



Invasive Alien Species Report for Peake Mantua to Corracreigh GWS Interconnector Pipeline

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Project	Invasive Alien Species Report for Peake Mantua to Corracreigh GWS Interconnector Pipeline
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1. Introduction and Summary

Tara Challoner, Ecological Consultant was commissioned by TJ O'Connor to survey for high-risk invasive alien species, along the proposed new Peake Mantua to Corracreigh GWS Interconnector Pipeline. (The route of this pipeline, within the existing road network is shown in **Figure 1**). A desk top survey was undertaken which did not find records of high-risk invasive alien species within 1km of the proposed works. A detailed field survey was undertaken on August 7th, 2023. One high risk invasive alien species was recorded, Cherry Laurel, (*Prunus laurocerasus*). However, this plant will not be impacted by the proposed development and its presence does not have the potential to lead to an offence under the Birds and Natural Habitats Regulations 2011 (S.I. 477 of 2011).

This report concludes that the proposed development will not have any invasive alien species impacts. A list of all plant species recorded during this survey is shown in **Appendix A**.

2. Invasive Alien Species

Alien plants are defined as those plants which have been introduced outside of their native range by humans and their activities, either purposefully or accidentally. Invasive alien (or non-native) species are so-called as they typically display one or more of the following characteristics or features:

- (1) prolific reproduction through seed dispersal and/or re-growth from plant fragments
- (2) rapid growth patterns
- (3) resistance to standard weed control methods

The threat to biodiversity and related ecosystem services that invasive alien species pose takes different forms, including severe impacts on native species and the structure and functioning of ecosystems through the alteration of habitats, predation, competition, the transmission of diseases, the replacement of native species throughout a significant proportion of range and through genetic effects by hybridisation. Furthermore, invasive alien species can also have a significant adverse impact on human health and the economy.

The National Biodiversity Data Centre has carried out Risk assessments to review the current knowledge on alien species. This enabled the categorisation of these species as being of either high, medium or low risk of invasiveness. Of the 377 recorded alien species in Ireland that were risk assessed, the majority (66%) are at risk of low impact, 21% ranked with a risk of medium impact and 13% ranked as having a risk of high impact.

3. Alien invasive species legislation

Regulations 49 and 50 of the European Communities (Birds and Natural Habitats) Regulations 2011 and as enacted in Ireland under S.I. 477 of 2011 of the European Communities (Birds and Natural Habitats) Regulations 2011 make it an offence to plant, disperse, allow dispersal or cause the spread of certain species e.g., Japanese knotweed, Himalayan knotweed and Himalayan Balsam. The Regulations prohibit possession for these

plants or any vector material from these plants for the purpose of sale, breeding, reproduction, propagation, distribution, introduction or release, or to keep anything from which the plant can be reproduced or propagated from, without a granted licence.

The Wildlife (Amendment) Act 2000 states that anyone who plants or otherwise causes to grow in a wild state in any place in the State any species of (exotic) flora, or the flowers, roots, seeds or spores of (exotic) flora shall be guilty of an offence.

