality.
- Suitable habitat: extent.
- Suitable habitat: condition.
- Water quality: macroinvertebrate and phytobenthos (diatoms).

- Substratum quality: filamentous algae (macroalgae); and, macrophytes (rooted higher plants).
- Substratum quality: sediment.
- Substratum quality: oxygen availability.
- Hydrological regime: flow variability.
- Host fish.
- Fringing habitat: area and condition.

Salmon *Salmo salar* [1106]

To restore the favourable conservation condition of Atlantic Salmon in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Distribution: extent of anadromy.
- Adult spawning fish.
- Salmon fry abundance.
- Out-migrating smolt abundance.
- Number and distribution of redds.
- Water quality.

Otter *Lutra lutra* [1355]

To maintain the favourable conservation condition of Otter in Mweelrea/Sheeffry/Erriff Complex /SAC, which is defined by the following list of attributes:

- Distribution.
- Extent of terrestrial habitat.
- Extent of marine habitat.
- Extent of freshwater (river) habitat.
- Extent of freshwater (lake) habitat.

- Couching sites and holts.
- Fish biomass available.
- Barriers to connectivity.

Petalwort *Petalophyllum ralfsii* [1395]

To maintain the favourable conservation condition of Petalwort in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Distribution.
- Area of suitable habitat.
- Hydrological conditions: soil moisture.
- Hydrological conditions: water table level.
- Physical structure: bare soil.
- Vegetation structure: vegetation height.
- Vegetation composition: shrub cover.

Slender Naiad *Najas flexilis* [1833]

To maintain the favourable conservation condition of Slender Naiad in Mweelrea/Sheeffry/Erriff Complex SAC, which is defined by the following list of attributes:

- Population extent.
- Population depth.
- Population viability.
- Population abundance.
- Species distribution.
- Habitat extent.
- Hydrological regime: water level fluctuations.
- Lake substratum quality.

- Water quality.
- Acidification status.
- Water colour.
- Associated species.
- Fringing habitat: area and condition.

b). State how this activity furthers the Conservation Objective(s)

Under Article 6 of the EU Habitats Directive, DHLGH is required to ensure the favourable conservation status of all Annex I habitats and Annex II species within SACs.

The Conservation Objectives seek to maintain protected SAC feature(s) where evidence exists that it is in favourable condition in the site, or where there is uncertainty concerning the assessed condition of a feature but no reason to suspect deterioration in condition since designation.

Where evidence exists that a feature is declining and/or damaged and therefore not in a favourable condition in the site, the Conservation Objectives will seek to restore the protected feature.

Since Rhododendron is known to negatively alter habitat condition, the implementation of the control measures within the site as outlined above will directly contribute to the Site Specific Conservation Objectives. Notably, but limited to:

Northern Atlantic wet heaths with Erica tetralix [4010]

- **Habitat area.**
- **Community diversity.**
- **Vegetation composition: negative indicator species.**
- **Vegetation composition: non-native species.**

Blanket bogs (* if active bog) [7130]

- **Habitat area.**
- **Community diversity.**
- **Vegetation composition: negative indicator species.**
- **Vegetation composition: non-native species.**

Transition mires and quaking bogs [7140]

- **Habitat area.**
- **Community diversity.**
- **Vegetation composition: negative indicator species.**
- **Vegetation composition: non-native species.**

***Juniperus communis* formations on heaths or calcareous grasslands [5130]**

- **Habitat area.**
- **Vegetation composition: negative indicator species.**

In the absence of the project, the Conservation Objectives for Mweelrea/Sheeffry/Erriff Complex SAC would not be achieved as there would be continued highly detrimental impacts of invasive Rhododendron, dramatically reducing levels of habitat cover and species richness.

Particular threats to peatland habitats will increase, with encroachment and replacement of typical communities. The project will be beneficial to maintaining and working towards achieving favourable conservation condition of the peatland habitats in the site and the typical species of these protected habitat types.

c). Does this activity have the potential to impact negatively on any Conservation Objective (CO), Qualifying Interest (QI)/Special Conservation Interest (SCI) for this or any other European site?

The effect on European Sites and their QI/SCI within a defined Zone of Influence of the proposed Rhododendron control measures was assessed using expert opinion.

