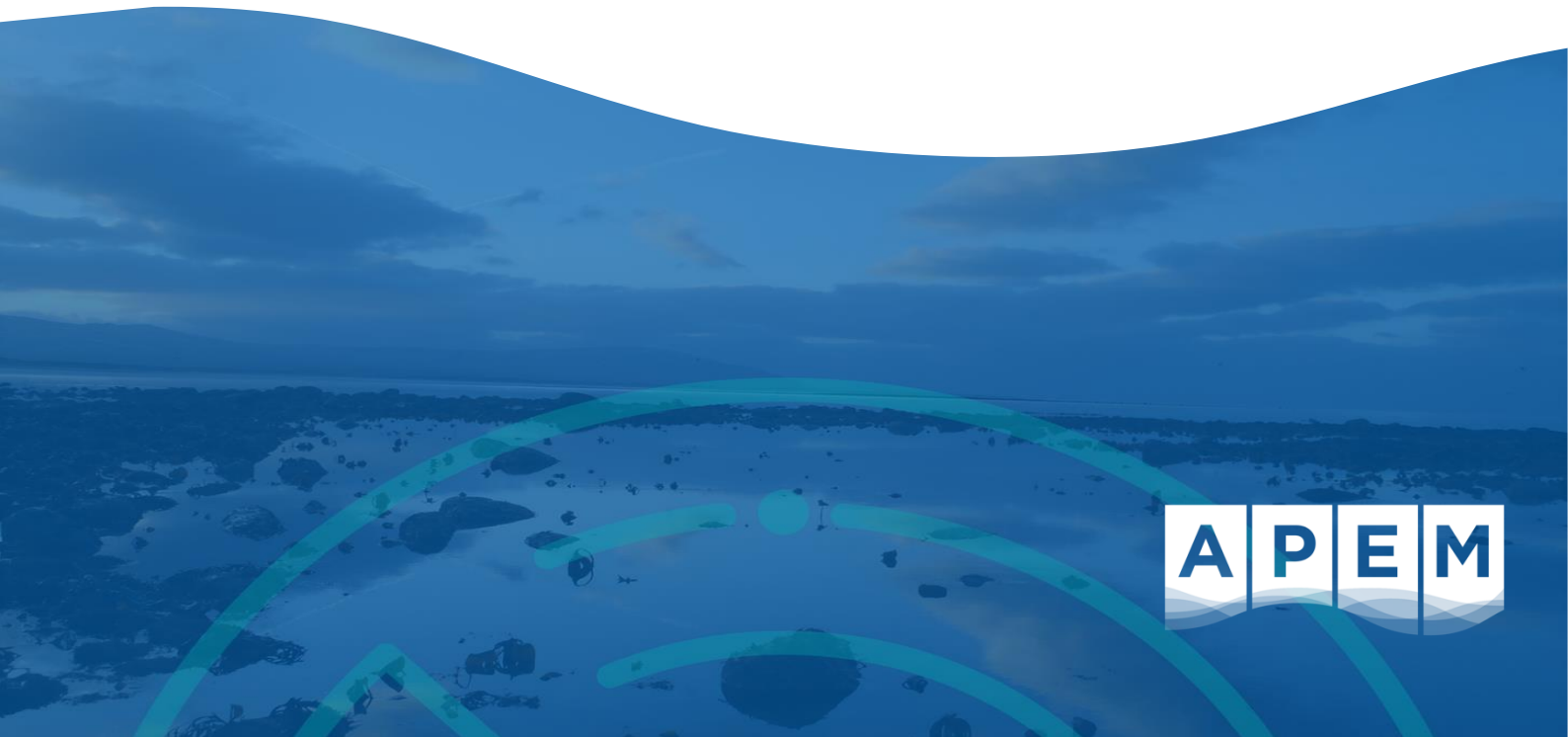
FutureEnergy Ireland

Cummeennabuddoge Wind Farm, Co. Kerry

Method Statement for Kerry Slug *Geomalacus maculosus*

P00010264

November 2023



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1. Introduction

APEM Ireland was commissioned by Atmos Consulting, on behalf of FuturEnergy Ireland (FEI), on 27 September 2022 to prepare a method statement to inform a derogation licence application for the disturbance and relocation of the Kerry slug *Geomalcus maculosus* population prior to construction of the proposed Cummeennabuddoge Wind Farm, Co. Kerry.

1.1. Site description

The proposed wind farm development site ("the Site") is centred at Irish Transverse Mercator (ITM) coordinates 520354 583232 in the Townlands of Cummeenavrick, Glashacormick, Clydaghroe and Cummeennabuddoge in Co. Kerry (see Figure 1). The Site is located in the Derrynasaggart Mountains ca. 4.5 km north of Ballyvourney Village. The dominant land use in the surrounding area is forestry. Clydaghroe Wind Farm is immediately south of the Site, Caherdowney Wind Farm to the east and Gneeves Wind Farm to the north - east.

The Site covers a total area of ca. 709 ha across an elevation of ca. 270 to 580 m. The Site is dominated by active forestry plantation sub-divided by access tracks. Some remnant sections of degraded heath and peatland are present in small pockets within the Site. A number of small tributary streams of the River Clydagh flow through the Site. Two small loughs are present on the southern boundary of the Site.

1.2. Brief Description of the Proposed Development

Planning Permission is being sought by FuturEnergy Ireland for the construction and operation of 17 wind turbines including a permanent met mast, on-site substation and all ancillary works and the construction of an underground grid connection to Ballyvouskill, Co. Cork. Planning permission is being sought for a 35-year operational life from the date of commissioning of the entire wind farm.

1.3. Aim of the Method Statement

This method statement aims to set out the proposed approach to protect Kerry slug during construction and operation of the proposed development. This method statement also aims to provide supporting information that can be used to inform a derogation licence for disturbance and relocation of Kerry slug for the proposed Cummeennabuddoge Wind Farm, Co. Kerry.

This report will;

- Set out the relevant legislation relating to Kerry slug,
- Describe the baseline data collection method,
- Summarise the baseline ecological conditions at the Site to support Kerry slug,
- Provide a method statement to reduce the impacts effects on the local Kerry slug population
- Identify potential enhancement measures where available, and
- Set out the requirements for post-construction monitoring if required.

