Forestry, Ecology & Environment

# Kerry Slug Derogation Licence Application

Clearfell and Reforestation Project, FC:GP509
Gortfadda, Sneem, Co. Kerry.

Compiled by: Veon Ltd (Veon Ecology),
David M. McGillycuddy B.Sc. (Hons) in Wildlife Biology.

Completion Date: 8th December 2025

# Table of Contents

# List of Figures



# List of Tables



# List of Photographs



## Executive Summary

Veon Ecology carried out Kerry Slug (*Geomalacus maculosus*) surveys within the proposed project site at Gortfadda, Sneem, Co. Kerry, centred at Lat Lon coordinates 51.89186236, -9.81450472. The site comprises six plots, covering a total forested area of approximately 60.31 ha.

The survey aimed to establish whether Kerry Slug is present on the site and, if so, to assess its distribution and abundance. The results inform the assessment of potential ecological impacts of the proposed forestry operations and the development of appropriate mitigation measures.

This report supports an application for a derogation licence for disturbance to Kerry Slug (*Geomalacus maculosus*), as required under Regulation 54A(2)(a–e) of the European Communities (Birds and Natural Habitats) Regulations (as amended). Kerry Slug is protected under the Wildlife Act 1976 (as amended) and is listed on Annex II and IV of the EU Habitats Directive, with Annex IV providing protection against disturbance and habitat destruction.

# General

## Details of Author(s)


| | |
|---|---|
| **Name:** | David M. McGillycuddy |
| **Address:** | The Yard, Market Yard, Newcastle West, Co. Limerick |
| **Company Name:** | Veon Ltd (Veon Ecology) |
| **E-mail:** | [redacted] |


| | |
|---|---|
| **Relevant Qualifications/ Affiliations/ Experience:** | David M. McGillycuddy, B.Sc. (Hons) in Wildlife Biology, Munster Technological University (formerly IT Tralee), ACIEEM, AEnvCW.<br><br>David is an experienced ecologist with over eight years of professional experience. He has led and contributed to a wide range of ecological projects, producing comprehensive reports and assessments, including Preliminary Ecological Appraisals (PEAs), Biodiversity Management Plans (BMPs), Natura Impact Statements (NISs), Ecological Impact Assessments (EcIAs), Environmental Impact Assessments (EIAs), habitat mapping, and related studies.<br><br>He has expertise in a broad range of survey methods and techniques, with a proven track record in surveying and safeguarding protected species, including terrestrial mammals, birds, and bats. He also has experience assessing invasive alien species (IAS), river management, botanical surveys, and evaluating water quality through physicochemical and Q-sampling surveys. David applies his skills to design and implement effective, site-specific mitigation measures for the protection of ecological receptors. |
| **Scope of Contribution in Preparing This Report:** | Desktop survey, potential habitat survey, Kerry Slug survey, impact assessment, and finalising the report. |

## Quality Assurance

| Veon Ltd (Veon Ecology) | | | | | | |
|---|---|---|---|---|---|---|
| Revision | Description | Author: | Date | Reviewed By: | Date | Doc Ref No. |
| 1.0 | Draft Report | David McGillycuddy | 28/11/2025 | Donnachadh Powell | 28/11/2025 | 16989 |
| 2.0 | Final Report | David McGillycuddy | 08/12/2025 | Amy Haigh | 08/12/2025 | 16989 |

# Section 1: INTRODUCTION

This Supporting Information has been prepared using the template for derogation licence applications (Part E: Template for Supporting Information). It provides detailed evidence submitted by the applicant to support the application and ensures that the assessment can be undertaken in a robust and comprehensive manner. Presenting the information in this structured format enables National Parks and Wildlife Service (NPWS) officials to readily access the relevant evidence and assess whether compliance with the specific, stringent tests is met.

The preparation of this information follows guidance provided by the NPWS and the European Commission. It addresses the potential impacts of the proposed forestry operations on Kerry Slug (*Geomalacus maculosus*) and outlines the mitigation measures proposed to ensure the species' maintenance at a favourable conservation status.

The cumulative tests that the NPWS will apply before a derogation may be granted are as follows:

- **Test 1**: The derogation is required for one or more of the specific reasons set down in Regulation 54(2) (a)-(e).
- **Test 2**: There must be no satisfactory alternative.
- **Test 3**: The derogation is not detrimental to the maintenance of the populations of the species concerned at a favourable conservation status in their natural range.

## 1.1 Objective of the Proposed Works

The objective of the proposed works is to carry out forestry operations, including Clearfell, Forest Road Construction, and Reforestation, within the designated Plots 1-5 at Gortfadda, Sneem, Co. Kerry. These operations are required to manage the existing conifer and mixed forest stands effectively while ensuring that potential impacts on Kerry Slug are appropriately mitigated through translocation and habitat management. The derogation licence is required to implement mitigation measures involving the translocation of Kerry Slug, carried out immediately in advance of the forestry operations, to ensure the species is safeguarded.

## 1.2 Qualifications & Relevant Experience

The baseline surveys and preparation of this application were led by David M. McGillycuddy, B.Sc. (Hons) in Wildlife Biology, ACIEEM, AEnvCW, an experienced ecologist with over eight years of professional experience in ecological assessments, habitat surveys, and species protection. This derogation licence is being applied for on behalf of the applicant by David M. McGillycuddy (Veon Ltd, Project Ecologist). Previous Kerry Slug licences held include Licence No. C18/2024 and Licence No. DER-KERRY-SLUG-2024-38.

Site visits were carried out in 2024, during which Kerry Slug records were collected via hand searching and live refuge trapping using metric traps[1]. David has extensive experience surveying protected species, including Kerry Slug, and implementing species-specific mitigation measures and habitat management.

This derogation application relates solely to the translocation of Kerry Slugs from Plots 1-5. The activity is designed to ensure that forestry operations do not adversely affect the local population, and translocation will be carried out under licence following best-practice protocols to minimise mortality and disturbance.

All previous baseline surveys that may have caused disturbance to Kerry Slug were completed under Licence No. C18/2024 and Licence No. DER-KERRY-SLUG-2024-38. No trainees were involved, and all work was conducted by qualified personnel in accordance with licence conditions.

[1] Metric traps are a type of refuge trap. Each trap (0.25 m²) consists of an absorbent material covered with a reflective upper surface and black plastic on the underside. The traps are wetted before being laid out.

## 1.3 Background

The site of the proposed forestry operations is located at Gortfadda, Sneem, Co. Kerry. The project area is centred at approximately Lat/Lon: 51.89186236, -9.81450472. The location of the proposed project site is presented in **Figure 1.1**. The site comprises six forest plots with a total forested area of approximately 60.31 ha. The land is privately owned and managed by the applicant in accordance with current forestry management plans and applicable environmental regulations.

The surrounding landscape comprises a mixture of coniferous forestry, agricultural grasslands, wet heath with rocky outcrops, and cutover bog. Site elevation ranges from c. 75 m to 228 m, with moderately steep slopes falling to the east. The forest stands are underlain by a mix of peaty podzols over lithosols, peats, surface and groundwater gleys, with areas of deep peaty gley and mineral alluvium also present.

The proposed forestry activities include:

- Clear-felling of designated conifer and mixed forest stands.
- Construction of a forest road to maintain access for management and timber extraction.
- Reforestation of harvested areas with appropriate species in line with sustainable forestry practice.

These operations are required to manage the existing forest stands in line with sustainable forest management principles, maintain stand condition and long-term resilience, and support long-term productivity. All works will be carried out in accordance with established forestry management guidelines while mitigating potential impacts on protected species, including the Kerry Slug.

A Harvest Plan has been submitted to correspond with TFL01066824, which applies for clear-felling licence approval for 43.87 ha of Sitka Spruce (*Picea sitchensis*) and Japanese Larch (*Larix kaempferi*). Harvesting is scheduled to occur in 2026, 2028, and 2031. Harvesting machinery will consist of a harvester and a low-ground pressure forwarder with a fourteen-tonne bunk capacity.

The site is managed under current forestry planning frameworks and complies with all relevant environmental regulations, including:

- European Communities (Birds and Natural Habitats) Regulations 2011, as amended
- Wildlife Act 1976, as amended
- EU Habitats Directive (92/43/EEC) and Birds Directive (2009/147/EC)
- Water Framework Directive (2000/60/EC)
- Relevant forestry guidance, including the Forestry Standards Manual (2024) and the suite of mandatory environmental guidelines published by the Department relating to Water Quality, Archaeology, Landscape, Biodiversity, Harvesting, Aerial Fertilisation, Forest Protection, Freshwater Pearl Mussel (*Margaritifera margaritifera*), Otter (*Lutra lutra*), and Kerry Slug (*Geomalacus maculosus*). Adherence to the measures described in these publications is a condition of all grant schemes.

There are No. 13 Natura 2000 sites within 15 km of the project site, comprising No. 11 Special Areas of Conservation (SAC) and two Special Protection Areas (SPA). The nearest designated European site is the Blackwater River (Kerry) SAC (002173), which overlaps the entire project site, while the furthest relevant European site is the Killarney National Park SPA (004038), located c. 14.1 km east of the project site. In addition, the project site is hydrologically connected to Kenmare River SAC (002158), approximately 8.9 km downstream.

The site is located on land zoned as “Other Rural Areas” and within a “Visually Sensitive Area” under the Kerry County Development Plan (CDP) 2022-2028. All works undertaken will comply with the provisions of the CDP, relevant forestry guidelines, and environmental protection requirements.

A new harvesting road is proposed to connect with the existing road entering the forest property from the local tertiary road L-11675, to facilitate future harvesting operations within the site. The current forest entrance is located on a relatively straight section of the public road. All works will be completed to specification. Pavement base material will comply with the COFORD *Forest Road Manual - Guidelines for the Design, Construction and Management of Forest Roads*, using either an on-site borrow pit or suitable locally sourced stone. Robust mitigation measures will be implemented to prevent damage to on-site resources or any resources downstream.

All proposed operations will be carried out in full adherence with Forest Service/Department of Agriculture, Food and the Marine (DAFM) guidelines, including:

- Forestry Standards Manual (DAFM, 2024)
- Forest Harvesting and the Environment Guidelines (DAFM, 2000)
- Standards for Felling and Reforestation (DAFM, 2019)

Felling maps and the Harvesting Management Plan are provided in **Appendix 1** and **4**. All reforestation operations will follow best practice as outlined in *Standards for Felling and Reforestation* (DAFM, 2019).

Kerry Slug was detected at low density within the conifer plantation habitat, which forms the bulk of the habitat available in the study area. Removal of habitat which could potentially support slug populations cannot be avoided. As recorded slug populations are widely scattered throughout the site on individual Sitka Spruce trees that will be directly affected by the proposed project, it is considered prudent to adopt a worst-case scenario approach and treat the entire conifer plantation habitat to be affected as potentially suitable for Kerry Slug. Taking this worst-case scenario, the total area of potential slug habitat to be impacted under the project footprint is c. 46.36 ha.

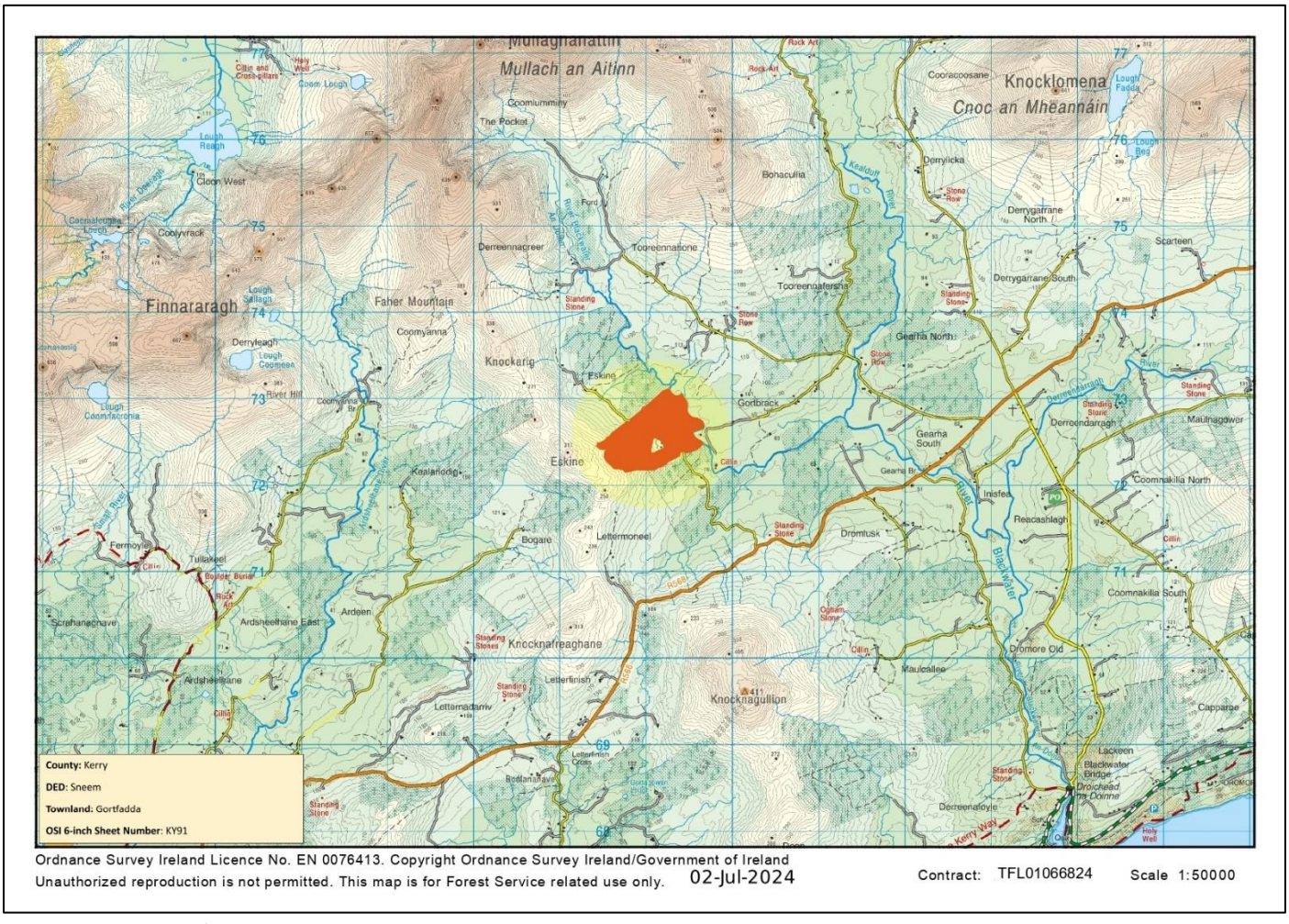



*Figure 1.1: Project site location map.*

# Section 2: ACTIVITIES TO BE COVERED UNDER DEROGATION

The derogation licence will cover translocation works undertaken during the proposed forestry operations within the subject site, in accordance with the mitigation measures set out in the TFL application documents, including the Natura Impact Statement (NIS), Harvest/Reforesting Plan, Invasive Alien Plant Species (IAPS) Management Plan, and the Kerry Slug Survey and Habitat Assessment (as completed for TFL01066824 & CN95471) to mitigate potential impacts on Kerry Slugs. Relevant mapping is provided in **Appendix 1**, with the Harvest Plan included in **Appendix 4**.

## 2.1 Kerry Slug Specific Mitigation Measures

During the proposed forestry operations, the operational footprint will be kept to a minimum to avoid direct loss of Kerry Slug habitat.

In accordance with the *Forestry and Kerry Slug Guidelines* (2009)[2], the application for a derogation licence includes Kerry Slug survey results and mitigation measures to minimise impacts on the species, with local NPWS conservation rangers consulted to advise on appropriate measures.

The derogation licence will allow the named licence holder (an appropriately experienced ecologist) to carry out the capture and translocation of Kerry Slugs, as well as the removal of suitable conifer plantation habitat through the proposed forestry operations. Translocation efforts will commence at least six weeks prior to any works on site, including any enabling works.

Translocation will be employed to avoid and minimise impacts on Kerry Slugs, with slugs within the operational footprint translocated to Plot 6, identified as suitable habitat to maintain local populations. Plot 6 will remain outside the operational footprint and will not be subject to forestry operations, ensuring the translocated population is protected.

