



Natura Impact Report

In support of Appropriate Assessment

Waters of LIFE

Supporting Actions

Version 1

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1 Introduction

The Waters of LIFE is an EU LIFE Integrated Project (IP) which aims to help reverse the deterioration of Ireland's most pristine waters.

The overall objective of the Waters of LIFE IP is to support the implementation of measures to protect and enhance High-Status Waters and thus to support the work of the Blue Dot Catchments Programme.

The coordinating beneficiary is the Department of Housing, Local Government and Heritage (DHLGH).

1.1 Background

The ongoing loss of high status waters is among the most concerning, protracted and persistent water quality trend in Ireland. Other water quality trends have well-understood cause and effect, with detailed plans in place to mitigate impacts. More actions are necessary to protect pristine waters. Many of these waters are small, upland streams. The protection and restoration of these waters is one of the key underpinning principles of the Water Framework Directive (WFD).

The Waters of LIFE IP is as a catchment-scale demonstration project to test and validate the effectiveness of implementing locally-tailored 'best practice' measures across a range of landscapes and land-uses typically associated with the catchments of high-status waters. The project will demonstrate the effective implementation of an integrated catchment-based approach for the application of measures to protect and/or restore all waters for which a high-status objective has been identified in Ireland's River Basin Management Plan.

The project will be implemented across six high-status river sub-catchments comprising a mixture of land-uses typical of such catchments. These include:

- Avonmore Demonstration Sub-Catchment, Co. Wicklow
- Awbeg (Kilbrin) Demonstration Sub-Catchment, Co. Cork
- Graney Demonstration Sub-Catchment, Co. Galway
- Islands Demonstration Sub-Catchment, Co. Galway/Co. Roscommon

- Shournagh, Demonstration Sub-Catchment, Co. Cork
- Sheen Control Sub-Catchment, Co. Kerry

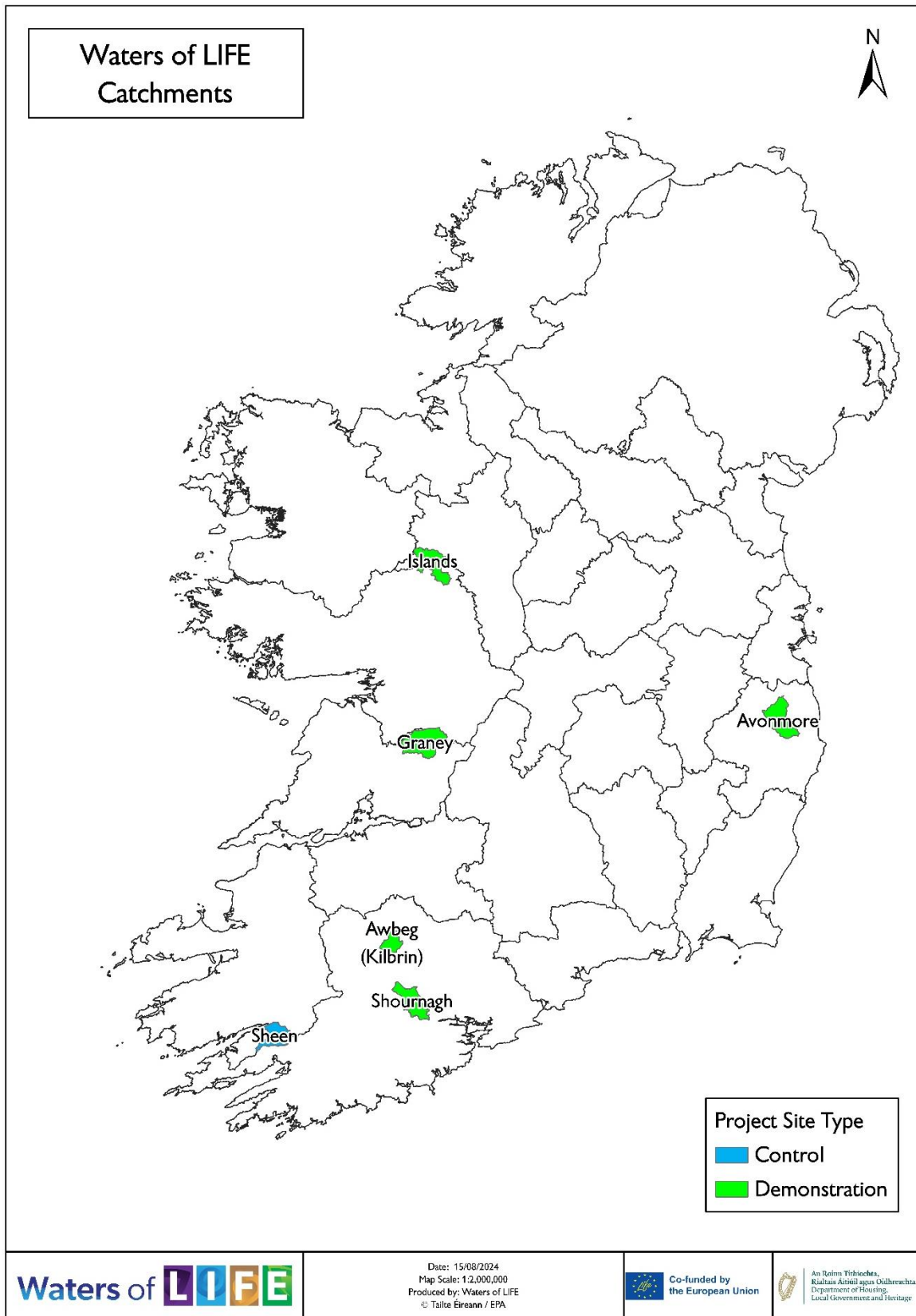


Figure 1: Location of pilot catchments included in the Waters of LIFE project

The project will trial and validate the implementation of measures at the catchment scale across the five demonstration catchments with the view to:

- Building technical understanding and capacity in relation to the design and implementation of measures across a variety of key land-uses to deliver effective solutions at a catchment-wide scale for the protection of high-status waters;
- Promoting community and landowner ownership of the actions proposed and ensuring local community involvement in developing the land-use management actions to be implemented;
- Making recommendations that will inform the development of future agri-environment and forestry policies and provide for the long-term sustainable management of high-status areas;
- Enhancing public appreciation of the ecology, ecosystems and natural capital value of high-status waters and their catchments;
- Developing and building synergies between measures implemented to address water quality considerations and related biodiversity objectives within the catchments of high-status waters, and:
- Monitoring and demonstrating the effectiveness of the measures implemented.

A key component of the project is the development and implementation of an Agri-Environmental Results-Based Payment Scheme (RBPS). Results-Based Payments Schemes link payments to farm owners based on the environmental quality of a farm, with higher environmental quality resulting in a higher payment level. The reward system incentivises environmental quality enhancement across farms and the sustainable management of agricultural land, with resultant benefits for water quality. The project also incentivises the adoption of range of potential measures (actions) designed to address specific water quality risks across the farm environment, through education, advice and financial support.

1.2 Legislative Context

The European Communities (Birds and Natural Habitats) Regulations, 2011-2015 (the 2011 Regulations) transpose into Irish Law Directive 2009/147/EC (the Birds Directive) and Council Directive 92/43/EEC (the Habitats Directive) and list habitats and species that are of international importance for conservation and require protection. This protection is afforded in part through the designation of sites that represent significant examples of habitats that support populations of listed species within a European context, known as Natura 2000 sites. Sites designated for bird species are classed as Special Protection Areas (SPAs) and sites designated for other protected species and/or habitats are classed as Special Area of Conservations (SACs). Together, SPAs and SACs comprise the Natura 2000 network of protected sites.

Article 6(3) of the Habitats Directive requires competent authorities, to carry out an Appropriate Assessment (AA) of plans and projects that, alone and/or in combination with other plans and projects, would be likely to have significant effects on Natura 2000 sites. The European Court of Justice has made a relevant ruling in relation to when an AA is required and its purpose:

“Any plan or project not directly connected with or necessary to the management of the site is to be subject to an appropriate assessment of its implications for the site in view of the site’s conservation objectives if it cannot be excluded, on the basis of objective information, that it will have a significant effect on that site, either individually or in combination with other plans or projects” and that the plan or project may only be authorised “where no reasonable scientific doubt remains as to the absence of such effects”.

Article 6(3) of the Habitats Directive defines the requirements for assessment of projects and plans for which likely significant effects on Natura 2000 sites may arise. This is transposed into Irish legislature under the European Communities (Birds and Natural Habitats) Regulations, 2011-2015. According to Regulation 42(1) of the Regulation, the competent authority has a duty to:

- Determine whether the proposed scheme is directly connected to or necessary for the management of one or more Natura 2000 sites; and, if not,
- Determine if the scheme, either individually or in combination with other plans or projects, would be likely to have a significant effect on the Natura 2000 site(s) in view of best scientific knowledge and the Conservation Objectives of the site(s).

This report consists of the AA for the Waters of LIFE project. It is intended to assess and mitigate all high-level structural considerations regarding the implementation of measures by participating farmers and supporting the competent authority to comply with the Habitats Directive. Situations where further AA screening is required will be outlined in this document providing direction for appropriate assessment at the individual application scale.

Situations where the action could negatively impact habitats or species within or upstream of Natura sites are carefully considered with mitigation through restrictions on the location of the action, the time of year the action takes place, carefully specified methodologies and the appropriate training of both project teams and farming advisors. These preventative measures are built into both the application and approval process and will be outlined in this report. While such mitigation can be put in place at a scheme level, this will not negate the need to undertake site level AA screening for certain actions with a full appropriate assessment deemed necessary by the project team.

In summary this AA has been prepared in accordance with the following guidance:

- Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive). Official Journal of the European Communities, *L206/7*;
- Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (Birds Directive). Official Journal of the European Union, *L20/7*;
- DOEHLG (2010) Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities.

- EC (2019) Managing Natura 2000 sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC. Environment Directorate-General of the European Commission;
- EC (2021) Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC. Environment Directorate-General of the European Commission;
- European Communities (Birds and Natural Habitats) Regulations 2011. *SI No. 477/2011*;
- IFI (2016) Guidelines on protection of fisheries during construction works in and adjacent to waters. Inland Fisheries Ireland;
- NPWS (2010) *Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities*. Circular Letter NPWS 1/10 & PSSP 2/10. Department of Environment, Heritage and Local Government, Dublin;
- NPWS (2019) The Status of EU Protected Habitats and Species in Ireland. Volume 2 & 3: Article 17 Assessments. Department of Arts, Heritage and Gaeltacht, Dublin;
- Part XAB of the Planning and Development Act, 2000 (as amended).

1.3 Appropriate Assessment Process

Guidance produced by DEHLG (2009) sets out a four-stage process for carrying out AA with European Commission guidance simplifying to three main stages (European Commission 2021), shown in Figure 2 below and described in the following sections. The outcome at each stage determines whether the next stage in the process is required.

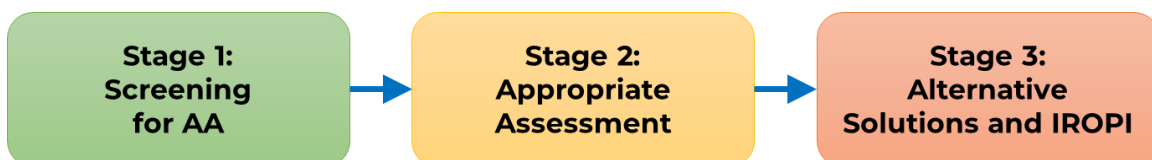


Figure 2: The three stages of Appropriate Assessment (EC, 2021)

DEHLG (2009) addresses issues of mitigation and avoidance of impacts; also covering the Article 6(4) derogation provisions for circumstances in which there

are no alternatives and for which there are imperative reasons of overriding public interest (IROPI) requiring a plan or project to proceed.

Stage 1 – Screening

This is carried out to determine the necessity for a more detailed Stage 2 Appropriate Assessment where likely significant impacts on European sites are identified. Stage 1 Screening involves the following steps:

- Description of the project / plan and site characteristics (existing environment)
- Determination of whether the project is directly connected with, or necessary to, the management of a Natura 2000 site
- Identification and description of European sites that could potentially be affected
- Identification and description of potential impacts
- Assessment of potential impacts
- Exclusion of sites where no significant effects are foreseen

Stage 2 – Appropriate Assessment

If likely significant effects are foreseen, this stage involves assessing the impact of the plan or project on the integrity of the European site, either alone or in combination with other plans or projects, with respect to the structure and function of the site and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts is carried out. If adequate mitigation is proposed to ensure no significant adverse impacts on European sites, then the process may end at this stage. However, if the likelihood of significant impacts remains, then the process must proceed to Stage 3.

Stage 3 – Procedure under Article 6(4) Assessment where no Alternative Solutions Exist and where Adverse Impacts Remain

This final stage only comes into play if, despite a negative assessment, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed. The plan or project process

examines alternative ways of achieving the objectives of the plan or project that may avoid adverse impacts on the integrity of the European site. This is only possible if there are no alternative solutions, the imperative reasons of overriding public interest are duly justified, and if suitable compensatory measures are adopted to ensure that the overall coherence of the Natura 2000 network is protected.

The Habitats Directive promotes a hierarchy of avoidance, mitigation and compensatory measures. First, the project or plan should aim to avoid any impacts on European sites by identifying possible impacts early in the process and designing / writing the project or plan in order to avoid such impacts. Second, mitigation measures should be applied, if necessary, during the AA process to the point where no adverse impacts on the site(s) remain.

If the project or plan is still likely to result in impacts on European sites, and no further practicable mitigation is possible, then it must be rejected. If no alternative solutions are identified and the plan is required for imperative reasons of overriding public interest (IROPI test) under Article 6(4) of the Habitats Directive, then compensation measures are required for any remaining adverse effect.

In the case of this Natura Impact Report, it was determined that the implementation of measures proposed through the Waters of LIFE project requires Stage 2 Appropriate Assessment.

2 Assessment of Likely Significant Effects

2.1 Assessment of Focus and Programme Design

This AA report considers the impact of implementing Waters of LIFE Supporting Actions on the Natura 2000 network of sites. The five demonstration catchments included in the Waters of LIFE programme (Figure 1) encompass range of habitats, including improved grassland, semi-natural grasslands, grasslands on peat, and woodland/scrub. There are varying degrees of interaction with Natura 2000 sites across the catchments.

A Waters of LIFE Catchment Agricultural Scientist is assigned to each of the pilot catchment included in the programme. Catchment based staff have a range of technical background and skills, including agricultural sciences, freshwater and marine ecology. The catchment team is supported by a project manager and senior scientist, alongside GIS and data analysis, communications, admin and finance specialists. Over 200 farmers have been recruited to the programme to date across the five catchments and further expressions of interest have been received for the next intake in September 2025.

Each farm included in the programme will have had their habitat identified and mapped. Each farmer has selected a farm advisor to undertake scoring of these habitats and to work with them to determine how habitats could be improved, either through changes to management practices or the implementation of appropriate Supporting Actions (or both).