1.4. Evidence of Technical Competence and Experience

This report was prepared by APEM ecologist Owen Twomey. Dr Michael Dobson carried out the technical review of this report.

Owen Twomey is a Senior Ecologist with APEM Ireland. Owen holds a BSc (Hons) in Environmental Science with a major in Zoology and a Postgraduate Diploma (PgDip) in Ecological Assessment from University College Cork. Owen has worked in ecological consultancy since 2016. Owen's specialist areas are; mammal surveys (with a focus on bat, badger and otter); habitat survey, mapping and classification; ecological impact assessment; appropriate assessment; and geographical information systems. Owen has experience in surveying for Kerry slug and has worked on developments where they are a known ecological constraint. Owen has previously held derogation licences for the surveying, capturing and translocation of Kerry slug as part of national developments.

Dr Michael Dobson is an Associate Director with APEM. He holds a BSc (Hons) in Biology from the University of Southampton and a PhD is freshwater ecology from the University of London (Queen Mary College). Mike spent 20 years as a research scientist, specialising in ecology and management of rivers and freshwater wetlands throughout Europe and East Africa, along with developing biotic indices for river quality assessment in Central America. He was Director of the Freshwater Biological Association for six years before joining APEM in 2013, working initially in the limnology and water quality team before moving to APEM Ireland in 2022. Mike has written many peer-reviewed papers in ecology and biogeography, along with two undergraduate textbooks for Oxford University Press (both in their second editions) and seven identification guides to freshwater invertebrates of Britain and Ireland. He has extensive experience of survey design, data analysis and reporting, including publication and verbal reporting for non-technical audiences. His experience includes both biological and water quality impact assessment on fresh waters, along with nutrient budget assessments.

1.5. Relevant Legislation

The following legislation is relevant to this Method Statement:

- The Habitats Directive (92/43/EEC);
- European Communities (Birds and Natural Habitats) Regulations 2011 -2021;
- The Wildlife Acts 1976 to 2021;

A summary of the above legislation as it relates to Kerry Slug is provided in Appendix A.

1.5.1. Derogation Licences

In certain circumstances a person may apply for a licence to disturb and / or destroy the breeding and / or resting habitat of animal species listed on Annex IV of Habitats Directive, such as Kerry slug, and as set out under Regulation 51 of the European Communities (Birds and Natural Habitats) Regulations 2011-2021. The application for a licence is made under Regulation 54 and should be made in writing, including supporting information, to the Wildlife Licence Unit of NPWS.

2. Baseline Data Collection

The methods used to collect baseline data to inform this method statement are outlined in the section.

2.1. Study Area

The study areas for the desktop study included the planning application area, as defined by the Site boundary (Figure 1). Existing records from the National Biodiversity Data Centre (NBDC) and the National Parks and Wildlife Service (NPWS) were sourced up to 2 km from the Site during the baseline data collection to provide context of the local population distribution.

2.2. Desk Study

A desk study was carried out to inform this method statement and to collate the available existing information on Kerry slug populations within the Site and surrounding area (up to ca. 2 km). The Site and the surrounding area were viewed using available satellite imagery[1] to help identify features and habitats which may be suitable to support Kerry slug.

The National Biodiversity Data Centre (NBDC)[2] online resource was accessed for information on Kerry slug previously recorded within the 2 km grid squares W18Q, W18R, W18V, W18W, W28B, W28C, W28G and W28H within which the Site is located. Data from the NPWS collected as part of the Article 17 reporting on Kerry slug[3] were also accessed during the desktop survey and input to a GIS for interpretation.

The desk study included a review of previous ecology reports prepared for this development including the draft Biodiversity Chapter of the Environmental Impact Assessment Report (EIAR) prepared for the proposed wind farm (Atmos 2022).

2.3. Field Survey

Kerry slug surveys within the Site were carried out in August – September 2021 by Malachy Walsh and Partners (MWP 2021) in support of the preparation of the EIAR for the proposed wind farm development. These surveys consisted of live refuge trapping and hand searching for Kerry slug under licence. Five traps were set out at eight different locations where stone outcropping occurred within the Site. Hand searching was carried out in tandem with the metric outcrop trapping.

2.3.1. Limitations

Desk study data is unlikely to be exhaustive, especially in respect of species, as it is reliant on the availability of good existing data and is intended mainly to set a context for the study. Interpretation of maps and aerial photography has been carried out using recent imagery, but it has not been possible to verify the accuracy of any statements relating to land use and habitat context outside of the study area.

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[1] https://www.google.ie/maps (last accessed 20 September 2023)
[2] https://maps.biodiversityireland.ie/ (last accessed 20 September 2023)
[3] https://www.npws.ie/maps-and-data/habitat-and-species-data/article-17/2019/species/molluscs (last accessed 20 September)

3. Baseline Ecological Conditions

This section sets out the baseline ecological conditions within the Site to support Kerry slug.

3.1. Existing Records

There is a single record of Kerry slug held by NPWS within 2 km of the Site. This was recorded at Derrynasaggert ca. 1.8 km southwest of the Site at the closest point. There is a cluster of records at a further distance of ca. 2.7 km south of the Site at Slievereagh (Figure 2). NBDC holds no records within the 2 km grid squares within which the Site is located.

The Kerry slug surveys carried out in 2021 recorded Kerry slug at all 8 transect locations as well as 89 additional records from hand searches and incidental observations (Figure 2).

3.2. Habitats

The habitats recorded within the Site, as described in the Biodiversity Chapter prepared for this wind farm development (Atmos 2022), are summarised below. The location of these habitats are shown in Figure 3.

3.2.1. Conifer plantation

Conifer plantation (WD4) is the dominant habitat within the Site. This habitat covers ca. 501.2 ha (73%) of the total Site and consists of a mixture of age profiles from recently planted to mature post-thicket stages.

3.2.2. Recently felled woodland

Recently felled woodland (WS5) covers ca. 131.2 ha (19.1%) of the total Site. This habitat comprises large areas within the centre of the Site where conifer plantation has been felled and not replanted.

