

Proposed civic amenity centre,  
Kinincha, Gort, Co Galway

**Appropriate Assessment**

Natura Impact Statement  
(revised)

Report for Galway County Council

October 2021

# 1. INTRODUCTION

The purpose of this report is to examine the proposed development for possible ecological impacts on the integrity of the Natura 2000 network. It was requested by Galway County Council to accompany a Part 8 proposal under the Planning and Development Regulations 2001 (as amended).

The development site is close to the Gort River which flows in Coole Lough so has to be assessed with regard to Article 6 (3) of the EU Habitats Directive which states:

*Article 6 (3): Any plan or project not directly connected with or necessary to the management of the [Natura 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the [Natura 2000] site in view of the [Natura 2000] site's conservation objectives.*

This is transposed into national legislation by Regulation 31 of the European Communities (Natural Habitats) Regulations 1997.

The report will examine the impacts on the integrity of the Natura 2000 sites and allow for a full Appropriate Assessment of the project. It includes a description of the flora and fauna of the site to determine if any ecological connection or parallels exist between the area and the local Natura 2000 sites.

The description is derived from a field visit in August 2020 which was made after examining the available files and online sources of information for the local Natura 2000 sites.

All work was undertaken by Roger Goodwillie, B.A., M.Sc., a full Member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and a practising ecologist for 40 years.

The sources of information used to collect data on the Natura 2000 network of sites include:

- Ordnance Survey of Ireland mapping and aerial photography available from [www.osi.ie](http://www.osi.ie), Google Earth and Bing aerial photography.
- Online data available on Natura 2000 sites as held by the National Parks and Wildlife Service (NPWS) from [www.npws.ie](http://www.npws.ie) including; the Natura 2000 network Data Form; Site Synopsis; Generic Conservation Objective data.
- Online database of rare, threatened and protected species o Publicly accessible biodiversity datasets.
- Status of EU Protected Habitats in Ireland. (National Parks & Wildlife Service, 2013).

## 2. DESCRIPTION OF AREA

The site consists of rough ground between the road and a small tributary channel of the Gort River, adjacent to a licensed municipal wastewater treatment plant. There is a small shed nearby in scrub, beyond the southern end of the site. The area experienced some fly tipping in the past so there are low piles of stone or asphalt materials grown over by vegetation. There is no evidence of flooding as the site is raised above the adjacent floodplain.

### 2.1 Habitats & Flora

The habitat could be described as scrub (WS1 in Fossitt 2000) with a little dry meadows and grassy verges (GS2). Bramble *Rubus fruticosus* and blackthorn *Prunus spinosa* are common with small trees of grey willow *Salix cinerea* and larger ones of goat willow *Salix caprea* and Italian alder *Alnus cordata*. In between, are such plant species as

<i>Arrhenatherum elatius</i>	false oat grass
<i>Elytrigia repens</i>	scutch
<i>Urtica dioica</i>	nettle
<i>Lathyrus pratensis</i>	meadow vetchling
<i>Trifolium pratense</i>	red clover
<i>Chamerion angustifolium</i>	rose-bay
<i>Origanum vulgare</i>	wild marjoram

The site is limited by an unclipped hedge of the eastern side, formed of elder *Sambucus nigra*, blackthorn *Prunus spinosa*, hawthorn *Crataegus monogyna* and ivy *Hedera helix*. Then a narrow strip of improved agricultural grassland (GA1) occurs followed by the watercourse with its marginal plants of fool's watercress *Apium nodiflorum*, yellow flag *Iris pseudacorus* and nettle *Urtica dioica*.

### 2.2 Fauna

There was no evidence of large mammals on site though the rabbit would be expected. The site is fairly isolated from other tree growth and is unlikely to have high significance for bats, especially as the nearby shed is unsuitable for roosting. However, the roadside hedges and trees in the wastewater treatment plant do provide cover for commuting and feeding animals. A survey (FGE October 2021) found low-moderate bat activity along the road and moderate feeding activity on the site, concentrating on the scrubland to the south. Seven species were recorded, including the light-sensitive whiskered and Natterer's bats. A lesser horseshoe bat was also recorded. This is a rarer species than the others and one that is included in Annex 2 of the Habitats Directive.

