

Attachment No 5

Ten Copies of Natura Impact Statement



145815-26/11/2014-FI Rt-Natura Impact Statement



**Construction of a Proposed Pig Fattening House
and Associated Feed Mixing Room and Pig
Walkway**

**Annakisha Pig Farm
Annakisha North, Doneraile, Co. Cork**

**Stage I: Screening for Appropriate Assessment
Stage II: Natura Impact Statement**

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1. INTRODUCTION

1.1. Background

This report comprises a Stage I Screening for Appropriate Assessment and Stage II Natura Impact Statement (NIS). It has been produced following an assessment of the potential effects of the proposed construction of a pig fattening house and associated feed mixing room and pig walkway at an existing pig farm at Annakisha North, Doneraile, Co. Cork.

Matthew Hague CEnv MCIEEM, an ecological and environmental consultant with over 13 years of relevant consultancy experience, was commissioned to prepare the Screening for Appropriate Assessment and Natura Impact Statement.

The purpose of the report is to determine the effects, if any, of the proposed development and associated features on Natura 2000 sites, also known as European Sites (candidate Special Area of Conservation (cSAC) and Special Protection Area (SPA), designated for nature conservation), and to assess if there is the potential for significant effects on the qualifying interests or on the conservation objectives of these sites.

A desk study review and field visit were undertaken and the potential impacts on the Natura 2000 sites as well as on other ecological receptors, both as a result of the proposed development and in-combination with other developments in the area, are assessed in this report.

This report follows the European Commission guidance on Appropriate Assessment (2001)¹ and an outline of the AA process is presented in **Appendix I**. **Figure 1** shows the site location in relation to relevant Natura 2000 sites.

2. METHODOLOGY

2.1. Desk study and field visit

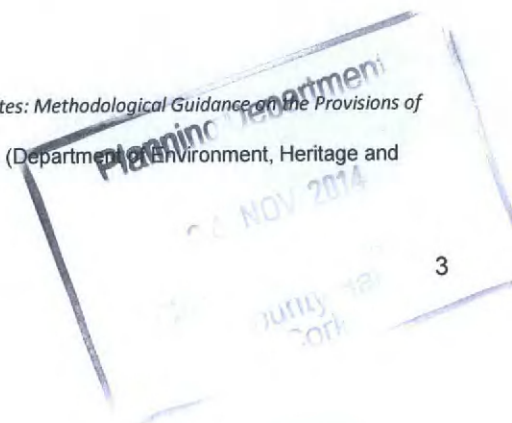
A desk-based assessment was undertaken of the area surrounding the proposed development at Annakisha, focusing on habitats and species that are listed as qualifying interests in the designation of the Natura 2000 sites. A search was carried out for all Natura 2000 sites within 15km of the site, (and further afield, if potentially connected to the proposed development site by a pathway), in accordance with the *Appropriate Assessment Guidance for Planning Authorities*².

A field visit was undertaken on 3rd November 2014, to assess the overall ecological value of the site, with particular reference to any European protected habitats and species.

Information was collated from the organisations and websites listed below:

¹ European Commission (2001) *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*

² *Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities*. (Department of Environment, Heritage and Local Government, 2010 revision)



- Recent aerial photography and photographs taken at the site;
- Online data available on Natura 2000 sites as held by the National Parks and Wildlife Service (NPWS) from www.npws.ie;
- Information on water quality in the area available from www.epa.ie;
- Information on the South West River Basin District from www.wfdireland.ie, including:
 - South Western River Basin District Management Plan (2009 – 2015);
- Information on soils, geology and hydrogeology in the area available from www.gsi.ie;
- The Status of EU Protected Habitats in Ireland – Backing Documents Volumes 1 to 3. (National Parks & Wildlife Service, 2007).

The report makes reference to the *European Union (Good Agricultural Practice for Protection of Waters) Regulations 2014*³.

Conservation Objectives for all of the Natura 2000 sites have been provided by NPWS and these have been reviewed as part of this study (see **Appendix II**). In addition, records of key species, held by the National Biodiversity Data Centre (NBDC) and Bat Conservation Ireland (BCI), were analysed.