3.2.3. Cutover bog

Cutover bog (PB4) covers ca. 18.6 ha (2.7%) of the total Site. This habitat is present in the southeast of the Site north of Lough Carrignamork and Lough Gal. Peat removal in these this area has created disturbed ground and exposed glacial till in places.

3.2.4. Buildings and artificial surfaces

The Site is also sub-divided by a large number of roads including forestry tracks and farm tracks that are lined with either gravel or asphalt. Built lands and artificial surfaces (BL3) within the Site have a combined area of ca. 6.5 ha (1%) of the total Site.

3.2.5. Wet heath / blanket bog / wet grassland / Dry-humid acid grassland

Narrow linear mosaics comprising a mixture of wet heath (HH3), blanket bog (PB2) wet grassland (GS4) and dry-humid acid grassland (GS3) are present along stream corridors and forestry tracks within the Site. These habitats cover ca. 14.7 ha (2.3%) of the total Site. These habitats are likely kept open by grazing deer.

3.2.6. Wet heath

Wet heath (HH3) covers ca. 6.9 ha (1%) of the total Site. Wet heath habitat is present in areas of undisturbed, unplanted land towards the edges of the Site to the north and south. It is likely that wet heath was the original habitat covering much of the Site prior to afforestation.

3.2.7. Disturbed ground

There are small sections of disturbed ground scattered throughout the Site. This habitat comprises a mixture of spoil and bare ground (ED2), recolonising bare ground (ED3) and active quarries and mines (ED4). These areas cover ca. 2 ha (0.3%) of the total Site.

3.2.8. Scrub

Scrub (WS1) cover ca. 3.6 ha (0.5%) of the total Site. This habitat is generally dominated by willow Salix species and has formed along access tracks and streams that cross the Site.

3.2.9. Eroding / upland rivers

Approximately six first-order tributary streams of the Clydagh River rise within the Site and flow northwards from the first-order tributary streams to the river.

3.2.10. Dry meadows and grassy verges

Dry meadows and grassy verges (GS2) cover ca. 1.3 ha (0.2%) of the total site. Dry meadows and grassy verges area present along the proposed access track on the easternmost side of the Site.

3.2.11. Wet grassland

Wet grassland covers ca. 0.48[4] ha (0.1%) of the total Site. Wet grassland has been recorded at two small areas on the banks of the River Clydagh on the northern boundary of the Site and along the proposed access track on the easternmost side of the Site.

[4] To 2 decimal places given small size of area

3.3. Suitability of the Site to support Kerry Slug

The existing records of Kerry slug from within 2 km of the Site, in addition to records collected during surveys at the Site in 2021, confirm that this species is present within the Site and in the wider area.

There is a strong association between Kerry slug distribution and Devonian old red sandstone geology within the species' native range in Ireland, although more recent records are in areas of granite geology (Kearney, 2010). The primary underlying bedrock geology of the Site (Green sandstone & purple siltstone) is suitable for Kerry slug.

Traditionally (Platts & Speight 1988) three broad habitat types were considered suitable to support Kerry slug where this geology occurs and where humid conditions and bryophytes in which the species shelters and feeds are present. These three habitat types are deciduous woodland; blanket bog; and lake shores. More recent research (Mc Donnell *et al.* 2013) has determined that suitable habitat for this species also includes blanket bog, heath, conifer plantation (including areas of clear fell) and wet grassland. This same research states that the importance of water edge habitat, such as lake shores, to Kerry slug is not supported by their findings as they collected samples in areas with no obvious water bodies.

The following habitats within the Site should therefore be considered suitable to support Kerry slug;

- Conifer plantation
- Recently felled woodland
- Cutover bog
- Wet heath / blanket bog / wet grassland / Dry-humid acid grassland
- Wet heath
- Scrub[5]
- Wet grassland

Where the above habitat occurs alongside areas of exposed siliceous rock it would be considered optimum habitat to support Kerry slug. Suitable habitat covers ca. 95% of the total site (Figure 4). While Kerry slug has a very restricted geographical range, where it does occur it is often widespread and common. As such Kerry slug should be assumed to be present wherever suitable habitat occurs within the Site.

A summary of the total cover of habitat within the Site suitable to support Kerry slug is presented in Table 1. This table also provides an estimate of the amount of each habitat type that will be permanently lost due to the proposed wind farm development. The estimated habitat loss is based on the indicative development boundary provided by the client (Figure 4).

[5] Where exposed rock is also present

Table 1. Suitable Kerry slug habitat within the Site

Habitat	Total within Site (ha)	Permanently lost (ha)	Permanently lost (%)
Conifer plantation	501.2	138.3	27.6
Recently felled woodland	131.2	49.4	37.6
Cutover bog	18.6	1.4	7.6
Wet heath / blanket bog / wet grassland / Dry-humid acid grassland	14.7	2.4	16.3
Wet heath	6.9	3	42.9
Scrub[6]	3.6	1	28
Wet grassland	0.48[7]	0.17	35

[6] Where exposed rock is also present

[7] To 2 decimal places given small size of area

4. Method Statement

This method statement sets out the approach to manage Kerry slug during all phases of the proposed development.

The Biodiversity Chapter of the EIAR prepared for this planning application (Atmos Consulting, 2022) concluded that there would be no significant residual effects on Kerry slug after mitigation measures have been put in place. Potential effects identified include direct mortality and injury, loss of suitable habitat and a reduction in habitat suitability due to the spread of invasive species such as *Rhododendron ponticum.* Measures put forward in the Biodiversity Chapter specifically to reduce potential effects on Kerry slug, such as those described in Section 4.1 – 4.3 below, include translocation of Kerry slug to be carried out under derogation licence and provision of 'slug underpasses' at suitable locations along wind farm roads.

This method statement will be updated post-consent, following further Kerry slug survey work (under licence) and incorporation of any planning conditions, and will be used to support an application for a derogation licence under Regulation 54 of the EC (Birds and Natural Habitats) Regulations 2011 – 2021. The derogation licence application will be submitted to NPWS Wildlife Licensing Unit.

The derogation licence will allow the named licence holder (who must be an appropriately experienced ecologist) to carry out surveying, trapping, capturing and translocation of Kerry slug as well as the removal of the suitable habitat to support Kerry slug within the Site. Translocation surveys will begin at least six weeks prior to any works commencing on Site; this includes enabling works such as tree felling and ground investigations.