A review of best available scientific information shows no evidence of any chemical legacy through the application of this method of Rhododendron treatment in soils, suggesting that chemical impacts do not pose any indirect or legacy effects, or barriers to habitat recovery.

The effect on European Sites and their Qualifying Interests/Special Conservation Interests within a defined Zone of Influence of the project was assessed using expert opinion. No significant adverse impacts on the QI or SCI features of any other SAC or SPA are anticipated.

Yes ☐ No ☑

d). Are there aspects of this activity which are NOT directly connected with the management of the site?

Yes ☐ No ☑

If the answer to EITHER of the above questions is **Yes** a Screening for AA is required, go to Part 2.

If the answer to BOTH questions is **No** go to Part 5.

7. Part 2: Identification of European Sites within the Potential Zone of Influence of proposed activities

List all European sites which may be affected by this activity because they are linked by an ecological pathway. If the site has a second European designation (SAC, SPA) this also needs to be considered.

8. Part 3: Assess the likelihood of significant effects

Provide this information for **each site** listed in Part 2.

List the QI/SCIs for the site(s), their current conservation condition and the Site Specific Conservation Objectives (SSCO) for that QI/SCI. Then answer the questions about the impact on that QI/SCI.

Tick all the boxes below which may apply.

Your answer will determine if the activity is likely to have a (negative) effect on this QI/SCI. Negative effects may arise because of the activity's location within the site; its proximity to the QI/SCI or the size of the land take involved; the abstraction of water or minerals; emissions or waste arising; the types of transport or machinery being used; the length of time involved or seasonality of the work.

a). There is likely to be a reduction in the area of QI/SCI habitat ☐

b). The physical/chemical quality of the environment is likely to be changed in a way which may cause the deterioration of the QI/SCI habitat (e.g. applying lime to an acidic soil) ☐

c). The structure of the ecological community is likely to be altered (e.g. through altered species composition) in a way which will have negative impact on the QI/SCI. ☐

d). A QI/SCI species is likely to be disturbed (e.g. through noise, vibrations) ☐

e). The population size, characteristics or reproductive success of a QI/SCI species is likely to be changed either directly or indirectly (e.g. lighting close to a bat roost entrance) ☐

f). QI/SCI species or habitats are likely to be more vulnerable to change or less resilient to external change (e.g. to flooding, fire or drought) ☐

g). There are likely to be effects on other species /habitats (not a QI/SCI for this site) which are ecologically linked with this QI/SCI and, as a consequence, there are likely to be negative effects on this QI/SCI (e.g. the impacts on geese which are the SCI when their non-QI feeding areas are damaged). ☐

h). This activity will cause a deterioration in the conservation condition of this QI/SCI. ☐

i). There are likely to be other ecological effects not listed above which are likely to have a significant effect on the QI/SCI. ☐

Explain the effects:

_____

If you have ticked a box for any QI/SCI in any of the sites affected by this activity the likelihood of a significant effect cannot be ruled out and the activity MUST be screened IN for AA.

9. Part 4: In Combination Effects

Is this activity likely to cause negative effects in combination with any other plan or project?

(In answering this question you should consider any other consents which have been applied for or granted. For example, other ARCs, planning consents, forestry consents, or activities authorised as part of an agreed farm or land management plan. List the plans or projects considered).

_____

_____

No ☑ **Yes** ☐ **Uncertain** ☐

If the answer is Yes or Uncertain the activity MUST be screened IN for AA. Fill in Part 5 accordingly.

10. Part 5: Findings of the Screening for AA

Screening not carried out as the activity is “directly connected with or necessary to the management of the site”. ☑

Likely significant effects are expected or uncertain.

This activity Screens **IN** and AA **is** required. ☐

Likely significant effects are NOT expected.

This activity Screens **OUT** AA **is not** required. ☐

Signature: Ryan Wilson-Parr, Head of Ecological Assessment

Date: 21st March 2024

11. Part 6: Conclusion

Following an analysis of the activity, the EAU determines[4], in accordance with Regulation 42A(8) of the 2011 Regulations, that the Rhododendron control measures within the Mweelrea/Sheeffry/Erriff Complex Special Area of Conservation are entirely comprised of activities that directly support the Conservation Objectives of this European site.