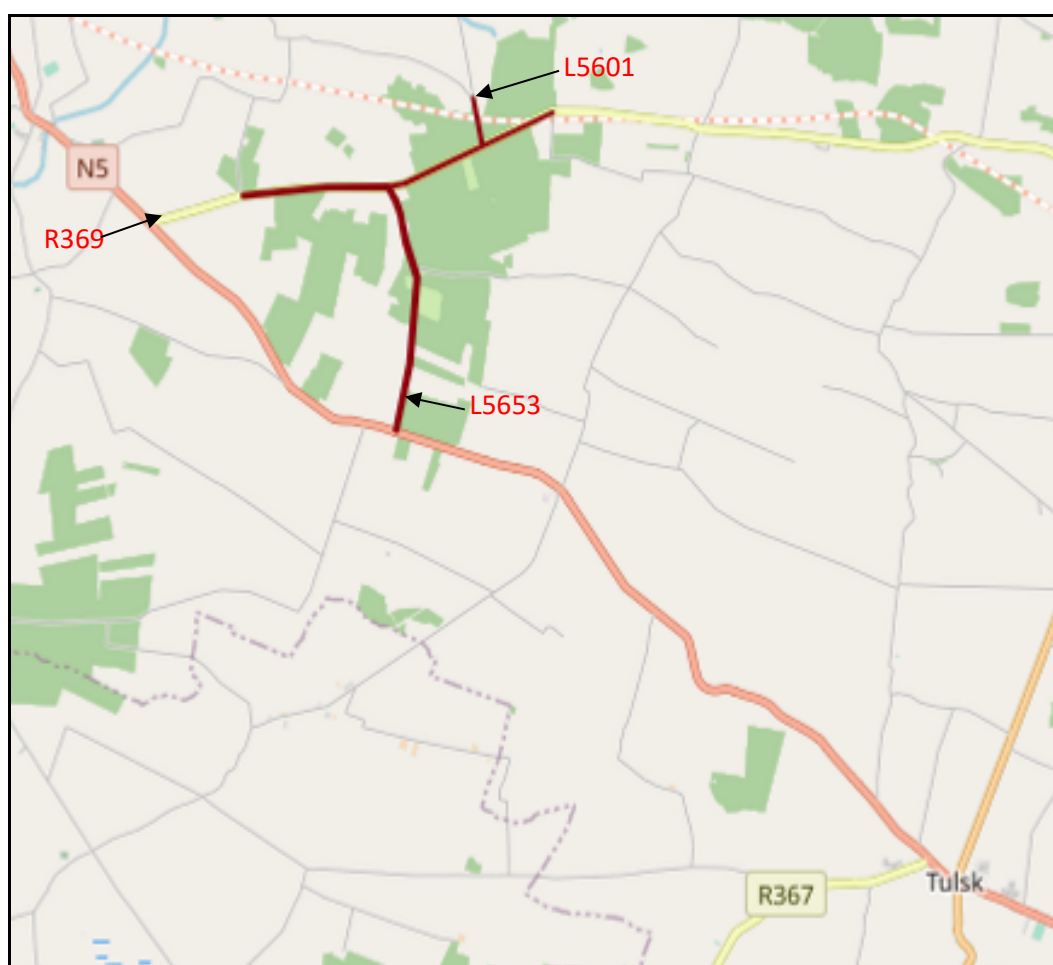
The EU Regulation (No.1143/2014) on invasive alien species entered into force on 1st January 2015. The Regulations as updated by (EU) 2022/1203 of 12 July 2022 published a first list of 84 invasive alien species of EU concern. The species on the list are subject to restrictions on keeping, importing, selling, breeding and growing. Member States of the European Union must take measures to stop their spread, implement monitoring and preferably eradicate these species. Even if they are already widespread in the country, they are expected to manage the species to avoid further spread.

4. Existing landscape

The proposed development is situated in a quiet rural area, with surrounding land use dominated by state owned coniferous dominant forestry, and extensively managed cattle and sheep grazed pasture. Roscommon County Council have defined 36 landscape character areas for Roscommon county. This proposal occurs within the Tulsk and Rathcroghan Plateau, one of 2 landscapes within the county classified as being of exceptional landscape value. This is principally due to the visually striking concentration of archaeological monuments at Rathcroghan Complex, comprising of mounds, ringforts, ring barrows, ancient roads and field systems, megalithic tombs and souterrains.

Figure 1 shows the location of the proposed pipeline: it runs along the minor road, L5653 which connects the R369 to the N5, (this road being approximately 2.2km long) and for a distance west and east of the L563 on the R369 of approximately 1km, and 1.66km respectively. From the R369, it runs approximately 428m northwards along the minor road, L5601.

Figure 1 Location map



5. Desk survey

The National Biodiversity Data Centre (NBDC) shows records for high impact invasive alien species in the hectads (10km x 10km square) in which the proposed development is situated. These are shown below in **Table 1**. There are no records of high impact invasive alien species within tetrads along the development route (M78X, M78Y, M78T), (the 2km OS grid squares which overlap with the proposed development site).