4.1. Mortality / Injury

The methods to be followed to reduce the likelihood of direct mortality of Kerry slug as a result of the proposed development are provided in this section. The methods proposed will prevent the deliberate killing of individuals which is an offence under Part 6, Section 51(2) of the European Communities (Birds and Natural Habitats) Regulations 2011 – 2021 (see Appendix A).

- Surveys to trap and relocate Kerry slug will be carried out prior to commencement of any works, including tree felling, to facilitate the wind farm development. Suitable receptor sites to receive any captured Kerry slugs will be identified before surveys and relocation begins. Receptor sites will consist of areas of suitable habitat, such as that detailed in Section 3 and shown in Figure 4. Receptor Sites will include habitats of exposed rock, habitats with of moss-covered trees, or a mixture of both that will be unaffected by the development.

- The live trapping and capturing methods used will include metric trapping and hand searches by the ecologist named on the licence and with experience in surveying for Kerry slug.

- Trapping methods will be informed by McDonnell (2011). Traps will be placed a minimum of 6 weeks prior to works commencing and checked weekly. The location of the traps throughout the Site will be decided by the licenced ecologist. Trap locations will be informed by this Method Statement and will focus on the suitable habitats detailed in section 3 and shown in Figure 4.

- Hand searching will focus on features such as exposed rocks and boulders and moss-covered trees. Particular attention will be given to features which provide cover such as any crevices, or where moss cover may be most dense, and under mats of moss and or flaking bark. Hand searches will be carried out under suitable weather conditions when this species is more likely to be active in

the open, such as damp and humid conditions, on overcast warm damp days either during or after rain, at dawn, dusk or during the night periods during mild weather.

- During the hand searches any suitable vegetation to support Kerry slug, such as mats of moss other bryophytes, will be collected along with slugs. This collected material will be used in the capturing and translocation of Kerry slug (see below). This will also reduce the likelihood of Kerry slug moving back into the area.

- Once captured, slugs will be placed into a clean secure container with sufficient ventilation. Gloves will be used when handling slugs. Bryophytes from the capture location will also be placed into the container if present to provide a food, source of moisture and shelter. If no bryophyte cover is present an alternative food source, such as carrot slices, will be provided along with local vegetation. In dry conditions deionised water should be used 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 translocated to a receptor site with exposed rock, slugs captured under moss on trees will be translocated to a receptor with moss covered trees etc. In all cases translocated slugs will be placed under cover, such as moss or other vegetation, at the receptor site to reduce the likelihood of predation or desiccation. Captured slugs will be relocated to receptor site as soon as possible after capture within the same day.

- The final surveys will be carried out a maximum of 24 hours before the habitat being destroyed. Areas will only be entered once translocation surveys, as detailed above, are complete and it is confirmed as safe to proceed by the licence holder.

- A full record of all translocations, including numbers captured, photo evidence of Kerry slug, capture and receptor coordinates will be kept and made available to NPWS on request.

- The contractor appointed to construct the wind farm will be responsible to ensure that there will be no use of machinery outside of the footprint of the development to prevent accidental death of slugs in areas that have not been surveyed or where slugs have not been translocated

4.2. Loss of Habitat

The methods to be followed to limit the extent of habitat loss as a result of the proposed development are provided in this section. The methods will prevent damage to Kerry slug habitat outside of the development footprint. Damage or destruction to breeding site or resting habitat of Kerry slug without a derogation licence is an offence under Part 6, Section 51(2) of the European Communities (Birds and Natural Habitats) Regulations 2011(see Appendix A).

- The contractor appointed for the construction phase will be responsible for ensuring that no machinery is allowed to enter lands outside of the development footprint to prevent damage to suitable Kerry slug habitat outside of the development.

- Kerry slug has a strong association with sandstone outcrops and boulders. Suitable surface boulders within the footprint of the development will be collected at a number of locations within the Site and retained at designated locations for later reinstatement. The selection of suitable boulders and locations for collection, retention and final placement will be decided by the ecologist named on the derogation licence in collaboration with the appointed contractor and developer as approrpiate. Placement locations will be adjacent to the development footprint to avoid tracking machinery over undisturbed habitat.

- Areas requiring tree felling outside of the development footprint, such as within the buffer around each turbine, will have stumps left in-situ. Research (Reich et al. 2012) has shown that clear-felled areas with retained stumps provide suitable habitat to support Kerry slug. The suitability of these areas could be further increased by the addition of retained surface boulders as described above.

- Where tree felling is required, such as with the buffer around each turbine, a line of log piles will be placed within the boundary of the felling area. Kerry slug can take refuge within log piles and feed on the bryophytes supported by the decaying wood.

4.3. Population Fragmentation

The dispersal and population movements of Kerry slug is not well known. There is also a lack of quantitative data on population estimates and genetic variation across its native range (Moorkens 2009, McDonnell 2011). While the species is largely sedentary[8] efforts will be taken to prevent barriers to movement within suitable habitats to avoid population fragmentation. As the dispersal and population movements of Kerry slug are not well known there are no measures specified in literature to reduce the effect of population fragmentation for projects such as this. The following methods have been developed based on the known ecology of Kerry slug and are specific to this project.

- Kerry slug can be sensitive to changes in the mineral composition of strata (Platts & Speight 1988). Sandstone is generally neutral to slightly acidic. The proposed internal roads will be capped with limestone which is alkaline. This may cause reduction in movements of Kerry slug across wind farm roads. To reduce the potential barrier effect of these roads underpasses will be provided underneath the road surfaces. Underpasses will be made of neutral to slightly acidic material and will have a minimum diameter of 30 cm to reduce the likelihood of blockage.

- The roadsides leading to and from the underpasses should be lined with features such as boulders and log piles to direct potential movements to these areas. These features will be placed at a minimum distance of 20 m from the underpasses either side of the road.

- Underpasses will be prioritised in locations through optimal and suitable habitats detailed in section 3 and shown in Figure 4. Underpasses will be installed at the same location as road drains but will be placed above the expected water levels to avoid extended times of flooding. The location of the underpasses will be determined at the detailed project design stage with input from the ecologist holding the derogation licence.