### 2.3 Evaluation

There are no features of habitat interest on the site and the plant and insect species seen were all common ones, widely distributed in the area and expected to occur. The importance of the scrub and local hedges for bats is moderate.

No invasive species were seen such as Japanese knotweed.

### 3. APPROPRIATE ASSESSMENT

#### 3.1 Introduction

Appropriate assessment was introduced by the EU Habitats Directive as a way of determining if a planned project is likely to have a significant effect on the integrity of one of the Natura 2000 sites so far designated (i.e. the candidate SAC's and SPA's), or their conservation objectives. In this case there are twenty-one Natura sites within 15km which are shown on the map at end. They are:

Name of site	Site Code	Distance (km)
Coole-Garryland complex	0252	1.0
Coole-Garryland SPA	4107	1.4
Newhall-Ballylee Turlough SAC	2293	3.1
East Burren complex	1926	3.4
Caherglassaun Turlough SAC	0238	3.8
Ballinduff Turlough SAC	2295	4.0
Slieve Aughty SPA	4168	4.2
Lough Cutra SAC	0299	4.4
Lough Cutra SPA	4056	4.4
Cahermore Turlough SAC	2294	5.0
Termon Lough SAC	1321	5.3
Lough Coy SAC	2117	5.5
Peterswell Turlough SAC	0318	5.7
Drummin Wood SAC	2181	6.8
Gortacarnaun Wood SAC	2180	6.9
Ardrahan Grassland SAC	2244	8.2
Inner Galway Bay SPA	4031	9.5
Galway Bay complex	0268	9.5
Lough Fingal complex	0606	10.5
Sonnagh Bog SAC	1913	11.1
Castletaylor complex SAC	0242	11.3

In the Irish context the assessment has been interpreted as a four-stage process. Firstly, a screening exercise (Stage 1) determines if a project could have significant effects on a Natura site. If it does or the situation is unclear a Natura Impact Statement (Stage 2) is provided to the planning or regulatory authority which then conducts an Assessment of the information supplied. Examples of significant effects are a loss of habitat area, fragmentation of the habitat, disturbance to species using the site and changes in water resources or quality. If such negative effects come to light in the assessment, alternative solutions are investigated by the proponent (Stage 3) and modifications

made unless the project is deemed to be driven by 'imperative reasons of overriding public interest' in its current form. In this case Stage 4 then deals with compensatory action.

The following guidance documents have been used in the screening process:

- Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (DEHLG 2009, Revised February 2010).
- EU Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC (EC, 2007).
- Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (EC, 2002).
- Managing Natura 2000 Sites: The provisions of Article 6 of the 'Habitats' Directive 9. (EC 2000).
- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPW 1/10 and PSSP 2/10.
- Guidelines for Good Practice Appropriate Assessment of Plans under Article 6(3) Habitats Directive (International Workshop on Assessment of Plans under the Habitats Directive, 2011).
- Guidance document on the strict protection of animal species of Community interest under the Habitats Directive 92/43/EEC.
- The Status of EU Protected Habitats and Species in Ireland 2013 (Department of Arts, Heritage and the Gaeltacht, 2013). 2/43/EEC (EC, 2000.)
- Court of Justice EU Case C-323/17. Directive 92/43/EEC Article 6(3) — Screening in order to determine whether or not it is necessary to carry out an assessment of the implications, for a special area of conservation, of a plan or project — Measures that may be taken into account for that purpose.
- Appropriate Assessment Screening for Development Management OPR Practice Note PN01. March 2021

### 3.2 Project description

A civic centre is planned at this location accepting many materials for re-cycling from the domestic sector. They may consist of

Aerosols	Metals
Paints, hazardous and non-hazardous	Metallic packaging (Paint tins)
Oils – engine and food, oil filters	Mixed packaging (polystyrene)
Household medicines	CD's & DVD's
Herbicides and pesticides	Tetra Paks
Books, mixed paper, newspapers	Waste electronics
Cardboard	Batteries
Timber – treated and un-treated	Clothing, footwear
Glass	Drink cans, glass jars, bottles

Fluorescent tubes and lamps,

White goods

Hazardous materials and liquids will be in bunded enclosures and the site will be paved and drained to a sump with oil interceptor, to be pumped into the adjacent wastewater treatment plant. Therefore any spillage will be captured and treated in the adjacent wastewater plant.