**Mitigation Measures Prior to Operations:**

- Areas of suitable Kerry Slug habitat (i.e., exposed siliceous rock outcrop in association with wet heath) outside the operational footprint will be avoided.
- Subject to the provisions of a derogation licence, pre-commencement checks will be undertaken in each 0.75 ha section in advance of works to locate Kerry Slugs.
- Checks will comprise a programme of metric trapping followed by hand searching, conducted under the supervision of a qualified/licenced project ecologist.
- Metric traps will be installed approximately six weeks prior to commencement of works, progressing in tandem with forestry operations.
- Hand searches will be undertaken in addition to trapping, under suitable weather conditions when Kerry Slugs are most active, such as damp, humid, overcast conditions, during or after rain, or at dawn, dusk, or night during mild weather.
- Kerry Slugs identified during checks will be translocated to Plot 6, or to other suitable habitat nearby, subject to NPWS approval under the derogation licence. The receptor site (Plot 6) includes a mixture of exposed rock and moss-covered trees and will not be affected by the proposed forestry operations.
- Slugs collected from forestry areas will be relocated to forested habitat, and slugs from grassland will be relocated to grassland within Plot 6.
- Progressing checks alongside the works ensures minimal time lag between identification and translocation, reducing the risk of Kerry Slugs moving into areas scheduled for works or disturbance.
- Once captured, slugs will be placed in clean, secure containers with sufficient ventilation. Gloves will be worn when handling slugs. Bryophytes from the capture location will also be placed in the container, if present, to

[2] Forest Service (2009). *Forestry and Kerry Slug Guidelines*. Department of Agriculture, Food and the Marine, Dublin. Available at: https://www.gov.ie.

provide food, moisture, and shelter. If no bryophyte cover is present, an alternative food source, such as carrot slices, along with local vegetation, will be provided. In dry conditions, deionised water may be added to increase moisture in the container.

- Captured slugs will be translocated to similar habitat; for example, slugs captured under moss on exposed rock will be relocated to a receptor site with exposed rock, while slugs from moss-covered trees will be relocated to moss-covered trees. In all cases, slugs will be placed under cover (e.g., moss or other vegetation) at the receptor site to reduce predation or desiccation. Slugs will be relocated to the receptor site as soon as possible, ideally on the same day as capture.
- Final checks will be completed no more than 24 hours prior to tree-felling operations. Areas will only be entered once translocation checks are complete and the licence holder confirms it is safe to proceed.
- A full record of all translocations, including numbers captured, photographs of Kerry Slugs, and capture and receptor coordinates, will be kept and made available to NPWS on request.
- The contractor undertaking forestry operations will ensure no machinery is used outside the operational footprint, preventing accidental harm to slugs in uninspected or non-translocated areas.

**Mitigation Measures During Forestry Operations:**

- The footprint of the proposed forestry operations will be kept to the minimum necessary to complete the works.
- Machinery will be confined to designated access roads and the operational footprint.
- The operational footprint will be clearly marked to prevent inadvertent encroachment into uninspected suitable Kerry Slug habitat.
- Ongoing checks and monitoring of suitable habitat within the works area will continue throughout operations, particularly during wet periods when slugs are most active.
- Where felling is required, tree stumps will be retained where possible, and turves, boulders, and exposed rock will be stored and reinstated to maintain suitable habitat.
- Should Kerry Slugs be encountered during operations, they will be translocated to Plot 6 by the appointed qualified/licenced ecologist.
- A selective, phased harvesting plan will maintain some tree cover, reduce immediate habitat disruption, and staggered replanting will minimise the size of future felling coupes.
- Scattered trees and boulders containing lichen will be retained, and tree stumps will be left to decay naturally, providing further habitat for Kerry Slugs.
- Buffer zones of approximately 10 m will be maintained around known Kerry Slug locations and breeding sites.
- Areas of suitable habitat outside the operational footprint will be avoided.
- Forestry operations will be scheduled for periods when Kerry Slugs are less active to reduce disturbance.

**Additional Habitat Protection Measures:**

- Areas of suitable habitat outside the operational footprint will be avoided to minimise disturbance.
- The clearfell and reforestation plan will be implemented to avoid or reduce impacts on identified Kerry Slug habitats.
- No machinery or stockpiling will occur within identified refugia or sensitive microhabitats.
- Tree stumps within clear-felled areas provide suitable habitat to support Kerry Slugs and will be left in situ where possible.
- The replacement of closed canopy mature forestry with open areas comprising a mixture of tree stumps, surface boulders, and existing exposed rock will provide long-term suitable habitat for Kerry Slugs in these areas.
- Monitoring of Kerry Slugs in areas adjacent to the operational footprint will be undertaken to assess the impact of operations and ensure populations remain stable post-works.

The Kerry Slug checks will follow the methodology outlined in McDonnell & Gormally (2011), consisting of hand searches and the deployment of metric refuge traps manufactured by De Sangosse (Pont du Casse, France). Checks will be undertaken during suitable weather conditions wherever possible. In accordance with NRA (2009) guidelines, Kerry Slug checks can be carried out throughout the year. Night-time checks are recommended during damp or humid conditions, although daylight checks can also be undertaken on cloudy, damp days. Additionally, nearby trees will be examined when collecting refuge traps.

### 2.1.1 Hand Searches

Hand searches will be carried out during suitable weather conditions (damp and mild) across the site. Within the site and conifer plantation plots, hand searches will include inspecting under carpets of epiphytic bryophytes, examining lichens and mosses on tree trunks, checking bark (to a maximum height of approximately 2 m), stumps, and rocks, as well as examining the areas between these features (Reich *et al.*, 2012).

Fixed-route transects will be walked throughout the site. At approximately 20 m intervals along each transect, hand searches will be conducted. Each 0.75 ha section will be checked for approximately 45 minutes prior to the commencement of works. Kerry Slugs located within the works footprint will be carefully collected and translocated to suitable habitat within Plot 6.

### 2.1.2 Metric Traps

Synthetic mats (0.25 $m^2$), designed to attract Kerry Slugs, will be deployed at the inspection sites. These mats are double-sided LDPE polymer, with one side perforated to absorb heat and the other side coated with aluminium to reflect heat. The lining of the mats is composed of synthetic wool.

Following grant of the NPWS licence, metric traps will be placed in potentially suitable Kerry Slug habitats within the site. The mats will be baited with carrots, soaked in water, and positioned throughout the proposed works area. Mats will be pegged to ground surfaces, secured onto trees, or fixed to boulders. Kerry Slugs, if present, are expected to crawl under these mats, attracted by heat and moisture.

Following deployment, the mats will be checked regularly from April to October inclusive. During each visit, mats will be examined for evidence of Kerry Slugs, bait will be replenished, and mats will be re-moistened as necessary. Kerry Slugs located within the works footprint will be carefully collected and translocated to suitable habitat within Plot 6.

### 2.1.3 Translocation

Prior to undertaking works in areas of suitable habitat, translocation of Kerry Slugs to suitable habitat within Plot 6 will be carried out to avoid and minimise any direct negative impact on the species. Translocation will follow the methodology set out below:

- In advance of any works, areas of exposed rock and suitable trees within and adjacent to the forestry operations footprint will be inspected by a suitably qualified and licenced ecologist for the presence of Kerry Slugs.
- Search, trapping, and translocation will only be carried out during wet or humid weather conditions.
- The identification of suitable receiving habitat is critical. Slugs found under moss on exposed rock will be relocated to a receptor site with exposed rock, while slugs from moss-covered trees will be relocated to moss-covered trees. In all cases, slugs will be placed under cover (e.g., moss or other vegetation) at the receptor site to reduce predation or desiccation. Slugs will be relocated to the receptor site as soon as possible, ideally on the same day as capture.

# Section 3: ECOLOGICAL SURVEY & SITE ASSESSMENT

## 3.1 Pre-existing Information on Species at Location & Environs

- The project area lies within Hectad V77.
- The Blackwater River (Kerry) SAC (002173), designated for the conservation of Kerry Slug, overlaps the proposed works area.
- Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC (000365), also designated for Kerry Slug, is located c. 1.4 km north of the proposed works area.
- Records from the National Biodiversity Data Centre (NBDC), accessed 1st December 2025 indicate No. 18 Kerry Slug records within Hectad V77, the most recent from 2021.

## 3.2 Status of the Species in the Local/Regional Area

- Kerry Slug populations in the area are protected under the Wildlife Act 1976 (as amended) and are listed on Annex II and IV of the EU Habitats Directive, with Annex IV providing protection against disturbance and habitat loss.
- The overall conservation status of the species has been reported as favourable, and it is not currently considered threatened within its Irish range (NPWS, 2019).
- The Kerry Slug, listed as a Qualifying Interest (QI) of the Blackwater River (Kerry) SAC, occurs within the site where suitable habitat is present. A Conservation Objective (CO) for Blackwater River (Kerry) SAC is to maintain the favourable conservation condition of Kerry Slug, reflecting its conservation significance at local, regional, and international scales.
- Based on desk studies, historical records, and site-specific baseline assessments, Kerry Slugs are confirmed to be present in suitable microhabitats within the forestry operations footprint, although in low numbers.

## 3.3 Objectives of the Survey

The objectives of the Kerry Slug surveys, undertaken in 2024 under the appropriate NPWS licence, were to:

- Determine the presence, distribution, and abundance of Kerry Slugs within the proposed forestry operations footprint.
- Identify key microhabitats supporting the species.
- Provide baseline data to inform mitigation measures, including translocation and habitat management.

## 3.4 Description of Survey Area

- The survey area included the conifer plantation (Fossitt habitat code: WD4) and adjoining wet heathland along the local road.
- The conifer plantation comprises mainly mature stands of Sitka spruce with limited exposed rock, boulders, and variable bryophyte and lichen cover.
- Heathland areas contain exposed rocky outcrops and boulders with moss and lichen cover.

## 3.5 Survey Methodology

**Hand Searches:**

- Conducted during damp and mild weather conditions.
- Searches targeted bryophyte carpets, lichens on tree trunks, bark (up to 2 m height), stumps, rocks, and spaces between these features.
- Fixed route transects were walked throughout the site (Figure 3.2). At approximately 20 m intervals, hand searches were carried out, recording numbers of individuals within c. 5 m of the transect. Each plot (1–6) was searched for approximately 45 minutes.

**Metric Traps:**

- Synthetic mats (0.25 m², De Sangosse, France) were deployed at No. 15 sites throughout the survey area (**Figure 3.2**).
- Mats were baited with carrots, soaked in water, and pegged to ground surfaces, secured to trees or boulders using string and pegs.
- Mats were checked fortnightly from February to March 2024; bait was replenished and mats re-moistened as necessary.

**Survey Maps, Timing, & Equipment:**

- Surveys covered all forestry plots (1-6) and adjacent heathland areas (**Figures 3.1** and **3.2**).
- Baseline surveys were carried out on 15th and 19th December 2023, and throughout 2024.
- Equipment included metric refuge mats, pegs, gloves, and a smartphone for recording GPS coordinates and taking photographs.

**Best Practice & Appropriateness:**

- Methodology followed McDonnell & Gormally (2011) and NRA (2009) guidelines.
- The combination of hand searches and metric traps represents current best practice for detecting Kerry Slug presence.

**Limitations/Uncertainties:**

- The species is microhabitat-specific; uneven distribution may have resulted in under-detection.
- Weather conditions may have affected slug activity during surveys.

## 3.6 Survey Results

- A total of No. 36 Kerry Slugs were recorded in 2024 (**Table 3.1**).
- Approximately 66% were recorded under metric traps; c. 33% via hand searches.
- Most records were from trees within the conifer plantation; some were from exposed rocks and boulders in adjacent heathland (**Figure 3.3**).
- All forestry plots except Plot 5 supported Kerry Slug recordings.
- Distribution is widespread but uneven and generally low, reflecting the species' microhabitat specificity.
- Photographs of the habitats and Kerry Slug observations are provided in **Appendix 2**.

*Table 3.1: Kerry slug records during 2024 surveys.*

| Kerry Slug Records | | | |
|---|---|---|---|
| Date | Feature | Number of Individuals | Latitude/Longitude |
| 16/02/2024 | Boulder/Rocky outcrops adjoining local road | 2 | 51.89241100, -9.81866330 |
| 16/02/2024 | Boulder/Rocky outcrops adjoining local road | 1 | 51.89278222, -9.81918618 |
| 28/02/2024 | Slug Mat No. 2 | 1 | 51.89094000, -9.80997535 |
| 28/02/2024 | Slug Mat No. 5 | 1 | 51.89259993, -9.81166939 |
| 28/02/2024 | Slug Mat No. 6 | 1 | 51.89226531, -9.81307911 |

| Kerry Slug Records | | | |
|---|---|---|---|
| Date | Feature | Number of Individuals | Latitude/Longitude |
| 28/02/2024 | Slug Mat No. 11 | 3 | 51.89046661, -9.81852507 |
| 28/02/2024 | Boulder/Rocky outcrops adjoining local road | 1 | 51.89241100, -9.81866330 |
| 28/02/2024 | Boulder/Rocky outcrops adjoining local road | 2 | 51.89278222, -9.81918618 |
| 15/03/2024 | Slug Mat No. 2 | 1 | 51.89094000, -9.80997535 |
| 15/03/2024 | Slug Mat No. 11 | 1 | 51.89046661, -9.81852507 |
| 15/03/2024 | Slug Mat No. 14 | 4 | 51.89373411, -9.81608750 |
| 15/03/2024 | Individual Sitka Spruce | 4 | 51.89385489, -9.81584900 |
| 15/03/2024 | Boulder/Rocky outcrops adjoining local road | 1 | 51.89241100, -9.81866330 |
| 29/03/2024 | Slug Mat No. 2 | 1 | 51.89094000, -9.80997535 |
| 29/03/2024 | Slug Mat No. 3 | 1 | 51.89389881, -9.80981750 |
| 29/03/2024 | Slug Mat No. 5 | 1 | 51.89259993, -9.81166939 |
| 29/03/2024 | Slug Mat No. 6 | 3 | 51.89226531, -9.81307911 |
| 29/03/2024 | Slug Mat No. 11 | 3 | 51.89046661, -9.81852507 |
| 29/03/2024 | Slug Mat No. 14 | 3 | 51.89373411, -9.81608750 |
| 29/03/2024 | Individual Sitka Spruce | 1 | 51.89261541, -9.81848097 |