The Waters of LIFE Supporting Actions are available to the farmer to either:

- Address specific environmental issues on the farm
- Contribute to achievement of environmental objectives
- Increase the farmer's capacity to improve habitat scores through improved management.

Areas of a farm where Supporting Actions may provide benefits are identified and mapped by farm advisors using the programme's bespoke mobile mapping application. Where a Supporting Action is recommended by the advisor, the type of action selected and the location are assessed by the Waters of LIFE project

team and screened for Appropriate Assessment. The Supporting Action can only be implemented following approval by the project team. Similarly, payment to the farmer will only be made for a Supporting Action once it has been approved and the installation has been verified in the field.

Natura site feature consideration has been built into the all aspects of the programme, including:

- Scorecard development and structure
- Supporting Actions and their specification
- Development of an agreed process of approval, involving competent authorities, advisors and national and local knowledge.

Engagement has included workshops, webinars, training and consultation across the stakeholder groups. Natura site considerations being central across these engagements. A rules matrix has been adapted from an existing version developed through the Agri-Climate Rural Environment Scheme (ACRES).

Eligibility for the Waters of LIFE programme

All farmers that participate in the Waters LIFE scheme must comply with the following list of mandatory conditions:

- Must be located in one of the five demonstration catchments (Figure 1).
- An approved agricultural advisor must be engaged to undertake habitat scoring and advise on suitable management approaches and/or the implementation of Supporting Actions.
- In the first year of scheme participation, it is mandatory to attend a training course (Waters of LIFE Farmer Training), to facilitate knowledge transfer advice on risks to water quality and good environmental practices.
- Farmers participating in the scheme must also adopt the following mandatory general actions:

- Have a run-off risk assessment (RRA)¹ carried out
- Have an up to date nutrient management plan for their farm (Awbeg and Shournagh sub-catchments only).
- Carry out nutrient surplus recording using AgNav (Awbeg and Shournagh sub-catchments only).
- Complete mandatory training where the importance of the screening process and restriction matrix is explained.

Process of identification of Supporting Actions through to approval

The process of NPI identification through to approval is illustrated in the Figure 3.

2.2 Scorecards

Waters of LIFE scorecards are used to measure habitat quality. They have been developed to reward and incentivise ecosystem services delivery on farmland, specifically those associated with water quality protection or improvement.

All scorecards contain sections on Ecological Integrity, Hydrological Integrity and Threats & Pressures. Ecological Integrity assesses the quality and condition of the habitat using indicators such as the presence and cover of certain plant species and vegetation structure. Hydrological Integrity considers the presence and condition of drainage features, with further specific considerations related to peat soils and riverside habitats. The Threats & Pressures section assesses damaging activities and potential threats to the ecological integrity of the habitat (e.g., the spread of invasive species or risks to water quality).

¹ The Runoff Risk Assessment is a whole-farm assessment that identifies areas on the farm where water flows within the farmyard and on farm land. The purposes of this assessment is to work alongside farmers to identify suitable locations for mitigation measures to manage such runoff.

Completed by Waters of LIFE team in advance of assessments

- 1) Flow units and farm yards are map for each farm based off of LPIS parcels supplied by DAFM and various GIS datasets.
- 2) Plots to be scored are habitat mapped using various GIS datasets.
- 3) Available datasets for each farm including mapped plots and flow units are loaded into the Waters of LIFE online system for farm advisors to assess farms

Completed by trained and approved farm advisors using Waters of LIFE app and web portal.

- 1) Fields are assessed for Run Off Risk, where risks to water quality and flow pathways are mapped.
- 2) Habitats are scored using Waters of LIFE scorecards
- 3) Specific management recommendations are made in consultation with the farmer.
- 4) Any queries relating to the assessment are submitted to the Waters of LIFE team in advance of approval.
- 5) Supporting Actions are submitted to the Waters of LIFE team via the desktop web portal for screening.

Approval process completed by Waters of LIFE team

- 1) Application of a screening intersect report by DAFM to identify where supporting actions overlap with mapped sensitive areas.
- 2) The result of the intersect report is assessed using a rules matrix, which includes exclusion of habitats and sensitive areas considering scorecard criteria.
- 3) Additional Supporting Action Screening, where the rules matrix flags potential impacts, appropriately trained persons in the Waters of LIFE teams assess the impact, and conduct an in combination assessment where relevant, with decisions recorded using a standard template.

Supporting Actions are either rejected or approved, based on the three stage process and expert opinion of the Waters of LIFE staff

Figure 3: Process of Supporting Action Selection

There are six scorecards in use as part of the results-based payment scheme, all of which are habitat-focused. The scorecards are outlined as follows:

1. **Riverside habitat on improved grassland:** This scorecard is to be used for riverside areas (the 20 m from top of bank or water's edge) in areas of improved grassland.
2. **Riverside habitat on improved tillage:** This scorecard is to be used for riverside areas in areas of tillage.

3. **Semi-Natural Grassland:** This scorecard is to be used for grassland habitats unless there is a clear reason to use another grassland scorecard.
4. **Scrub/Woodland:** The scrub and woodland scorecard is to be used in fields where scrub (shrubs, stunted trees or brambles) or woodland dominate.
5. **Peatland:** The peatland scorecard is to be used in fields where peatland habitats such as wet heath, dry heath, blanket bog, raised bog, or a mosaic of habitats such as heath, bog and or grassland are present.
6. **Grassland on Peat:** The scorecard is to be used for grassland habitats overlying peat soils. This scorecard will be restricted to the Islands demonstration catchment only.

2.3 Supporting Actions

Supporting Actions are targeted measures intended to provide protection from and/or remediate threats and pressures to water quality. Supporting Actions will also deliver co-benefits for biodiversity and overall value of ecosystem services provided across a farm. Correspondingly, Supporting Actions can be used to increase the results-based field score of a habitat being assessed as part of the results-based payment scheme. Supporting Actions specifications provide information on the selection of appropriate Supporting Actions depending on the specific issue/risk and how to understand potential impacts to receptors. The applicant and their advisor must consider both the benefits and potential adverse effects on any downstream receptors when applying for approval for the implementation of any Supporting Action(s).

The following are key requirements in the approval process of Supporting Actions:

- Only approved where likely to achieve an environmental benefit. This should result in an increased habitat score and benefits to water quality.
- Only approved by a trained Project Team member ensuring appropriate environmental safeguards are highlighted. This includes a review of ecological and cultural datasets following a standard procedure, otherwise referred to as the intersect report, screening and rules matrix assessment.

- Those presenting an element of ecological risk due either to the nature of the works or the ecological sensitivity of the site are to be supervised on the ground by the Project Team.
- All completed actions to be implemented strictly in accordance with the constraints set out in the specification document.
- Relevant to Natura impact and mitigation relevant aspects, the specification considers:
 - Conditions for applying including reserving the right to inspect, audit and otherwise monitor and evaluate the actions
 - General Biosecurity protocols. Considering invasive species that may impact European sites
 - Designated site exclusions including SPAs, SACs, NHAs and pNHAs.
 - Maximum areas for activities.

As per the programme's terms and conditions, works must not commence until applicants receive their approval letter from the Waters of LIFE team. The approval process ensures proposed actions can be evaluated for their suitability and screened for Appropriate Assessment.

The Supporting Actions desktop screening, which encompasses AA screening, will be undertaken with the decision recorded with the appropriately skilled Waters of LIFE team member. Where there is potential for negative impacts, the action will not be approved. There will be a mechanism to allow an override of a default decision made by the screening system. This will consist of a specific Override Report which will document the reasons for the override decision and be signed off by the Waters of LIFE team member responsible for the decision. It will also be counter signed by the Waters of LIFE Project Manager or Assistant Project manager/ Project Scientist, ensuring that there are controls in place to prevent inappropriate use of the facility to override default decisions.

2.4 Rules Matrix

Criteria focusing on the screening and approval for a comprehensive suite of Non-Productive Investments (NPIs) was previously developed in the form of a rules matrix through the ACRES programme. The development was undertaken in conjunction with DAFM and its advisors, followed by wider consultation with

project stakeholders including the NPWS. The suite of potential Supporting Actions provided by the Water of LIFE scheme are closely aligned with these NPIs. Given the alignment between NPIs and the Water of LIFE supporting measures, the existing rules matrix for NPIs has been adapted for use in the screening of Waters of LIFE Supporting Actions.

The application of the rules matrix forms a critical stage of the mitigation approach in terms of eliminating potential impact pathways. While not all, the majority of tests created are either directly or indirectly relevant to Natura 2000 sites.

Each test consists of one or more restrictive parameters allowing consideration of available spatial datasets, ortho images or direct site information. The contents of each cell test is binary where “0” is a rejection of the proposed action and “1” is a pass. If there is no data to inform the test, then the action is considered to be positive and the default response within the matrix applies. While a proposed action must pass every test to be authorised, each test is subject to an override by the operator if supported by adequate data. The level of evidence to justify an override will vary depending on the circumstances. In some cases, there may be seasonal or other limitations as to when supporting data can be obtained, e.g. assessing Merlin nest sites in Conifer tree line, which can only be obtained during the Merlin nesting season. A summary of rules to exclude Natura habitats are outlined in 3.2.

2.5 Natura 2000 Sites Likely to be Affected

While considering the nature of this scheme and the objective to protect and restore water quality in high status waters, unintended impacts on Natura 2000 sites cannot be ruled out given the potential spatial overlap between the application of Supporting Actions and Natura 2000 sites. Therefore, a standard approach to screening will be carried out similar to any other activities of such a scale.

Section 3.2.3 of the *Guidance for Planning Authorities* (DEHLG, 2010) outlines the procedure for selecting the Natura 2000 sites to be subject to Screening. It states that Natura 2000 sites potentially affected should be identified and listed, bearing in mind the potential for direct, indirect and/or cumulative effects. It also states

that the specific approach to Screening in each case is likely to differ depending on the scale and likely effects of the plan or project. However, it advises that the following sites should generally be included:

- All Natura 2000 sites within or immediately adjacent to the plan or project area;
- All Natura 2000 sites within the likely zone of impact of the plan or project; and,
- In accordance with the Precautionary Principle, all Natura 2000 sites for which there is doubt as to whether or not they might be significantly affected.

The “likely zone of impact” of a plan or project is the geographic extent over which significant ecological effects are likely to occur. In the case of plans, DEHGL (2010) recommends that this zone extend to a distance of 15 km in all directions from the boundary of plan area. In the case of projects, however, the guidance recognises that the likely zone of impact must be established on a case-by-case basis, with reference to the following key variables:

- The nature, size and location of the project;
- The sensitivities of the ecological receptors; and,
- The potential for cumulative effects.

For a programme with improvement driven actions that are confined to small impact footprints, a proportionate approach should be considered when determining the spatial resolution of the impact assessment. Following the guidance provided in DEHGL (2010), the likely zone of impact of the scheme on Natura 2000 sites (both SACs and SPAs) was defined as either **overlapping or within 500 meters** of the five demonstration catchments.

Additional consideration was also given to Natura 2000 sites (SACs only) outside of the likely zone of impact where sites designated for aquatic Qualifying Interests (QI) are in direct hydrological connection to the demonstration catchments. These are summarised in Appendix II and Appendix III. In line with DEHGL (2010), downstream SACs within a distance of 15km were considered, with impacts assessed for all water dependent QIs.

Some bird species are included in the assessment that are not QIs of statutory designated sites with the zone of impact of the Waters of LIFE agri programme, however, these species are listed as Annex I species which may travel significant distance from SPAs where they are listed as QI's, to visit ex-situ foraging sites. For this reason, they have been included in the assessment and any impacts on potential ex-situ foraging sites are mitigated by the Rules Matrix Restrictions.

GIS analysis used publicly available datasets in conjunction with publicly available satellite imagery to consider the boundaries of Natura 2000 sites in relation to the likely zone of impact from Waters of LIFE demonstration catchments, and potential downstream pathways (Appendix II).

2.6 Identifying Potential Impacts on Natura 2000 Sites

Considering the Source, Pathway, Receptor model, the risk of the impact does not automatically mean that it will occur or that it will be significant. However, identification of the risk does mean that there is a possibility of ecological or environmental damage occurring. The significance of any potential impact will be dependent upon the exposure and nature of the risk and the characteristics of the receptor. In the context of AA assessment, potential impacts are assessed assuming an absence of appropriate mitigation.

In the case of the actions undertaken as part of the Waters of LIFE project, the sources of risk are mainly considered to be disturbance or direct management interventions that impact habitat condition, and changes in land use and/or hydrological regimes. Pathways that may convey these risks to ecological receptors include physical proximity, air, water and ecological interactions. The potential for likely significant effects on the QIs of SACs or SCIs of SPAs, within the likely zone of impact, is assessed in view of the sites' relevant Conservation Objectives. As an overarching project level AA, and given the nature of the actions, individual conservation objectives are considered under an assumption of a requirement to restore.

Where potential pathways of risk between the Waters of LIFE project and the QI/SCI are identified, the likely effects on the relevant Conservation Objectives are assessed. Actions which have no connectivity, or where it is very obvious the

Conservation Objectives for the QIs/SCIs of a European site will not be undermined, despite a connection, are eliminated from the assessment process. As a proportionate approach to the low-level impact of the potential suite of actions, an aggregation of QIs and SCIs representing all the screened in Natura sites the feature is designated for can be undertaken. The approval framework for Supporting Actions will provide additional screening and impact assessment at a local level.

The SACs and SPAs that overlap or occur within 500 m of Waters of LIFE project demonstration catchments are shown in Appendix II. Additional downstream screening considers potential downstream SACs with mobile aquatic species, also shown in Appendix II. A summary of Habitats and Species of European sites occurring within the likely zone of impact of the projects five demonstration catchments are shown in Appendix III. The potential impacts associated with the implementation of specific Supporting Actions on habitats and species can be considered under the following headings using European Commission Guidelines (2002) categories:

Loss / reduction of habitat area

There is the potential for loss or reduction of habitat through the implementation of Supporting Actions. For example, through the installation/upgrading of farm infrastructure, through the creation of new habitat (wetlands) or the management of existing habitat (gorse control). This habitat loss/reduction may take the form of physical damage/removal, smothering/overburdening or through chemical damage.

Disturbance to key species

The areas of land included within the project comprise predominantly agricultural land, with an associated background level of activity that flora and fauna will have been subjected to. However specific activities generating noise/vibration, such as installation of fencing, or construction of crossings, may have an acute disturbance impact on a range of protected species – for example bird species such as the Curlew or aquatic features such as Otter.

Habitat or species fragmentation

While the function of the scheme is to improve the environmental quality of participating agricultural lands, there is potential for fragmentation if actions are unmonitored. Fragmentation can impact the viability of specific populations or areas of habitat. This could be associated with the installation/renovation of farm infrastructure, such as fencing.