Associated roadworks for the project aim to improve access by creating two passing places in positions where there is no roadside hedge and re-surfacing a distance of about 270m. The programme will be carried out between September and February to minimise any disturbance of bats; the hedges will also be clipped on the road side but not on the tops. The passing places will be replanted with hawthorn to achieve greater continuity along the road margins, an important aspect of lesser horseshoe bat's feeding areas.

No new road drainage will be required.

### **3.3 Screening of Natura sites**

This stage determines whether there is a linkage and pathway between the project site and the Natura 2000 sites in the area through which environmental impacts could operate. The most frequent type of link is waterborne, either by means of a watercourse or through groundwater. In other cases the pathway may be aerial or other factors aboveground – air pollution, noise, disturbance etc.

#### **Coole-Garryland complex SAC & Coole-Garryland SPA**

These sites are downstream in the same catchment, about 4.7km by surface water link or 1km through groundwater. Since there is a drainage channel and a river which take any immediate flow, the pathway is likely to be on the surface and the groundwater route sealed by the fine sediment of the riverbeds.

#### **Newhall-Ballylee Turlough SAC**

This complex turlough is mostly fed by the Boleyneendorrish River, bringing water from the Slieve Aughty mountains. Some lateral water movements occur over all the lowland area (South Galway flooding study 1997) but these are in response to local rainfall events and do not represent main flows. No likely impact.

#### **East Burren complex SAC**

The site is located on higher ground than the project area, west of the 'Gort' river valley that takes the flow from the project area through Coole and Caherglassaun Loughs to the sea at Kinvarra. No impact possible.

#### **Caherglassaun Turlough SAC**

The turlough is lower down the catchment and any deleterious material from the project area would be very much diluted in Coole Lough by the time it reached here, about 9km away by watercourse. No likely impact.

**Ballinduff Turlough SAC**

Ballinduff Turlough is fed by inflowing water from Coolfin on its NW side (NPWS data). No possible impact.

**Slieve Aughty SPA**

Much above the site in altitude and producing rather than receiving water from it. No impact possible.

**Lough Cutra SAC & Lough Cutra SPA**

This lake is higher up the catchment than the project site and gives rise to the Gort River south of the town. No impact possible.

**Cahermore Turlough SAC**

This is a fairly dry turlough, fed by a local catchment and not on the main outflow from the Gort River. No impact possible.

**Termon Lough SAC**

Located on the SW side of Gort, this does not receive drainage from the project area. No possible impact.

**Lough Coy SAC & Peterswell Turlough SAC**

These two turloughs are fed by the Boleyneendorrhish River bringing water from the Slieve Aughty mountains. No drainage link with the project site.

**Drummin Wood SAC & Gortacarnaun Wood SAC**

These woods occur on the slopes of the Slieve Aughty mountains, above Lough Cutra and not open to any potential impact.

**Ardrahan Grassland SAC**

A dry rocky site above the level of the project area and Gort River. No impact possible.

**Inner Galway Bay SPA & Galway Bay complex SAC**

Galway Bay is the destination for outflows from the project area but marine dilution would be so great to minimise any potential impact. No likely impact.

**Lough Fingal complex SAC**

Fed by a local catchment, not in contact with Gort River. No impact possible.

**Sonnagh Bog SAC**

Higher than project site, on Slieve ASughty nountains. No possible impact.

**Castletaylor complex SAC**

Located north of Ardrahan, this is fed by a local catchment. No possible impact.

It is considered that all sites can be screened out of potential impact except for the Colle-Garryland Complex SAC and the Coole-Garryland SPA. Although the water from these sites reaches Caherglassaun Lough and Galway Bay, it would be subject to increasing dilution on this journey and considerable residence time in the lake where it could be denatured or sedimented out.

### **3.4 Screened-in sites**

#### **3.4.1 Coole-Garryland complex SAC**

The Coole-Garryland Complex is situated in a low-lying karstic limestone area west of Gort, in Co. Galway. It contains a series of seasonal lakes (turloughs), which are fed by springs and a partly submerged river, surrounded by woodland, pasture and limestone heath.