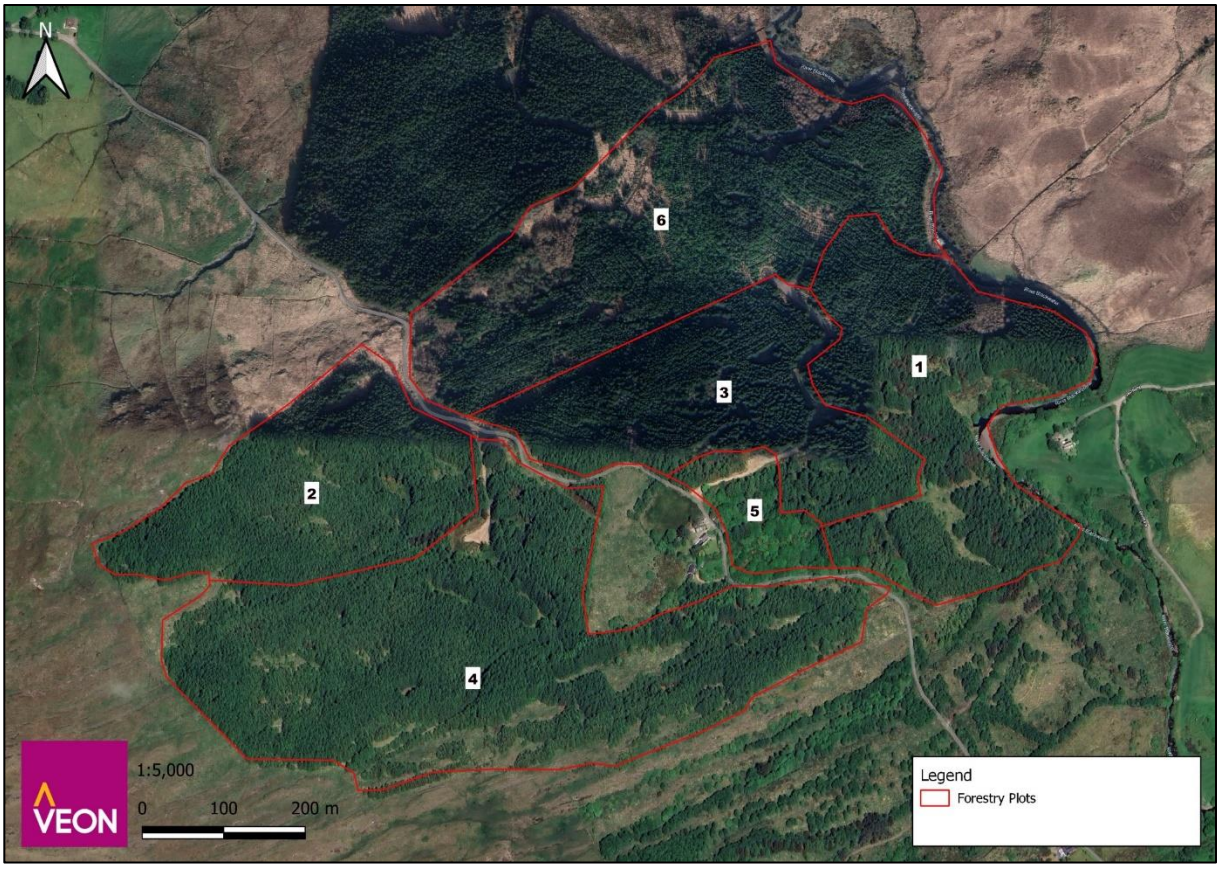



*Figure 3.1: Forestry plots map.*

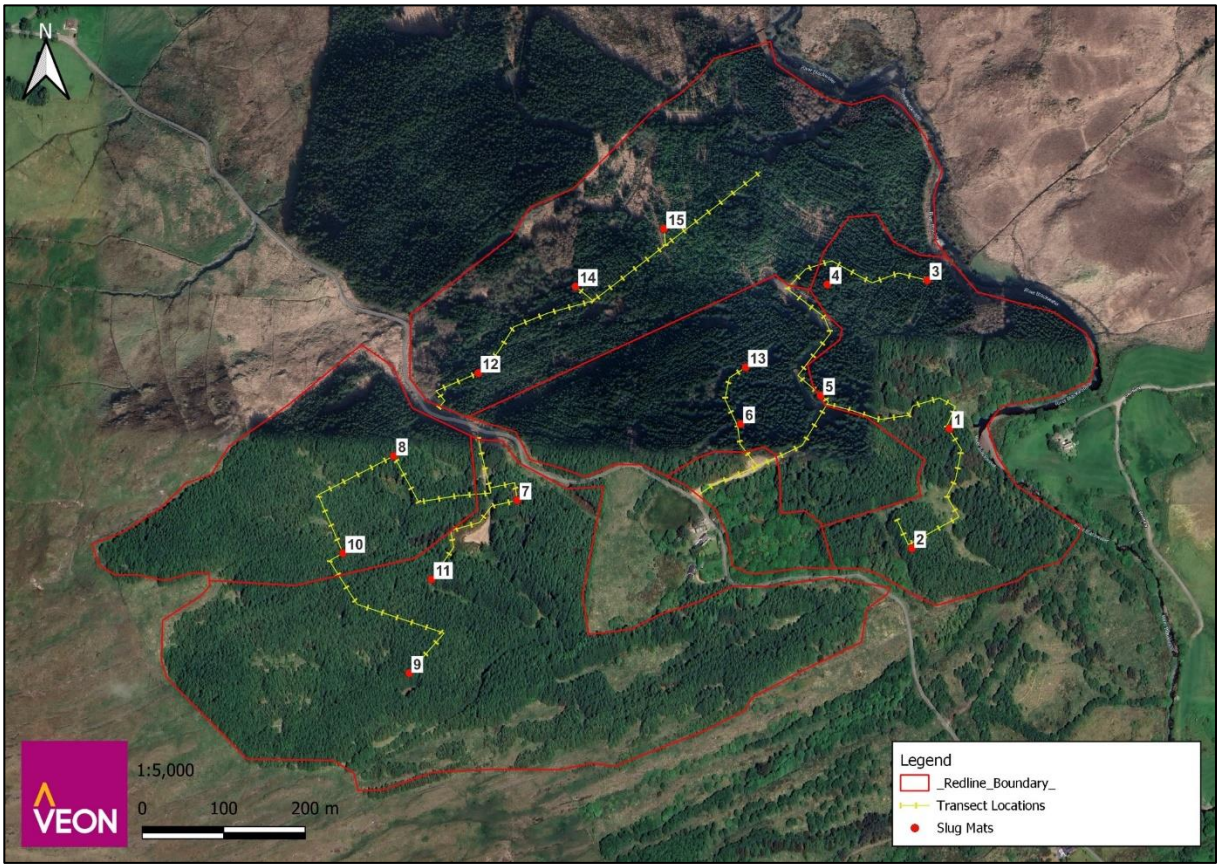



*Figure 3.2: Transect and slug mat locations.*

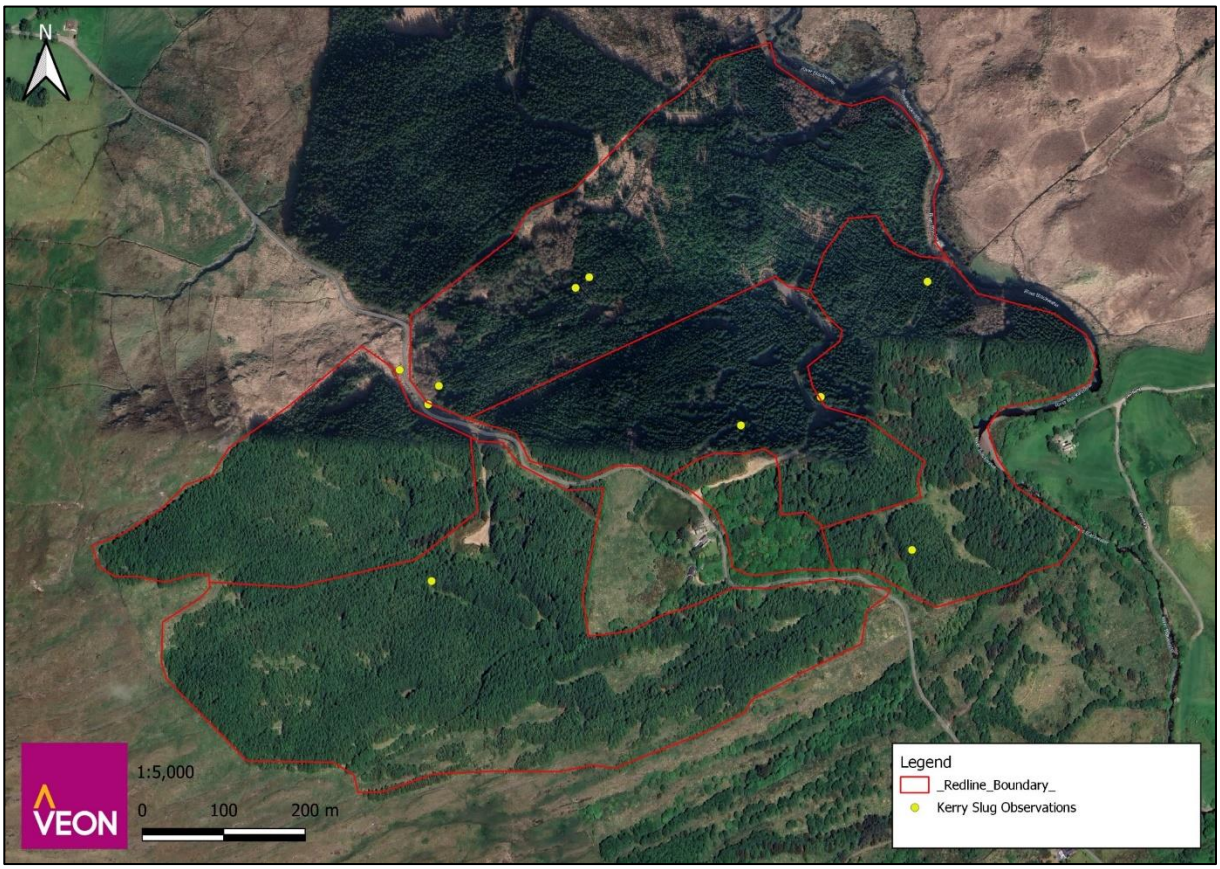



*Figure 3.3: Kerry slug observation locations.*

## 3.7 Population Size Class Assessment

- The population within the site is small and fragmented, as indicated by low numbers per trap and per tree or boulder.
- Distribution suggests a localised, microhabitat-dependent population, typical of Kerry Slug.
- The population likely persists at low density within the conifer plantation and adjacent heathland habitats, consistent with historic regional records.
- While a larger Kerry Slug population is presumed to occur in the surrounding landscape, suitable habitat is present both within and adjacent to the subject site.
- Mitigation measures, including avoidance of key habitat features and adjustments to the works footprint and Harvest Plan, were implemented to reduce potential impacts on the population.
- In the absence of these measures, habitat loss, degradation, and mortality due to machinery movements in areas of suitable habitat could have resulted in a Potential Short-Term Slight Negative Impact on the Kerry Slug population.
- **Figure 3.4** illustrates the proposed Kerry Slug translocation area within Plot 6, identifying suitable habitats for potential mitigation and conservation management.

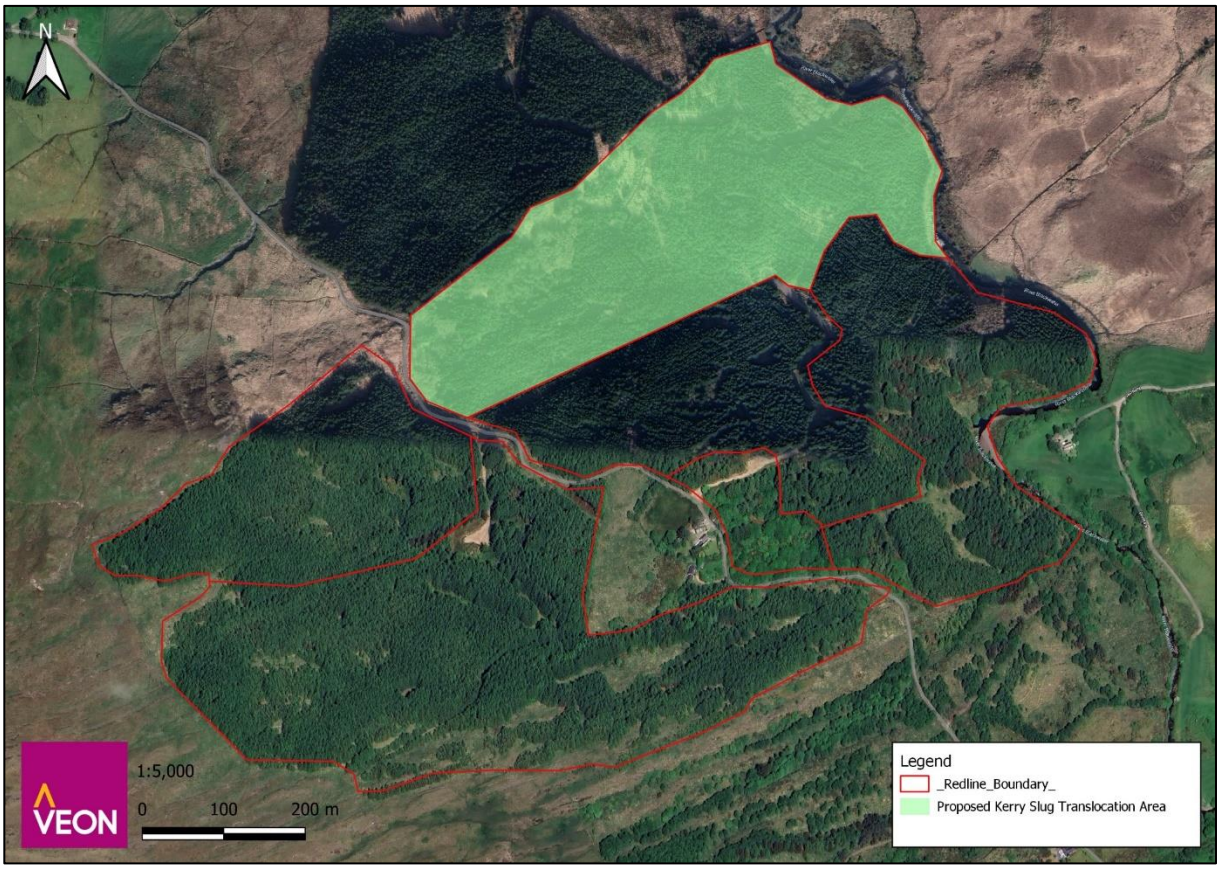



*Figure 3.4: Proposed kerry slug translocation area.*

# Section 4: EVIDENCE TO SUPPORT THE DEROGATION TESTS

The following guidance documents were consulted in advance of preparing this derogation application: the NPWS *Guidance on the Strict Protection of Certain Animal and Plant Species under the Habitats Directive in Ireland* (NPWS Guidance Series 1, 2021); the NPWS *Guidance on Applications for Regulation 54 Derogations for Annex IV Species* (NPWS, 2025); the European Commission *Notice: Guidance Document on the Strict Protection of Animal Species of Community Interest under the Habitats Directive 2021/C 496/01* (2021); and Mullen, E., Marnell, F. & Nelson, B. (2021) *Strict Protection of Animal Species: Guidance for Public authorities on the Application of Articles 12 and 16 of the EU Habitats Directive to development/works undertaken by or on behalf of a Public authority*.

Article 16 of the Habitats Directive sets out three preconditions, all of which must be met before a derogation from the requirements of Article 12 or Article 13 of the Directive can be granted. These preconditions are also reflected in Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), as amended. The preconditions are:

1. A reason(s) listed in Regulation 54 (a)-(e) applies;
2. No satisfactory alternatives exist;
3. The derogation would not be detrimental to the maintenance of a population(s) at a favourable conservation status.

It should be noted that precondition 1 must be met before preconditions 2 and 3 are considered. It is considered that all three preconditions have been met, as outlined below.

## 4.1 Test 1 – Reason for Derogation:

Test 1 involves identifying the reason(s) for carrying out the activity requiring derogation. Regulation 54(2)(a)-(e) states that a derogation licence may be granted for any of the reasons listed (a) to (e). In this case, the following reasons apply:

(a) In the interests of protecting wild fauna and flora and conserving natural habitats
(c) In the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment

Reason (a) may be chosen in circumstances where the applicant wishes to carry out an action that could lead to one or more of the prohibited activities taking place, in order to protect other wild flora and fauna and/or natural habitats. The EC Guidance (2021) states that:

*"Given the general objective of the Directive, vulnerable, rare, endangered or endemic species and natural habitats (for example, those listed in the annexes to the Habitats Directive) are more likely to be covered by this reason, which would effectively aim to reduce the negative impact of a given species on them. It would be unusual to prioritise the interests of a species that is common and thriving over the interests of a species that meets the criteria of Article 1(g) of the Directive." (Para 3-19).*

This reason is satisfied in this case. Kerry Slugs, protected under the Wildlife Act 1976 (as amended) and listed on Annex II and IV of the EU Habitats Directive, were confirmed on site during 2024 surveys. Forestry operations in Plots 1-5 will unavoidably disturb their habitat, and there is a risk of direct mortality from machinery during felling and forestry activities. A derogation is therefore required to enable the lawful search, handling, and translocation of individuals to Plot 6, which provides equivalent suitable habitat, shelter, moisture, and foraging resources. Plot 6 will have no forestry operations, ensuring the long-term protection of translocated individuals. These mitigation measures minimise the risk of mortality and ensure the ongoing conservation of the species within the study area.

Reason (c) may be chosen where the applicant wishes to carry out an action that could lead to one or more of the prohibited activities taking place, with the purpose of achieving the interests of public health and public safety, or for other imperative reasons of overriding public interest (IROPI). In this case, the active management of the forestry will achieve the following:

- Reduce the risk of windthrow, which can cause tree damage and endanger personnel and nearby property;
- Minimise the risk of forest fire, which could threaten both the environment and public safety;
- Prevent habitat degradation and unsafe conditions arising from unmanaged vegetation, litter accumulation, or infrastructure damage (e.g., ESB poles);
- Maintain sustainable forest operations that support timber production, rural employment, and climate and biodiversity targets.

When consideration of IROPI is required, the EC Guidance (2021) should be referred to during the preparation of applications, as it provides a useful interpretation on how this reason may be relied upon:

"Secondly, the 'overriding' nature of this public interest must be underlined. This implies that not every form of public interest of a social or economic nature is sufficient, in particular when set against the particular weight of the interests protected by the Directive. Careful balancing of interests is needed here. It is also reasonable to assume that in most cases, the public interest is likely to be overriding only if it is a long-term interest: short-term interests that only yield short-term benefits would not be sufficient to outweigh the long-term interest of species conservation." *(Para 3-32).*

Further guidance published by NatureScot[3] in Scotland on the same topic also offers advice in determining what might constitute "other imperative reasons of overriding public interest". In the context of this derogation application, the following examples are relevant:

- "where it is shown that there is a vital contribution to strategic economic development or regeneration;
- where failure to proceed would have unacceptable social and/or economic consequences".

The guidance from Scotland further states that when considering species licences under IROPI, it is relevant to consider whether an activity or development is required to meet, or contribute to meeting, a specific need, such as:

- "maintaining the health, safety, education or environment (sustainable development, renewable or green energy, green transport);
- complying with national planning policies;
- supporting economic or social development (nationally important infrastructure development projects, employment, regeneration, mineral extraction, housing etc.)".