Reduction in species density

There is the potential for a reduction in species density as a consequence of a variety of impacts originating from the implementation Supporting Actions. These include inadvertent sediment/nutrient losses associated with the implementation of actions requiring ground works, presenting a risk to aquatic habitats/species. A reduction in species density may also come about through the actions implemented leading to a change on grazing regime across the habitat(s). The use of pesticides and herbicides to control pests and competing vegetation/invasive species may also alter species composition of habitats should they be applied without due care.

Changes in key indicators of conservation value such as decrease in water quality and quantity

Should the implementation of a Supporting Action result in any significant changes to the hydrology, or nutrient/chemical and sediment levels entering the system, impacts to the aquatic features of designated sites within or downstream of the installation are possible. There is also the risk of specific pollution events occurring during works which could impact key conservation value indicators.

The potential impacts described above have been identified without considering safeguards incorporated into the programme to mitigate such impacts. The overriding objective of the programme is to improve water quality and aquatic health. Avoiding any potential adverse environmental effects as a result of has been at the forefront of project design and the development of an appropriate suite of actions and associated mitigations. These are further described in Section 3.2.

The key activities associated with Supporting Actions and their implementation potentially giving rise to such impacts on sensitive receptors include:

- Introduction or spread of Non-Native Invasive (NNI) species:

The use of plant/machinery and transportation of materials/soils during the implementation of actions increases the risk of introducing/spreading NNIs within European sites unless relevant measures are adhered to.

- Topsoil excavation and spoil movement/ disposal:

Some actions will involve excavation. This activity could give rise to habitat loss, smothering or disturbance if undertaken within adjacent to or upstream of sensitive habitats. Excavation works also give rise to exposed sediment or the release of nutrients which, if not appropriately managed, could result in sediment losses to/eutrophication of watercourses and therefore have an adverse effect on downstream aquatic habitats and species within the zone of influence.

- Use of pesticides/herbicides:

The implementation of some Supporting Actions permit the careful use of pesticides and herbicides. These products can present a risk to surrounding vegetation within terrestrial habitats and they can also present a risk to aquatic life in the immediate area and downstream if not used appropriately in proximity to watercourses.

- Habitat damage/species disturbance through accessing locations using heavy plant machinery:

There is the possibility that accessing certain locations or using heavy machinery to implement actions could damage habitats/disturb species.

- Installation or upgrading of farm infrastructure:

In the absence of safeguards, the installation of fences and upgrades to tracks and crossings all have the potential to lead to habitat disturbance (natural terrestrial or aquatic habitats) including fragmentation and grazing regime change. Such infrastructure may, in certain situations also alter hydrological conditions of watercourses or water-dependent terrestrial habitats.

- Clearance of vegetation including woody vegetation:

Actions such as scrub management or clearance of invasive species will require the removal of vegetation including woody vegetation. This can give rise to ground disturbance and subsequent losses of sediment to watercourses. In addition, removal of woody vegetation undertaken at inappropriate times could impact bird or mammal breeding sites.

Stage 2 Appropriate Assessment is required due to the identification of potential impacts of Supporting Actions on Natura 2000 sites, if left unmitigated. A large element of mitigation has been built into the design of the project, which draws on the experiences of prior programmes such as the Hen Harrier, FARMPEAT and Pearl Mussel Projects. In addition, the screening and assessment process being applied in the Waters of LIFE project closely mirrors that of the ACRES scheme, which has been previously subject to AA.

The assessment process presented in the following section further considers the potential impacts arising and incorporates mitigation into the programme design to ensure no significant adverse effects on the Natura 2000 network of sites.

2.7 Effects on Conservation Objectives and Consideration of Alternatives

As explained in Section 1.2, each SCI and QI in each Natura 2000 site is assigned a Conservation Objective of either restoration or maintenance of its “favourable conservation condition”. These comprise a set of attributes with corresponding targets that must be met if the specific Conservation Objective for that SCI or QI is to be achieved. The restoration and maintenance of the favourable

conservation condition of habitats and species within each Natura 2000 sites contributes to the overall favourable conservation status of those habitats and species at a national level. Favourable conservation status is described in more generic terms below.

Favourable conservation status of a habitat is achieved when:

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

The favourable conservation status of a species is achieved when:

- Population dynamics data on the species concerned indicate it is maintaining itself on a long-term basis;
- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and,
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Screening concluded that Natura 2000 sites occur within the likely zone of impact of the Waters of LIFE project (See Appendix II and III). Additional Natura 2000 sites screened in based on downstream connections and potential impacts on relevant aquatic QIs are also listed in Appendix III.

Site-specific attributes and targets as part of Conservation Objectives for the SACs and SPAs screened in for the five demonstration catchments have been published by the NPWS and are detailed in full on their website www.npws.ie. As set out in Article 6(3) of the Habitats Directive and as per the 2011 Regulations, a likely effect of any plan or project on any Natura 2000 site is deemed to be significant if, in view of best scientific knowledge, it would, either individually or in combination with other plans or projects, compromise and/or delay the achievement of one or more of the Conservation Objectives of that site. An assumption of the highest sensitivity and management objectives (restore)

across all Natura sites are considered in this assessment for the purposes of applying project level mitigation.

The conventional approach to delivering agri-environmental programmes throughout the European Union is prescriptive or measures-based. This approach was not taken as it has been shown that, despite significant funds being paid on measures-based agri-environment programmes in the past (e.g. REPS and GLAS in Ireland), the delivery of environmental benefits has not been clear. This scheme uses the results-based approach to financially reward farmers for the existing ecosystem services being provided by habitats across their farm, while also incentivising them to do more to improve the coverage, diversity and quality of these habitats. This is in line with the approach of ACRES, the current national Agri-environmental programme.

2.8 Screening Conclusion

The Waters of LIFE project actions have been developed with full consideration of the potential effects on Natura 2000 sites and their Conservation Objectives, as directed by Article 6(3) of the Habitats Directive. Following the observations and considerations presented in this report, the following conclusions have been reached:

- The implementation of some Supporting Actions have, in the absence of mitigation and safeguards, the potential for adverse effects on the SPAs and SACs listed in Appendix III.
- Potential adverse effects identified (in the absence of mitigation and safeguards) relate to unregulated application of the actions leading to impacts across a range of habitats and species. Such potential impacts would include:
 - Habitat disturbance due to inappropriate siting or methods of installation. This could impact on sensitive terrestrial or aquatic habitats and species.
 - Habitat displacement or disturbance due to invasive species. This could impact on sensitive terrestrial or aquatic habitats and species.

- Sediment losses to watercourses associated with soil disturbance during, and following installation of certain NPIs. This could impact on sensitive aquatic species.

Stage 2 Appropriate Assessment is required due to the identification of potential impacts on Natura 2000 sites. Stage 2 of the Appropriate Assessment process presented in the following section further considers the potential impacts arising and highlights the mitigation factored into the project design to ensure no significant adverse effects on the Natura 2000 network of sites occurs.

3 Stage 2 Appropriate Assessment

3.1 Description of Potential Impacts

Screening for Appropriate Assessment has identified the potential for adverse impacts to arise due to the implementation of NPIs. The QIs of these sites that are sensitive to such impacts are listed in along with a description of the potential impacts.

Similarities across an aggregation of QIs and SCIs provide an effective summary of the impact and required mitigations given the scale of consideration for this scheme level AA. A review of the Site Specific Conservation Objectives (SSCOs) for the QIs were therefore assessed according to impact pathway to streamline the assessment. To focus on the potential pathways of the Supporting Actions, a targeted categorisation of potential impacts directly relevant to potential actions has been formulated:

- Introduction/spread of non-native invasive species
- Habitat damage (physical)/removal
- Habitat smothering/overburdening
- Habitat damage (chemical)
- Habitat damage (fragmentation)
- Habitat damage (grazing regime change)
- Hydrological regime change impacts
- Downstream sediment/ siltation impacts
- Downstream chemical impacts
- Downstream nutrient/eutrophication impacts
- Disturbance/ threats to bird species (SCIs/SPAs)
- Disturbance/ threats to QI species (SACs overlapping/adjacent)

The summary of these applied against the programmes Supporting Actions can be found in Appendix IV.

3.2 Mitigation

While NPIs are designed to improve the ecological value of the target areas, the potential remains for negative impacts on the Natura 2000 sites if unmitigated. Potential impacts of Natura 2000 sites have therefore been taken into consideration in all stages of the scheme to ensure no adverse impacts accrue as a result of the programme. Potential impacts relate to both habitats and species.

The safeguards presented have informed specifications, rules and guidance/training material relating to Supporting Actions. All Supporting Actions are approved on the basis that farmers adhere to the requirements as set out in the specification documents.

The primary safeguard in the application of Supporting Actions is avoidance. Supporting Actions will not be delivered on the agreed list of excluded habitats, as set out in the Rules Matrix. This Rules Matrix is based on that used by ACRES and will be supplied by DAFM to Waters of LIFE project for use, as such the Rules Matrix also includes habitats that are not found within the Waters of LIFE catchments. All sensitive habitats that are within the Waters of LIFE catchments are included in the Rules Matrix. The agreed list of excluded habitats includes:

- Caves (20m Buffer)
- Intertidal areas
- Juniper Scrub
- Lakes and ponds
- Dune habitat
- Mountain cliffs
- Natural watercourses
- Reed beds
- Saltmarshes
- Scree Slopes
- Sea cliffs
- Bog Woodland
- Other Wet woodland
- Yew woodlands

A table showing how the above excluded habitats correlate with the suite of Annex I habitats defined under the Habitats Directive can be found in Appendix VI.

The Rules Matrix provides further Natura 2000 relevant restrictions covering the following areas under certain conditions (according to tests):

- Habitat Scorecard status (see Section **Error! Reference source not found.**)
- Turloughs
- Mineral flushes
- Mature Woodland
- Annex Grasslands, Peatlands and Heathlands
- Wader areas
- Nesting sites of Annex species.
- Lesser Horseshoe Bat 1km squares
- Roosting sites
- Freshwater Pearl Mussel sensitive areas.
- Areas used by Migratory Geese or Swans
- Otters SAC
- Merlin SPA
- Watercourse proximities
- Cutover bog
- Invasive species status

An additional outline summary of the restrictions on Supporting Action categories can be found in Appendix VI.

The following considerations are recommended while the majority are already incorporated into the programme design:

- The Supporting Actions specification describes the means and safeguards for implementation. The specifications include detailed restrictions for each action to minimise general ecological and Natura 2000 specific impacts. The final specification for Supporting Actions is included as Appendix I.

- Supporting Actions are designed to reduce risk to water quality on the farm and to increase the habitat score. The scoring system is aligned to reflect higher scores for higher habitat quality. While additional safeguards are in place to prevent unintended consequences to non-target features, improvements to water quality within catchments that contain Natura sites is a key intended direction for Supporting Actions.
- Natura 2000 site protection and improvement is considered in each stage of programme design from the farmer discussion, Supporting Actions specification through to assessment and approval (see Figure 3 relevant key stages). This foundation provides embedded mitigation as avoidance measures but also underpinned by a results-based approach with Natura 2000 site improvement in mind.
- All participating Farm Advisors are obliged to attend Waters of LIFE training to become Waters of LIFE approved advisors. Topics covered at these training events include; scoring techniques, selection of suitable Supporting Actions and their implementation.
- Biosecurity protocols set out in the Supporting Actions specification and the provided Rules Matrix should be strictly followed. Restrictions on actions due to historic presence of invasive species are also set out in the Rules Matrix, also requiring strict adherence.
- All Waters of LIFE catchment scientists and engage in knowledge sharing workshops and a team training in topics including; scoring techniques, selection of suitable Supporting Actions including Natura and ecological sensitivities.
- Application of the Rules Matrix as agreed by all Waters of LIFE team members. This Rules Matrix will be supported by a project specific IT system. The Waters of LIFE team is a multidisciplinary team of experts who regularly share knowledge and experience at workshops to help guide the decision making process for the programme implementation. This team is supported by a steering group of expert ecologists, agri-scientists and catchment scientists, who provide further review of these decisions. The Rules Matrix considers Natura site feature sensitivities both spatially and temporally as summarised in Appendix VI. As Annex I Habitats, the Rules Matrix habitat exclusions shall be strictly applied.

- A Desktop Screening stage following the application of the Rules Matrix will apply additional checks including Natura oriented protections with site visits where necessary. This includes the locating of Supporting Actions in relation to sensitive habitats; in relation to each other (e.g. proximity of earth bunds to silt traps) and/or maximum allowable areas for certain activities in protected areas (e.g. self-seeding conifer management).
- The additional Desktop Screening stage will provide a trackable system involving trained staff, utilising experienced ecologists where necessary. Where there is potential for negative impacts, the action will not be approved. Collective skill sharing of approaches across Waters of LIFE team members will be encouraged using shared guidance protocols and workshops where necessary.
- If, following review of a proposed Supporting Action by the Project Team, a potential adverse impact remains and on balance the Supporting Action could be seen as providing an overall ecological benefit, a Supporting Action Specific Appropriate Assessment will be required. This may be necessary where works are bespoke and have not been considered within this scheme level Appropriate Assessment; or where actions are extensive in scale and/or the receiving environment is particularly sensitive. In these instances, a Natura Impact Statement will be prepared and submitted to the relevant authority for consideration.

3.3 In combination/Cumulative Impacts

The Waters of LIFE programme of Supporting Actions were assessed in combination with other plans and projects. Other plans and projects with the potential to have cumulative or in-combination effects are listed in Table 1. The majority of these plans and programmes have also been subject to Appropriate Assessment in their own right.