Given the amount of information available, including from NPWS and other sources, it has been possible to gather adequate information on the site and the adjacent area (in particular, the Natura 2000 sites), in order to make an informed, sound judgement as to the potential impacts of the proposed development on the qualifying interests of Natura 2000 sites.

2.2. Assessment of impact significance

In ecological and environmental impact assessment, for the risk of an impact to occur there must be a 'source', such as a construction site; a 'receptor', such as a designated site for nature conservation; and a pathway between the source and the receptor, such as a watercourse that links the construction site to the designated site. Although there may be a risk of an impact it may not necessarily occur, and if it does occur, it may not be significant.

Potential impacts on qualifying habitats, species and conservation objectives may result from:

- Habitat loss and/or fragmentation;
- Impacts to habitat structure;
- Disturbance to species of conservation concern;
- Impacts on water quality;
- Air pollution;
- Noise pollution;
- Mortality to species (such as roadkill).

In addition, the significance of the potential impacts depends on:

- Effectiveness of mitigation measures;
- Distance of pathway between source and receptor;
- Character of existing environment;

³ SI 31 of 2014

- o Tolerance of receptor to potential impacts.

Where it is certain that any element of the project will have no significant impact it can be 'screened out' at Stage I of Appropriate Assessment. However, should there be any uncertainty as to the potential effects, Stage II Appropriate Assessment is undertaken and a Natura Impact Statement (NIS) is prepared.

3. STAGE I: SCREENING FOR APPROPRIATE ASSESSMENT

3.1. The proposed development

The existing pig farm located in Annakisha North, Doneraile, Co. Cork is an EPA licensed installation (Integrated Pollution Prevention and Control (IPPC) registered number P0446-01). The proposed development consists of a purpose built pig fattening house, with an associated feed mixing room and a pig walk way. The new structures will be built on a field to the north of the existing farm buildings. This field was formerly in agricultural use, however it has in the past been stripped, and comprises a hardcore and gravel surface. It is used for material storage at this time.

As a result of the proposed development, total pig numbers on the farm are expected to increase by approximately 37%, from 7,462 to 10,214 (all categories combined). Slurry production on the farm is expected to increase by approximately 3,000m³ (33%).

As is currently the case, organic manure (pig slurry, including water used in power washing) arising from the pig farm will continue to be applied to fields in a manner consistent with the existing codes of practice for slurry spreading and in accordance with SI 31 of 2014.

The proposed development is being designed in such a way as to ensure that no significant ecological impacts occur, in particular it is intended to avoid any impacts whatsoever on any Natura 2000 site. However, due to the proximity of the River Blackwater cSAC, it has been determined that the project should be subject to Screening for Appropriate Assessment under Article 6(3) of the EU Habitats Directive.

Full details of the proposed development are presented in architect's drawings and in the Environmental Impact Statement accompanying the Planning Application.

3.2. Ecological Overview

3.2.1. Relevant Natura 2000 sites

Four Natura 2000 sites could potentially be affected by the proposals, as follows:

Candidate Special Areas of Conservation:

1. **Blackwater River cSAC (Cork/Waterford) (002170) 1.5km south (North Caherduggan/Carrig River – a tributary of the River Blackwater);**
2. Ballyhoura Mountains cSAC (002036) 15km north;
3. Carrigeenamronety Hill cSAC (002037) 15km north;

Special Protection Area:

4. Kilcolman Bog SPA (004095) 7.3km north.

Conservation Statements have been prepared for Ballyhoura Mountains cSAC and Carrigeenamronety Hill cSAC only.

Only the Blackwater River cSAC (in bold in the list above) is potentially linked to the proposed development site. The pathway is via surface water, with an unnamed stream, a tributary of the River Blackwater, present within 50m of the proposed site area, to the north. This stream flows through farmland to the west and through mixed deciduous woodland to the east and south of the Annakisha site.

It is considered that no other Natura 2000 sites have any connection (pathway) to the proposed development at Annakisha due to their locations and the features (qualifying interests) for which they are designated. These sites are not considered further in this report.

A summary of the qualifying features, conservation objectives and vulnerabilities for the cSAC is presented in **Appendix II** of this report. This information is taken from the NPWS database for the site⁴.

There are no conservation management plans available for the River Blackwater cSAC.