The proposed forestry operations form part of authorised and sustainable forest management and provide multiple long-term benefits, including:

- Contribution to rural employment and local economic activity;
- Production of timber and renewable materials;
- Compliance with Ireland's Shared National Vision for Trees, Woods & Forests 2050 and Ireland's Forest Strategy 2023-2030;
- Support for national and EU climate and biodiversity objectives;
- Enhancement of habitat diversity, water protection, and overall environmental quality.

The derogation is required solely to permit the controlled translocation of Kerry Slugs. Impacts on the species are limited, temporary, and fully mitigated. The social, economic, environmental and public safety benefits of the forestry operations, including reducing the risk of forest fire and windthrow, under strict mitigation measures constitute overriding public interest, while ensuring the protection of the Kerry Slug. Therefore, Test 1 has been met.

[3] Guidance licensing - Test 1 - Licensable Purpose - Licence in relation to European Protected Species. Available at: https://www.nature.scot.

## 4.2 Test 2 – Absence of Alternative Solutions

Test 2 involves determining whether there is a satisfactory alternative to the derogation i.e. whether the problem the applicant faces, or the objective of the activity, can be achieved in a way that does not require a derogation. When granting derogations, it must be demonstrated to NPWS that no satisfactory alternative exists. Applicants should provide the necessary evidence, presenting a clear comparison of alternative solutions and explaining why they are not satisfactory.

The applicant should consider the full range of alternative solutions, taking account of the best available scientific and technical evidence, the specific circumstances of the site, and compliance with the prohibited activities set out in the Habitats Directive.

In keeping with the Commission's Guidance, if a derogation is shown to be the only satisfactory solution, it must be limited strictly to what is necessary to address the specific problem or situation, and no further.

The EC Guidance (2021) states (Para 3-61):

*"In addition, the solution finally selected, even if it involves a derogation, must be objectively limited to the extent necessary to resolve the specific problem or situation. This means that derogations must be limited in time, place, numbers of specimens involved, specific specimens involved, persons authorised, etc."*

In this case, the following alternatives were considered:

1. Do-nothing alternative
If the forestry operations were to proceed without any translocation of Kerry Slugs, individuals present in Plots 1–5 would be exposed to habitat disturbance and the risk of direct mortality from machinery during felling and forestry activities. This approach would have a negative impact on the local Kerry Slug population and would not comply with mitigation requirements for species under strict protection.

2. No Management of the Forest
Leaving the forest completely unmanaged (i.e., no harvesting or operational activities in Plots 1–5) to avoid impacting Kerry Slugs was also considered but is unsatisfactory. This approach would prevent the associated habitat disturbance but would compromise the achievement of public safety and environmental objectives, including reducing the risk of windthrow and forest fire, preventing habitat degradation, maintaining infrastructure safety (e.g., ESB poles), and supporting sustainable forest management, timber production, and rural employment. It would also hinder Ireland's compliance with national forest strategy objectives and climate and biodiversity commitments.

3. Controlled translocation (proposed approach)
The selected approach involves the lawful search, handling, and translocation of Kerry Slugs from Plots 1-5 to Plot 6 and adjacent suitable heath and grassland mosaics, which provide equivalent habitat, shelter, moisture, and foraging resources. Plot 6 will have no forestry operations, ensuring the long-term protection of translocated individuals. This approach minimises the risk of mortality, fully mitigates potential impacts on the local population, and allows forestry operations to continue in a sustainable manner.

A comparison of these alternatives demonstrates that controlled translocation is the only satisfactory solution. It reduces the negative impacts on the Kerry Slug population while enabling the forestry operations to achieve their environmental, economic, and public safety objectives. This approach complies with NPWS guidance by balancing the conservation needs of the species with the broader objectives of sustainable forest management.

As per the reasoning provided above, the condition in Test 2 has been met.

## 4.3 Test 3 – Impact of a Derogation on Conservation Status

This final test involves determining whether granting a derogation would be detrimental to the maintenance of populations of the species in question at a favourable conservation status within their natural range (Regulation 54(2)). The rationale behind this test is that strictly protected species must be maintained at such a status, or restored to favourable status if this is not the case at present.

The net effect of granting a derogation on the species' conservation status must be, at worst, neutral or, at best, positive for the species concerned. If a derogation is likely to have a significant negative effect on the population, its future prospects, or at the national or biogeographical level, then a derogation cannot be granted.

In this case, the licence application for searching for and translocating Kerry Slugs is intended to ensure that any individuals within the works area are carefully located, handled, and moved to Plot 6. Although suitable habitat for Kerry Slugs will be lost due to the felling operations, habitat enhancement measures will be implemented in accordance with the NIS and Harvest Plan. The appointed forester will also assess the site for additional habitats and features that can be retained to enhance local biodiversity, such as standing or fallen deadwood, boulders, or old broadleaf trees with cavities, loose bark, or ivy cover.

Before any machinery is brought onto the site, the forester will deliver a 'toolbox talk' and walk the entire felling footprint with the harvesting contractors to highlight sensitive habitats and key features for Kerry Slugs. Appropriate safety signage will be erected, and contractors will be supervised to ensure all mitigation measures are fully implemented. Tree stumps, individual scattered trees, and boulders will be retained in situ to provide suitable habitat and refuge for Kerry Slugs.

The habitats within Plot 6 provide equivalent shelter, moisture, and foraging resources, and will not be subject to forestry operations, ensuring the long-term protection of translocated individuals. This measure mitigates potential negative impacts on the local Kerry Slug population during forestry operations and supports the maintenance of the species at a favourable conservation status.

The site is located within the core distribution range of the Kerry Slug in Ireland (Reich *et al*., 2012) and forms part of a wider landscape that contains extensive suitable habitat for the species. While tree felling in Plots 1-5 will directly affect some individual Kerry Slugs, the habitat loss is limited to the works footprint and will not result in a significant impact on the species at a population level. Suitable habitat in the surrounding landscape remains available.

Evidence from previous Kerry Slug and other invertebrate translocation programmes demonstrates that careful search and relocation, when combined with appropriate habitat management, can maintain local populations (O'Hanlon *et al*., 2017; DER-KERRY-SLUG-2018-88).

The NIS submitted with applications TFL01066824 and CN95471 confirms that all forestry operations will comply with environmental regulations and NPWS licence conditions. Controlled translocation and ongoing monitoring will ensure that the derogation does not compromise the maintenance of Kerry Slug populations at a favourable conservation status within their natural range.

The controlled translocation, together with the continued sustainable management of forestry and adjacent habitats, ensures that Kerry Slugs remain at a favourable conservation status while allowing sustainable forestry operations to proceed safely and effectively.

As per the reasoning provided above, the condition in Test 3 has been met.

# Section 5: MONITORING THE IMPACTS OF THE DEROGATIONS

Monitoring of Kerry Slugs in areas within and adjacent to the operational footprint will be undertaken to assess the impact of forestry operations and ensure that local populations remain stable post-works. Pre-works searches in Plots 1–5 will be conducted to locate Kerry Slugs within the work area, ensuring all individuals can be safely translocated to Plot 6 and adjacent suitable heath and grassland mosaics. Searches will follow McDonnell & Gormally (2011), using both hand searching and metric refuge trapping. Searches will be undertaken by qualified ecologists under licence.

Following translocation, the receptor habitat in Plot 6 and adjacent areas will be checked to confirm that slugs have established and are utilising suitable shelter, moisture, and foraging resources. Periodic checks will be carried out during and after forestry operations to verify survival and habitat use; these will be simple inspections rather than formal long-term surveys. Any Kerry Slugs encountered during operations will be recorded and handled in accordance with licence requirements, and translocated to similar suitable habitat within Plot 6. Tree stumps, scattered trees, boulders, and other microhabitats will be retained wherever possible to provide additional refuge.

A full record of all translocations, including the number of Kerry Slugs captured, photographs of individuals, and capture and receptor coordinates, will be maintained and made available to NPWS on request. Areas of exposed rock or other microhabitats identified for enhancement along or adjacent to the works footprint will be monitored, with photographs taken annually until replanting operations are completed, and results incorporated into post-works monitoring. If monitoring indicates any issues, corrective measures such as habitat enhancement or additional translocations will be implemented as required.

Reports will be submitted to NPWS, including a completion report after the works summarising translocation activity, and follow-up reports summarising observations, habitat condition, and any corrective actions taken. A Returns Form and a derogation report will be completed and submitted to the Wildlife Licensing Unit of NPWS, detailing the results of monitoring, search and translocation activities, and any mitigation measures employed to address unforeseen circumstances.

This monitoring and reporting programme ensures that the derogation is implemented correctly, provides scientifically-based evidence on its effectiveness, and supports the objective of maintaining Kerry Slugs at favourable conservation status while allowing sustainable forestry operations to proceed safely.

# Section 6: BIBLIOGRAPHY


CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.3. Chartered Institute of Ecology and Environmental Management, Winchester.

Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora Directive 2009/147/EC on the Conservation of Wild Birds.

Department of Agriculture, Forestry and the Marine (2019) Standards for Felling and Reforestation.

EPA Maps (n.d.). Available Online at: https://gis.epa.ie/EPAMaps.

European Communities (Birds and Natural Habitats) (Amendment) Regulations (2015). S.I. No. 355/2015.

European Communities (Birds and Natural Habitats) Regulations (2011). S.I. No. 477/2011.

European Union Habitats Directive (1992). Council Directives 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.

Fossitt, J.A. (2000). A Guide to Habitats in Ireland. The Heritage Council.

Kearney, J., (2010). Kerry Slug (*Geomalacus maculosus* Allman, 1843) recorded at Lettercraffroe, Co. Galway. *Irish Naturalist's Journal* 31: 68-69.

McDonnell, R. and Gormally, M. (2011a). Distribution and Population Dynamics of the Kerry Slug, *Geomalacus maculosus* (*Arionidae*), Irish Wildlife Manuals No. 54, National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin

McDonnell, R.J. and Gormally, M.J., (2011b) A live trapping method for the protected European Slug, *Geomalacus maculosus* Allman, 1843 (Arionidae). *Journal of Conchology*, 40 (4): 483-485

Moorkens, E. A. & Killeen, I. J. (2009). Database of association with habitat and environmental variables for non-shelled slugs and bivalves of Britain and Ireland. *Irish Wildlife Manuals*, No. 41. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin, Ireland.

NBDC (2025). National Biodiversity Data Centre - Biodiversity Maps https://maps.biodiversityireland.ie/Map.

NPWS (2008a) Conservation Status Assessment Report for *Geomalacus maculosus*. National Parks and Wildlife Service, Dublin.

NPWS (2008b) Species Action Plan - Kerry Slug *Geomalacus maculosus*. National Parks and Wildlife Service, Dublin

NPWS (2010) Threat Response Plan Kerry Slug Geomalacus Maculosus. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin.

NPWS (2019). The Status of EU Protected Habitats and Species in Ireland. Volume 1: Summary Overview. Unpublished NPWS report.

NPWS (2019a). The Status of EU Protected Habitats and Species in Ireland. Volume 1: Summary Overview. Unpublished NPWS report.

NPWS (2019b). The Status of EU Protected Habitats and Species in Ireland. Volume 2: Habitat Assessments. Unpublished NPWS report.

NPWS (2019c). The Status of EU Protected Habitats and Species in Ireland. Volume 3: Species Assessments. Unpublished NPWS report.

NRA (2009a). Guidelines for Assessment of Ecological Impacts of National Roads Schemes. National Roads Authority.

NRA (2009b). Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes. National Roads Authority.

Office of the Planning Regulator (OPR) (2021). Appropriate Assessment Screening for Development Management.

Platts, E. A. & Speight, N.C.D. (1988). The taxonomy and distribution of the Kerry Slug *Geomalacus maculosus* Allman, 1843 (Mollusca: arionidae) with a discussion of its status as a threatened species. *Irish Naturalist's Journal* 22: 417-460.

Reich, I., O'Meara, K., Mc Donnell, R.J. and Gormally, M.J. (2012). An assessment of the use of conifer plantations by the Kerry Slug (*Geomalacus maculosus*) with reference to the impact of forestry operations. Irish Wildlife Manuals, No. 64. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Ireland.

Smith, G.F., O'Donoghue, P., O'Hora, K and Delaney, E. (2011). Best Practice Guidance for Habitat Survey and Mapping. Heritage Council.