- Underpasses should be kept free of blockages. Annual checks will be carried out as part of the routine operation of the development and any blockage will be removed during these checks.

[8] Mean mobility of 0.55 m (broadleaf wood) to 0.12 m (blanket bog) recorded per day (McDonnell 2011)

5. Potential Enhancement Measures

This section identifies any measures that will enhance the value of the Site in relation to the current conditions. Much of the Site currently consists of suitable habitat for Kerry slugs. Measures should only be considered enhancements if they increase the value of habitat for Kerry slug from “not suitable” to “suitable”, or from “suitable” to “optimal “.

Conifer plantation is a suitable habitat for Kerry slug where mosses are abundant and where suitable cracks and crevices occur. Conifer plantation would also be considered suitable where the understoreys are open and relatively well lit. Kerry slug appear to avoid the densest planting and the centre of plantations (McDonnell & Gormally 2011), likely due to the lack of food availability (NPWS 2021).

Mature areas of closed canopy forestry are proposed to be felled within the turbine buffer zones. These areas will remain free of forestry and not subsequently developed. As mentioned in section 4.2 tree stumps within clear felled areas provide suitable habitat to support Kerry slug. Tree stumps will be left in-situ in these areas where possible. These areas will then be further enhanced by the addition of retained surface boulders collected from the Site during clearance works (see section 4.2). Should there be insufficient surface boulders retained to cover these areas, then additional subsurface sandstone rock sourced from the on Site borrow pits may be used. Previous research has shown that Kerry slug will recolonise boulder habitat after clear-felling (McDonnell & Gormally, 2011; Reich et al., 2012).

The replacement of closed canopy mature forestry with open areas comprising a mixture of tree stumps and provision of surface boulders along with the existing exposed rock will result in a long term provision of suitable habitat for Kerry slug in these areas.

6. Post-construction Monitoring

This section identifies any monitoring required for Kerry slug after the proposed development has been constructed.

- The underpasses detailed in section 4.3 will be required to remain open for the movement of slug throughout the lifetime of the development. Annual monitoring of each underpass will be carried out as part of the routine maintenance of the development. Monitoring will be carried out by a designated person with responsibility for maintaining or implementing environmental measures forming part of the development. Any blockages will be removed as soon as possible.

- The effectiveness of the underpasses as mitigation will also be monitored and recorded. The entrances and features placed to direct Kerry slug to the underpasses will be examined for the presence of Kerry slug. Checks will be carried out annually for a period of 5 years post completion of construction. During each check a minimum of 33% of underpasses within the Site will be examined. The checks will be hand searches carried out under licence by an ecologist experienced in Kerry slug ecology. The effectiveness of the underpasses and other measures will be used to inform future developments.

- Enhancement areas detailed in section 5 will be monitored to record recolonisation by Kerry slug. Monitoring will be carried out under licence by an ecologist with experience of carrying out Kerry slug surveys. Monitoring will comprise live traps as detailed in section 4.1. Traps will be left in-situ at multiple locations with each section. The number of traps and their placement will be determined by the licence holder. Monitoring will be carried out once a year for a period of 5 years post construction to assess the effectiveness of the enhancement measures. A record of monitoring will be kept and made available to NPWS upon request. Records will include the number of slugs observed, photo evidence and the coordinates of the traps. The effectiveness of the measures will be used to inform future developments.

7. Conclusions

The impacts and effects of the proposed development on the population of Kerry slug at the Cummeennabuddoge Wind Farm site will be reduced following implementation of the measures described in this document. The methods developed for this project will prevent the deliberate killing of Kerry slug, damage or destruction of its breeding or resting habitat outside of the development footprint, and reduce the potential to fragment the local population. The measures set out in this report can be used to inform the conditions, restrictions or requirement of a derogation licence