3.2.2. Other designated conservation areas (other than Natura 2000 sites)

No non-European designated conservation sites occur within the immediate footprint of the proposed development. Numerous nationally important sites, proposed as Natural Heritage Areas (pNHAs), are located within the north Cork area. However only one such site (Awbeg Valley (above Doneraile) pNHA, 000075) is present anywhere near the site, approximately 5km to the north. This site is upstream of Annakisha and is part of the Blackwater River cSAC. It is therefore not considered further in this report.

3.2.3. Rare and protected species

The NPWS database was consulted with regard to rare species (Curtis & McGough 1988) and species protected under the Flora Protection Order (1999). There are no known records of rare or protected plant species within the immediate vicinity of the proposed development.

There are records of starved wood sedge (*Carex depauperata*), orange foxtail (*Alopecurus aequalis*), and otter (*Lutra lutra*) within the wider local area, however none of these species are known to occur at the Annakisha site, and none were observed.

3.2.4. Ecological sites and habitats**Habitats and species**

The proposed development area comprises a single field. This field is heavily disturbed and is dominated by a hardcore and gravel surface, with a narrow grass strip along the northern edge. The field is used for storage of building material, concrete and spoil. The field is currently at a lower level than the existing

⁴ <http://www.npws.ie/protectedsites/>

buildings (up to 3m). The northern boundary of this field comprises a post and rail fence, with a number of immature ash trees planted.

To the north of the site is a single field, currently unmanaged. This field slopes gently down to a strip of mixed deciduous woodland, dominated by ash (*Fraxinus excelsior*), hazel (*Corylus avellana*) and sycamore (*Acer pseudoplatanus*) at this location and associated with a stream flowing in an easterly direction. The stream joins the North Caherduggan River/Carrig River to the south east of the farm before entering the River Blackwater itself, close to the N72 road. Although the field is wet and slopes to the stream, no direct flow of water from the field to the stream was observed.

The site for the proposed building construction is of no ecological significance.

Fauna

No features suited to bats are present on the site, however the stream is likely to be used by commuting and foraging bats. Two red squirrels were noted in a mature beech tree on the banks of the stream, approximately 200m west of the site. During the field survey no evidence of badgers was found however a possible badger sett, long-disused, was recorded in the coniferous plantation to the east of the farm. Numerous rabbits are present on the farm, and fox droppings were also noted.

A typical assemblage of farmland bird species was noted, including blackbird, rook, magpie, starling, robin and chaffinch.

3.3. Assessment of likely effects

No construction works will take place within the boundary of any designated site. As a result there will be no direct impacts such as loss of habitat within any such site. Furthermore, there will be no loss of any habitat or species listed as a qualifying feature of any designated site, but occurring outside its boundary. The loss of the site itself is of no ecological significance.

The construction and operation of the proposed development could potentially give rise to siltation or pollution, including organic waste, that could enter watercourses and therefore the Blackwater River cSAC.

During the ongoing operation of the pig farm, pig slurry will continue to be spread on fields offsite, under licence and in accordance with water quality legislation, as is currently the case. Such practices could, potentially, result in the contamination of nearby watercourses. Contaminated surface water run-off could affect water quality (and in turn affect the habitats and species present in the river system). Although the risk of a pollution event occurring of a magnitude that would result in significant adverse effects on the Natura 2000 sites is extremely low, this element of the proposed development does theoretically have the potential to result in adverse effects on water quality in the River Blackwater cSAC.

3.4. In combination effects

In order to identify potential 'In Combination Effects', other developments in the vicinity of Annakisha were identified using Cork County Council's on-line planning search. It is not considered likely that the

proposed project will have any significant 'in combination effects' with granted permissions on the Natura 2000 sites listed in Section 3.2.1.

3.5. Summary of impacts

1. During the **construction** phase there is a risk of pollution and siltation entering the nearby watercourse, potentially resulting in impacts on the Blackwater River cSAC;
2. During the **operational** phase there is a risk of pollution and siltation entering the nearby watercourse, potentially resulting in impacts on the Blackwater River cSAC;
3. During the **operational** phase there is a risk of contamination of watercourses resulting from the spreading of slurry, potentially resulting in impacts on the Blackwater River cSAC.