Table 1: Plans and projects with potential in-combination effects

Plan/Project	Description of Plan / Project	Potential for Cumulative or In-combination Impacts
ACRES CP and General	<p>ACRES is Ireland's agri-environment climate scheme under Ireland's CAP Strategic Plan. This €1.5 billion flagship agri-environment scheme is a farmer-friendly scheme to help address biodiversity decline while delivering an income support for up to 50,000 farm families in Ireland.</p> <p>The ACRES CP includes a results based payment scheme with the support of NPIs to help improve the ecological score of fields within the scheme. ACRES CP is available to all farmers in zones defined as High Priority Geographical Areas.</p> <p>ACRES general is available nationally (outside of the high priority geographical area defined for the ACRES Co-operation approach) and offers a range of actions for individual farmers, both targeted and general that help to improve biodiversity.</p>	<p>A number of catchments overlap with ACRES CP zones and all farmers within the catchment can be in ACRES General. The goal of ACRES is to improve biodiversity and in doing so have a positive impact on the conservation status of the relevant European sites. All NPIs for the ACRES CP results based agri-programme have gone through a near identical Appropriate Assessment process with very similar rules matrix restrictions underpinning the mitigation methodology. As such it is concluded that implementation of both programmes will result in positive impacts on the conservation status of the relevant European sites.</p>
Farming for Water EIP	<p>LAWPRO in partnership with Teagasc / ASSAP and Dairy Industry Ireland (DII) submitted a bid for funding in a competitive call under the European Innovation Partnerships (EIP) initiative of Ireland's Rural Development Programme in 2023. A budget of €50m over 5 years has been allocated to the project. The Department of Housing, Local Government and Heritage is funding the administrative costs of the Water EIP with €10m allocated over 5 years.</p>	<p>All Waters of LIFE demonstration catchments overlap with Areas for Action in WFD cycle 2 and 3 with objectives to restore and/or protect water quality, and/or the Nitrogen Priority Areas for Action. Considering the common objective of both the Waters of LIFE programme and the Farming for Water EIP in improving water quality within overlapping catchments it is concluded that implementation of both programmes will result in positive impacts on the conservation status of the relevant European sites.</p>

Plan/Project	Description of Plan / Project	Potential for Cumulative or In-combination Impacts
	<p>The project specifically focuses on reducing losses of phosphorus, nitrogen, sediment and, where relevant, pesticides to water from agricultural lands by promoting the adoption of innovative best practice in nutrient management, the application of nature-based Natural Water Retention Measures (NWRM) and other suitable measures at the farm level following the principals of Integrated Catchment Management (ICM) and science.</p>	
<p>Wild Atlantic Nature</p>	<p>Wild Atlantic Nature LIFE Integrated Project (IP) is a nine-year environmental project (2021-2029) led by the Wild Atlantic Nature project team of the Department of Housing, Local Government and Heritage. It aims to improve Ireland's performance in conserving habitats, and in particular to improve the conservation status in the Special Areas of Conservation (SAC) Network of blanket bog, a priority habitat under the Habitats Directive. The project works with farmers and local communities to conserve and improve the quality of blanket bogs and associated habitats, and the ecosystem services they provide including clean water, carbon storage and biodiversity. Central to the Wild Atlantic Nature project is the development and demonstration of a Results-Based agri-environmental Payment Scheme (RBPS) model across a number of the project sites</p>	<p>The Graney catchment overlaps with one potential project site of Wild Atlantic nature LIFE IP which is the Loughatorick South Bog SAC. The nature of this IP is to improve the conservation status in the Special Areas of Conservation (SAC), as is the objective of the Waters of LIFE programme through measures to improve water quality. it is concluded that implementation of both programmes will result in positive impacts on the conservation status of the relevant European sites.</p>
<p>Local Authority Waters Programme (LAWPRO)</p>	<p>The programme is a shared service working with Local Authorities and State agencies to meet obligations under the EU Water Framework Directive for the development and implementation of River Basin Management Plans in Ireland. The core objective of the River Basin Management Plan is to protect and restore water quality to 'good ecological status' in Ireland's rivers, lakes, estuaries and coastal waters.</p>	<p>All Waters of LIFE catchments overlap with the priority Areas for Action where LAWPRO catchment assessment teams and the associated Agricultural Sustainability and Advisory Programme (ASSAP), are working towards improving water quality. Considering the common objective of both the Waters of LIFE Programme and the LAWPRO in improving water quality within overlapping catchments it is concluded that implementation of both programmes will result in positive impacts on the conservation status of the relevant European sites.</p>

Plan/Project	Description of Plan / Project	Potential for Cumulative or In-combination Impacts
<p>County Development Plans</p>	<p>Overall strategies for the proper planning and sustainable development of the administrative area of the relevant Local Authorities.</p>	<p>The development of agri-environmental programme considers each of the County Development Plans. The programme of measures was developed to be locally adaptable and catchment specific. The selection of measures ensures they are appropriate for the specific pressure and locality in conjunction with the programmes Local Catchment Assessments. This provision therefore ensures due regard for potential conflict and/or in combination impacts with Local County Development Plans.</p>

3.4 Residual Impacts

Waters of LIFE Supporting Actions will not result in any residual impacts on the Conservation Objectives of any European site. With an emphasis on Natura site enhancement and with impact screening embedded in each stage of the approval process, no residual impact concerns remain.

The implementation of Supporting Actions is expected to result in positive impacts across Natura 2000 sites over the longer-term, but also the incentives provided to farmers to maintain and enhance the ecological quality of their farmland habitats through results-based payments.

3.5 Conclusion of Natura Impact Statement

In accordance with 92/43/EEC methodological guidance on the provisions of Article 6(3) and 6(4) Waters of LIFE Supporting Actions implementation has been subjected to Appropriate Assessment. The conclusion of this assessment is that through safeguards built into the design of this results-based programme, there will be no significant adverse effects on the integrity of the Natura 2000 network, directly, indirectly or in combination with other plans or projects.

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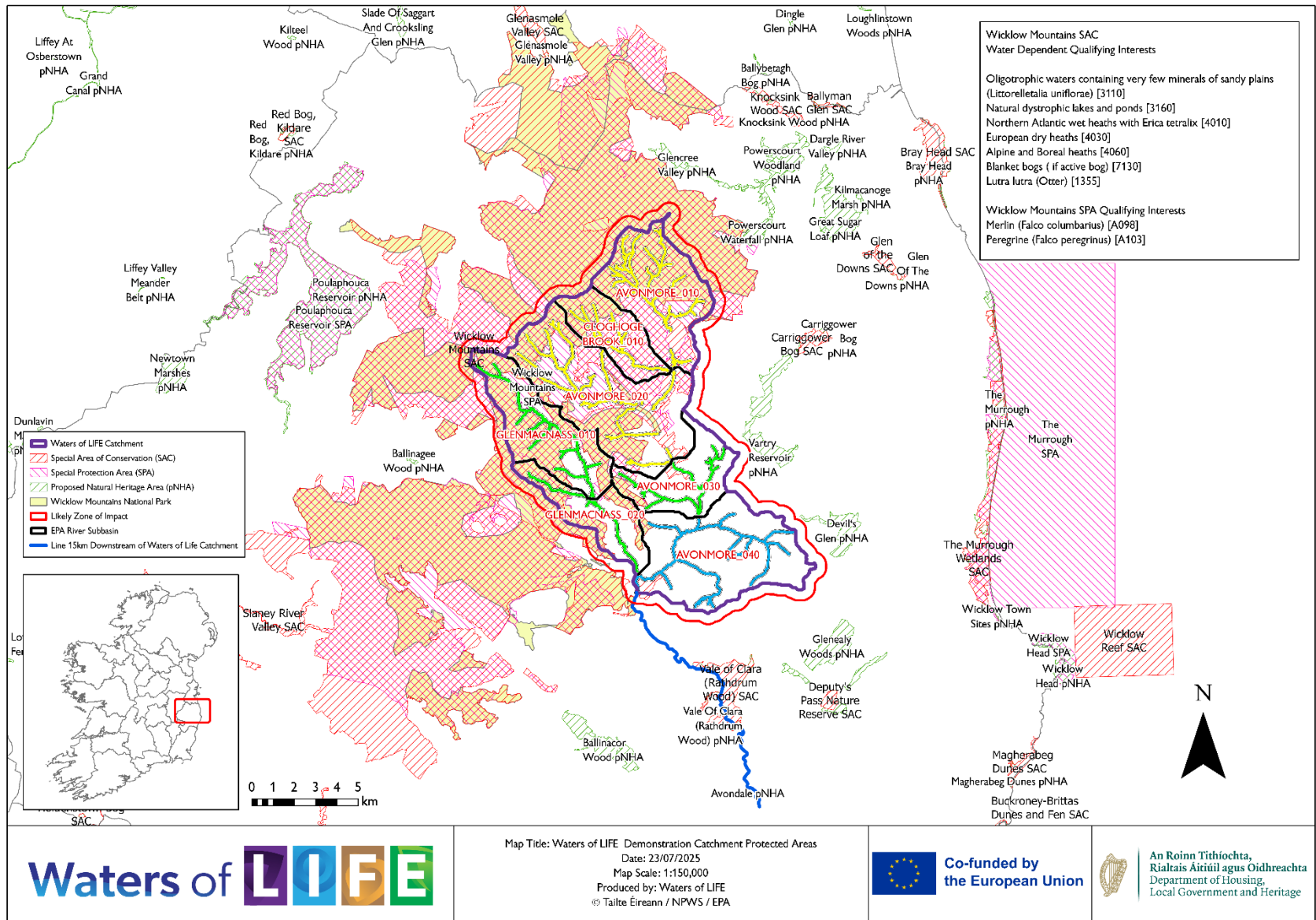
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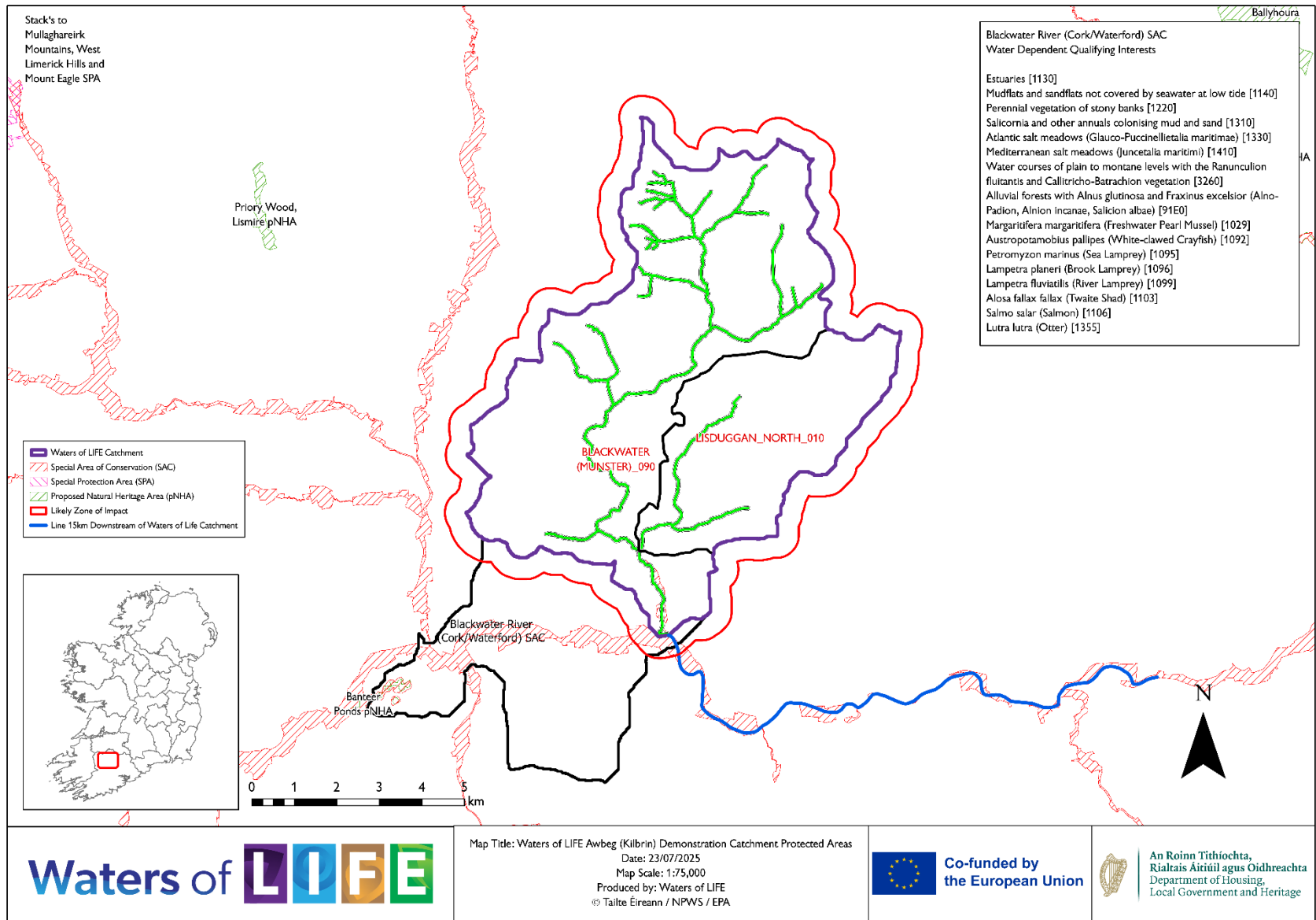
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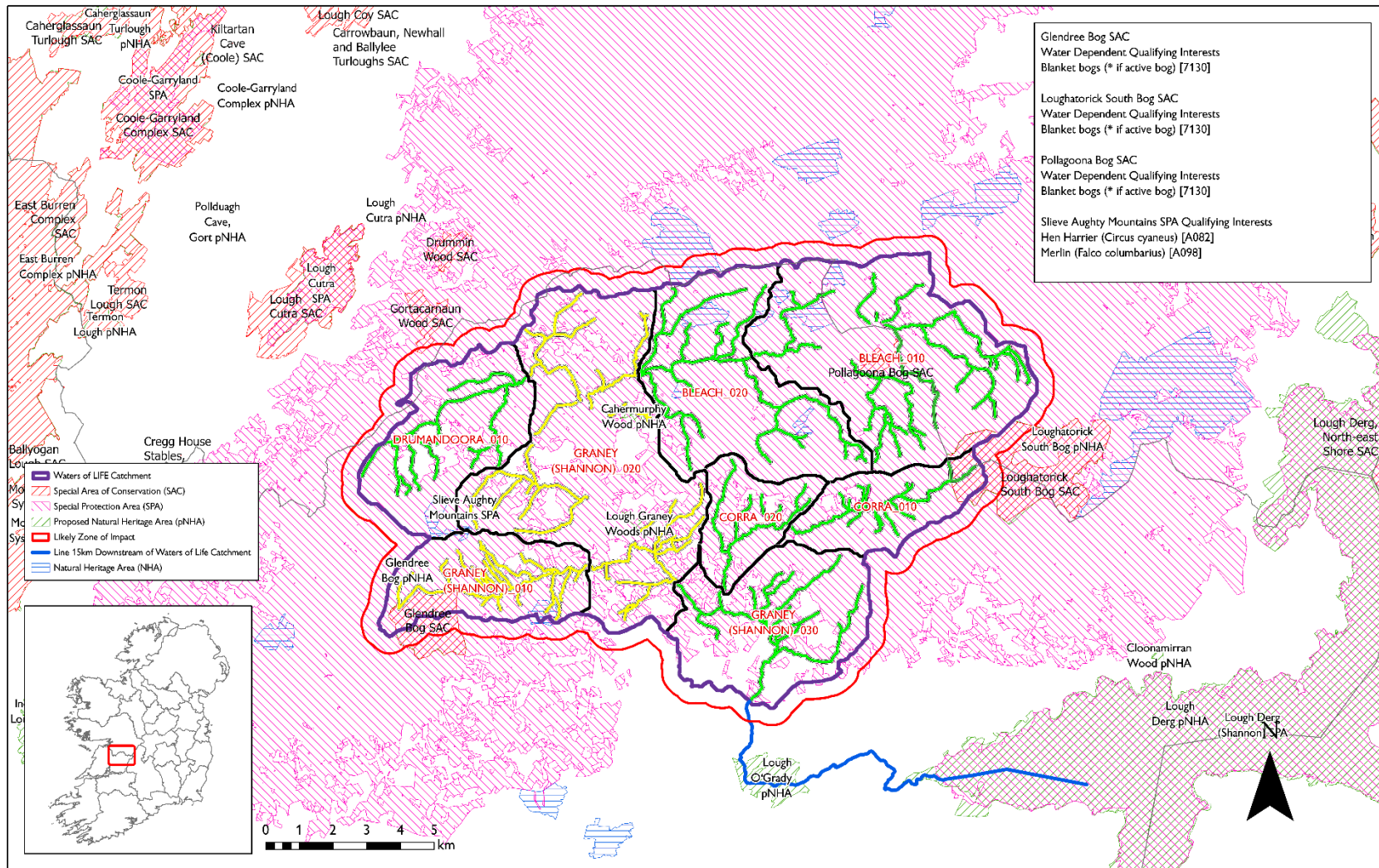
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Appendix I: Supporting Action Specifications