# Section 7: APPENDICES

## Appendix 1. MAPS & FIGURES

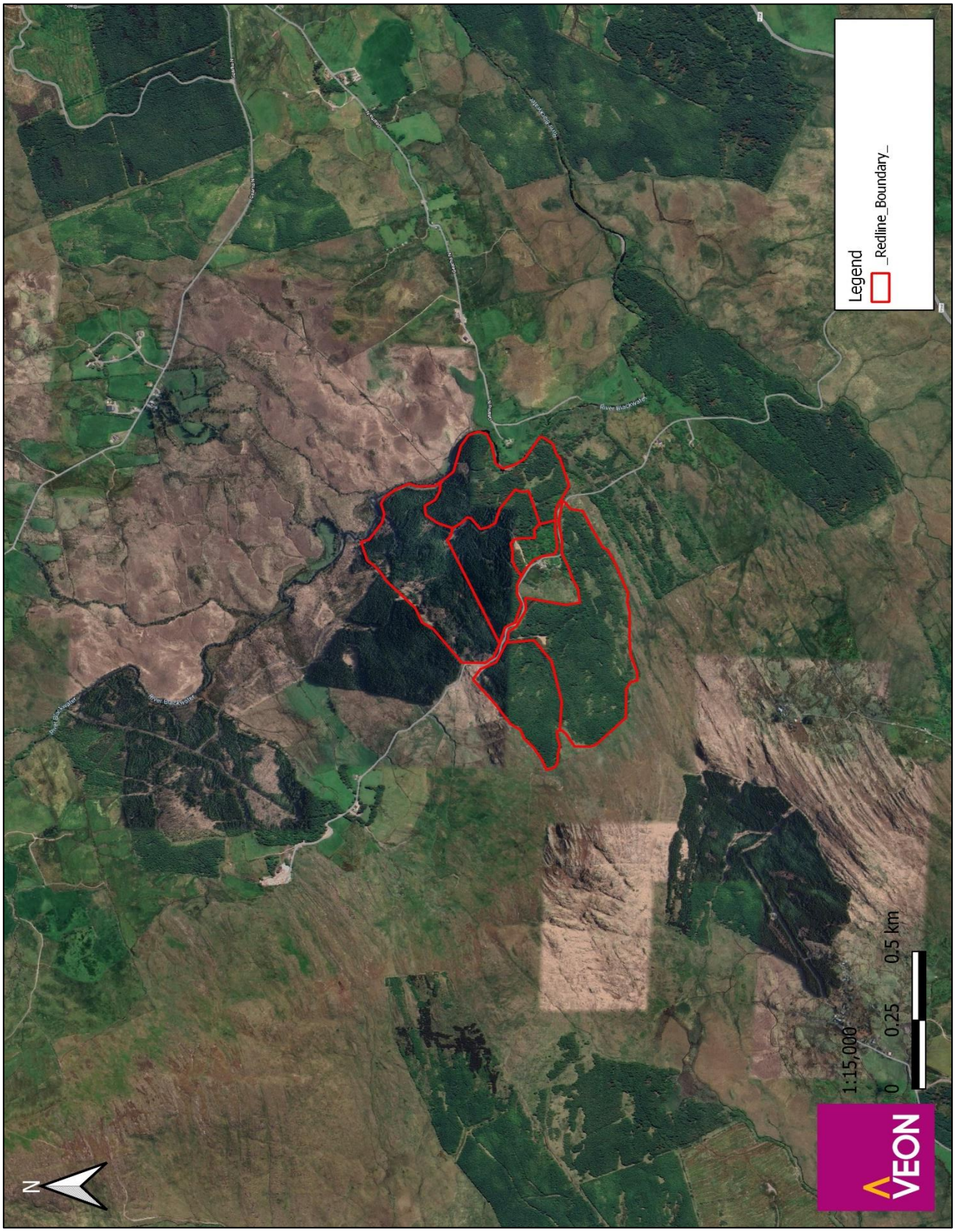



*Figure 7.1: Site location and redline boundary.*

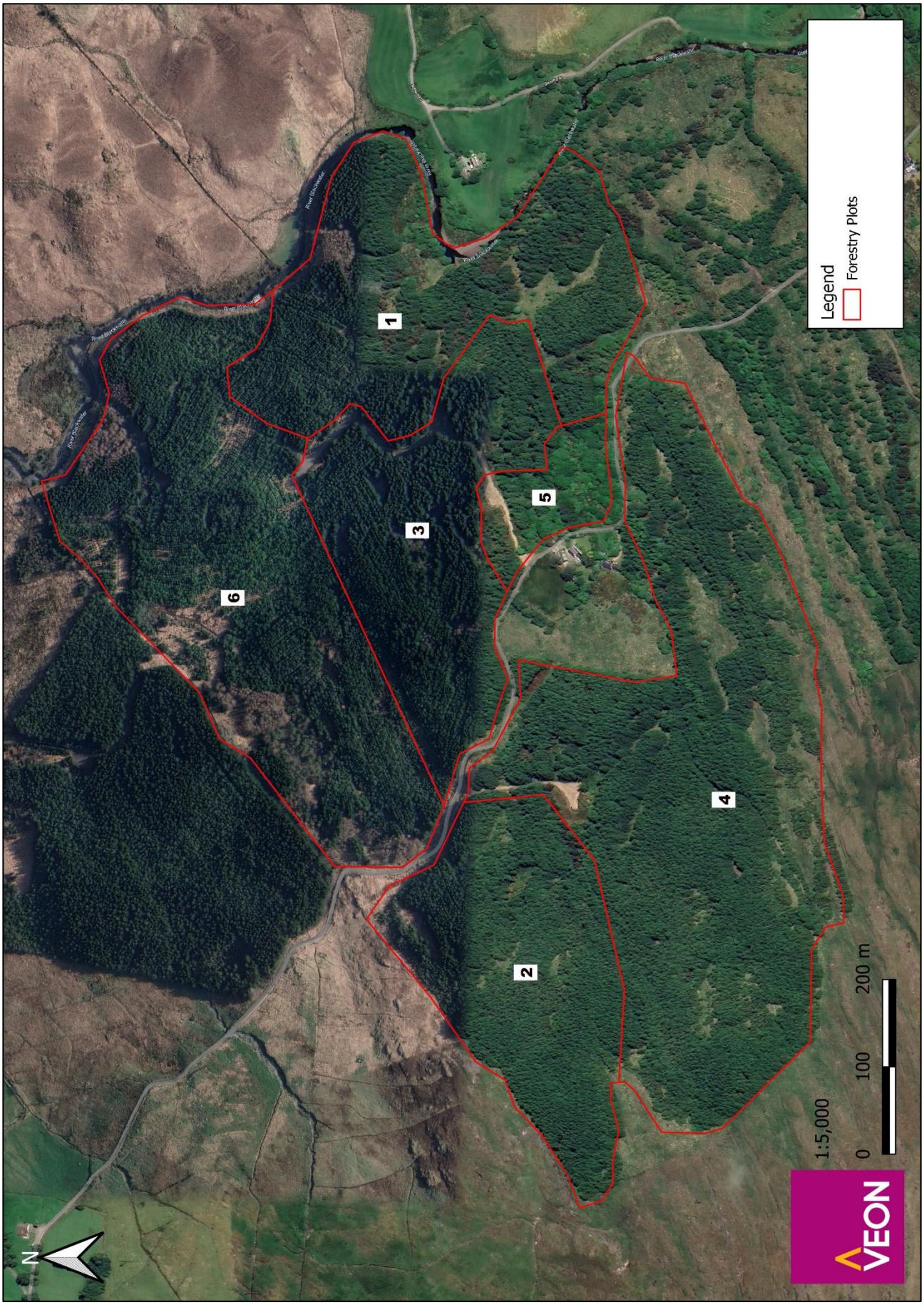



*Figure 7.2: Forestry plots map.*

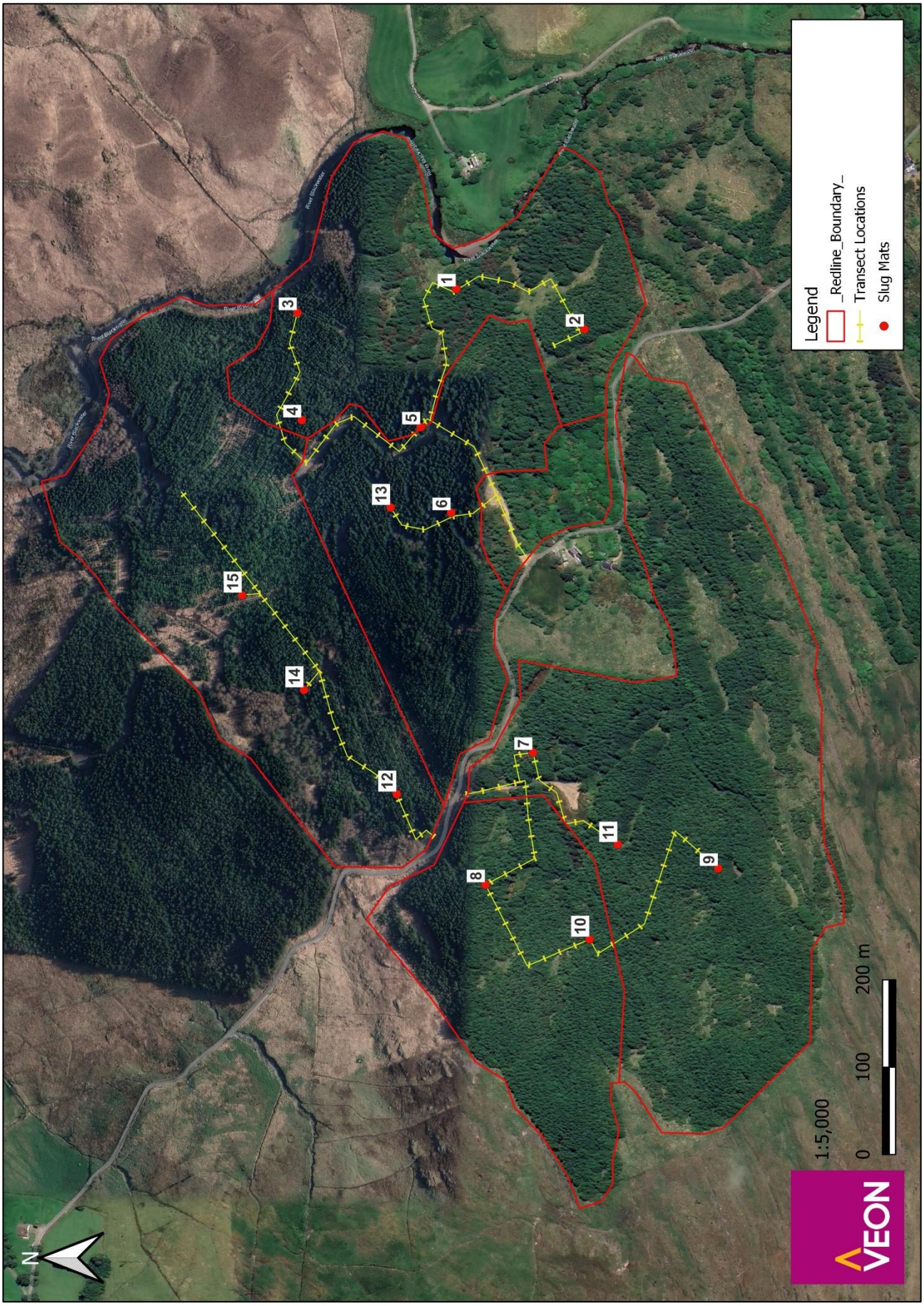



*Figure 7.3: Transect and slug mat locations.*

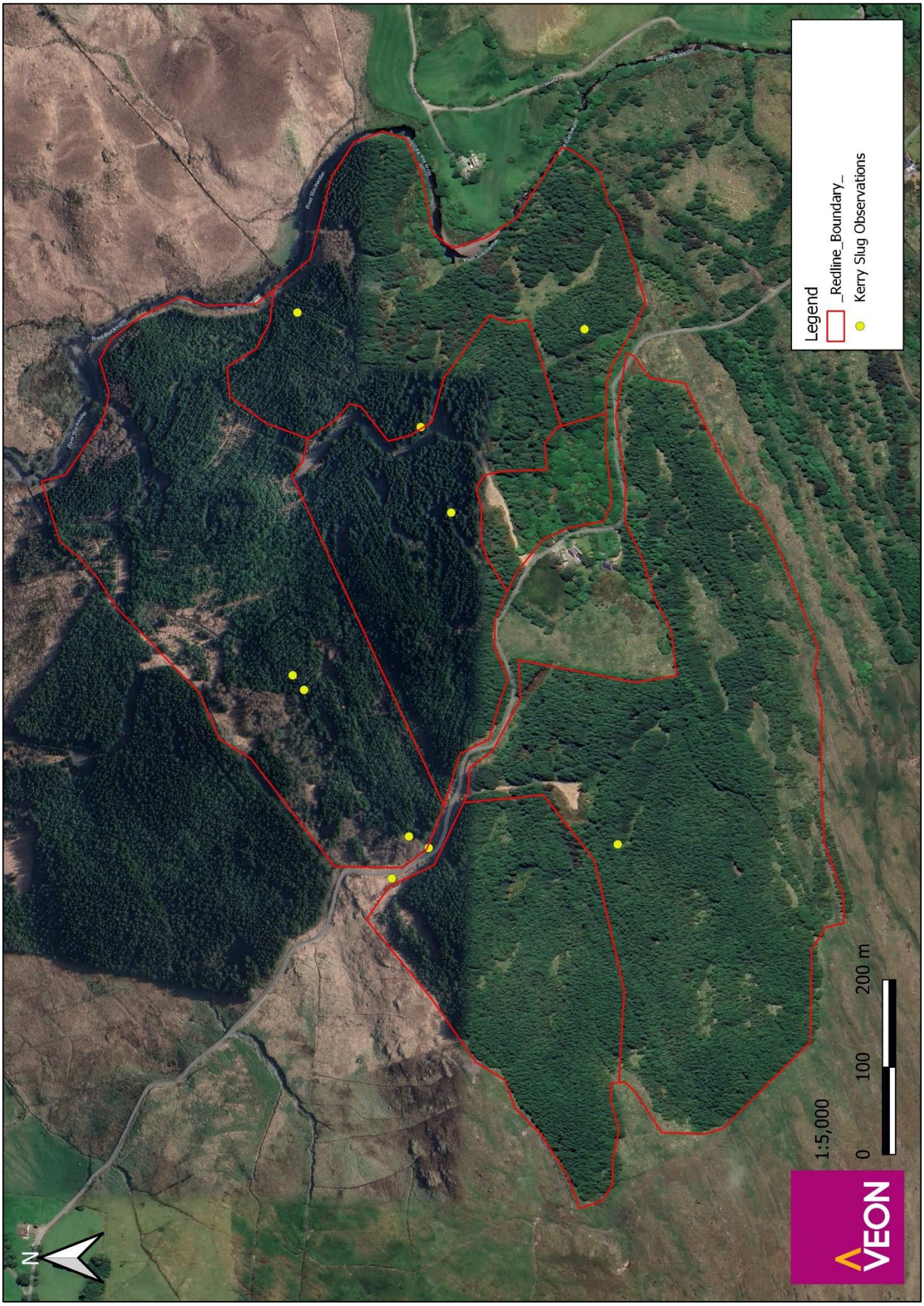



*Figure 7.4: Kerry slug observation locations.*

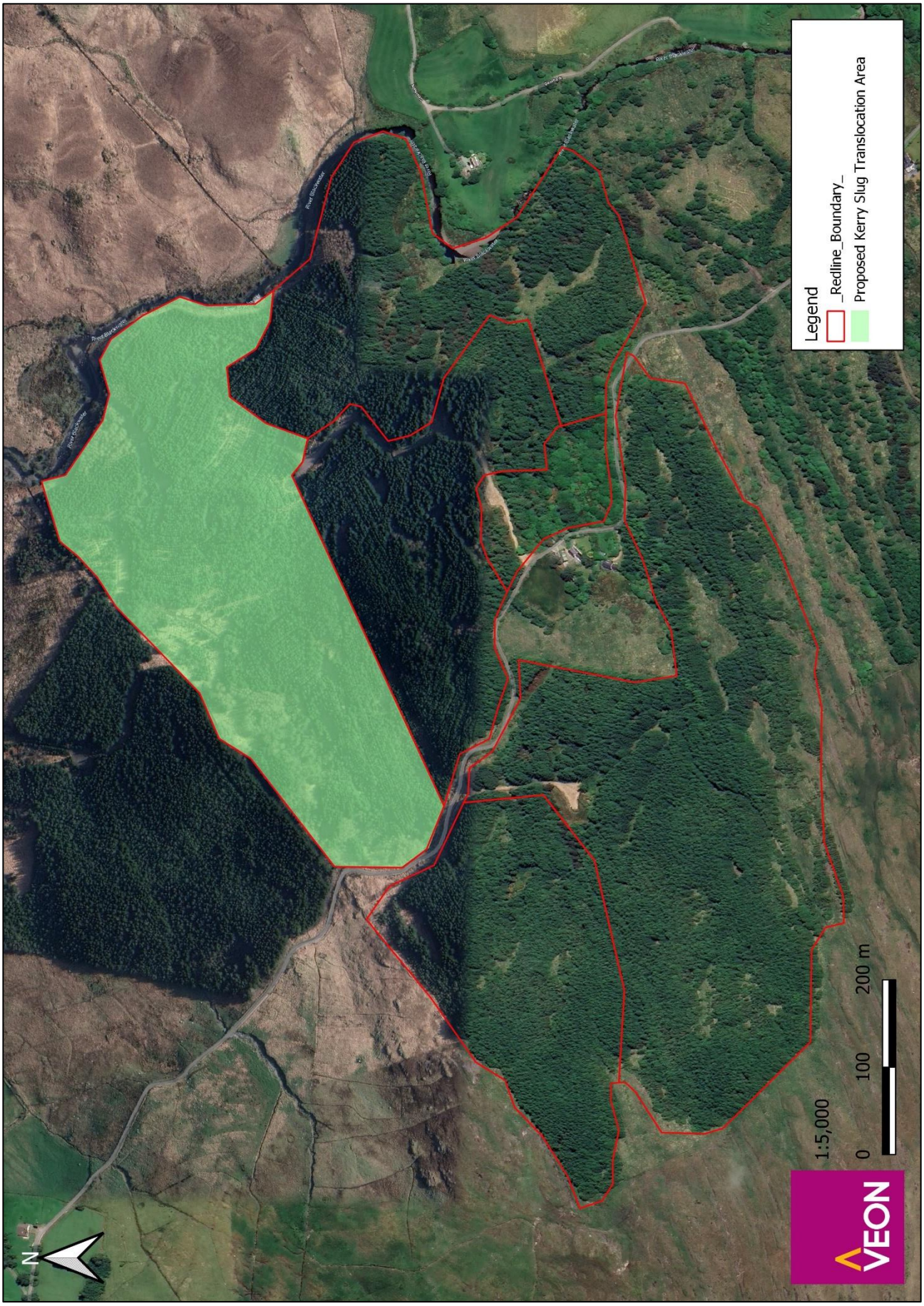



*Figure 7.5: Proposed kerry slug translocation area.*

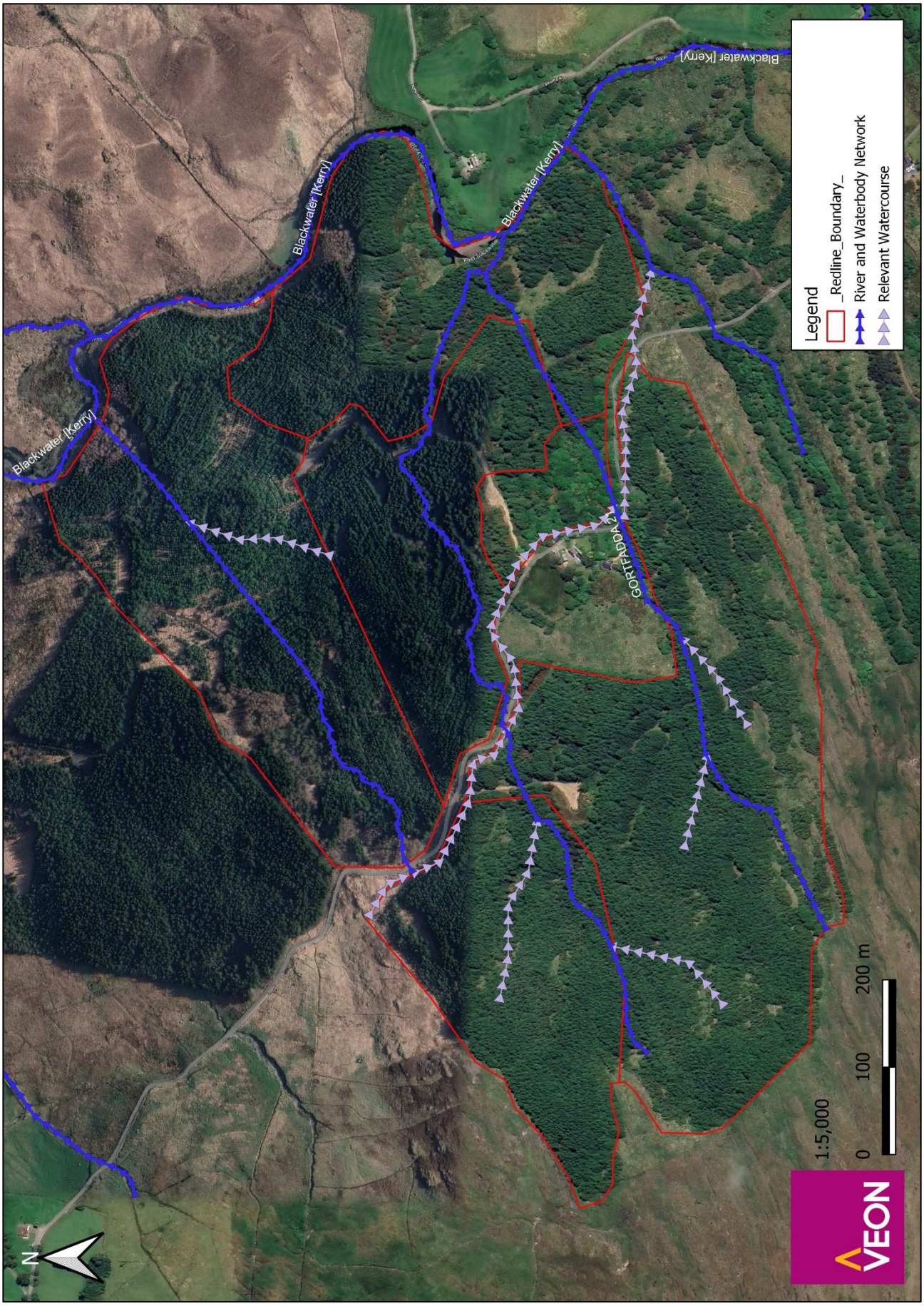



*Figure 7.6: Hydrology map.*

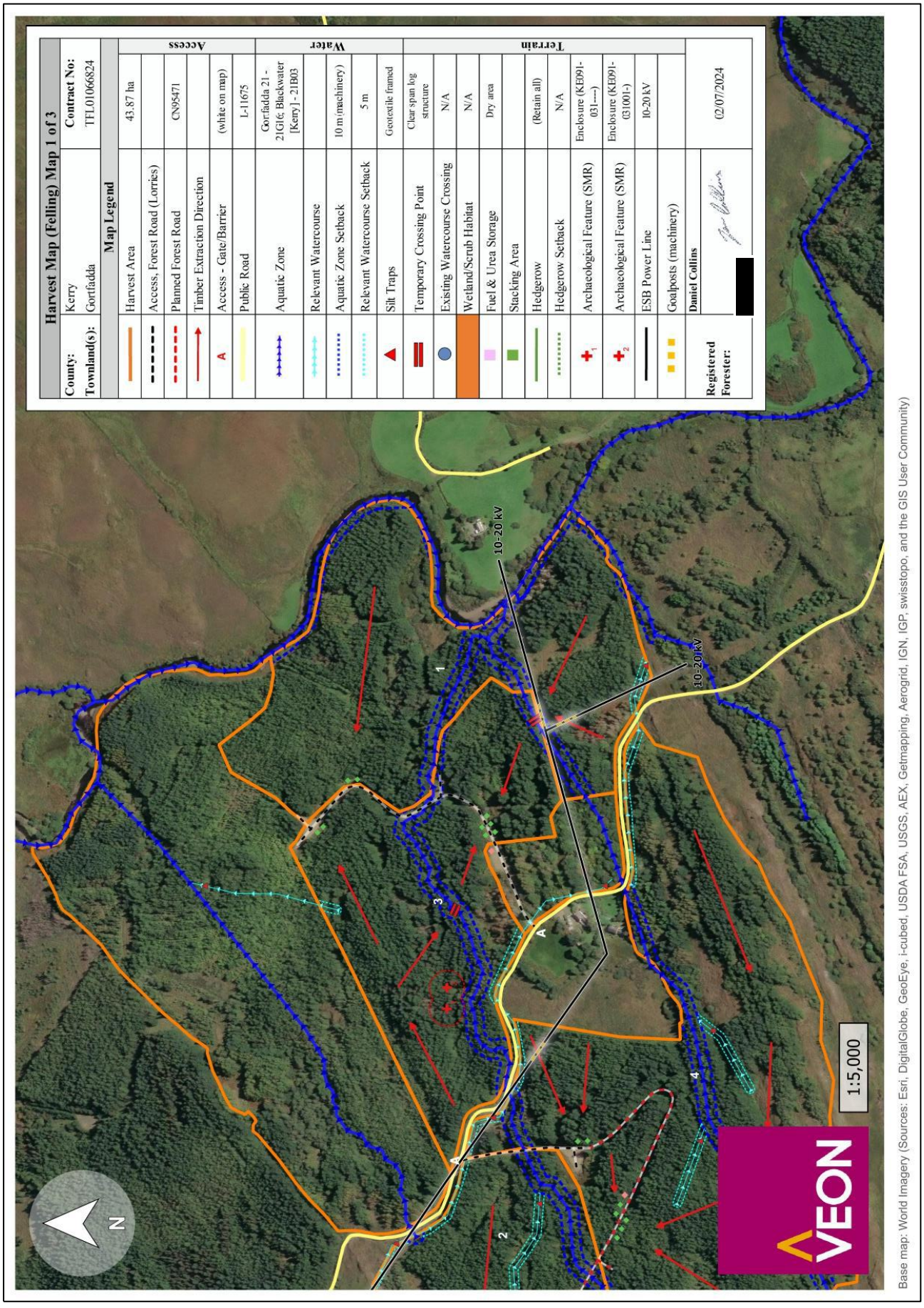



*Figure 7.7: Harvest map (1 of 3).*

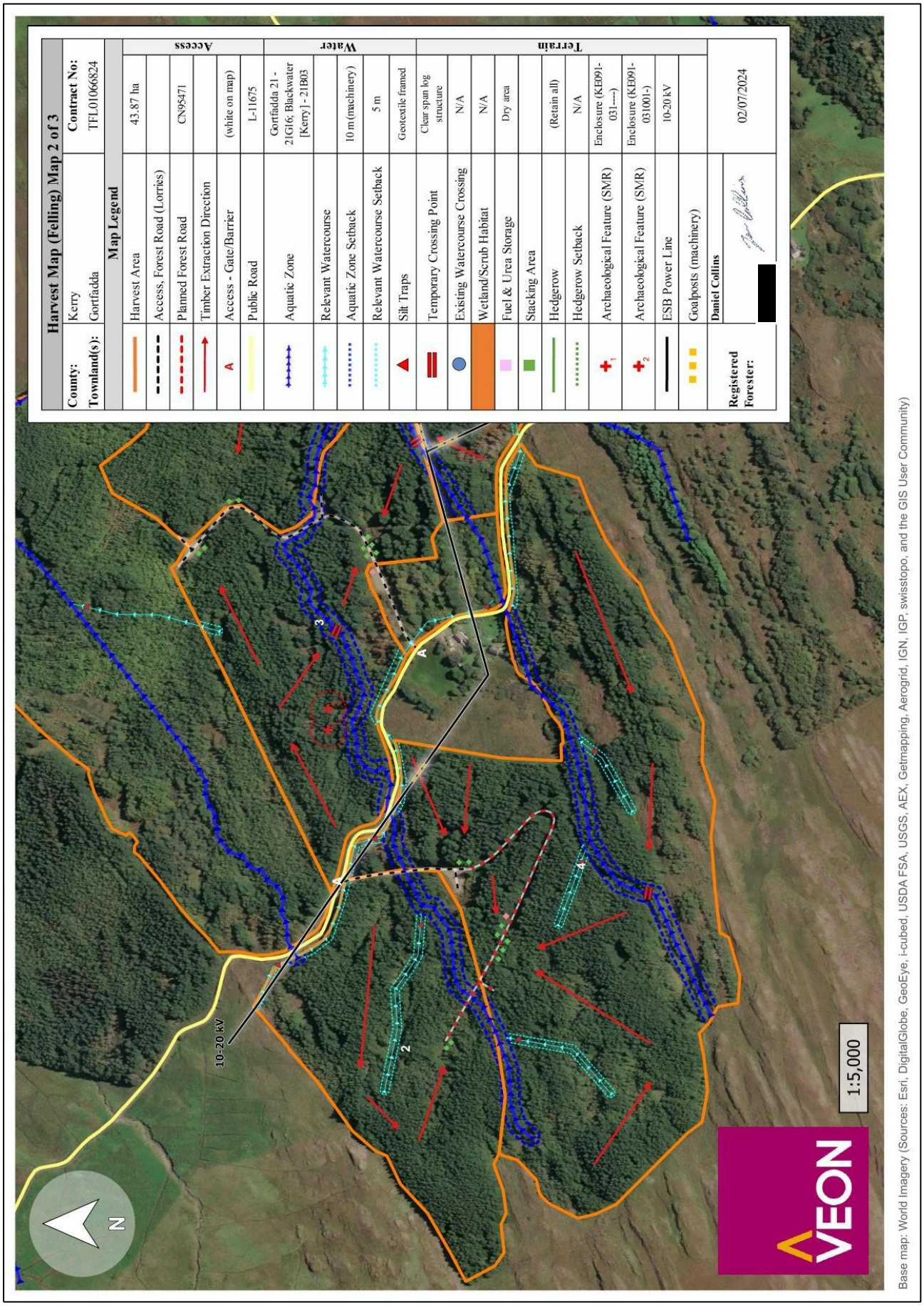



*Figure 7.8: Harvest map (2 of 3).*

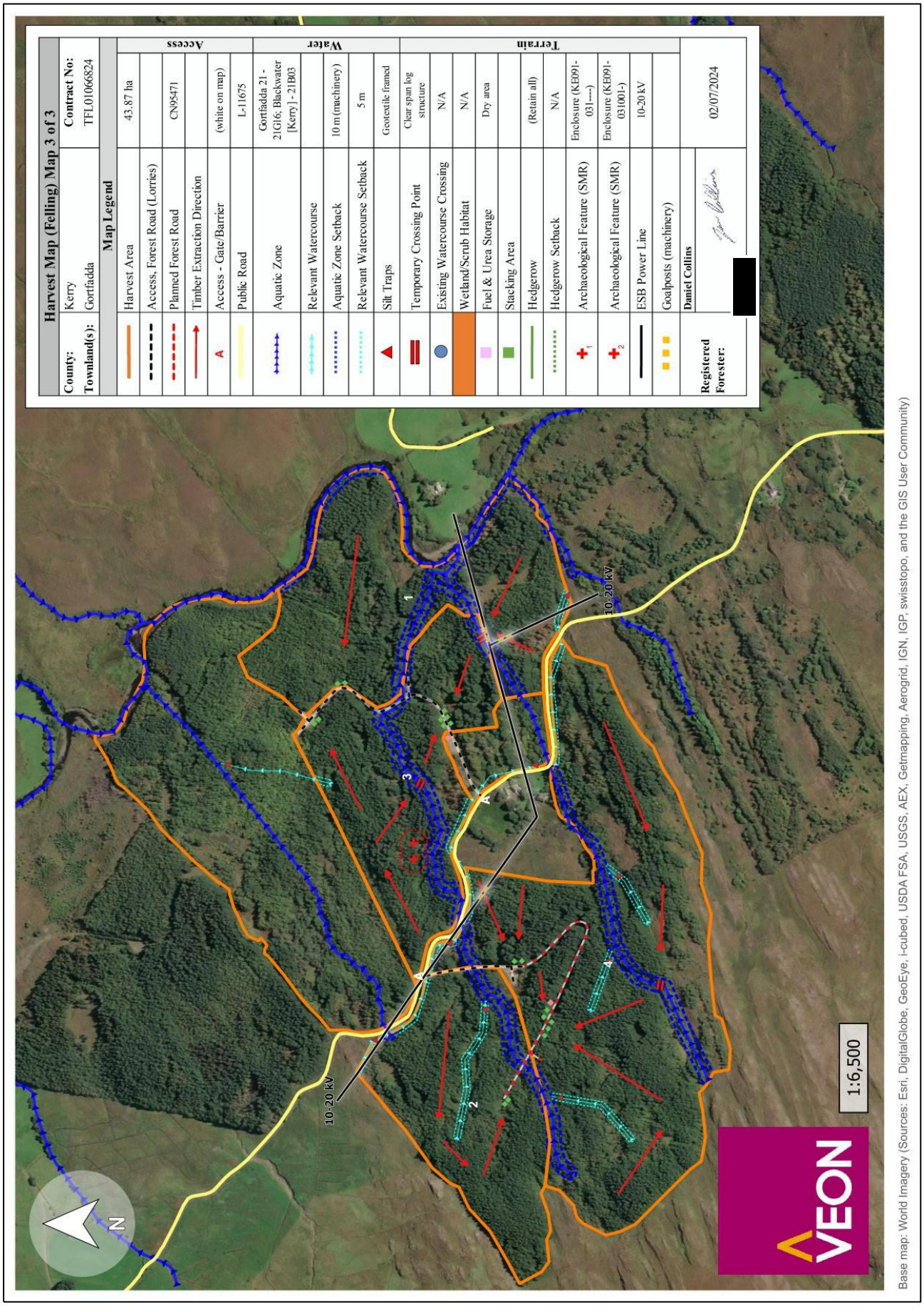



*Figure 7.9: Harvest map (3 of 3).*

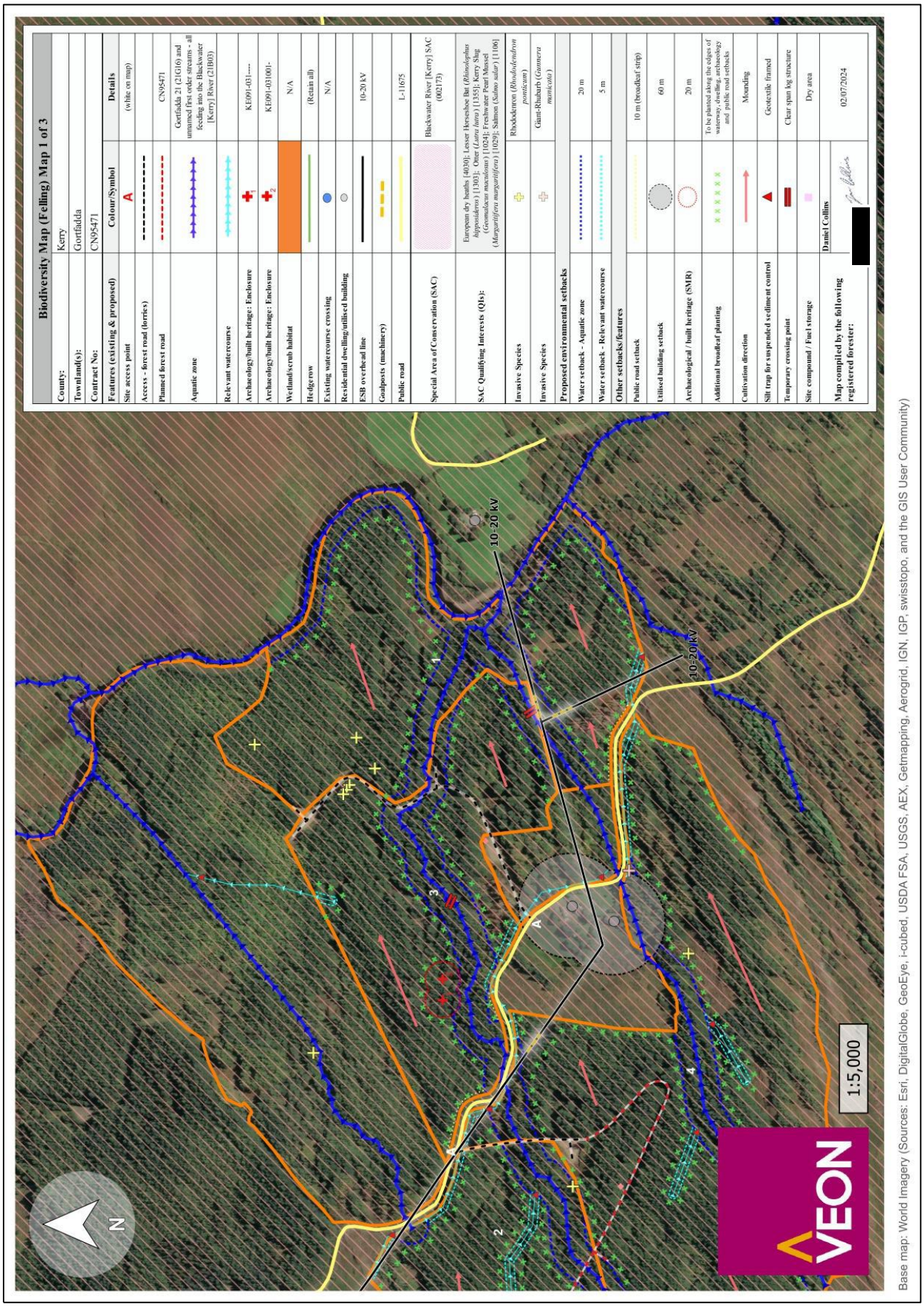



*Figure 7.10: Biodiversity map (1 of 3).*

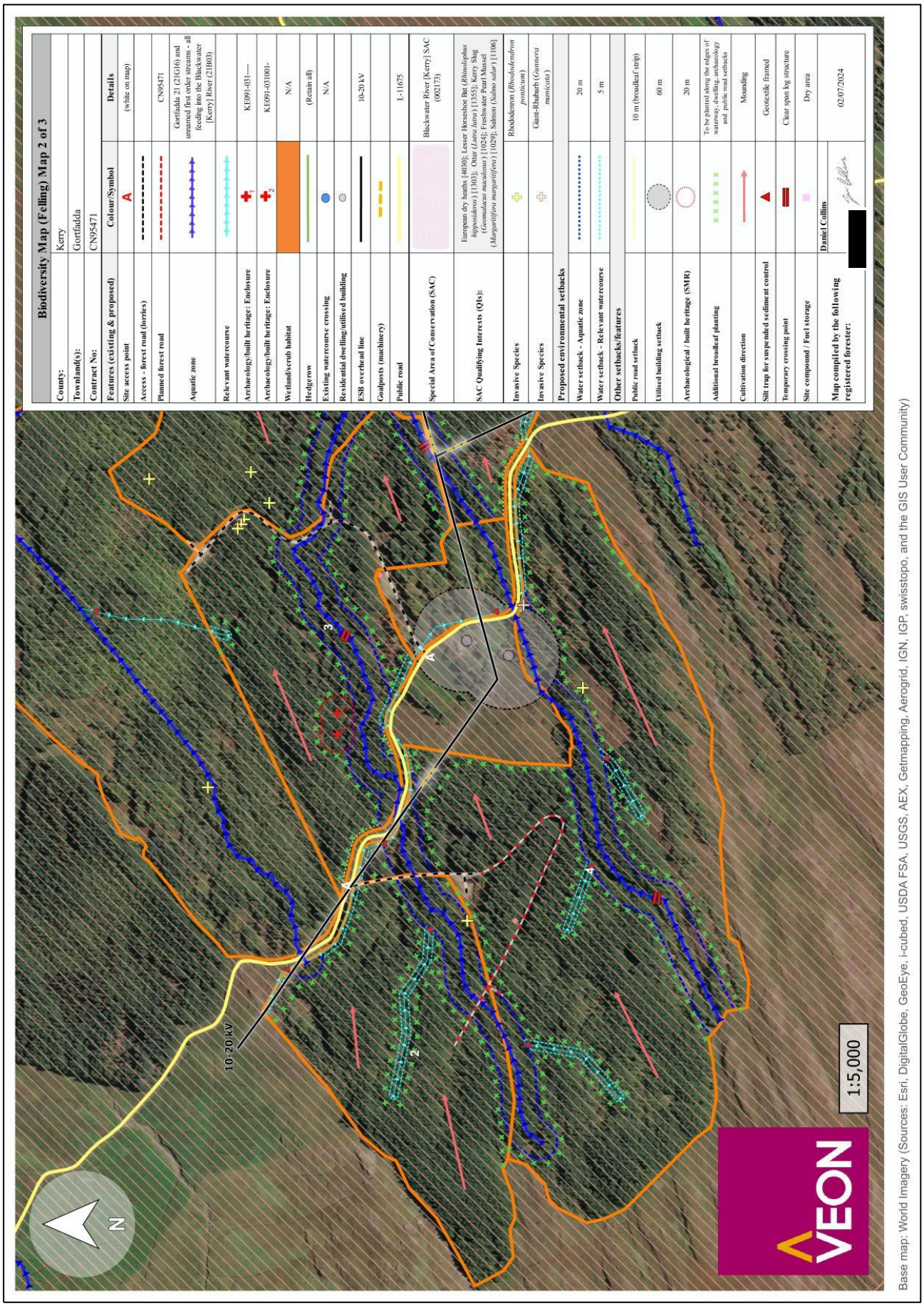



*Figure 7.11: Biodiversity map (2 of 3).*

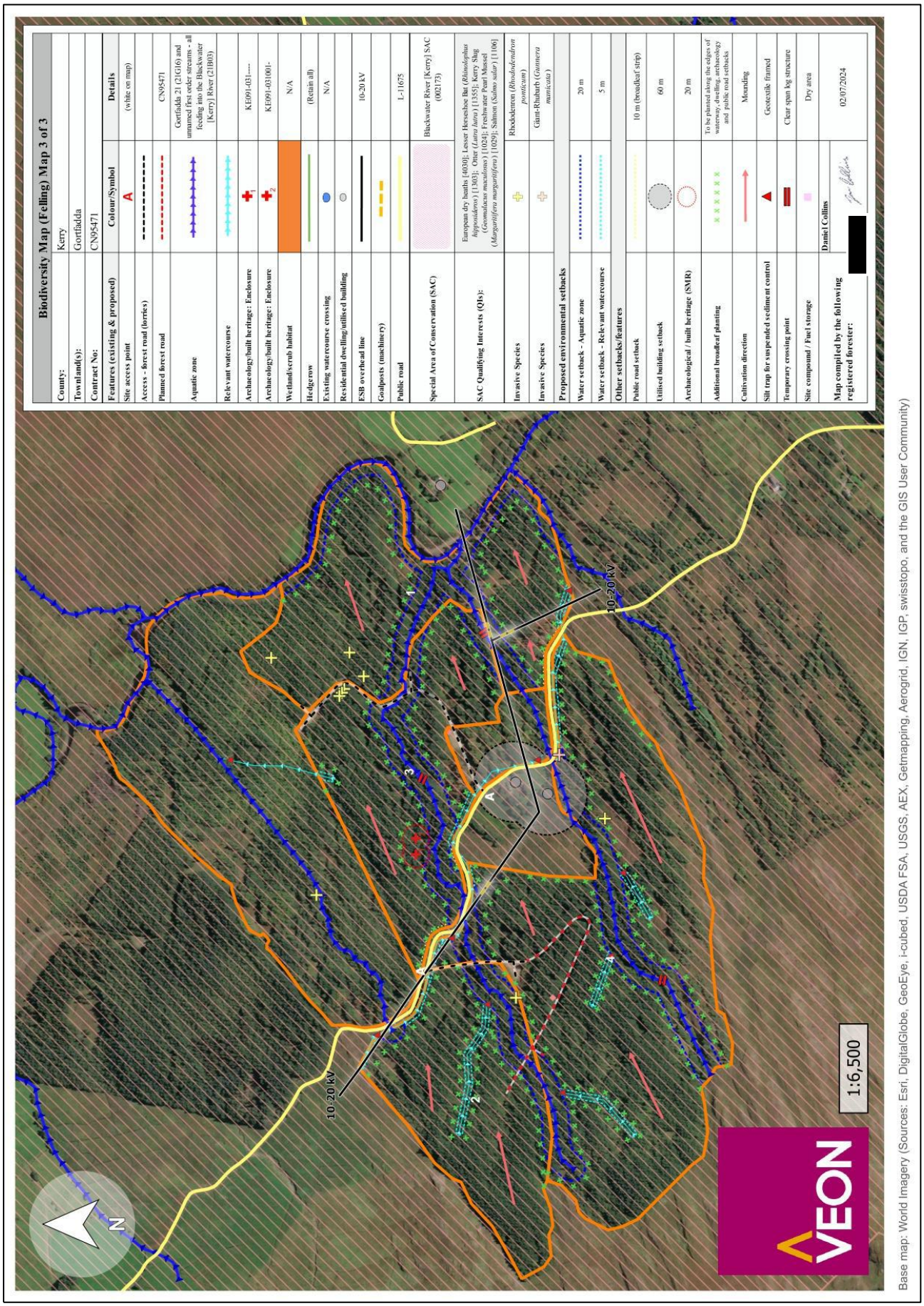



*Figure 7.12: Biodiversity map (3 of 3).*

# Appendix 2. PHOTOGRAPHS

*Photograph 7.1: Kerry slug at survey location 51.89241100, -9.81866330.*

*Photograph 7.2: Kerry slugs recorded at slug mat No. 11.*

*Photograph 7.3: Kerry slug recorded at slug mat No. 2.*

*Photograph 7.4: Kerry slug at survey location 51.89261541, -9.81848097.*

*Photograph 7.5: Rocky outcrops present within the survey site which support kerry slug.*

*Photograph 7.6: Boulders present within the wet heath habitat which support kerry slug.*

*Photograph 7.7: Metric trap placed on individual tree within conifer plantation.*

*Photograph 7.8: Metric trap placed on rocky outcrop within conifer plantation.*

# Appendix 3. NPWS SURVEY LICENCES

**Licence no. DER-KERRY-SLUG-2024-38**

**EUROPEAN COMMUNITIES (BIRDS AND NATURAL HABITATS) REGULATIONS 2011 (S. I. No 477 of 2011)**

**DEROGATION LICENCE**

Granted under Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations 2011.

The Minister for Housing, Local Government and Heritage, after obtaining professional advice, is satisfied that:

**(A)** In the interests of protecting wild flora and fauna and conserving natural habitats.

**(B)** There is no satisfactory alternative, and the action authorised by this licence will not be detrimental to the maintenance of the population of **KERRY SLUG** referred to below at a favourable conservation status in their natural range.

The Minister, in exercise of the powers conferred on him by Regulation 54 of the Habitats Regulations hereby grants to **Forest Clover 1 Ltd, 2nd Floor, 1-2 Haddington Road, Dublin 4, Co. Dublin** a licence in respect of the **Kerry Slug**. This licence authorises the following:

(a) Disturbance

(b) Authorised actions