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Figures

Figure 1. Site Location

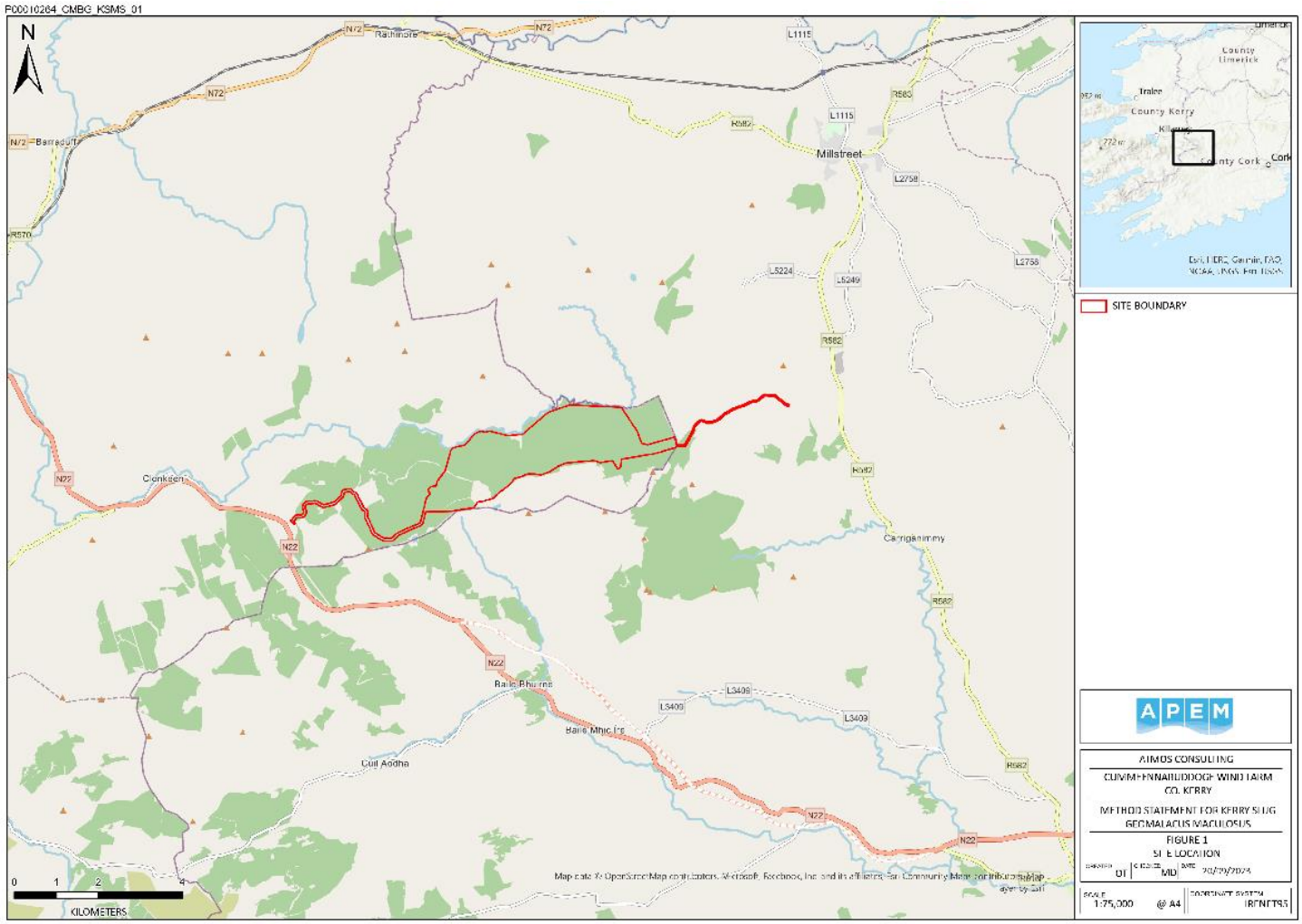


Figure 2. Existing Records