It can be concluded with certainty that the project is a necessary conservation measure that is directly connected with or necessary for the management of the site.

[4] Ryan Wilson-Parr (Head of Ecological Assessment, Department of Housing, Local Government and Heritage) 21st March 2024.

12. Supplementary Information

Figure 1. (below): Location of Mweelrea/Sheeffry/Erriff Complex SAC as per the NPWS (2017) Conservation Objectives: Mweelrea/Sheeffry/Erriff Complex SAC 001932. Version 1.

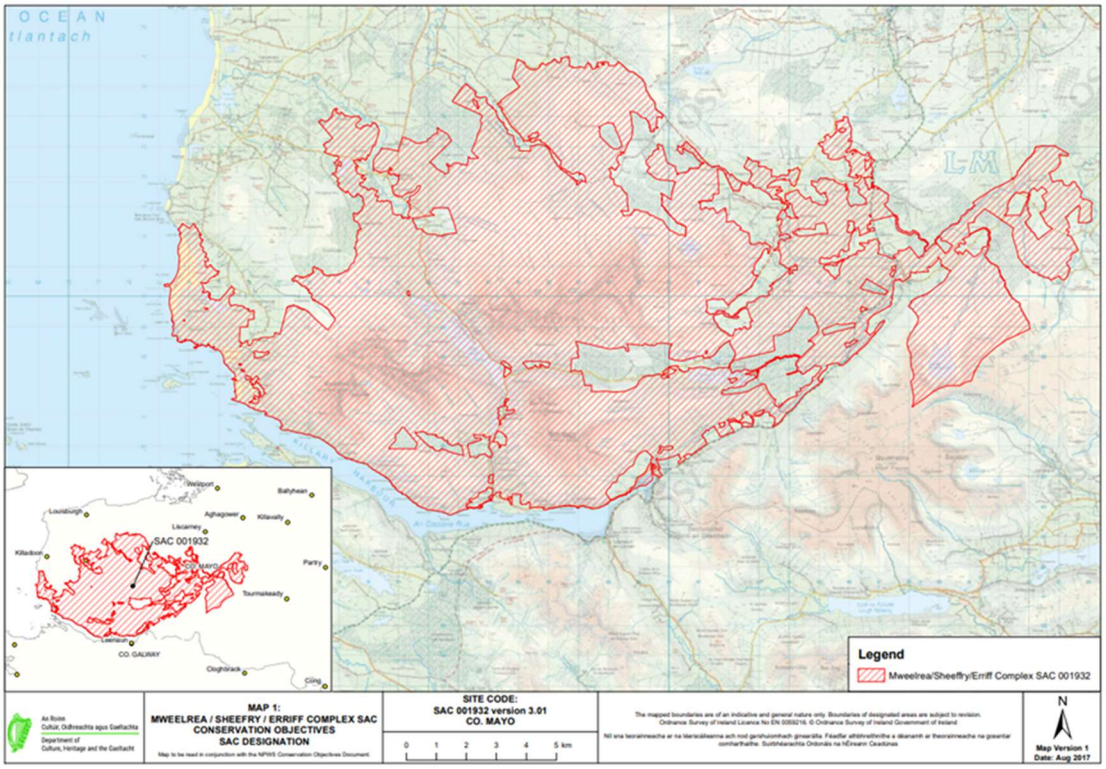


Figure 2. (below): Location of adjacent West Connacht Coast SAC as per the NPWS (2017) Conservation Objectives: Mweelrea/Sheeffry/Erriff Complex SAC 001932. Version 1.