**This licence is subject to the terms and conditions set out overleaf.**

**Terms and Conditions**

1. This licence is granted solely to allow the activities specified in connection with the **ecological surveys for presence of Kerry slugs** located at **Gortfadda, Sneem, Co. Kerry**, for **Forest Clover 1 Ltd.**

2. All activities authorised by this licence, and all equipment used in connection herewith, shall be carried out, constructed and maintained (as the case may be) so as to avoid unnecessary injury or distress to any species of **Slug**.

3. The works will be supervised by ecologist **David McGillycuddy of Veon Limited, Unit 1, Block D, 1 Leopardstown Business Centre, Ballyogan Road, Co. Dublin D18 DK64.**

4. This licence may be modified or revoked, for stated reasons, at any time.

5. The mitigation measures outlined in the application report (**Kerry Slug Survey and Risk Assessment**), together with any changes or clarification agreed in correspondence between NPWS and the agent or applicant, are to be carried out. Strict adherence must be paid to all the proposed measures in the application.

6. The actions which this licence authorise shall be completed between the **6th February 2024** and **31st March 2024.**

7. This licence shall be produced for inspection on a request being made on that behalf by a member of An Garda Síochána or an authorised NPWS officer appointed under Regulation 4 of the Habitats Regulations.

8. If this licence addresses works that are subject of a planning application, no such works permitted under this licence can occur until planning permission is granted.

9. If this licence expires prior to works permitted under this licence commencing, a new application must be sought in advance, including the provision of any updated data or reports.

10. On completion of the actions which this licence authorises, all recordings of Kerry Slugs affected will be made using the standardised data form provided below and must be submitted to the NPWS within four weeks of the expiry date of this licence. Included with the below returns form, a report must be submitted to **Dr. Brian Nelson, brian.nelson@npws.gov.ie.** This report should include locations of all translocation sites, the number of **Kerry Slugs** translocated, areas of replacement habitat created and results of the monitoring programme. A copy of same report must be submitted to **wildlife.reports@npws.gov.ie**.

11. The local National Parks and Wildlife Service field officer **Gerald McEnery,** [redacted] should be contacted prior to the commencement of any activity.

Claire Crowley

**Claire Crowley**
(a person authorised by the Minister to sign on his behalf)

**06/02/2024**

Wildlife Licensing Unit
Department of Housing, Local Government and Heritage
Wildlife Licensing Unit
R. 2.03
90 North King Street
Smithfield
Dublin 7
D07 N7CV

National Parks & Wildlife Service
LICENCE

National Parks & Wildlife Service
LICENCE

An Roinn Tithíochta,
Rialtais Áitiúil agus Oidhreachta
Department of Housing,
Local Government and Heritage