The turlough system is considered to be the most diverse in the country, for both its physiography and vegetation; it is unique in that it is so closely associated with woodland. The woodland is extremely diverse in terms of both habitat and species and was assessed as having the highest conservation rating in the country among the sites surveyed for the National Survey of Native Woodlands. The juxtaposition of these two distinct habitats has led to the development of interesting plant and animal communities that include a suite of rare insect, plant and fungal species. The site includes good quality examples of seven habitats that are listed on Annex I of the E.U. Habitats Directive. Overall, the range of good quality habitats present at Coole-Garryland which support a high diversity of species render the site of high conservation value.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (\* = priority; numbers in brackets are Natura 2000 codes):

- [3150] Natural Eutrophic Lakes
- [3180] Turloughs\*
- [3270] *Chenopodium rubri* p.p. and *Bidention* p.p. Vegetation
- [5130] Juniper Scrub
- [6210] Orchid-rich Calcareous Grassland\*
- [8240] Limestone Pavement\*
- [91J0] Yew Woodlands\*

#### **3.4.2 Coole-Garryland SPA**

The Coole-Garryland SPA is situated in a low-lying karstic limestone area west of Gort and comprises the water areas of the SAC. It comprises a series of turloughs, which are fed by springs and a partly submerged river, surrounded by woodland, pasture and limestone heath. Coole Lough is the largest and most permanent of the turloughs and retains some water throughout the year. Water levels vary greatly depending on rainfall and this has consequences on the numbers of birds present. During prolonged dry spells, higher numbers of some species are present as birds from other sites in the catchment are attracted to the permanent waters of Coole Lough.



The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for Whooper Swan. The numbers average at 214 birds which gives the site an international importance.

### **3.4.3 Conservation objectives**

#### **SAC**

Each of the above interests has conservation objectives listed in NPWS (2020). Broadly these may be expressed as follows:

1. To maintain the Annex I habitats for which the SAC has been selected at favourable conservation condition
2. To maintain the Annex II species for which the SAC has been selected at favourable conservation condition.

#### **SPA**

To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests (whooper swan) for this SPA.

The favourable conservation condition of a habitat is achieved when:

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

The favourable conservation condition of a species is achieved when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

### **3.4.4 Potential effects**

The development area does not hold any of the habitats or species for which the local Natura 2000 sites are listed and therefore cannot act as a reserve area in case of loss. The only rare or protected species on site is the lesser horseshoe bat although the data suggests it is only a sporadic use for commuting or feeding.

The only potential impact would be if deleterious run-off was to enter the Gort River and then affect the ecology of Coole Lough downstream. It is most unlikely that such an effect would penetrate through to Caherglassaun Lough or Galway Bay in view of the size of the facility and the occurrence of dilution.

Since mitigation measures are necessary in the design of the facility, the process is continued into a Natura Impact Statement to examine the conservation objectives for the sites in more detail.

#### 4. NATURA IMPACT STATEMENT

The Natura sites open to risk are the Coole-Garryland complex which is both an SAC and SPA. Sites downstream of it – Caherglassaun and Inner Galway Bay - are sufficiently far removed that any material will be extremely diluted after passage through Coole Lough, even at low water levels.

The civic amenity is essentially a transit station for waste to be collected and stored for short periods before onward shipment for treatment or disposal.

The materials to be accepted at the centre are examined for **potential** effects

Waste stream	Container/treatment	Effect
Aerosols, paint and paint containers	Stored in approved bins, in bunded area for onward transport	Potential negative in run-off water
Books, paper, magazines, cardboard	Stored in roll on/roll-off compactor bins	No impact
Hard plastic	Stored in skip	No impact
Soft plastic	Stored in roll on/roll-off compactor bins	No impact
CD's & DVD's	Dry goods without leachate	No Impact
Used oil and filters	Collected in bunded oil storage tanks	Potential negative in run-off water
Hazardous materials, batteries etc	Stored in dry bins	No impact
Timber	Stored in roll on/roll-off bins	No impact
Flat glass	Stored in skip	No impact

WEEE	Roll-on/roll-off contained with lockable doors	No impact if managed properly
Fluorescent tubes	Dry bins	No Impact
Residual waste	Roll-on/roll-off compactor with bin lift	No impact
Bottles, food cans, clothes	Glassco/Rehab containers	No impact