3.6. Screening conclusion

The first part of the screening process requires consideration of the project in respect of whether it is directly connected with or necessary for the management of European Sites. 'Directly' in this context means solely conceived for the conservation management of a site and 'management' in this context refers to the management measures required in order to maintain in favourable condition the features for which the European Site has been designated.

- The proposed development is neither directly connected with, nor necessary for, the management of any Natura 2000 sites.

It is considered that the proposed development at Annakisha (the impact 'source') is potentially linked, via the water 'pathway', with Natura 2000 sites associated with the River Blackwater (the 'receptors').

The Blackwater River cSAC is in close proximity to the proposed development. For the reasons outlined in Sections 3.3 and 3.5 it has been concluded that the proposed development should be subject to Appropriate Assessment under Article 6(3) of the EU Habitats Directive (Stage II Appropriate Assessment).

4. STAGE II: NATURA IMPACT STATEMENT

4.1. Introduction

From the Stage I Appropriate Assessment Screening report it is concluded that the proposed development has the potential to impact on the Blackwater River cSAC as follows:

1. During the **construction** phase there is a risk of pollution and siltation entering the nearby watercourse, potentially resulting in impacts on the Blackwater River cSAC;
2. During the **operational** phase there is a risk of pollution and siltation entering the nearby watercourse, potentially resulting in impacts on the Blackwater River cSAC;
3. During the **operational** phase there is a risk of contamination of watercourses resulting from the spreading of slurry, potentially resulting in impacts on the Blackwater River cSAC.

4.2. Description of the designated sites

The Blackwater River cSAC is selected for a number of protected species, including the freshwater pearl mussel, white-clawed crayfish and a number of freshwater fish. It is of importance for its diverse habitats, ranging from old sessile oak woodlands and alluvial forests to its watercourses and coastal salt meadows.

Relevant details of the Qualifying Features, Vulnerability and Conservation Objectives of the cSAC and SPA are presented in Appendix II.

4.3. Description of the project

The overall project is described in Section 3.1 of this report and full details of the proposed development are presented in the documentation accompanying the planning application, including the EIS and architect's drawings. It is proposed to construct a new pig fattening house and associated feed mixing room and pig walkway on the site of an existing pig farm. The resulting development will result in an increase in pig numbers on the farm of approximately 37%, and a related increase in the production of pig slurry in the order of 33%.

4.4. Potential impacts on the integrity of designated sites

It is not proposed to undertake any works within any designated site. Furthermore, no evidence of any of the species or habitats for which the Blackwater River cSAC is designated was found either within or in the immediate vicinity of the footprint of the proposed development. The proposed development will result in the removal of a heavily disturbed field. These works will not result in the loss of any habitats of ecological value and the finished construction will have no impacts on the River Blackwater.

In the event that contaminated water should enter any watercourse during the construction or operation of the proposed development at Annakisha pig farm, including on the lands used for pig slurry spreading, there is the potential for negative impacts on the integrity of the Blackwater River cSAC. Such contamination could include silt, foul water, hydrocarbons, or other pollutants.

4.5. Impact mitigation

In this section, reference is made to Section J of a letter dated 16/10/2014, from Cork County Council, to Mr Michael Monagle, care of Mr Con Curtin, Agricultural Consultant.

1. During the **construction** phase there is a risk of pollution and siltation entering the nearby watercourse, potentially resulting in impacts on the Blackwater River cSAC;

In response to **Section J(1)** of the letter from Cork County Council, A construction method statement will be put in place by the contractor. The method statement will have adequate regard to appropriate guidelines relating to the control of water pollution from construction sites, including CIRIA Guideline C648⁵ and CIRIA Guideline C532⁶.