**Licence No. C18/2024**

**NATIONAL PARKS & WILDLIFE SERVICE**

**Wildlife Acts 1976 to 2018 – Sections 23 and 34**

**LICENCE TO CAPTURE PROTECTED WILD ANIMALS FOR EDUCATIONAL, SCIENTIFIC OR OTHER PURPOSES**

The Minister for Housing, Local Government and Heritage in exercise of the powers conferred on him by Sections 9, 23 and 34 of the Wildlife Acts 1976 to 2018 authorises:

**David McGillycuddy of Veon Limited, Unit 1, Block D, 1 Leopardstown Business Centre, Ballyogan Road, Co. Dublin D18 DK64**

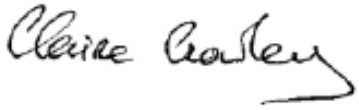
To disturb specimens of the species specified in Column 1 of the Schedule hereunder in the area specified in Column 2 by the means specified in column 3 for scientific, educational or other purposes during the period beginning **February 6th 2024** and ending on **31st March 2024,** subject to the conditions listed overleaf.

**SCHEDULE**

| 1 | 2 | 3 |
|---|---|---|
| **Species** | **Area** | **Means of capture** |
| **Kerry Slug (*Geomalacus maculosus*)** | **Gortfadda, Sneem, Co. Kerry** | **Metric trap Synthetic mat** |

**8 March 2022**

For the Minister for Housing, Local Government and Heritage



## Conditions

1. This licence shall be produced for inspection on a request being made on that behalf by a member of An Garda Síochána or any person appointed by the Minister for Housing, Local Government and Heritage under Section 72 of the Wildlife Acts 1976 to 2018, to be an authorised person for the purposes of the Acts.

2. The local NPWS District Conservation Officer or Conservation Ranger must be contacted during business hours prior to the activity commencing under the terms of this licence.

3. This licence permits the capture of Kerry Slug using baited refuge traps of the type described in Irish Wildlife Manuals, No. 54 (Distribution and population dynamics of the Kerry Slug, Geomalacus maculosus (Arionidae).

4. Traps must be removed after the survey is completed.

5. This licence does not permit the taking or killing of specimens. All slugs found under the traps must be released where they are found or in the nearest area of suitable habitat.

6. **A full report must be submitted no later than 3 months after the end of the licence giving full details (location, date, Irish grid reference, surveyor) of the survey methodology and, if any, all records of Kerry Slug. Future licence applications will be refused in the event of a report not being submitted.**

7. Photographs of a sample (minimum of one per trap locality) of the slugs encountered should be included as proof of identification.

8. On expiry of this licence a return stating the work carried out must be provided to
   - Dr Brian Nelson, Invertebrate Ecologist, Science Unit, National Parks and Wildlife Service, 90 North King Street, Dublin 7, D07 N7CV, [redacted]

9. Any query in relation to this licence should be addressed to National Parks and Wildlife Service, 90 North King Street, Dublin 7, D07 N7CV.