Appendix II: Maps of Designated Sites Within Demonstration
Catchments Zone of Impact







Glendree Bog SAC
Water Dependent Qualifying Interests
Blanket bogs (* if active bog) [7130]

Loughatorick South Bog SAC
Water Dependent Qualifying Interests
Blanket bogs (* if active bog) [7130]

Pollagoona Bog SAC
Water Dependent Qualifying Interests
Blanket bogs (* if active bog) [7130]

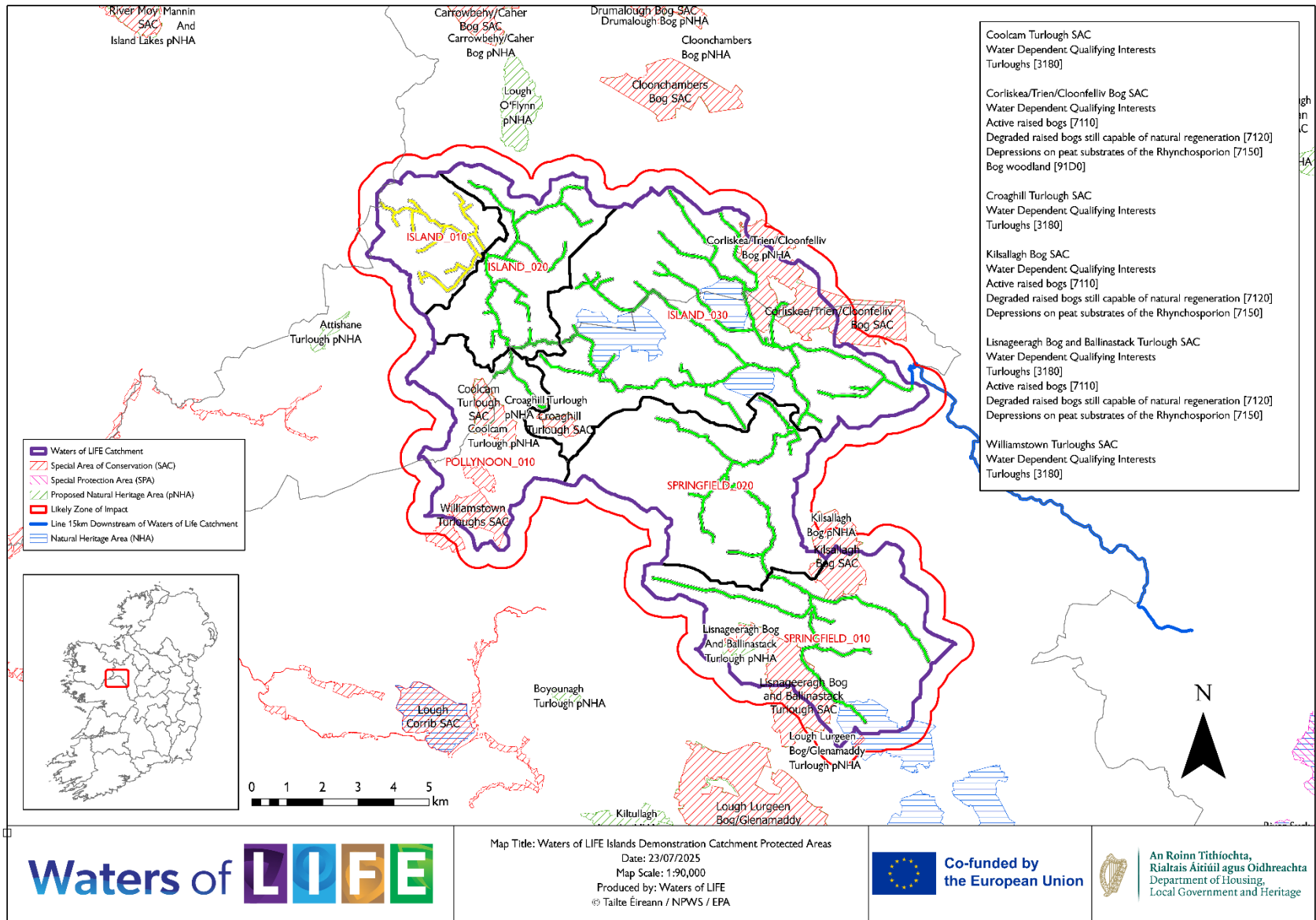
Slieve Aughty Mountains SPA Qualifying Interests
Hen Harrier (*Circus cyaneus*) [A082]
Merlin (*Falco columbarius*) [A098]

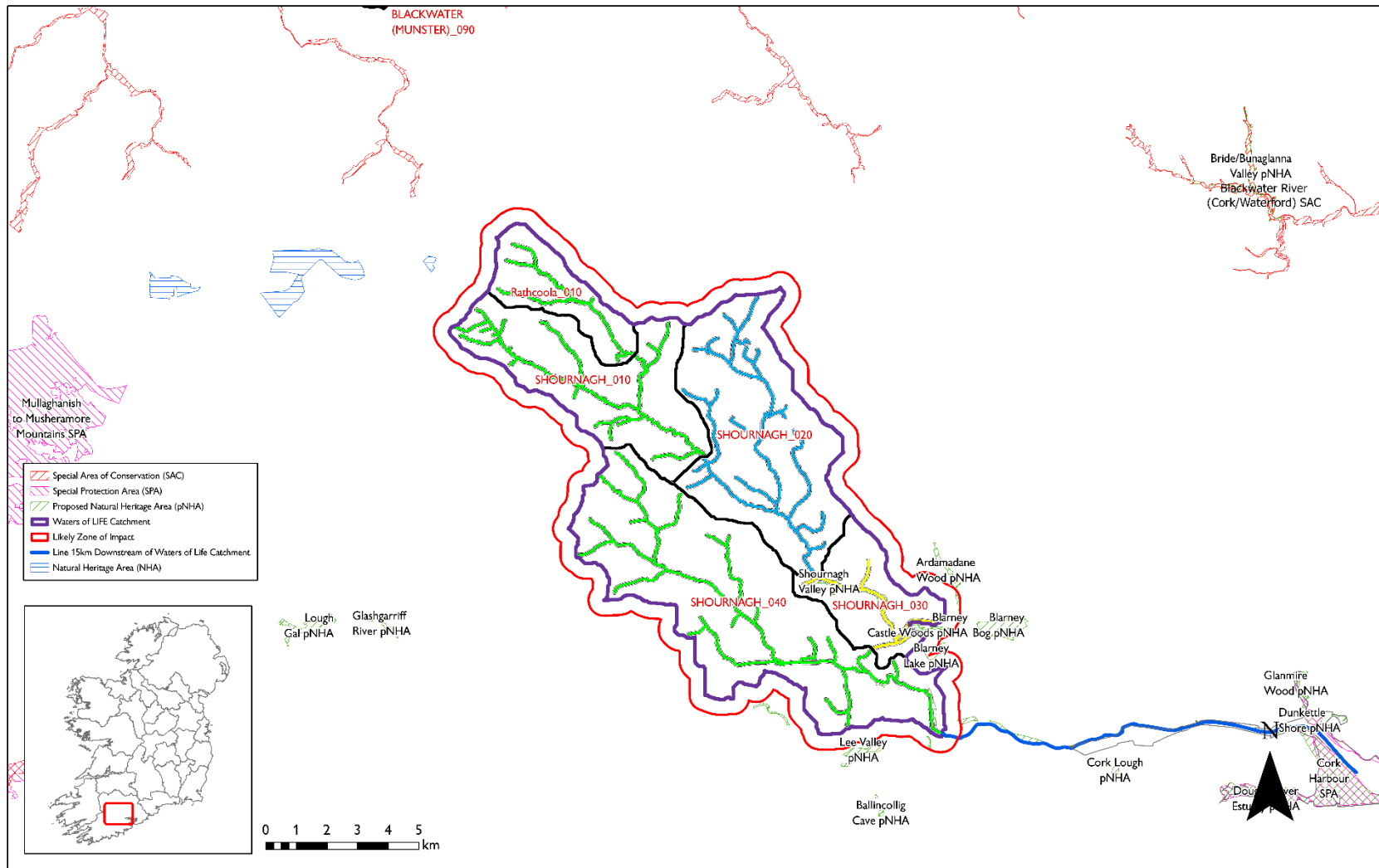
Waters of LIFE

Map Title: Waters of LIFE Graney Demonstration Catchment Protected Areas
Date: 23/07/2025
Map Scale: 1:100,000
Produced by: Waters of LIFE
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Department of Housing,
Local Government and Heritage





Map Title: Waters of LIFE Shournagh Demonstration Catchment Protected Areas
 Date: 23/07/2025
 Map Scale: 1:110,000
 Produced by: Waters of LIFE
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Appendix III: Screened in QIs of Statutory Designated Sites within the Programmes zone of impact

Table 2: Screened-in SAC Species, categorised into groups for potential impact assessments and grouped by associated catchment

Catchment	SAC	Species Name	Category
Avonmore	Wicklow Mountains SAC	1355 - Otter (<i>Lutra lutra</i>)	Otter
Awbeg	Blackwater River (Cork/Waterford) SAC	1029 - Freshwater Pearl Mussel (<i>Margaritifera margaritifera</i>)	Pearl Mussel
Awbeg	Blackwater River (Cork/Waterford) SAC	1092 - White-clawed crayfish (<i>Austropotamobius pallipes</i>)	Aquatic Mobile Species
Awbeg	Blackwater River (Cork/Waterford) SAC	1095 - Sea Lamprey (<i>Petromyzon marinus</i>)	Aquatic Mobile Species
Awbeg	Blackwater River (Cork/Waterford) SAC	1096 - Brook Lamprey (<i>Lampetra planeri</i>)	Aquatic Mobile Species
Awbeg	Blackwater River (Cork/Waterford) SAC	1099 - River Lamprey (<i>Lampetra fluviatilis</i>)	Aquatic Mobile Species
Awbeg	Blackwater River (Cork/Waterford) SAC	1103 - Twaite Shad (<i>Alosa fallax</i>)	Aquatic Mobile Species
Awbeg	Blackwater River (Cork/Waterford) SAC	1106 - Atlantic salmon (<i>Salmo salar</i>)	Aquatic Mobile Species
Awbeg	Blackwater River (Cork/Waterford) SAC	1355 - Otter (<i>Lutra lutra</i>)	Otter
Awbeg	Blackwater River (Cork/Waterford) SAC	1421 - Kilarney Fern (<i>Trichomanes speciosum</i>)	Plants

Catchment	SAC	Habitat Name	Category
Avonmore	Vale of Clara (Rathdrum Wood) SAC	91A0 - Old sessile oak woods with Ilex and Blechnum in the British Isles	Forest habitats
Avonmore	Wicklow Mountains SAC	7130 - Blanket bogs (* if active bog)	Bog
Avonmore	Wicklow Mountains SAC	91A0 - Old sessile oak woods with Ilex and Blechnum in the British Isles	Forest habitats
Avonmore	Wicklow Mountains SAC	3110 - Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	Freshwater habitats
Avonmore	Wicklow Mountains SAC	3160 - Natural dystrophic lakes and ponds	Freshwater habitats
Avonmore	Wicklow Mountains SAC	6130 - Calaminarian grasslands of the Violetalia calaminariae	Grasslands
Avonmore	Wicklow Mountains SAC	6230 - Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	Grasslands
Avonmore	Wicklow Mountains SAC	4010 - Northern Atlantic wet heaths with Erica tetralix	Heaths
Avonmore	Wicklow Mountains SAC	4030 - European dry heaths	Heaths
Avonmore	Wicklow Mountains SAC	4060 - Alpine and Boreal heaths	Heaths
Avonmore	Wicklow Mountains SAC	8110 - Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	Scree/Slopes
Avonmore	Wicklow Mountains SAC	8210 - Calcareous rocky slopes with chasmophytic vegetation	Scree/Slopes
Avonmore	Wicklow Mountains SAC	8220 - Siliceous rocky slopes with chasmophytic vegetation	Scree/Slopes

Catchment	SAC	Habitat Name	Category
Awbeg	Blackwater River (Cork/Waterford) SAC	1220 - Perennial vegetation of stony banks	Coastal Habitats
Awbeg	Blackwater River (Cork/Waterford) SAC	91A0 - Old sessile oak woods with Ilex and Blechnum in the British Isles	Forest habitats
Awbeg	Blackwater River (Cork/Waterford) SAC	91E0 - Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	Forest habitats
Awbeg	Blackwater River (Cork/Waterford) SAC	3260 - Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation	Freshwater habitats
Awbeg	Blackwater River (Cork/Waterford) SAC	1130 – Estuaries	Marine habitats
Awbeg	Blackwater River (Cork/Waterford) SAC	1140 - Mudflats and sandflats not covered by seawater at low tide	Marine habitats
Awbeg	Blackwater River (Cork/Waterford) SAC	1310 - Salicornia and other annuals colonising mud and sand	Marine habitats
Awbeg	Blackwater River (Cork/Waterford) SAC	1330 - Atlantic salt meadows (Glauco-Puccinellietalia maritima)	Marine habitats
Awbeg	Blackwater River (Cork/Waterford) SAC	1410 - Mediterranean salt meadows (Juncetalia maritimi)	Marine habitats
Graney	Glendree Bog SAC	7130 - Blanket bogs (* if active bog)	Bog
Graney	Gortacarnaun Wood SAC	91A0 - Old sessile oak woods with Ilex and Blechnum in the British Isles	Forest habitats
Graney	Loughatorick South Bog SAC	7130 - Blanket bogs (* if active bog)	Bog
Graney	Pollagoona Bog SAC	7131 - Blanket bogs (* if active bog)	Bog
Islands	Coolcam Turlough SAC	3180 – Turloughs	Turloughs