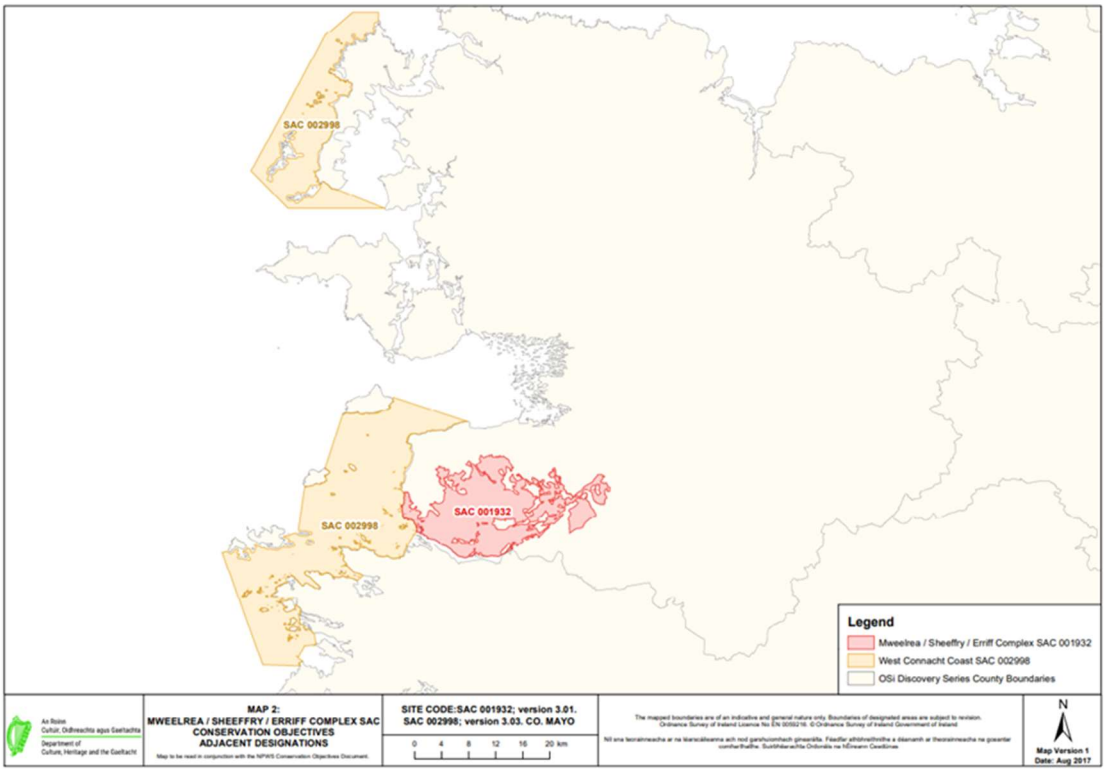
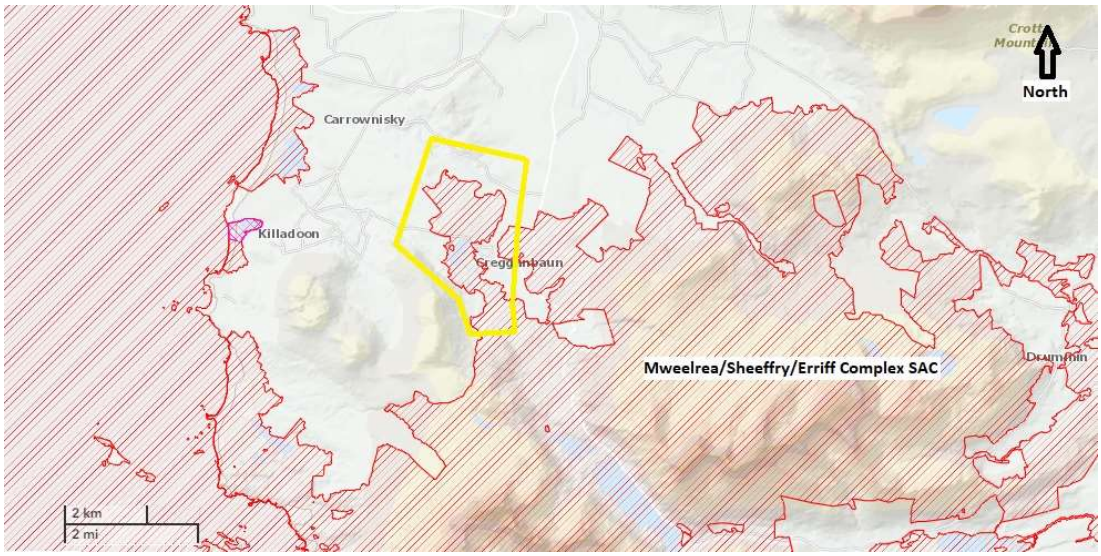


Figure 3. (below): Map of Mweelrea/Sheeffry/Erriff Complex SAC with Cregganbaun area highlighted in yellow.



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