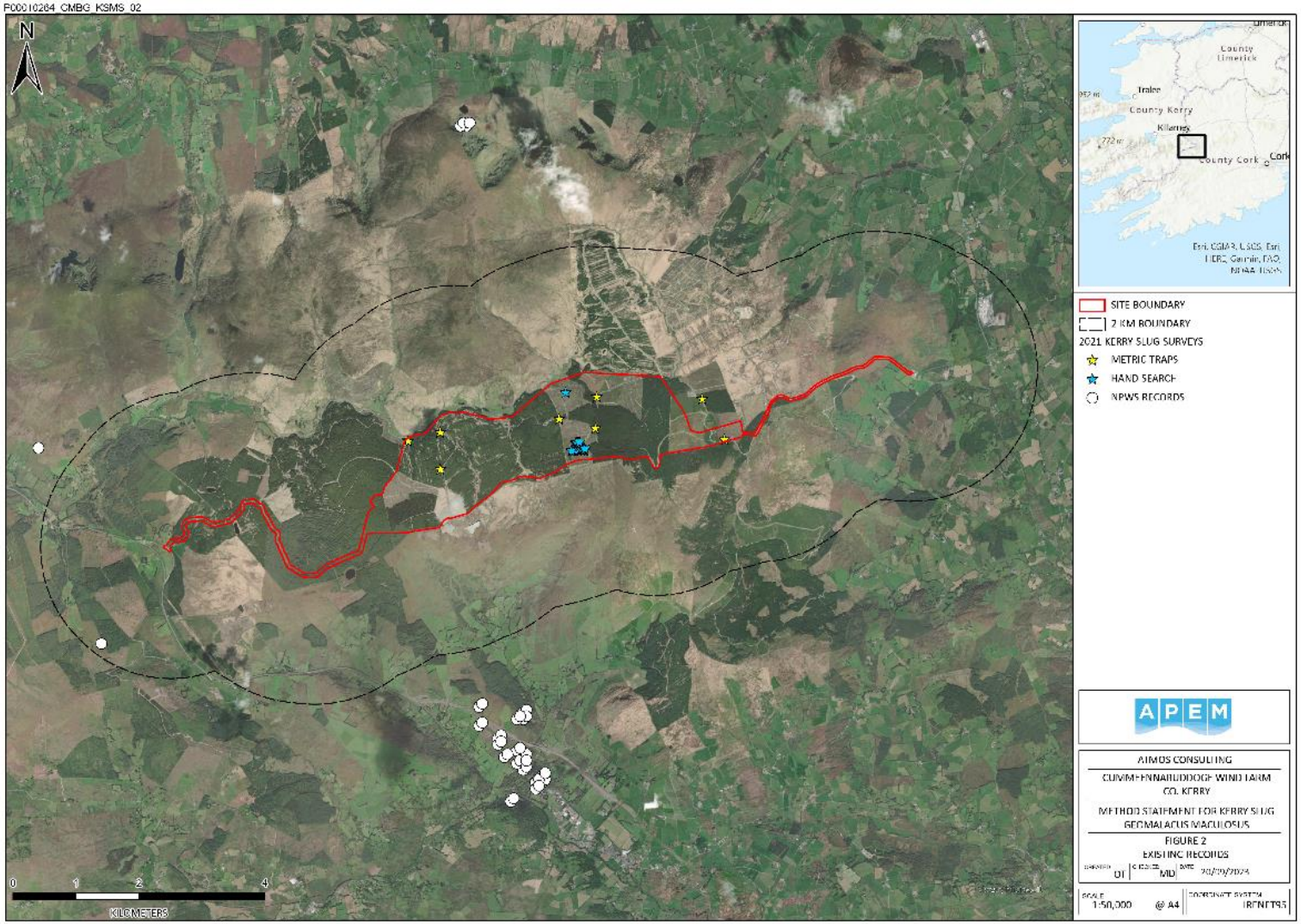


Figure 3. Habitat Map

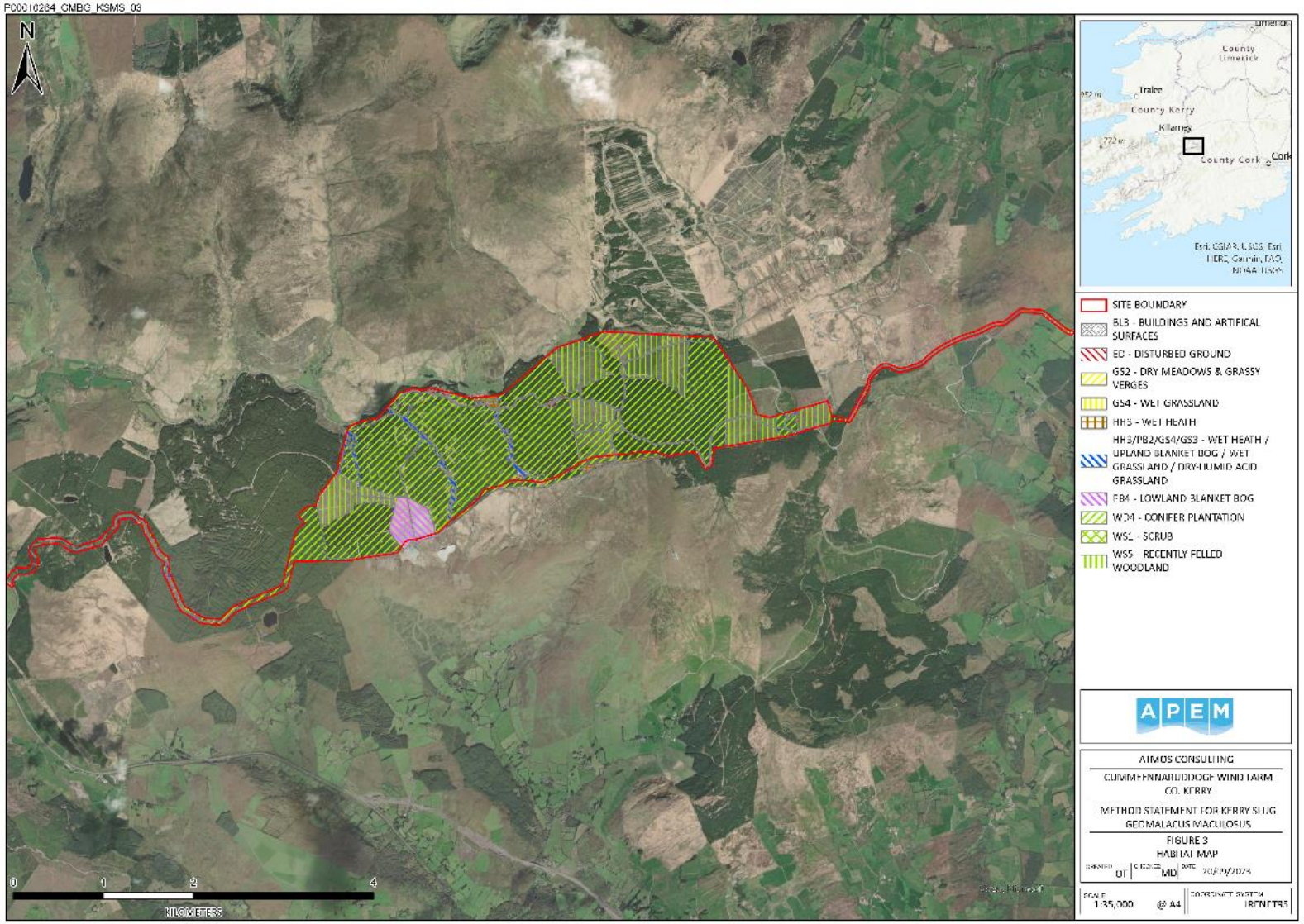
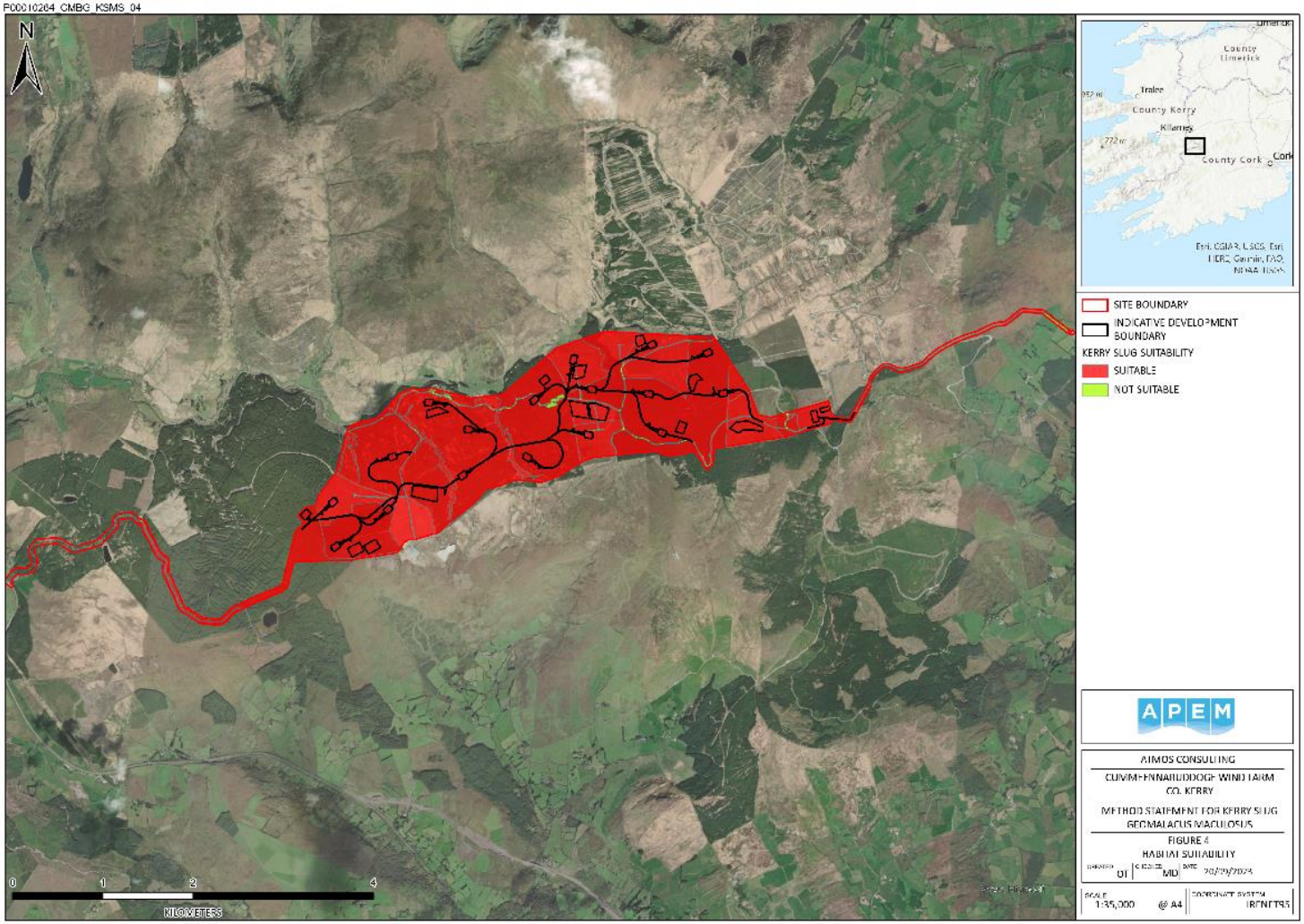