Catchment	SAC	Habitat Name	Category
Islands	Corliskea/Trien/Cloonfelliv Bog SAC	7110 - Active raised bogs	Bog
Islands	Corliskea/Trien/Cloonfelliv Bog SAC	7120 - Degraded raised bogs still capable of natural regeneration	Bog
Islands	Corliskea/Trien/Cloonfelliv Bog SAC	7150 - Depressions on peat substrates of the Rhynchosporion	Bog
Islands	Corliskea/Trien/Cloonfelliv Bog SAC	91D0 - Bog woodland	Bog woodland
Islands	Croaghill Turlough SAC	3180 – Turloughs	Turloughs
Islands	Kilsallagh Bog SAC	7110 - Active raised bogs	Bog
Islands	Kilsallagh Bog SAC	7120 - Degraded raised bogs still capable of natural regeneration	Bog
Islands	Kilsallagh Bog SAC	7150 - Depressions on peat substrates of the Rhynchosporion	Bog
Islands	Lisnageeragh Bog and Ballinastack Turlough SAC	7110 - Active raised bogs	Bog
Islands	Lisnageeragh Bog and Ballinastack Turlough SAC	7120 - Degraded raised bogs still capable of natural regeneration	Bog
Islands	Lisnageeragh Bog and Ballinastack Turlough SAC	7150 - Depressions on peat substrates of the Rhynchosporion	Bog
Islands	Lisnageeragh Bog and Ballinastack Turlough SAC	3180 – Turloughs	Turloughs
Islands	Williamstown Turloughs SAC	3180 – Turloughs	Turloughs
Shournagh	No SACs within zone of impact of this catchment		

Table 3: Screened-in SPAs and their associated QIs categorised into groups for potential impact assessments and grouped by associated catchment

Catchment	SPA	Species Name	Category
Avonmore	Wicklow Mountains SPA	Merlin (<i>Falco columbarius</i>) [A098]	Raptor
Avonmore	Wicklow Mountains SPA	Peregrine (<i>Falco peregrinus</i>) [A103]	Raptor
Graney	Lough Derg (Shannon) SPA	Common Tern (<i>Sterna hirundo</i>) [A193]	Tern
Graney	Lough Derg (Shannon) SPA	Cormorant (<i>Phalacrocorax carbo</i>) [A017]	Cormorant
Graney	Lough Derg (Shannon) SPA	Goldeneye (<i>Bucephala clangula</i>) [A067]	Duck
Graney	Lough Derg (Shannon) SPA	Tufted Duck (<i>Aythya fuligula</i>) [A061]	Duck
Graney	Slieve Aughty Mountains SPA	Hen Harrier (<i>Circus cyaneus</i>) [A082]	Raptor
Graney	Slieve Aughty Mountains SPA	Merlin (<i>Falco columbarius</i>) [A098]	Raptor
Shournagh	Cork Harbour SPA	Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]	Wader
Shournagh	Cork Harbour SPA	Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]	Gull
Shournagh	Cork Harbour SPA	Black-tailed Godwit (<i>Limosa limosa</i>) [A156]	Wader
Shournagh	Cork Harbour SPA	Common Gull (<i>Larus canus</i>) [A182]	Gull
Shournagh	Cork Harbour SPA	Common Tern (<i>Sterna hirundo</i>) [A193]	Tern
Shournagh	Cork Harbour SPA	Cormorant (<i>Phalacrocorax carbo</i>) [A017]	Cormorant
Shournagh	Cork Harbour SPA	Curlew (<i>Numenius arquata</i>) [A160]	Wader

Catchment	SPA	Species Name	Category
Shournagh	Cork Harbour SPA	Dunlin (<i>Calidris alpina</i>) [A149]	Wader
Shournagh	Cork Harbour SPA	Golden Plover (<i>Pluvialis apricaria</i>) [A140]	Plover
Shournagh	Cork Harbour SPA	Great Crested Grebe (<i>Podiceps cristatus</i>) [A005]	Grebe
Shournagh	Cork Harbour SPA	Grey Heron (<i>Ardea cinerea</i>) [A028]	Wader
Shournagh	Cork Harbour SPA	Grey Plover (<i>Pluvialis squatarola</i>) [A141]	Plover
Shournagh	Cork Harbour SPA	Lapwing (<i>Vanellus vanellus</i>) [A142]	Wader
Shournagh	Cork Harbour SPA	Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183]	Gull
Shournagh	Cork Harbour SPA	Little Grebe (<i>Tachybaptus ruficollis</i>) [A004]	Grebe
Shournagh	Cork Harbour SPA	Oystercatcher (<i>Haematopus ostralegus</i>) [A130]	Wader
Shournagh	Cork Harbour SPA	Pintail (<i>Anas acuta</i>) [A054]	Duck
Shournagh	Cork Harbour SPA	Red-breasted Merganser (<i>Mergus serrator</i>) [A069]	Duck
Shournagh	Cork Harbour SPA	Redshank (<i>Tringa totanus</i>) [A162]	Wader
Shournagh	Cork Harbour SPA	Shelduck (<i>Tadorna tadorna</i>) [A048]	Duck
Shournagh	Cork Harbour SPA	Shoveler (<i>Spatula clypeata</i>) [A857]	Duck
Shournagh	Cork Harbour SPA	Teal (<i>Anas crecca</i>) [A052]	Duck
Shournagh	Cork Harbour SPA	Wigeon (<i>Mareca penelope</i>) [A855]	Duck

Appendix IV: Potential Impacts of Supporting Actions

Table 4: Potential Impacts of each Supporting Actions within the Waters of LIFE Agri programme

Supporting Action	Potential adverse impact											
	Introduction/spread of non-native invasive species	Habitat damage (physical)/removal	Habitat smothering/overburdening	Habitat damage (chemical)	Habitat damage (fragmentation)	Habitat damage (grazing regime change)	Hydrological regime change impacts	Downstream sediment/siltation impacts	Downstream chemical impacts	Downstream nutrient/eutrophication impacts	Disturbance/threats to bird species (SCIs/SPAs)	Disturbance/threats to QI species (SACs overlapping/adjacent)
Permanent Single Strand Electric	Y	Y			Y	Y		Y			Y	
Sheep Fence	Y	Y			Y	Y		Y			Y	
Sheep Fence Mountain Rate	Y	Y			Y	Y		Y			Y	
Barb Wire Fence	Y	Y			Y	Y		Y			Y	
Deer Fence	Y	Y			Y	Y		Y			Y	
Solar Powered Electric Fencer											Y	
Gateway Measures	Y	Y					Y	Y			Y	
Waters Bars	Y	Y	Y		Y		Y	Y			Y	Y
Vegetated Bunded Drain	Y	Y	Y		Y		Y	Y			Y	Y
Earth Bund	Y	Y	Y		Y		Y	Y			Y	Y

Supporting Action	Potential adverse impact											
	Introduction/spread of non-native invasive species	Habitat damage (physical)/removal	Habitat smothering/overburdening	Habitat damage (chemical)	Habitat damage (fragmentation)	Habitat damage (grazing regime change)	Hydrological regime change impacts	Downstream sediment/ siltation impacts	Downstream chemical impacts	Downstream nutrient/eutrophication impacts	Disturbance/ threats to bird species (SCIs/SPAs)	Disturbance/ threats to QI species (SACs overlapping/adjacent)
Sediment Trap	Y	Y	Y		Y		Y	Y			Y	Y
Hedgerow Establishment-with earth bund	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Hedgerow Establishment – without earth bund	Y	Y		Y	Y	Y					Y	
Grassland Buffer Cross-slope												
Spatially Targeted Riparian Buffer 0.01-0.04ha	Y	Y		Y				Y	Y		Y	Y
Spatially Targeted Riparian Buffer 0.05-0.1ha	Y	Y		Y				Y	Y		Y	Y
Spatially Targeted Riparian buffer 0.11 to 0.2ha	Y	Y		Y				Y	Y		Y	Y
Tree Planting	Y	Y			Y	Y		Y			Y	
Willow Beds	Y	Y			Y	Y		Y			Y	

Supporting Action	Potential adverse impact											
	Introduction/spread of non-native invasive species	Habitat damage (physical)/removal	Habitat smothering/overburdening	Habitat damage (chemical)	Habitat damage (fragmentation)	Habitat damage (grazing regime change)	Hydrological regime change impacts	Downstream sediment/ siltation impacts	Downstream chemical impacts	Downstream nutrient/eutrophication impacts	Disturbance/ threats to bird species (SCIs/SPAs)	Disturbance/ threats to QI species (SACs overlapping/adjacent)
Small Scale Wetland Pond	Y	Y	Y				Y	Y			Y	
Culvert	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y
River, Stream Crossing/Bridge	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y
Solar Pump	Y	Y				Y	Y	Y			Y	
Water Storage Tank	Y	Y									Y	
Pasture Pump	Y	Y				Y	Y	Y			Y	
Water Trough	Y	Y									Y	
Water supply piping and fittings	Y	Y				Y	Y	Y			Y	
Non Native Invasive Species Management	Y	Y		Y	Y						Y	Y
Conifer Removal	Y	Y		Y	Y	Y					Y	Y

Supporting Action	Potential adverse impact											
	Introduction/spread of non-native invasive species	Habitat damage (physical)/removal	Habitat smothering/overburdening	Habitat damage (chemical)	Habitat damage (fragmentation)	Habitat damage (grazing regime change)	Hydrological regime change impacts	Downstream sediment/ siltation impacts	Downstream chemical impacts	Downstream nutrient/eutrophication impacts	Disturbance/ threats to bird species (SCIs/SPAs)	Disturbance/ threats to QI species (SACs overlapping/adjacent)
Water Table Management on Peat soils	Y	Y			Y	Y	Y	Y		Y	Y	Y
Green Hay	Y		Y			Y						
Contractor Mobilisation Fee	Always paired with another Supporting Action which have their own potential adverse impacts											
Bespoke Measures	Assessed on a case by case basis, all bespoke measures are presumed to have all potential adverse impacts until proved otherwise.											
Host Farmer Payment	Monetary compensation for field walks and access to site, no potential adverse impacts expected.											

Appendix V: Screened in QIs of Statutory Designated Sites within
the Programmes zone of impact and screened in Potential
Adverse Impacts:

Table 5: Screened in SAC species and Potential Adverse Impacts

SAC QI Category	Potential Adverse Impact
Aquatic mobile species Including: Twaite shad, White-clawed Crayfish, River lamprey, Brook lamprey, Sea lamprey, Salmon	Habitat damage (physical)/removal
	Habitat smothering/overburdening
	Habitat damage (chemical)
	Hydrological regime change impacts
	Downstream sediment/ siltation impacts
	Downstream chemical impacts
Otter	Habitat damage (physical)/removal
	Habitat smothering/overburdening
	Habitat damage (chemical)
	Habitat damage (fragmentation)
	Habitat damage (grazing regime change)
	Hydrological regime change impacts
	Downstream sediment/ siltation impacts
	Downstream chemical impacts
	Downstream nutrient/eutrophication impacts
Pearl Mussel	Habitat damage (physical)/removal
	Habitat smothering/overburdening
	Habitat damage (chemical)
	Hydrological regime change impacts
	Downstream sediment/ siltation impacts
	Downstream chemical impacts
Plants (Killarney Fern)	Introduction/spread of non-native invasive species
	Habitat damage (physical)/removal
	Habitat smothering/overburdening
	Habitat damage (chemical)
	Habitat damage (fragmentation)
	Habitat damage (grazing regime change)
	Hydrological regime change impacts

Table 6: Screened in SAC habitats and Potential Adverse Impacts

Habitat Category	Corresponding Annex I habitat	Potential Adverse Impact
Bog and Bog Woodland	7110 - Active raised bogs	Introduction/spread of non-native invasive species
	7120 - Degraded raised bogs still capable of natural regeneration	Habitat damage (physical)/removal
	7130 - Blanket bogs (if active bog)	Habitat damage (grazing regime change)
	7150 - Depressions on peat substrates of the Rhynchosporion 91D0 - Bog woodland*	Habitat damage (chemical)
Coastal Habitats*	1220 - Perennial vegetation of stony banks	Introduction/spread of non-native invasive species
		Habitat damage (physical)/removal
		Habitat damage (grazing regime change)
		Habitat damage (chemical)
Forest Habitats	91A0 - Old sessile oak woods with Ilex and Blechnum in the British Isles 91E0 - Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	Introduction/spread of non-native invasive species
		Habitat damage (physical)/removal
		Habitat damage (grazing regime change)
		Habitat damage (chemical)
Freshwater Habitats*	3110 - Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) 3160 - Natural dystrophic lakes and ponds 3260 - Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation	Introduction/spread of non-native invasive species
		Hydrological regime change impacts
		Downstream sediment/siltation impacts
		Downstream chemical impacts
		Downstream nutrient/eutrophication impacts
Grasslands	6130 - Calaminarian grasslands of the Violetalia calaminariae 6230 - Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	Introduction/spread of non-native invasive species
		Habitat damage (physical)/removal

Habitat Category	Corresponding Annex I habitat	Potential Adverse Impact
		Habitat damage (grazing regime change)
		Habitat damage (chemical)
Heaths	4010 - Northern Atlantic wet heaths with <i>Erica tetralix</i>	Introduction/spread of non-native invasive species
	4030 - European dry heaths	Habitat damage (physical)/removal
	4060 - Alpine and Boreal heaths	Habitat damage (grazing regime change)
		Habitat damage (chemical)
Marine Habitats*	1130 – Estuaries	No impact pathway concluded
	1140 - Mudflats and sandflats not covered by seawater at low tide	
	1310 - <i>Salicornia</i> and other annuals colonizing mud and sand	
	1330 - Atlantic salt meadows (<i>Glaucopuccinellietalia maritimae</i>)	
	1410 - Mediterranean salt meadows (<i>Juncetalia maritimi</i>)	
Scree and slopes*	8110 - Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>)	Introduction/spread of non-native invasive species
	8210 - Calcareous rocky slopes with chasmophytic vegetation	Habitat damage (physical)/removal
	8220 - Siliceous rocky slopes with chasmophytic vegetation	Habitat damage (grazing regime change)
		Habitat damage (chemical)
Turloughs	3180 - Turloughs	Introduction/spread of non-native invasive species
		Habitat damage (physical)/removal
		Habitat damage (grazing regime change)
		Habitat damage (chemical)
		Downstream sediment/siltation impacts
		Downstream chemical impacts
*Supporting Actions are excluded from these habitats by the rules matrix		

Table 7: Categories of screened in SPA QIs and Potential Adverse Impacts

SPA QI Category	Potential Adverse Impact
Cormorant	Downstream sediment/ siltation impacts Downstream chemical impacts Downstream nutrient/eutrophication impacts
Ducks and Grebes Including: Northern pintail, Eurasian teal, Eurasian wigeon, Common pochard*, Greater scaup*, Common goldeneye, Gadwall*, Common eider*, Northern shoveler, Mallard*, Tufted duck, Common scoter*, Red-breasted merganser, Common shelduck, Horned (Slavonian) grebe*, Great crested grebe, Little grebe.	Habitat damage (physical)/removal Habitat smothering/overburdening Habitat damage (chemical) Habitat damage (grazing regime change) Disturbance/ threats to bird species (SCIs/SPAs) Hydrological regime change impacts Downstream sediment/ siltation impacts Downstream chemical impacts Downstream nutrient/eutrophication impacts
Gulls and Plovers Including: Black-headed gull*, European herring gull*, Common gull, Lesser black-backed gull, Black-legged kittiwake*, European golden plover, Grey plover	Habitat damage (physical)/removal Habitat damage (chemical) Habitat damage (grazing regime change)
Raptors Including: Hen Harrier, Merlin, Peregrine falcon	Habitat damage (physical)/removal Habitat damage (chemical) Habitat damage (grazing regime change) Disturbance/ threats to bird species (SCIs/SPAs)
Terns	No impact pathway concluded
Waders Including: Ruddy turnstone*, Sanderling*, Dunlin, Red knot*, Purple sandpiper*, Bar-tailed godwit, Black-tailed godwit, Common greenshank*, Grey heron, Common ringed plover*, Eurasian oystercatcher, Eurasian curlew, Common redshank, Northern lapwing	Habitat damage (physical)/removal Habitat damage (chemical) Habitat damage (grazing regime change) Disturbance/ threats to bird species (SCIs/SPAs) Hydrological regime change impacts Downstream sediment/ siltation impacts Downstream chemical impacts Downstream nutrient/eutrophication impacts

SPA QI Category	Potential Adverse Impact
Geese /Swans* Including: Greenland White-fronted Goose, Barnacle goose, Bewick's swan, Whooper swan, Greylag goose, Brent goose (light-bellied),	Habitat damage (physical)/removal Habitat smothering/overburdening Habitat damage (chemical) Habitat damage (fragmentation) Habitat damage (grazing regime change) Disturbance/ threats to bird species (SCIs/SPAs) Hydrological regime change impacts

* These species are not listed as Qualifying Interests of the SPAs that are in the zone of impact of the Waters of LIFE agri-environmental programme, however, these species are Annex I species which may travel significant distance from SPAs where they are listed, to visit ex-situ feeding sites. For this reason, they have been included in the assessment and any impacts on potential ex-situ foraging sites are mitigated by the Rules Matrix Restrictions.