The following elements will be included in the contractor's method statement:

⁵ Control of water pollution from linear construction projects. Technical Guidance (C648). CIRIA, 2006

⁶ Control of water pollution from construction sites. Guidance for consultants and contractors (C532). CIRIA, 2001

Planning Department

NOV 2014

County Council

- In order to ensure there are no construction impacts, either on Natura 2000 sites or on water quality in general, all hazardous substances, such as fuels, oils, cement and concrete products, will be delivered on-site by leak-proof containers or will be stored on-site in secure areas remote from drainage connections to the existing surface water drainage network.
- The contractor will take adequate precautions as part of the construction methodology to avoid any pollution from construction activities via run-off to the surface water drainage network.
- The method statement will include details of silt protection, such as cut off trenches, silt fences, and include a drawing, showing in necessary detail the approximate locations of watercourse buffers, bunded areas and areas for stockpiling of materials. It should be noted that it is unlikely that any materials will be stored on site for long periods.
- Concrete will be delivered ready mixed as required and used immediately.
- All surface water arising during construction will be directed to temporary settlement areas, to allow for any sediment to settle and be removed prior to the surface water discharging into the existing drainage system.
- In relation to risks related to potential contamination of surface waters reference is made in Table 1 to Section 5.3 of the EIS, which deals with mitigation measures for maintaining water quality at the site during construction;

5.3 Mitigation Measures for maintaining water quality on the pig farm

During the construction phase;

- The contractor will operate to approved industry standards to insure water quality is not adversely affected. To insure that contamination will not occur;
 - Where possible construction vehicles will be filled with fuel oil off-site;
 - If water has to be pumped from the construction site it will be passed through a swale / filtration system before discharged to the surface water;
 - Wheels of construction machinery will be washed to prevent clay being deposited on the public road. The wheel wash water will be stored in slatted tanks;
 - The excavated soil will be graded gently at the northern side of the in-fill area and will be compacted and reseeded immediately. The maximum gradient for the screening embankment will be a maximum 1 : 2 slope. The soil will not be deposited within 20m of the stream at the northern boundary of the site to allow a buffer near the stream.

Table 1: Extract from EIS Section 5.3

2. During the **operational** phase there is a risk of pollution and siltation entering the nearby watercourse, potentially resulting in impacts on the Blackwater River cSAC;

In response to **Section J(2)** of the letter from Cork County Council;

- The farm will continue to operate to very high standards relating to water quality, as is required under the existing IPPC Licence, issued by the EPA;
- The proposed slurry storage tank will be compliant with Department of Agriculture (DAFM) Si 123 Specification for the construction of reinforced tanks; and
- There will be more than 26 weeks slurry storage on site so that pig slurry will not be spread in the closed period (Oct 15th to Jan 12th) or during periods of high rainfall.

In relation to the management of risk and procedures relating to accidental release of contaminated water/slurry, reference is made to Section 1.5.4 of the EIS, which deals with Accidental Spillages / Environmental Incidents;

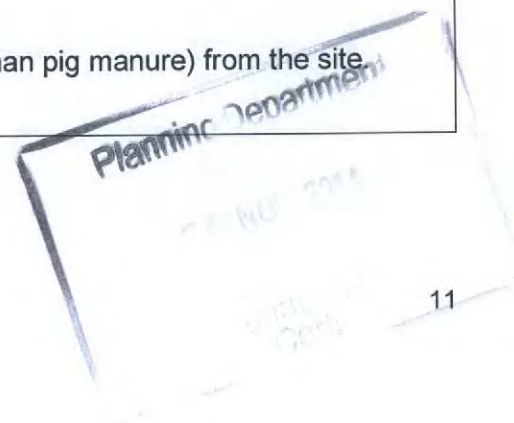
1.5.4 Accidental Spillages / Environmental Incidents

Accidental spillages are possible on-site if a tanker valve inadvertently opens or if a slurry tanker overturns and ruptures or, if a suction hose might disconnect from a tanker when loading. Liquid fuel and feed storage tanks could leak. However, as slurry tankers have a double valve mechanism, are high-pressure containers and are not likely to leak the probability of spillage from a tanker is so remote that it can be discounted completely.

An emergency response procedure is displayed in the office and all employees are aware of it. The emergency response instructions are displayed in the office of the pig unit. The following procedures are in place to deal with the possibility of off-site spillages

- Staff are instructed to notify the manager of the site immediately of a spillage event.
- There is one main slurry off take point for all pig houses – western end of house 6. The area around this is concreted to ensure that spills and drips do not soak away to ground.
- The pig manure is spread by experienced contractors and tractor operators. Their equipment is checked and renewed regularly.
- The slurry contractors have mobile phones so that they can contact the pig farm immediately if there are any emergencies.
- There is an emergency response procedure displayed in the office with relevant phone numbers of the emergency services.
- Only licensed haulers are employed to remove wastes (other than pig manure) from the site.