Table 1 NBDC list of high impact invasive alien species in hectads M78, M88

Species name	Species group	10km grid square
Cherry Laurel (<i>Prunus laurocerasus</i>)	flowering plant	M78
Japanese Knotweed (<i>Fallopia japonica</i>)	flowering plant	M78, M88
American Mink (<i>Mustela vison</i>)	terrestrial mammal	M78
Canadian Waterweed (<i>Elodea canadensis</i>)	flowering plant	M88

Source NBDC 10/08/2023

6. Field survey

A detailed invasive alien species survey was undertaken on August 7th, 2023. There were no high impact invasive alien species recorded within the proposed development site and the route of the pipeline was assessed for the presence of invasive alien species along all road verges. Cherry laurel (*Prunus laurocerasus*) – a high impact invasive alien species was recorded at one location. This plant has been categorised as a high impact invasive alien species, particularly concerning its threat to the conservation of native woodland habitats. Two other invasive alien species, one of medium and one of low impact were recorded as part of this survey. None of the species listed will be impacted by the proposed development which will occur within the existing road itself. The invasive alien species recorded are described and pictured below.

Table 2 Invasive alien species recorded during site survey (at road verges)

Invasive species	Category of risk of impact from National Biodiversity Data Centre
Cherry Laurel (<i>Prunus laurocerasus</i>)	High
Buddleia (<i>Buddleia davidii</i>)	Medium
Snowberry (<i>Symphoricarpos albus</i>)	Low

Laurel (Cherry Laurel) *Prunus laurocerasus*

This species is listed as a High Impact Invasive Species by the National Biodiversity Data Centre. It was recorded during the field survey, occurring in a small area on the south side of the R369, eastern section). See **Photograph 1**.

Cherry laurel is a large shrub or small tree with leathery, glossy, oblong, evergreen leaves, and with erect racemes of white flowers that give rise to black cherry-like fruits. It has been and continues to be widely planted for screening, hedging and game cover. It spreads by layering from where it has been planted, to form dense stands. It also produces abundant fruit, which can be dispersed by birds.

Cherry laurel is an extremely invasive plant species, particularly in the more humid western parts of Ireland, forming dense impenetrable thickets. It is unpalatable and likely toxic to mammals and probably invertebrates due to the presence of cyanide. It is avoided by grazing animals, thus giving it significant advantages over native species.

There are no specific legal provisions associated with growing of cherry laurel on the island of Ireland.

It is not listed in the Third Schedule of the European Communities (EC) Birds and Natural Habitats Regulations, nor is it listed in the Guidelines on the Management of Noxious Weeds and Non-Native Invasive Plant Species on National Road Schemes. Therefore, its presence at the site does not have the potential to lead to an offence under the Birds and Natural Habitats Regulations 2011 (S.I. 477 of 2011).

Extermination may be desirable if the infestation is causing undesired effects on natural or semi-natural habitats, but this can be achieved only through physical, mechanical means, and is expensive and labour-intensive. To inhibit regrowth, herbicides are usually applied to cut stools. Application of herbicides to mature, uncut plants is ineffective.

Buddleia (*Buddleia davidii*) has been classified by the NBDC as a non-native species with a medium risk of impact. It was recorded in one location on the south side of the R369, eastern section. See **Photograph 2**.

This species is listed on the Invasive Species Ireland “*Amber List: Recorded Species*” (which under the right conditions could represent a significant impact on native species or habitats). Buddleia is also included in the *NRA Guidelines on the Management of Noxious Weeds and Non-native Species on National Road Schemes* (NRA, 2010) as these species have been shown to have an adverse impact on landscape quality, native biodiversity, or infrastructure. This species is not included in the Third Schedule of the (EC) Birds and Natural Habitats Regulations 2011 (SI 477 of 2011). Therefore, its presence at the site does not have the potential to lead to an offence under the Birds and Natural Habitats Regulations 2011 (S.I. 477 of 2011).