Figure 4. Habitat Suitability



Appendix A: Legislation

The Habitats Directive (92/43/EEC);

Kerry slug is listed under Annex II and Annex IV of the Habitats Directive, which is transposed into Irish law through the EC (Birds and Natural Habitats) Regulations 2011.

Species listed under Annex II have the core areas of their habitat designated as Sites of Community Importance (SCI) and included in the Natura 2000 network. These sites must be managed in a accordance with the ecological needs of the species.

Species listed under Annex IV are afforded strict protection across their entire natural range within the EU. This includes areas within and outside of the Natura 2000 network.

European Communities (Birds and Natural Habitats) Regulations 2011 - 2021. No. 477/2011)

Kerry slug is protected under Part 6 of the Regulations. The legal protection set out within Part 6 of the EC (Birds and Natural Habitats) Regulations 2011 -2015 applies to all faunal species listed on Annex IV of the Habitats Directive. Part 6, Section 51(2) of the Regulations makes it an offence to:

deliberately capture or kill any specimen of these species in the wild,

deliberately disturb these species particularly during the period of breeding, rearing, hibernation and migration,

deliberately takes or destroys eggs of those species from the wild,

damage or destroy a breeding site or resting place of such an animal, or

keeps, transports, sells, exchanges, offers for sale or offers for exchange any specimen of these species taken in the wild, other than those taken legally as referred to in Article 12(2) of the Habitats Directive.

The use of the word "deliberately" should be read in light of the relevant case law[9]. The Commission's Guidance, based on these cases, proposes the following definition and commentary:

"Deliberate actions are to be understood as actions by a person who is aware that these actions will lead to capturing or killing a species listed in Annex IV, or consciously accepts the possibility of such an offence. In other words, the provision applies not only to a person who fully intends to capture or kill a specimen of a protected species but also to a person who is sufficiently informed and aware of the consequences his or her action will most likely have and nevertheless still performs the action, which leads to the capturing or killing of specimens (e.g. as an unwanted but accepted side effect)." 6

It should also be noted that in the case of damage to, or destruction of, a breeding or resting place of an Annex IV species animal may constitute an offence unless a derogation licence has been granted. This action does not need to be deliberate. Breeding and resting places are protected even when the animals are not using them, once there is a high probability that they will return. This places an onus

[9] Namely cases C-103/00 and C-221/04 of the Court of Justice of the European Union (CJEU)

of due diligence on anyone proposing to carry out an action or project that might result in such damage or destruction.

The Wildlife Acts 1976 to 2021

Kerry slug is protected under the Wildlife Acts 1976 - 2021. Section 23 of the Wildlife Acts applies to any animal which is of a species of fauna specified in the Fifth Schedule. Kerry slug was added to the Fifth Schedule by regulations made in SI 112/1990.

Section 23 of the Wildlife Acts makes it an offence to hunt, injure or wilfully interfere with or destroy the breeding place of any species listed on the Fifth Schedule of the Acts, other than in specific circumstances, as set out in Section 23 of the Wildlife Acts, when certain exemptions apply.

Section 23 of the Wildlife Acts prohibits all deliberate damage to Kerry slug and its habitat but does not cover indirect damage or activities that are licensed by other authorities3. Under this legislation it is an offence to intentionally kill or injure a bat or intentionally destroy or disturb a breeding place or resting place. It is also an offence under the Wildlife Acts if anyone wilfully interferes with or destroys the breeding place or resting place of a bat.

Derogation Licences

In certain circumstances, under both The Habitats Directive and The Wildlife Acts and, a person may apply for a derogation licence.

Licence to Interfere with or Destroy the Breeding Places of Any Wild Animals

The Wildlife Acts state that any person who wilfully interferes with or destroys the breeding place or resting place of any protected wild animal, shall be guilty of an offence.

Section 6 (a) allows for a person to "*to take, capture or humanely kill or capture and humanely kill at any time a protected wild animal of a species specified in the licence for such educational, scientific or any other purpose as shall be specified in the licence*" under licence.

It is permitted to destroy breeding or resting places in certain circumstances under a derogation afforded by Section 23 (7)(iv) which states that:

"anything which is duly done pursuant to a licence or other permission granted or issued pursuant to the Wildlife Acts, 1976 and 2000, or which is duly done pursuant to any other statute or statutory instrument, which is permitted to be done under such a statute or instrument or which is done pursuant to and in accordance with a licence or other permission granted or issued pursuant to such a statute or instrument or anything caused by or which results from, or is consequent upon or the effect of any other act or thing which is lawfully done."

Licence to Disturb Annex IV species or their Breeding or Resting Places

Article 16 of the Habitats Directive provides for derogations in limited situation. These may be issued *"provided there is no satisfactory alternative and the derogation is not detrimental to the maintenance of the populations of the species concerned at a favourable conservation status"*

If the proposed activity can be timed, organised and carried out so as to avoid committing offences under Irish wildlife legislation and the EU Habitats Regulations, then no derogation is required.

The domestic legislation that implements this Directive gives strict protection to Kerry slug and their breeding and resting places. Where a proposed development will affect a site known to be used by Kerry slug, consideration needs to be given to the likely impact on the population(s). Even when planning permission is given, or the activity does not require such permission, the wildlife legislation applies; Kerry slug and their breeding and resting places are still protected.

Applications for a derogation licence should be made in writing, including supporting information, to the Wildlife Licence Unit of NPWS.