Table 2: Extract from EIS Section 1.5.4



In response to **Section J(3)** of the letter from Cork County Council, soiled water arising at the farm currently is stored in underground tanks between associated with the existing buildings. The total existing available storage is 9,780m³. The total proposed available storage will rise to 13,343m³, on completion of the construction works, an increase of approximately 3,550m³. The projected annual production of pig manure is approximately 12,000m³. The projected slurry storage is in excess of the 26 weeks storage capacity specified in 10 (2) and table 1 of Schedule 2 of SI 31 of 2014 and is, again, in accordance with EPA IPPC licencing requirements. The EPA license requires that all slurry tanks are integrity tested on a regular basis.

Currently, **surface (storm) water** arising on the pig farm is directed to a rain water harvesting tank, in which it is stored and used in power washing. Water not used on the farm is discharged to the stream, via an inspection chamber at the entrance bridge. The new buildings and associated features will be connected to the existing site infrastructure. There will be an increase in the volume of storm water produced due to an increase in roof area. The increased roof area (1,653m²) and associated yards will result in an increase in the volume of storm water by approximately 2,400m³ (a 10% increase overall). Water quality is monitored at the tank under the existing EPA Licencing requirements. This will continue to be the case post-construction.

Provided proper working procedures are strictly adhered to, no impacts on existing watercourses are expected, either during the construction or operation of the new development. All facilities will be built to the relevant Department of Agriculture specifications to ensure protection of water resources. The pig manure management complies with Agricultural Bye-laws and SI 31 of 2014 in relation to good agricultural practice for the protection of watercourses. Furthermore the pig farm is monitored by the EPA Office of Environmental Enforcement and is compliant with EPA requirements.

3. During the **operational** phase there is a risk of contamination of watercourses resulting from the spreading of slurry, potentially resulting in impacts on the Blackwater River cSAC.

In response to **Section J(4)** of the letter from Cork County Council, organic manure arising from the pig farm will be applied to land in an appropriate manner, strictly in accordance with SI 31 of 2014 and good farm practice.

The application of fertiliser to the spread lands has been ongoing and consistent for many years. Some of this chemical fertiliser will be replaced with organic fertiliser. The existing habitats have adapted over time to the intensive agricultural activities practiced throughout the spread lands. Neither these habitats (all outside the Natura 2000 sites) nor the Natura 2000 sites themselves will be in anyway affected by the continued application of organic manure from the pig farm, provided the necessary mitigation measures, as detailed in the EIS and in this NIS, are adopted.

Mitigation measures pertaining to organic manure deposition:

- o To avoid contamination of the local watercourses minimum buffer zones of 20m for main river channels and 10m for small watercourses should be adhered to at all times during the application of pig slurry. Buffer zones are increased depending on gradient;

- Part 4 of SI 31 of 2014 should be adhered to (see Appendix III);
- A minimum buffer zone of 20m should be put in place and adhered to for areas which are adjacent to candidate Special Areas of Conservation (cSAC);
- Fields within cSACs are excluded from the land-spreading area;
- The guidelines for spreading state that spreading should only take place when suitable climatic and environmental conditions exist and to avoid spreading on:
 - wet or waterlogged soils;
 - land sloping steeply towards water courses;
 - frozen or snow covered soils.

Given the nature, location and type of development proposed at Annakisha Pig Farm, including the separate organic manure spreading activities, and the potential impact sources, pathways and receptors, there will be no resulting impact on the natural environment, including on designated Natura 2000 sites.

4.6. In combination effects

It is not expected that the proposed development will have any significant impacts on the integrity of any Natura 2000 sites.

As such, no in-combination impacts are anticipated, and it can be concluded that the development either on its own or in-combination with other developments will have no impact on Natura 2000 sites.

4.7. Natura Impact Statement conclusion

It has been concluded that, with the mitigation measures described above in Section 4.5 fully implemented, there will be no risk of significant negative effects on the Blackwater River cSAC or any other Natura 2000 site, either alone or in combination with other plans or projects, and therefore, there will be no adverse effect on the integrity of these Natura 2000 sites or on their conservation objectives as a result of the proposed construction.