Snowberry (*Symphoricarpos albus*) was frequently recorded along the R369. See **Photograph 3**. Snowberry has been classified by the NBDC as a non-native species with a low risk of impact. Snowberry is a deciduous shrub that can grow to a height of 2m. Snowberry spreads through suckering, in the right conditions the root system can grow rapidly and out-compete native plants. Once established it can form dense thickets and suppress the growth of native plants and prevent access. Berries are poisonous to humans. Due to its ability to grow rapidly, snowberry has been used as hedging, and to stabilise riverbanks and prevent erosion, which provided a corridor for further spread.

It is not listed in the Third Schedule of the European Communities (EC) Birds and Natural Habitats Regulations, nor is it listed in the Guidelines on the Management of Noxious Weeds and Non-Native Invasive Plant Species on National Road Schemes. Therefore, its presence at the site does not have the potential to lead to an offence under the Birds and Natural Habitats Regulations 2011 (S.I. 477 of 2011).

It may be eradicated by spraying with a strong glyphosate-based herbicide, which must be applied when the plant is in full leaf. Several applications may be required.

	Photograph 1. Laurel (Cherry Laurel) <i>Prunus laurocerasus</i> Woodland edge on south side of R369 Location: 53.834439903480984, - 8.321284342174517
	Photograph 2. Buddleia <i>Buddleia (Buddleia davidii)</i> Roadside on south side of R369 Approximate location: 53.836945449055385, - 8.312043978676526
	Photograph 3. Snowberry (<i>Symphoricarpos albus</i>) Roadside on south side of R369, frequently distributed.

7. Conclusion

No high-risk invasive or invasive alien plant species were found that will be impacted by the proposed development. The proposed development will not result in the spread or dispersal of any invasive alien species. Standard biosecurity measures should be implemented as part of the CEMP to ensure that invasive alien species from outside the project area are not brought into the development site.

Appendix A

Species recorded 07/08/23

Common name	Latin name
Agrimony	<i>Agrimonia eupatoria</i>
Alder	<i>Alnus glutinosa</i>
Annual meadow grass	<i>Poa annua</i>
Ash	<i>Fraxinus excelsior</i>
Beech	<i>Fagus sylvatica</i>
Birds foot trefoil	<i>Lotus pedunculatus</i>
Bittersweet	<i>Solanum dulcamara</i>
Black medick	<i>Medicago lupulina</i>
Bramble	<i>Rubus fruticosus agg.</i>
Broad buckler fern	<i>Dryopteris dilatata</i>
Broad leaved dock	<i>Rumex obtusifolius</i>
Buddleija	<i>Buddleia davidii</i>
Bugle	<i>Ajuga reptans</i>
Cleavers	<i>Galium aparine</i>
Cocksfoot	<i>Dactylis glomerata</i>
Coltsfoot	<i>Tussilago farfara</i>
Common daisy	<i>Bellis perennis</i>
Common fleabane	<i>Pulicaria dysenterica</i>
Common knapweed	<i>Centaurea nigra</i>
Common nettle	<i>Urtica dioica</i>
Common reed	<i>Phragmites australis</i>
Common sedge	<i>Carex nigra</i>
Common sorrel	<i>Rumex acetosa</i>
Common twayblade	<i>Listera ovata</i>
Compact rush	<i>Juncus conglomeratus</i>
Cotoneaster species	
Cow parsley	<i>Anthriscus sylvestris</i>
Creeping buttercup	<i>Ranunculus repens</i>
Creeping thistle	<i>Cirsium arvense</i>
Crested dog's tail	<i>Cynosurus cristatus</i>
Curled dock	<i>Rumex crispus</i>
Dandelion	<i>Taraxacum spp.</i>
Devils' bit scabious	<i>Succisia pratensis</i>
Dog rose	<i>Rosa canina</i>
Elder	<i>Sambucus nigra</i>
European gorse	<i>Ulex europaeus</i>
Evening primrose	<i>Oenothera biennis</i>
False brome	<i>Brachypodium sylvaticum</i>
False oat grass	<i>Arrhenatherum elatius</i>
Field forget me not	<i>Myosotis arvensis</i>
Flag iris	<i>Iris pseudacorus</i>
Fuchsia	<i>Fuchsia magellanica</i>
Germander speedwell	<i>Veronica chamedrys</i>