**Note: This licence does not confer right of entry onto any lands.**

# Appendix 4. Harvest Plan

# Harvest Plan Submitted in Support of Felling Licence Application – TFL01066824

| Proposed Felling & Reforestation Methods | |
|---|---|
| **Thinning (incl. CCF)** | ☒ N/A ☐ Harvester ☐ Chainsaw ☐ Forwarder ☐ Tractor/Quad ☐ Skyline ☐ Other (specify): |
| **Clear-felling** | ☐ N/A ☒ Harvester ☒ Chainsaw ☒ Forwarder ☐ Tractor/Quad ☐ Skyline ☐ Other (specify): |
| **Reforestation** | ☐ N/A ☒ Windrowing ☐ Pit planting ☒ Mounding ☐ Scrap mounding ☐ Scarification ☐ Other (specify): |
| **Site access (i.e. via forest road)** | ☒ Present ☒ Planned ☐ Not required ☐ Other (e.g. temporary roading/forest track): |

| Social & Environmental Features & Considerations | | |
|---|---|---|
| **Social** | **Habitat & Biodiversity** | **Soil & Water** |
| ☐ Recreational usage | ☒ Designated area (SAC, SPA, etc.) | ☒ Aquatic zone(s) on/adjoining site |
| ☒ Adjoining dwelling(s) | ☒ Broadleaves/diverse conifers | ☒ Relevant watercourse(s) |
| ☐ Right(s)-of-way present | ☒ Hedgerows | ☐ Water-related 'hotspots' |
| ☒ Utilities (power lines/water main) | ☐ Old/veteran trees | ☐ Water abstraction point |
| ☒ Sensitive landscape | ☐ Large scale deadwood | ☒ Peaty or peaty/gley |
| ☐ Important viewpoint(s) | ☒ Sensitive habitats | ☒ Steep slope(s) |
| ☒ Archaeological site(s) & feature(s) | ☒ Protected fauna | ☐ Water setback(s) present & intact |
| ☐ Cultural feature(s) | ☐ Protected flora | ☐ Supply of brash limited |
| ☐ Anti-social (dumping, fire, etc.) | ☐ Wetland habitat | ☐ Other: |
| ☐ Other (specify): | ☐ Other (specify): | ☐ Other: |

| Proposed Measures to Protect Social & Environmental Features & Considerations | |
|---|---|
| ☒ Consult with local residents | ☒ Establish excl. zones around arch. sites/features |
| ☒ Erect safety signage | ☒ Temporary bridging points (TBPs) required |
| ☒ Onsite briefing of all operators, pre-commencement | ☒ Install water setback at refor. |
| ☒ Carefully selected refuelling/repair/storage depot | ☒ Install dwelling setback at refor. |
| ☐ Measures to protect right(s)-of-way | ☒ Install public road setback at refor. |
| ☒ Measures to protect service features | ☒ Install archaeological setback at refor. |
| ☒ Measures to protect habitats & biodiversity features | ☒ Install biodiversity setback at refor. |
| ☒ Limit operations to dry weather | ☐ Install landscape setback at refor. |
| ☒ Daily visual monitoring of ground conditions | ☐ Inclusion of Refor. Objective 'CCF' |
| ☒ Daily visual monitoring of water | ☒ Inclusion of Refor. Objective 'BIO' |

| Proposed Measures to Protect Social & Environmental Features & Considerations (Cont..) | |
|---|---|
| ☐ Water sampling | ☐ Forest edge planting |
| ☒ Install silt traps/barriers | ☐ Environmental setback planting |
| ☐ Drain blocking/slow-water dams | ☐ Other (specify) |
| ☒ Utilise brash mats along extraction routes | ☐ Other (specify) |
| ☒ Exclude machinery in areas adjoining aquatic zones, water abstraction points & water-related 'hotspots' | ☐ Other (specify) |

**Ancillary Information (include relevant information to expand on above & to detail important aspects such as the sequencing of operations, the width of environmental setbacks & contingency planning. Ensure accurate cross-referencing and consistency with maps)** *

# 1. Introduction

This Harvest Plan has been submitted to correspond with TFL01066824, which applies for clear-felling licence approval for 43.87 hectares of Sitka spruce (*Picea sitchensis*) and Japanese Larch (*Larix kaempferi*), with an estimated total harvest volume of 17,215.0 $m^3$. Harvesting is scheduled to occur in the years 2025, 2028 and 2031. Harvesting machinery will consist of a harvester and a low-ground pressure forwarder with a fourteen-tonne bunk capacity.

All proposed operations will be carried out in full adherence to Forest Service/Department of Agriculture, Food and the Marine guidelines, including:

- **Forestry Standards Manual (DAFM, 2023).**
- **Forest Harvesting and the Environment Guidelines (DAFM, 2000).**
- **Standards for Felling and Reforestation (DAFM, 2019).**

## 1.1 Site Description:

The proposed felling area is located in the townland of Gortfadda, Co. Kerry, and comprises four forestry plots. The surrounding land primarily comprises a mixture of coniferous forestry, agricultural grasslands, wet heaths with rocky outcrops and cutover bog. The elevation of the site varies between c. 228-75 m and the topography is moderately steep and sloping to the east. The trees are predominantly underlain by a mixture of peaty podzols over lithosol and peats and surface and groundwater gleys, with deep peaty gleys and mineral alluvium soils also present in areas.

There are two listed archaeological features located on the site, both of which are found within Plot No. 3: enclosure (KE091-031----); and enclosure (KE091-031001-). The site also overlaps with two redundant archaeological records (KE091-032----; KE091-033----).

*1.1.1 Environmental Considerations:*

The most significant water feature in the environs of the felling area is the Blackwater River (21B03), which flows in a south-easterly direction along the north-eastern boundaries of Plot No. 1 and is a waterbody with a high-status objective. A number of first-order streams also traverse the harvesting area, flowing east, and eventually feeding

into the Blackwater River. The site also contains relevant watercourses, as indicated on the harvest and biodiversity maps.

Concerning designated conservation areas, the entire site overlaps with the Blackwater River [Kerry] SAC (002173), where the QIs include the Kerry Slug (*Geomalacus maculosus*), the Freshwater Pearl Mussel (*Margaritifera margaritifera*), the Otter (*Lutra lutra*) and the Lesser Horseshoe Bat (*Rhinolophus hipposideros*):

- The presence of Kerry Slug was discovered in the felling Plots No. 1, 3 and 4 (**please refer to the accompanying report 'Kerry Slug Survey and Habitat Assessment' – Veon Ecology**).
- Areas adjoining the felling area contain habitat suitable for the Freshwater Pearl Mussel and the site overlaps with one of the top eight river catchments for the species.
- The invasive species Rhododendron (*Rhododendron ponticum*) and Giant-rhubarb (*Gunnera tinctoria*) were also discovered within the felling footprint - invasive species is identified as a threat in the conservation objectives for the Blackwater SAC (**please refer to the accompanying report 'Invasive Alien Plant Species: Site Inspection & Management Plan' – Veon Ecology**).

The felling site is also hydrologically connected to the Kenmare River SAC (002158), which is found downstream and c. 6 km south of the site. Several other designated conservation areas can be found within 15 km of the plots:

- **NHAs:** Knockroe Bog NHA (000366).

- **SPAs:** Eirk Bog SPA (004108); Killarney National Park SPA (004038).

- **SACs:** Killarney National Park, Macgillycuddy's Reeks And Caragh River Catchment SAC (000365); Old Domestic Building, Askive Wood SAC (002098); Drongawn Lough SAC (002187); Cloonee and Inchiquin Loughs, Uragh Wood SAC (001342); Caha Mountains SAC (000093); Maulagowna Bog SAC (001881); Old Domestic Building, Dromore Wood SAC (000353); Castlemaine Harbour SAC (000343).

## 2. Pre-operation:

A safety statement will be issued to ensure that any dangerous or sensitive areas are known to all relevant individuals. Up-to-date contingency plans will be designed according to section five of the 'Standards for Felling and Reforestation' (DAFM, 2019) and will be triggered if necessary.

All forestry operations will comply with relevant environmental regulations and guidelines for the protection of Kerry Slugs. Due to unavoidable disturbance to the Kerry Slug habitat, a derogation license will be sought from the NPWS prior to the commencement of works. Works will be carried out in compliance with any conditions set by such licence. A pre-commencement site survey for the Kerry Slug will be conducted by a suitably qualified ecologist and any specimens found will be carefully translocated to the forestry north of Plots No. 1 and 3 under Sections 23 and 34-licence to 'Capture and/or humanely kill a protected wild animal for educational, scientific or other purposes.' The responsible forester will also carefully assess the site for other habitats that may be present and will identify if any features can be left in situ for the enhancement of local biodiversity (e.g. standing or fallen deadwood; boulders; old broadleaf trees bearing holes, loose bark or ivy cover).

In advance of any machine work on-site, the forester will provide a 'toolbox talk' and will walk the entire felling footprint with the harvesting contractors to highlight the prominent site risks (e.g. invasive species locations) and sensitive habitats (e.g. Kerry Slug) that are present. The forester will also erect all relevant safety signage and will ensure that contractors working on the site strictly adhere to all relevant standards - supervision will be consistent to ensure works are carried out appropriately, and to confirm that mitigation measures are effective.

## 3. Harvesting operations:

Harvesting has been planned in three-year intervals to allow 'greening-up' of important areas of the site before subsequent felling works commence (e.g. Plot No. 1 will be clear-felled in 2025 to allow this area to green over,

and to serve—in conjunction with setback areas—as a protective strip for the Blackwater River during subsequent felling operations). The harvesting works are also scheduled to occur when optimal weather conditions are to be expected (i.e. summer months), though this may not always be possible. If a period of rainfall persists, operations shall cease until dry weather prevails and the site has fully dried out, to help offset the risk of siltation and run-off.

### 3.1 Mitigative measures:

Before the harvesting operations commence, measures will be implemented to ensure that the local environment is protected:

- A ten-metre operational exclusion area will be observed from the edges of the aquatic zones which traverse through the harvesting area. Harvesting machinery shall not encroach upon these setback areas at any time during felling works.

- A five-metre exclusion area will be observed along the edges of all drainage ditches considered relevant watercourses. Machinery will not enter a relevant watercourse setback at any time during harvesting operations.

- To capture any suspended sediment, silt traps will be installed within relevant watercourses in advance of felling works. These will be constructed along and towards the end of mound drains, where a firm bank exists, and a ten-metre buffer area containing sufficient ground-layer vegetation (to filter out any remaining sediment) can be implemented. Silt traps will comprise an 'A-frame' timber structure, with a geotextile membrane attached, and will be anchored securely in place. Silt traps will be maintained to ensure efficacy and monitored for sediment build-ups – sediment will be cleared out and emptied onto a flat section of forest floor several metres from any waterways.

- The refuelling and chemical storage area on-site will be sited in a sheltered and dry area, at least fifty metres from aquatic zones and twenty metres from relevant watercourses. All fuels stored on the site will be appropriately bunded and harvesting machinery will be maintained in good working order to prevent soil contamination. Additionally, all harvesting machinery will be fitted with spill kits to mitigate adverse effects in the event of an accidental fuel spillage.

- There are three temporary crossing points to be installed on-site to facilitate timber harvesting. The forester will mark these areas out for the contractor before work begins. Additional crossing points may be installed if required. Temporary crossing points will consist of clear-span log structures. The integrity of the temporary crossing structures will be monitored carefully throughout operations.

- Any hedgerows on-site shall be retained and protected as an important habitat for local fauna. Old broadleaf trees will also be retained where possible, provided they are windfirm and pose no safety risk. Should any young broadleaf trees become unstable after the felling of conifer trees, these will be pollarded to a height of 3-4 metres, provided they are located alongside or within a planned setback. Any natural vegetation around the perimeter of the felling footprint will be left undisturbed.

- All guidelines relating to forestry and archaeology shall be strictly adhered to. A clearly defined twenty-metre exclusion area will be created around both enclosures and machinery passage and timber stacking shall be strictly forbidden within these areas. Contractors will be reminded to remain vigilant throughout harvesting for any undiscovered archaeological features that may be present in the area. In the event such a feature is discovered, the appropriate authorities will be immediately notified, and a twenty-metre (minimum) exclusion zone will be implemented around the feature until the significance of the find has been investigated.

- Works that are scheduled to occur proximate to electricity powerlines will be conducted according to chapter seven of the 'Forestry Standards Manual' (DAFM, 2023). Where it is necessary to direct operations underneath overhead powerlines, overhead goalposts will be erected to ensure safe machinery passage.

### 3.2 Timber Harvesting

Harvesting machinery shall not enter any setback areas during felling operations. Trees standing within a setback area and within reach of the harvesting arm will be felled by the harvester, and subsequently snedded and stacked outside of the setback area. Trees outside the reach of the harvesting machine will be felled manually by a competent chainsaw operator. Manually felled trees will subsequently be removed by an extended harvester arm, and will be snedded, processed and stacked outside of the setback. All felling will be directed away from aquatic zones and archaeological features.

To mitigate against potential infection by the butt-rott fungus (*Heterobasidion annosum)*, a urea solution will be applied to freshly cut conifer stumps during felling. The urea solution will contain a non-toxic dye to aid the forester in confirming that all stumps have been properly treated and shall not be applied within twenty metres of aquatic zones.

Timber extraction—as marked with a red arrow on the harvest map—will be directed away from watercourses wherever possible and shall not encroach upon any setback areas. Brash mats will be laid along all extraction routes to preserve soil quality and will be kept back from waterway setback areas. Additional brash will be deployed to reinforce any sections of soft ground that are subject to high levels of machinery passage. Brash mats will be replenished as soon as they show signs of wear. Load sizes will be monitored during the extraction phase to reduce the risk of soil compaction and rutting.

Logs will only be stacked in the areas marked on the harvest map. Timber stacking areas will be located no less than 50 metres from aquatic zones and will be located greater than 100 m from residential dwellings wherever possible. Once harvesting of timber begins, operators will only use the designated extraction routes and loading/stacking areas marked on the harvest map. While harvesting operations are ongoing, every effort will be made to avoid any damage to the site. Contractors will be reminded to regularly monitor extraction routes for any signs of soil damage. Contractors will also be encouraged to use extra brash (where available) to pre-empt the risk of soil rutting on-site. Should ground conditions begin to visibly deteriorate, a new track will be promptly established containing a new brash mat layer (Standards for Felling and Reforestation, 2019).

Once the timber has been cut and stacked, harvesting machinery will be inspected for invasive species plant materials. Log assortments will be loaded onto haulage trucks which are deemed suitable for use on public roads (Forestry Standards Manual: Table 5.3). Timber will exit the site via the route indicated on the haulage route map and will be transported to a pre-designated location.

## 4. Reforestation:

All reforestation operations will follow best practices as outlined in 'Standards for Felling and Reforestation' (DAFM, 2019).

Brash and branch wood in Plots No. 1, 2, 3 and 4 will be windrowed, and the site will be mounded using an excavator. Replanting of the site will occur during the planting season immediately after felling to limit competition with vegetation on-site and to improve the next rotation. No new drains will be created during the reforestation phase.

A twenty-metre setback area will be observed from the edge of all aquatic zones that flow within the felling area. The existing five-metre relevant watercourse and twenty-metre archaeology setbacks will remain undisturbed, and no tree planting shall occur within sixty metres of the outer walls of residential dwellings, or within ten metres of a public road.

Plot No. 1 will be replanted with an 80-20% mixture of Sitka spruce and additional broadleaf species. Additional broadleaves (ADBs) will comprise native Irish tree species: Sessile oak (*Quercus petraea*), Downy birch (*Betula pubescens*), Rowan (*Sorbus aucuparia*) and Hazel (*Corylus avellana*). Five rows of permanent ADBs will be planted in a winding pattern along the edge of the twenty-metre setback from the Blackwater River. As these trees

mature and begin to provide shade, develop holes and crevices, host lichen species and attract insects to the area they may serve as a useful habitat for the Kerry Slug and the Lesser Horseshoe Bat.

The remaining plots (No. 2, 3 and 4) will be replanted with Sitka spruce and additional broadleaf species in a 90-10% mixture respectively. The ADBs will be planted in a scalloped pattern along the borders of the waterway, dwelling and archaeology setbacks, and as a ten-metre broadleaf strip along any public road setbacks.

### 4.1 Chemical Use:

The use of any chemicals on-site will only be conducted during periods of dry, calm weather, and will observe all setback areas relating to waterways and other environmental considerations:

- No fertilisers will be required on this site.

- If deemed necessary, an appropriate herbicide will be applied to suppress competing ground-layer vegetation on-site. Use of herbicide will be limited to 1-2 applications over the first four-year period of tree growth. Herbicide shall not be applied within twenty metres of aquatic zones or within other waterway setback areas. Additionally, no herbicide shall be applied where heavy rainfall or high winds are forecast. Following a period of rainfall, herbicide shall not be applied until the site has fully dried out to prevent run-off into receiving waters.

- Pesticide applications shall only occur where strictly necessary, e.g. to mitigate against bark damage by the large pine weevil (*Hylobius abietis*). The use of pesticides is governed by the European Communities (Sustainable Use of Pesticides) Regulation 2012 (S.I.155/2012). If required, an approved pesticide will be carefully applied to plants by a professional user. Pesticide shall not be applied within twenty metres of aquatic zones, and broadleaf trees will be avoided.

## 5. Post-operation works:

Post-operation works will be conducted according to section sixteen of the 'Standards for Felling and Reforestation'. All waste and hazardous materials that may accumulate throughout operations will be carefully removed from the site (recycling wherever possible). Temporary crossing points will be removed, and the relevant areas will be restored to their original condition, with due care afforded to prevent the release of any lodged residues. Any harvesting debris evident within drains or sediment traps will be removed. Forest infrastructure will be inspected for any signs of damage and will be repaired if necessary.

### 5.1 Filling in years 1-4:

During the first four-year period, young trees will be regularly monitored, and re-planting of any tree failures (i.e. 'beating up') will occur to ensure the appropriate stocking rates are achieved.

***See also Forest Harvesting and the Environment Guidelines for further information**