The proposed works will be undertaken in a manner that ensures that there will be no significant impacts on other ecological receptors, in addition to those associated with Natura 2000 sites.

In conclusion, there will be no significant impact on any Natura 2000 site or on the qualifying interests of any such site.

APPENDIX I: BACKGROUND TO APPROPRIATE ASSESSMENT

The Natura 2000⁷ network is a Europe-wide network of ecologically important sites (SPAs and cSACs – also known as ‘European Sites’) that have been designated for protection under either the EU Birds Directive (*Council Directive 79/409/EEC on the Conservation of Wild Birds*) or the EU Habitats Directive (*Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna*).

The main aim of the Habitats Directive is “to contribute towards ensuring biodiversity through the conservation of natural habitats of wild fauna and flora in the European territory of the Member States to which the treaty applies”. Any actions taken must be designed to “maintain or restore, at a favourable conservation status, natural habitats and species of wild fauna and flora of Community interest”. Under Article 6 of the Habitats Directive, an assessment is required where a plan or project may give rise to significant effects upon a Natura 2000 site.

In addition, it is a matter of law that candidate SACs (cSACs) and Sites of Community Importance (SCI) are considered in this process.

Article 6 (paragraphs (3) and (4)) of the Habitats Directive states that:

(3) Any plan or project not directly connected with or necessary to the management of the site but likely to have significant effect thereon, either individually or in combination with other plans or projects, shall be subject to Appropriate Assessment of its implications for the site in view of the site’s conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.

(4) If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.”

The requirements of the Habitats Directive are transposed into Irish law by means of the *European Communities (Birds and Natural Habitats) Regulations 2011* (hereafter referred to as the *Birds and Habitats Regulations*)⁸ and by the *Planning and Development (Amendment) Act 2010*, as amended.

In Ireland, the statutory agency responsible for the designated areas is NPWS.

Stages in the assessment

European Commission guidance (2001)⁹ sets out the principles on how to undertake decision making in applying the Habitats Directive. The requirements of the Habitats Directive comprise four distinct stages:

⁷ The EU Habitats Directive, Article 3.1, states “A Coherent European ecological network of Special Areas of Conservation and Special Protection Areas pursuant to Directive 79/409/EEC shall be set up under the title Natura 2000”

⁸ SI No. 477 of 2011

⁹ European Commission (2001) *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*

Stage 1: Screening is the process which initially identifies the likely impacts upon a European site of a project or plan, either alone or in combination with other projects or plans, and considers whether these impacts may be significant. It is important to note that the burden of evidence is to show, on the basis of objective information, that there will be no significant effect; if the effect may be significant, or is not known, that would trigger the need for an Appropriate Assessment. There is European Court of Justice case law to the effect that unless the likelihood of a significant effect can be ruled out on the basis of objective information, then an Appropriate Assessment must be made.

Stage 2: Appropriate Assessment is the detailed consideration of the impact on the integrity of the European site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's conservation objectives and its structure and function. This is to determine whether or not there will be adverse effects on the integrity of the site. This stage also includes the development of mitigation measures to avoid or reduce any possible impacts.

Stage 3: Assessment of alternative solutions is the process which examines alternative ways of achieving the objectives of the project or plan that would avoid adverse impacts on the integrity of the European site, should avoidance or mitigation measures be unable to cancel out adverse effects.

Stage 4: Assessment where no alternative solutions exist and where adverse impacts remain. At Stage 4 an assessment is made with regard to whether or not the development is necessary for imperative reasons of overriding public interest (IROPI) and, if so, of the compensatory measures needed to maintain the overall coherence of the Natura 2000 network.

Conservation objectives of European sites

The conservation objectives for a European Site are intended to represent the aims of the Habitats and Birds Directives in relation to that site. To this end, habitats and species of European Community importance should be maintained or restored to 'favourable conservation status' (FCS), as defined in Article 1 of the Habitats Directive below:

The conservation status of a natural habitat will be taken as 'favourable' when:

- Its natural range and the 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;
- Conservation status of typical species is favourable as defined in Article 1(i).

The conservation status of a species will be taken as favourable 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.