Great willowherb	<i>Epilobium hirsutum</i>
Greater plantain	<i>Plantago major</i>
Grey willow	<i>Salix cinerea</i>
Ground elder	<i>Aegopodium podagraria</i>
Hard fern	<i>Blechnum spicant</i>
Harstongue	<i>Asplenium scolopendrium</i>
Hawthorn	<i>Crataegus monogyna</i>
Hazel	<i>Corylus avellana</i>
Hedge bindweed	<i>Calystegia sepium</i>
Hedge woundwort	<i>Stachys sylvatica</i>
Herb Robert	<i>Geranium robertianum</i>
Hogweed	<i>Heracleum sphondylium</i>
Horsestail	<i>Equisetum arvense</i>
Ivy	<i>Hedera helix</i>
Lady's bedstraw	<i>Galium verum</i>
Laurel	<i>Prunus laurocerasus</i>
Lawson's cypress	<i>Chamaecyparis lawsoniana</i>
Lesser burdock	<i>Arctium minus</i>
Maidenhair spleenwort	<i>Asplenium trichomanes</i>
Marsh thistle	<i>Cirsium palustre</i>
Marsh valerian	<i>Valeriana dioica</i>
Marsh woundwort	<i>Stachys palustris</i>
Meadow vetchling	<i>Lathyrus pratensis</i>
Meadowsweet	<i>Filependula ulmaria</i>
Mouse ear	<i>Cerastium fontanum</i>
Nipplewort	<i>Lapsana communis</i>
Osier	<i>Salix viminalis</i>
Oxeye daisy	<i>Leucanthemum vulgare</i>
Perennial sow thistle	<i>Sonchus arvensis</i>
Pineappleweed	<i>Matricaria discoidea</i>
Primrose	<i>Primula vulgaris</i>
Purple loosestrife	<i>Lythrum salicaria</i>
Quaking grass	<i>Briza media</i>
Ragwort	<i>Senecio jacobea</i>
Red bartsia	<i>Odontites vernus</i>
Red clover	<i>Trifolium pratense</i>
Redshank	<i>Persicaria maculosa</i>
Ribwort plantain	<i>Plantago lanceolata</i>
Rosebay willowherb	<i>Chamaenerion angustifolium</i>
Rough meadow grass	<i>Poa trivialis</i>
Selfheal	<i>Prunella vulgaris</i>
Silverweed	<i>Potentilla anserina</i>
Smooth sow thistle	<i>Sonchus asper</i>
Snowberry	<i>Symphoricarpos albus</i>
Soft rush	<i>Juncus effusus</i>
Spear thistle	<i>Cirsium vulgare</i>
Spirea	
Square stemmed St. John's wort	<i>Hypericum tetrapterum</i>
Purple moor grass	<i>Molinia caerulea</i>

Sweet violet	<i>Viola odorata</i>
Sycamore	<i>Acer pseudoplatanus</i>
Tormentil	<i>Potentilla erecta</i>
Tufted hair grass	<i>Deschampsia caespitosa</i>
Tufted vetch	<i>Vicia cracca</i>
Tutsan	<i>Hypericum androsaemum</i>
Upright hedge parsley	<i>Torilis japonica</i>
Water forget me not	<i>Myosotis scorpioides</i>
Watermint	<i>Mentha aquatica</i>
White clover	<i>Trifolium repens</i>
Wild angelica	<i>Angelica sylvestris</i>
Wild privet	<i>Ligustrum vulgare</i>
Wild strawberry	<i>Fragaria vesca</i>
Willowherb sp	<i>Epilobium sp.</i>
Yarrow	<i>Achillea millefolium</i>
Yorkshire fog	<i>Holcus lanatus</i>