#### 4.1 Screened-in European sites – potential impacts

##### Coole-Garryland complex SAC

Qualifying features	Conservation objective	Sensitivity/ type of impact
[3150] Natural Eutrophic Lakes	To maintain or restore favourable conservation condition of the habitats (NPWS (2012) Conservation Objectives: Coole-Garryland Complex SAC [000252]. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	Oil or chemical residues could affect aquatic organisms, especially fauna, leading to effects on diving duck, fish
[3180] Turloughs*	As above	As above depending on season and degree of flooding. Likely to be less severe overall as turloughs are flooded for 6-8 months
[3270] <i>Chenopodium rubri</i> p.p. and <i>Bidention</i> p.p. Vegetation	As above	Occurs on summer dry, turlough margins. Generally, less impact from oil and chemical residues on vegetation than on fauna. However, this community forms some food of aquatic birds, especially ducks
[5130] Juniper Scrub	As above	Occurs at higher level than lakes/turloughs. Out of contact. No potential impact

[6210] Orchid-rich Calcareous Grassland*	As above	Occurs at higher level than lakes/turloughs. Out of contact. No potential impact
[8240] Limestone Pavement*	As above	Occurs at higher level than lakes/turloughs. Out of contact. No potential impact
[91J0] Yew Woodlands*	As above	Occurs at higher level than lakes/turloughs. Out of contact. No potential impact

#### Coole-Garryland SPA

Special conservation interest	Conservation objective	Sensitivity/ type of impact
A038 Whooper Swan <i>Cygnus cygnus</i>	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA	Feeds on grass in turloughs and adjacent pastures. Also to some extent on submerged lake vegetation. Less so if at all on Bidention communities.

#### 4.2 Summary

The only potentially damaging substances are mineral oils and oil-based paints, both of which would have adverse effects on aquatic organisms in the Gort River and possibly Coole Lough. They could be transported with run-off from the site and lead to impacts on two of the listed habitats, Natural Eutrophic Lakes [3150] and Chenopodion rubri p.p. and Bidention p.p. Vegetation [3270] with knock-on effects on wintering wildfowl and possibly whooper swan numbers. The other qualifying habitats Juniper Scrub [5130], Orchid-rich Calcareous Grassland\*[6210], Limestone Pavement\* [8240] and Yew Woodlands\*[91J0] are out of the range of lake water or further downstream Turloughs\*[3180].

#### 4.3 Required mitigation

All containers will be positioned on an impermeable hardcore surface which will have a surface water collection system discharging to the adjacent wastewater treatment plant. This will remove any potentially damaging chemicals from the site and deal effectively with spillage.

It is intended that waste does not come into contact with the ground within the centre and that containers are removed for processing at an authorised facility as they come full.

Mitigation of the minor effects of roadworks have been covered in methodology (Section 3.2) while the bat report details further measures which should be installed, i.e. down-lighting when site is in use, no lighting overnight except for motion-activated security lights, minimal ultra-violet component in lights and some additional hedgerow planting around the civic centre.

## 5. CONCLUSION

The project will not have any significant effect on the integrity of the Natura 2000 site network, in particular on the ecology of the Coole-Garryland SAC & SPA. It will not compromise the attainment of these sites' conservation objectives and will not have a cumulative impact with other projects, e.g. road widening.

The following sites within 15km have been screened out

- Newhall-Ballylee Turlough SAC
- East Burren complex
- Caherglassaun Turlough SAC
- Ballinduff Turlough SAC
- Slieve Aughty SPA
- Lough Cutra SAC
- Lough Cutra SPA
- Cahermore Turlough SAC
- Termon Lough SAC
- Lough Coy SAC
- Peterswell Turlough SAC
- Drummin Wood SAC
- Gortacarnaun Wood SAC
- Ardrahan Grassland SAC
- Inner Galway Bay SPA
- Galway Bay complex SAC
- Lough Fingal complex SAC
- Sonnagh Bog SAC
- Castletaylor complex SAC

## References

DEHLG. 2009. Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (Revised February 2010).

European Commission. 2000. Managing Natura 2000 Sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. Office for Official Publications of the European Communities, Luxembourg.