Appendix VI: Rules Matrix Mitigation

The following data including in the Rules Matrix ensures that no Supporting Action will be placed in an area where it may have a potential adverse impact.

Table 8: Rules Matrix Excluded Habitats as Annex I equivalent

Habitats	Annex I habitat (EC Habitats Directive)
Bog Woodland	Bog woodland
Caves 20m buffer	Caves not open to the public
	Submerged or partially submerged sea caves
Intertidal & Adjacent areas	Coastal lagoons
	Large shallow inlets and bays
	Perennial vegetation of stony banks
	Mudflats and sandflats not covered by seawater at low tide
	Sandbanks which are slightly covered by sea water all the time
	Annual vegetation of drift lines
	Reefs
	Estuaries
	Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes')
	Humid dune slacks
	Fixed coastal dunes with herbaceous vegetation ('grey dunes')
	Embryonic shifting dunes, Dunes with <i>Salix repens ssp. argentea</i> (<i>Salicion arenariae</i>)
	Decalcified fixed dunes with <i>Empetrum nigrum</i>
	Atlantic decalcified fixed dunes (<i>Calluno-Ulicetea</i>)
Juniper Scrub	<i>Juniperus communis</i> formations on heaths or calcareous grasslands
Lakes and ponds	Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp.
	Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> - type vegetation
	Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i>
	Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>)
	Natural dystrophic lakes and ponds
Permanent natural watercourses	Rivers with muddy banks with <i>Chenopodion rubri p.p.</i> and <i>Bidention p.p.</i>
	Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation
Saltmarshes	Mediterranean and thermo-Atlantic halophilous scrubs (<i>Sarcocornetea fruticosi</i>)

Habitats	Annex I habitat (EC Habitats Directive)
	Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>)
	Mediterranean salt meadows (<i>Juncetalia maritimi</i>)
	Salicornia and other annuals colonizing mud and sand
	Calcareous and calcshist screes of the montane to alpine levels (<i>Thlaspietea rotundifolii</i>)
Scree Slopes	Calcareous rocky slopes with chasmophytic vegetation
	Siliceous rocky slopes with chasmophytic vegetation
	Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>)
Sea cliffs	Vegetated sea cliffs of the Atlantic and Baltic Coasts
Yew woodlands	<i>Taxus baccata</i> woods of the British Isles

Table 9: Supporting Actions with those Rules Matrix restrictions that mitigate for potential impacts on the conservation objectives of designated sites

Supporting Action	Action not permitted where there is the following restriction	Notes
Permanent Single Strand Electric	Archaeological Monument < 10 m Zone of Notification Archaeological complexes and field systems Presence of non-native invasive species (Giant Hogweed; Gunnera; Himalayan Balsam; Japanese Knotweed; Rhododendron) All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc.) Areas used by Geese and Migratory Swans Breeding Wader Turloughs Mineral Flushes	
Sheep Fence	Archaeological Monument < 10 m Zone of Notification Archaeological complexes and field systems Presence of non-native invasive species (Giant Hogweed; Gunnera; Himalayan Balsam; Japanese Knotweed; Rhododendron) All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc.) Areas used by Geese and Migratory Swans Breeding Wader Field Curlew sites < 500 m corncrake sites < 500 m Otter Habitats and Natural Watercourse < 10 m Archaeological Monument < 10m Zone of Notification	

Supporting Action	Action not permitted where there is the following restriction	Notes
	Archaeological complexes and field systems Presence of non-native invasive species (Giant Hogweed; Gunnera; Himalayan Balsam; Japanese Knotweed; Rhododendron) All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc.) Areas used by Geese and Migratory Swans Breeding Wader Field Curlew sites < 500 m corncrake sites < 500 m Otter Habitats and Natural Watercourse < 10 m Turloughs Mineral Flushes	
Sheep Fence Mountain Rate	Archaeological complexes and field systems Presence of non-native invasive species (Giant Hogweed; Gunnera; Himalayan Balsam; Japanese Knotweed; Rhododendron) All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc.) Areas used by Geese and Migratory Swans Breeding Wader Field Curlew sites < 500 m corncrake sites < 500 m Otter Habitats and Natural Watercourse < 10 m Turloughs Mineral Flushes	
Barb Wire Fence	Archaeological Monument < 10 m Zone of Notification Archaeological complexes and field systems	

Supporting Action	Action not permitted where there is the following restriction	Notes
	Presence of non-native invasive species (Giant Hogweed; Gunnera; Himalayan Balsam; Japanese Knotweed; Rhododendron) All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc.) Areas used by Geese and Migratory Swans Breeding Wader Field Curlew sites < 500 m corncrake sites < 500 m Turloughs Mineral Flushes Areas used by Geese and Migratory Swans Breeding Wader Field Curlew sites < 500 m corncrake sites < 500 m Turloughs Mineral Flushes	
Deer Fence	Archaeological Monument < 10 m Zone of Notification Archaeological complexes and field systems Presence of non-native invasive species (Giant Hogweed; Gunnera; Himalayan Balsam; Japanese Knotweed; Rhododendron) All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc.) Areas used by Geese and Migratory Swans Breeding Wader Field Curlew sites < 500 m corncrake sites < 500 m Otter Habitats and Natural Watercourse < 10 m Turloughs Mineral Flushes	

Supporting Action	Action not permitted where there is the following restriction	Notes
Solar Powered Electric Fencer	All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc.) Turloughs Mineral Flushes	
Gateway Measures	Archaeological Monument < 10 m Zone of Notification Archaeological complexes and field systems Presence of non-native invasive species (Giant Hogweed; Gunnera; Himalayan Balsam; Japanese Knotweed; Rhododendron) All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc.) Natural watercourses or mapped drains < 10 m Natural watercourses or mapped drains < 6 m Freshwater Pearl Mussel Catchment and Natural watercourses or mapped drains < 20 m Turloughs Mineral Flushes Area of Action > 1 Ha and in Hen Harrier Red Zone or NATURA Site	Must be placed on existing fencing or in line with approved fencing, must be more than 5 m from the river. See Supporting Actions specification document
Waters Bars	Archaeological Monument < 10 m Zone of Notification Archaeological complexes and field systems High Cover of Positive Indicators Presence of non-native invasive species (Giant Hogweed; Gunnera; Himalayan Balsam; Japanese Knotweed; Rhododendron)	

Supporting Action	Action not permitted where there is the following restriction	Notes
	<p>All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc.)</p> <p>Natural watercourses or mapped drains < 10 m</p> <p>Natural watercourses or mapped drains < 6 m</p> <p>Freshwater Pearl Mussel Catchment and Natural watercourses or mapped drains < 20 m</p> <p>Peatland Scorecard</p> <p>Annex Quality Peatlands and Heathlands</p> <p>Annex Quality Grasslands</p> <p>Other Peatland Habitats</p> <p>Turloughs</p> <p>Mineral Flushes</p>	
Vegetated Bunded Drain	<p>Archaeological Monument < 10 m Zone of Notification</p> <p>Archaeological complexes and field systems</p> <p>High Cover of Positive Indicators</p> <p>Presence of non-native invasive species (Giant Hogweed; Gunnera; Himalayan Balsam; Japanese Knotweed; Rhododendron)</p> <p>All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc.)</p> <p>Natural watercourses or mapped drains < 10 m</p> <p>Natural watercourses or mapped drains < 6 m</p> <p>Freshwater Pearl Mussel Catchment and Natural watercourses or mapped drains < 20 m</p> <p>Peatland Scorecard</p> <p>Annex Quality Peatlands and Heathlands</p> <p>Annex Quality Grasslands</p>	Restrictions on length of bunds and suitability of drains, not intended for natural or naturalised watercourses, see Supporting Actions specifications for detail.

Supporting Action	Action not permitted where there is the following restriction	Notes
	Other Peatland Habitats Turloughs Mineral Flushes	
Earth Bund	Archaeological Monument < 10 m Zone of Notification Archaeological complexes and field systems High Cover of Positive Indicators Medium cover of Positive Indicators Presence of non-native invasive species (Giant Hogweed; Gunnera; Himalayan Balsam; Japanese Knotweed; Rhododendron) All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc.) Areas used by Geese and Migratory Swans Any Peatland Habitat Breeding Wader Field Breeding Wader Hotspot 1 km ² Curlew sites < 500 m corncrake sites < 500 m Cutover Bog Peatland Scorecard Annex Quality Peatlands and Heathlands Annex Quality Grasslands Other Peatland Habitats Mature Woodland Natural watercourses or mapped drains < 10 m Natural watercourses or mapped drains < 6 m	

Supporting Action	Action not permitted where there is the following restriction	Notes
	<p>Freshwater Pearl Mussel Catchment and Natural watercourses or mapped drains < 20 m</p> <p>Turloughs</p> <p>Mineral Flushes</p>	
Sediment Trap	<p>Archaeological Monument < 10 m Zone of Notification</p> <p>Archaeological complexes and field systems</p> <p>High Cover of Positive Indicators</p> <p>Medium cover of Positive Indicators</p> <p>Presence of non-native invasive species (Giant Hogweed; Gunnera; Himalayan Balsam; Japanese Knotweed; Rhododendron)</p> <p>All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc.)</p> <p>Arterial Drainage Channels < 10 m</p> <p>Natural watercourses or mapped drains < 10 m</p> <p>Natural watercourses or mapped drains < 50 m</p> <p>Slope > 20deg</p> <p>Freshwater Pearl Mussel Catchment and Natural watercourses or drains <20 m Turloughs</p> <p>Area of Action > 1 Ha and in Hen Harrier Red Zone or NATURA Site</p> <p>Any Peatland Habitat</p> <p>Annex Quality Peatlands and Heathlands</p> <p>Annex Quality Grasslands</p>	

Supporting Action	Action not permitted where there is the following restriction	Notes
	Other Peatland Habitats Turloughs Mineral Flushes	
Hedgerow Establishment- with earth bund	Archaeological Monument < 10 m Zone of Notification Archaeological complexes and field systems High Cover of Positive Indicators Medium cover of Positive Indicators Presence of non-native invasive species (Giant Hogweed; Gunnera; Himalayan Balsam; Japanese Knotweed; Rhododendron) All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc.) Areas used by Geese and Migratory Swans Any Peatland Habitat Breeding Wader Field Breeding Wader Hotspot 1 km ² Curlew sites < 500 m corncrake sites < 500 m Cutover Bog Any Peatland Habitat Annex Quality Peatlands and Heathlands Annex Quality Grasslands Other Peatland Habitats Mature Woodland Natural watercourses or mapped drains < 10 m	

Supporting Action	Action not permitted where there is the following restriction	Notes
	Natural watercourses or mapped drains < 6 m Freshwater Pearl Mussel Catchment and Natural watercourses or mapped drains < 20 m Turloughs Mineral Flushes	
Hedgerow Establishment – without earth bund	Archaeological Monument < 10 m Zone of Notification Archaeological complexes and field systems High Cover of Positive Indicators Medium cover of Positive Indicators Presence of non-native invasive species (Giant Hogweed; Gunnera; Himalayan Balsam; Japanese Knotweed; Rhododendron) All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc.) Areas used by Geese and Migratory Swans Breeding Wader Field Breeding Wader Hotspot 1 km ² Curlew sites < 500 m corncrake sites < 500 m Annex Quality Peatlands and Heathlands Annex Quality Grasslands Mature Woodland Natural watercourses or mapped drains < 10 m Natural watercourses or mapped drains < 6 m Freshwater Pearl Mussel Catchment and Natural watercourses or mapped drains < 20 m	

Supporting Action	Action not permitted where there is the following restriction	Notes
	Turloughs Mineral Flushes	
Grassland Buffer Cross-slope	High Cover of Positive Indicators Presence of Orchids Presence of non-native invasive species (Giant Hogweed; Gunnera; Himalayan Balsam; Japanese Knotweed; Rhododendron) All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc.) Arterial Drainage Channels < 10 m Natural watercourses or mapped drains < 10 m Natural watercourses or mapped drains < 6 m Peatland Scorecard Breeding Wader Field Curlew sites < 500 m corncrake sites < 500 m Forest < 200 m Annex Quality Peatlands and Heathlands Annex Quality Grasslands Turloughs Mineral Flushes	
Spatially Targeted Riparian Buffer 0.01-0.04ha	Archaeological Monument < 10 m Zone of Notification Archaeological complexes and field systems High Cover of Positive Indicators Presence of non-native invasive species (Giant Hogweed; Gunnera; Himalayan Balsam; Japanese Knotweed; Rhododendron)	