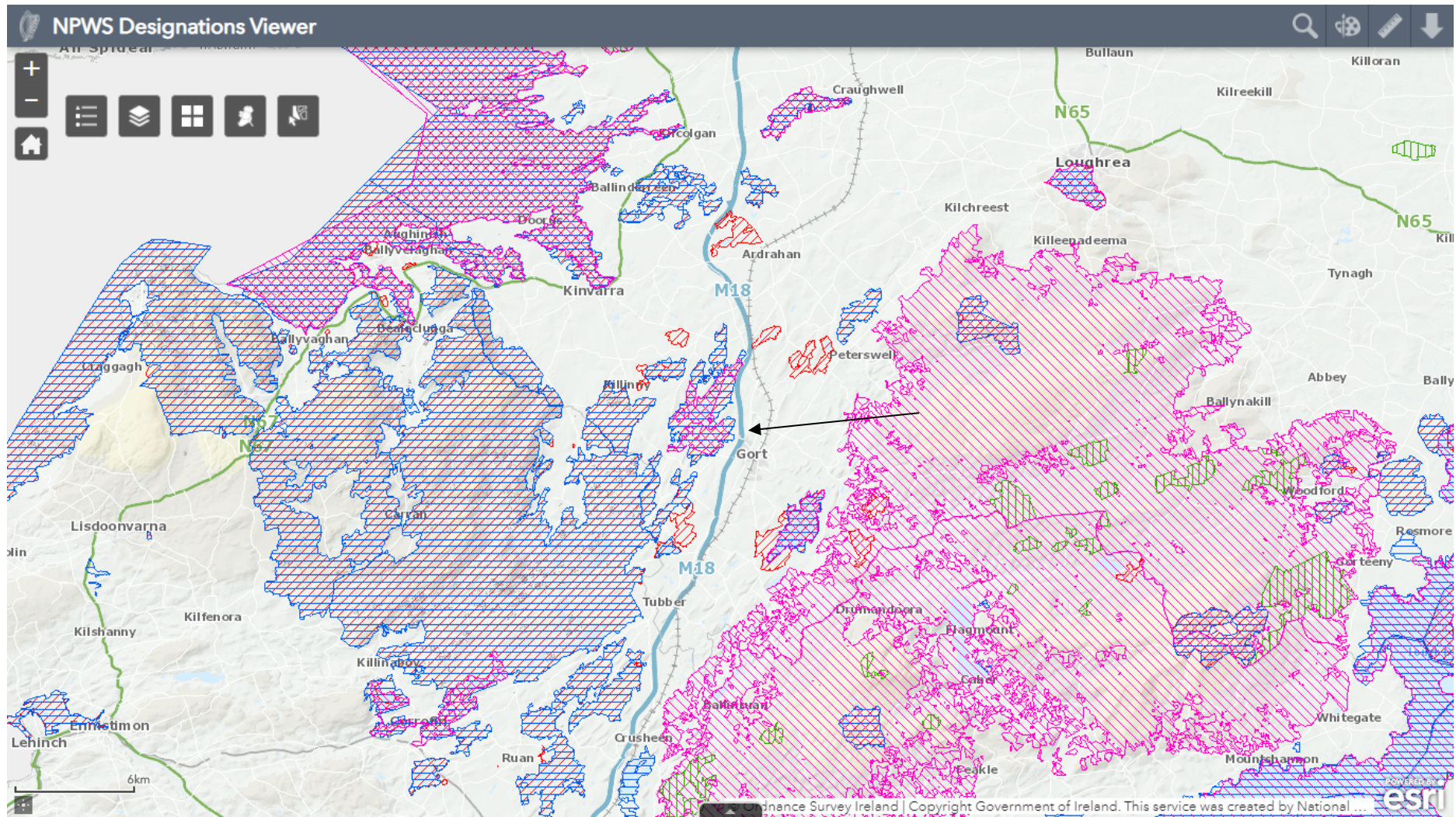
European Commission. 2002. Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. Office for Official Publications of the European Communities, Luxembourg.

European Commission. 2007. EU Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC. Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the Commission. IEEM. 2006.

Fossitt, J.A. 2000 *A guide to habitats in Ireland*. Heritage Council

NPWS (2020) Conservation objectives for Coole-Garryland Complex SAC [000252]. Generic Version 7.0. Department of Culture, Heritage and the Gaeltacht.

NPWS (2020) Conservation objectives for Coole-Garryland SPA [004107]. Generic Version 7.0. Department of Culture, Heritage and the Gaeltacht.



**Location of site in relation to Natura 2000 sites within 15km (red hatching)**