Supporting Action	Action not permitted where there is the following restriction	Notes
	<p>All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc.)</p> <p>Areas used by Geese and Migratory Swans</p> <p>Breeding Wader Field</p> <p>Breeding Wader Hotspot 1 km²</p> <p>Curlew sites <500 m corncrake sites < 500 m</p> <p>Hen Harrier Roost</p> <p>Annex Quality Peatlands and Heathlands</p> <p>Annex Quality Grasslands</p> <p>Other Peatland Habitats</p> <p>Turloughs</p> <p>Mineral Flushes</p>	
<p>Spatially Targeted Riparian Buffer 0.05-0.1ha</p>	<p>Archaeological Monument < 10 m Zone of Notification</p> <p>Archaeological complexes and field systems</p> <p>High Cover of Positive Indicators</p> <p>Presence of non- native invasive species (Giant Hogweed; Gunnera; Himalayan Balsam; Japanese Knotweed; Rhododendron)</p> <p>All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc.)</p> <p>Areas used by Geese and Migratory Swans</p> <p>Breeding Wader Field</p> <p>Breeding Wader Hotspot 1 km²</p> <p>Curlew sites < 500 m corncrake sites < 500 m</p> <p>Hen Harrier Roost</p> <p>Annex Quality Peatlands and Heathlands</p> <p>Annex Quality Grasslands</p>	

Supporting Action	Action not permitted where there is the following restriction	Notes
	<ul style="list-style-type: none"> Other Peatland Habitats Turloughs Mineral Flushes 	
Spatially Targeted Riparian buffer 0.11 to 0.2ha	<ul style="list-style-type: none"> Archaeological Monument < 10 m Zone of Notification Archaeological complexes and field systems High Cover of Positive Indicators Presence of non- native invasive species (Giant Hogweed; Gunnera; Himalayan Balsam; Japanese Knotweed; Rhododendron) All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc.) Areas used by Geese and Migratory Swans Breeding Wader Field Breeding Wader Hotspot 1 km² Curlew sites < 500 m corncrake sites < 500 m Hen Harrier Roost Annex Quality Peatlands and Heathlands Annex Quality Grasslands Other Peatland Habitats Turloughs Mineral Flushes 	
Tree Planting	<ul style="list-style-type: none"> Archaeological Monument < 10 m Zone of Notification Archaeological complexes and field systems High Cover of Positive Indicators Medium cover of Positive Indicators Orchids 	

Supporting Action	Action not permitted where there is the following restriction	Notes
	Presence of non-native invasive species All excluded habitats Areas used by Geese and Migratory Swans Peatland Scorecard Breeding Wader Field Breeding Wader Hotspot 1 km ² Curlew Sites < 500 m Corncrake < 500 m Cutover Bog Hen Harrier Roost Annex Quality Peatlands and Heathlands Annex Quality Grasslands Other Peatland Habitats Turloughs Mineral Flushes	
Willow Beds	Archaeological Monument < 10 m Zone of Notification Archaeological complexes and field systems High Cover of Positive Indicators Orchids Presence of non-native invasive species (Giant Hogweed; Gunnera; Himalayan Balsam; Japanese Knotweed; Rhododendron) All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc.) Overhead wires < 20 m Areas used by Geese and Migratory Swans Breeding Wader Field Breeding Wader Hotspot 1 km ² Curlew Sites <500m corncrake sites <500 m	

Supporting Action	Action not permitted where there is the following restriction	Notes
	Annex Quality Peatlands and Heathlands Annex Quality Grasslands Other Peatland Habitats Turloughs Mineral Flushes	
Small Scale Wetland Pond	Archaeological Monument < 10 m Zone of Notification Archaeological complexes and field systems High Cover of Positive Indicators Medium cover of Positive Indicators Presence of non-native invasive species (Giant Hogweed; Gunnera; Himalayan Balsam; Japanese Knotweed; Rhododendron) All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc.) Arterial Drainage Channels < 10 m Natural watercourses or mapped drains < 10 m Natural watercourses or mapped drains < 50 m Slope > 10 deg. Slope > 20 deg. Freshwater Pearl Mussel Catchment and Natural watercourses or drains <20 m Turloughs Mineral Flushes Area of Action >1 Ha and in Hen Harrier Red Zone or NATURA Site Natural watercourses or mapped drains < 10 m Natural watercourses or mapped drains < 6 m Freshwater Pearl Mussel Catchment and Natural watercourses or mapped drains < 20 m	

Supporting Action	Action not permitted where there is the following restriction	Notes
	Peatland Scorecard Annex Quality Peatlands and Heathlands Annex Quality Grasslands Other Peatland Habitats Turloughs	
Culvert	Archaeological Monument < 10 m Zone of Notification Archaeological complexes and field systems Presence of non-native invasive species (Giant Hogweed; Gunnera; Himalayan Balsam; Japanese Knotweed; Rhododendron) All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc.) Arterial Drainage Channels < 10 m Natural watercourses or mapped drains < 10 m Natural watercourses or mapped drains < 50 m Slope > 10 deg. Slope > 20 deg. Freshwater Pearl Mussel Catchment and Natural watercourses or drains < 20 m Turloughs Mineral Flushes Area of Action >1 Ha and in Hen Harrier Red Zone or NATURA Site	

Supporting Action	Action not permitted where there is the following restriction	Notes
River, Stream Crossing/Bridge	Archaeological Monument < 10 m Zone of Notification Archaeological complexes and field systems Presence of non-native invasive species (Giant Hogweed; Gunnera; Himalayan Balsam; Japanese Knotweed; Rhododendron) All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc.) Arterial Drainage Channels < 10 m Natural watercourses or mapped drains < 10 m Natural watercourses or mapped drains < 50 m Slope > 10 deg. Slope > 20 deg. Freshwater Pearl Mussel Catchment and Natural watercourses or drains < 20 m Turloughs Mineral Flushes Area of Action >1 Ha and in Hen Harrier Red Zone or NATURA Site	
Solar Pump	Archaeological Monument < 10 m Presence of non-native invasive species (Giant Hogweed; Gunnera; Himalayan Balsam; Japanese Knotweed; Rhododendron) All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc.) Freshwater Pearl Mussel Catchment and Natural watercourses or mapped drains < 20 m	

Supporting Action	Action not permitted where there is the following restriction	Notes
	Turloughs Mineral Flushes	
Water Storage Tank	Archaeological Monument < 10 m Zone of Notification Archaeological complexes and field systems Presence of non-native invasive species (Giant Hogweed; Gunnera; Himalayan Balsam; Japanese Knotweed; Rhododendron) All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc.) Arterial Drainage Channels < 10 m Natural watercourses or mapped drains < 10 m Natural watercourses or mapped drains < 6 m Breeding Wader Field Curlew Sites < 500 m Mature Woodland Turloughs Mineral Flushes	
Pasture Pump	Archaeological Monument < 10 m Zone of Notification Archaeological complexes and field systems Presence of non-native invasive species (Giant Hogweed; Gunnera; Himalayan Balsam; Japanese Knotweed; Rhododendron) All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc.) Natural watercourses or mapped drains < 6 m Freshwater Pearl Mussel Catchment and Drain < 12 m Mature Woodland	

Supporting Action	Action not permitted where there is the following restriction	Notes
	<p>Turloughs Mineral Flushes</p>	
Water Trough	<p>Archaeological Monument < 10 m Zone of Notification Archaeological complexes and field systems Presence of non-native invasive species (Giant Hogweed; Gunnera; Himalayan Balsam; Japanese Knotweed; Rhododendron) All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc.) Natural watercourses or mapped drains < 6 m Freshwater Pearl Mussel Catchment and Drain < 12 m Mature Woodland Turloughs Mineral Flushes</p>	
Water supply piping and fittings	<p>Archaeological Monument < 10 m Zone of Notification Archaeological complexes and field systems Presence of non-native invasive species (Giant Hogweed; Gunnera; Himalayan Balsam; Japanese Knotweed; Rhododendron) All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc.) Natural watercourses or mapped drains < 6 m Freshwater Pearl Mussel Catchment and Drain < 12 m Mature Woodland</p>	

Supporting Action	Action not permitted where there is the following restriction	Notes
	Turloughs Mineral Flushes	
Non Native Invasive Species Management	<p>Application for any Non Native Invasive Species management will automatically fail the initial screening test, and further assessment will be required on a case by case basis, regardless of location.</p> <p>NATURA SITE < 500 m</p>	<p>1) On site description from farm advisor including pictures and locations of each invasive species present.</p> <p>2) If further details are required a site visit from the Waters of LIFE team will be conducted.</p> <p>3) An invasive species management plan will be completed by a suitably qualified contractor to ensure relevant site specific mitigation is in place. This invasive species management plan will meet the requirements of best practice guidelines outlined in:</p> <p>a) The Management of Invasive Alien Plant Species on National Roads - Technical Guidance - Transport Infrastructure Ireland, 2020;</p> <p>b) The Management of Invasive Alien Plant Species on National Roads – Standard, Transport Infrastructure Ireland, 2020;</p>

Supporting Action	Action not permitted where there is the following restriction	Notes
		<p>c) Managing Invasive Non-native Plants in or near Freshwater - Environment Agency, 2010;</p> <p>4) Any non-native invasive species management within 500 m of a designated Natura site will trigger further site specific Appropriate Assessment before work can be conducted.</p>
Conifer Removal	<p>Archaeological Monument < 10 m</p> <p>Presence of non-native invasive species (Giant Hogweed; Gunnera; Himalayan Balsam; Japanese Knotweed; Rhododendron)</p> <p>All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc.)</p> <p>Natural watercourses or mapped drains < 10 m</p> <p>Natural watercourses or mapped drains < 50 m</p> <p>Natural watercourses or mapped drains < 6 m</p> <p>Hen Harrier HLNA (Red Zones)</p> <p>Hen Harrier Roost</p> <p>Mature Woodland</p> <p>Turloughs</p> <p>Mineral Flushes</p> <p>Area of Action > 1 Ha and in Hen Harrier Red Zone or NATURA Site</p>	

Supporting Action	Action not permitted where there is the following restriction	Notes
Water Table Management on Peat soils	Archaeological Monument < 10 m Zone of Notification Archaeological complexes and field systems Presence of non-native invasive species (Giant Hogweed; Gunnera; Himalayan Balsam; Japanese Knotweed; Rhododendron) All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc. Annex Quality Peatlands and Heathlands Annex Quality Grasslands Arterial Drainage Channels < 10 m Natural watercourses or mapped drains < 10 m Natural watercourses or mapped drains < 50 m Freshwater Pearl Mussel Catchment and Natural watercourses or drains < 20 m Turloughs Mineral Flushes Area of Action > 1 Ha and in Hen Harrier Red Zone or NATURA Site	1. Action can only be undertaken on peat soils 2. On site assessment by Waters of LIFE team including an initial Hydrological Assessment protocol developed by DAFM funded FarmPEAT programme to ensure works will have intended impacts on water levels. 3. The result of the initial Hydrological Assessment may require further assessment if any impact on neighbouring land is expected. 4. If the further hydrological assessment shows potential for impact outside of the proposed site area, an Appropriate Assessment will be required.
Green Hay	High Cover of Positive Indicators Presence of Orchids Presence of non-native invasive species (Giant Hogweed; Gunnera; Himalayan Balsam; Japanese Knotweed; Rhododendron) All excluded habitats (Caves 20 m buffer; Intertidal areas; Juniper Scrub; Lakes and Ponds; Annex Quality Dunes; Mountain cliffs; Natural watercourses or mapped drains; Reedbeds; Saltmarshes etc.) Arterial Drainage Channels < 10 m	

Supporting Action	Action not permitted where there is the following restriction	Notes
	Natural watercourses or mapped drains < 10 m Natural watercourses or mapped drains < 6 m Peatland Scorecard Breeding Wader Field Curlew Sites < 500 m Forest < 200 m Annex Quality Peatlands and Heathlands Annex Quality Grasslands Turloughs Mineral Flushes	
Contractor Mobilisation Fee	Not applicable	Always paired with another Supporting Action which have appropriate rules matrix restrictions.
Bespoke Measures	Not applicable	Categorised after submission, will always fail on initial screening, and sent to project team for further assessment, including Appropriate Assessment if required.
Host Farmer Payment	Not applicable	No potential adverse impacts expected from this Supporting Action and no rules matrix restrictions required.

Table 10: Additional Rule Matrix Restrictions with mitigating conditions

IF 'TEST' is TRUE	AND ACTION IS	CONDITION
Presence of Wild Deer	Tree planting	Adequate Protection from Deer required
	Hedgerow Establishment- with earth bund	
	Hedgerow Establishment – without earth bund	
	Spatially Targeted Riparian Buffer 0.01-0.04ha	
	Spatially Targeted Riparian Buffer 0.05-0.1ha	
	Spatially Targeted Riparian buffer 0.11 to 0.2ha	
	Willow Beds	
Hen Harrier Roost	Water Table Management on Peat soils	Works only occur between April to August
Hen Harrier HLNA (Red Zones)	Permanent Single Strand Electric	Fencing can only be installed between Sept 1st and Feb 28th Works can only be carried out between Sept 1st and Feb 28th
	Sheep Fence	
	Sheep Fence Mountain Rate	
	Barb Wire Fence	
	Deer Fence	
	Gateway Measures	
	Waters Bars	
	Earth Bund	
	Sediment Trap	
	Vegetated Bunded Drain	
	Gateway Measures	

IF 'TEST' is TRUE	AND ACTION IS	CONDITION
	Waters Bars Hedgerow Establishment- with earth bund Water supply piping and fittings	
Breeding Wader Fields	Permanent Single Strand Electric Sheep Fence Sheep Fence Mountain Rate Barb Wire Fence Deer Fence Gateway Measures Tree Planting Willow Beds Small Scale Wetland Pond	Fencing can only be installed between Sept 1st and Feb 28th
Arterial Drainage Channel < 10m	Pasture Pump Water Trough	Water trough must be situated at least 6m from the drainage channel Pasture Pump must be situated at least 6m from the drainage channel
Natural watercourse < 10 m	Pasture Pump Water Trough	Water trough must be situated at least 6m from the watercourse Pasture Pump must be situated at least 6m from the watercourse
Freshwater Pearl Mussel Catchment and Natural Water Course <20m	Pasture Pump Water Trough	Water Trough must be situated at least 12m from the watercourse Pasture Pump must be situated at least 12m from the watercourse

IF 'TEST' is TRUE	AND ACTION IS	CONDITION
Other Peatland Habitats	Water bars	Limestone gravel or fill material is not permitted
	Earth Bund	
	Hedgerow Establishment- with earth bund	
	Gateway Measures	
Annex Quality Peatlands and Heathlands	Water bars	Limestone gravel or fill material is not permitted
	Earth Bund	
	Hedgerow Establishment- with earth bund	
	Gateway Measures	
Cutover Bog	Water bars	Limestone gravel or fill material is not permitted
	Earth Bund	
	Hedgerow Establishment- with earth bund	
	Gateway Measures	
Peatland Scorecard	Water bars	Limestone gravel or fill material is not permitted
	Earth Bund	
	Hedgerow Establishment- with earth bund	
	Gateway Measures	