Guidance from the European Commission¹⁰ indicates that the Habitats Directive intends FCS to be applied at the level of an individual site, as well as to habitats and species across their European range. Therefore, in order to properly express the aims of the Habitats Directive for an individual site, the conservation objectives for a site are essentially to maintain (or restore) the habitats and species of the site at (or to) FCS.

The European Commission guidance recommends that screening should fulfil the following steps:

1. Determine whether the plan (or policy) is directly connected with or necessary for the management of Natura 2000 sites;
2. Describe the plan and describe and characterise any other plans or projects which, in combination, have the potential for having significant effects on Natura 2000 sites;
3. Identify the potential effects on Natura 2000 sites;
4. Assess the likely significance of any effects on Natura 2000 sites.

Generic Conservation Objectives for the sites have been provided by NPWS and are presented in **Appendix II**.

¹⁰ Managing Natura 2000 sites: the provisions of Article 6 of the Habitats Directive 92/43/EEC. (European Commission 2000)

APPENDIX II: RELEVANT DESIGNATED SITES

Blackwater River cSAC (Cork/Waterford) (002170)

The Blackwater River cSAC has been designated on the basis that it supports the following habitats and species of European importance.

Qualifying Interests

- Freshwater pearl mussel (*Margaritifera margaritifera*) [1029]
- White-clawed crayfish (*Austropotamobius pallipes*) [1092]
- Sea lamprey (*Petromyzon marinus*) [1095]
- Brook lamprey (*Lampetra planeri*) [1096]
- River lamprey (*Lampetra fluviatilis*) [1099]
- Twait shad (*Alosa fallax fallax*) [1103]
- Salmon (*Salmo salar*) [1106]
- Estuaries [1130]
- Mudflats and sandflats not covered by seawater at low tide [1140]
- Perennial vegetation of stony banks [1220]
- *Salicornia* and other annuals colonizing mud and sand [1310]
- Atlantic salt meadows (*Glaucopuccinellietalia maritimae*) [1330]
- Otter (*Lutra lutra*) [1355]
- Mediterranean salt meadows (*Juncetalia maritimi*) [1410]
- Killarney fern (*Trichomanes speciosum*) [1421]
- Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation [3260]
- Old sessile oak woods with *Ilex* and *Blechnum* in British Isles [91A0]
- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*) [91E0]
- *Taxus baccata* woods of the British Isles [91J0]

Vulnerability (extracted from Natura 2000 Standard Data Form)

While water quality in the system is mostly good there are localised stretches which have been polluted. Pollution is derived from agricultural run-off (fertilisers, slurry etc.) and from point sources mainly in towns along the rivers, and in some areas possibly forestry activities. Pollution remains a threat to water quality and poor water quality could impact on the various fish populations as well as *Margaritifera margaritifera* and *Austropotamobius pallipes*. Riverbank protection works to prevent erosion and fisheries related developments have recently occurred in parts of the Blackwater and some involve interference with the riverbed - such works could affect *Margaritifera margaritifera* populations. Most of the remaining woodlands have a significant amount of non-native species, including conifers and the invasive *Rhododendron ponticum*. If not controlled, the value of the woods will decrease further with time.

Site-Specific Conservation Objectives for the cSAC (dated 31 July 2012)

To maintain or restore the favourable conservation condition of the Annex I habitat(s) and /or the Annex II species for which the cSAC has been selected (i.e. the qualifying interests).

APPENDIX III: CODE OF PRACTICE FOR LAND-SPREADING PIG MANURE (AS SET OUT IN PART 4 OF SI 31 OF 2014)**PART 4****PREVENTION OF WATER POLLUTION FROM FERTILISERS AND CERTAIN ACTIVITIES***Distances from a water body and other issues*

17.

(2) Organic fertiliser or soiled water shall not be applied to land within—

- (a) 200m of the abstraction point of any surface waters, borehole, spring or well used for the abstraction of water for human consumption in a water scheme supplying 100m³ or more of water per day or serving 500 or more persons,
- (b) 100m of the abstraction point (other than an abstraction point specified in paragraph (a)) of any surface waters, borehole, spring or well used for the abstraction of water for human consumption in a water scheme supplying 10m³ or more of water per day or serving 50 or more persons,
- (c) 25m of any borehole, spring or well used for the abstraction of water for human consumption other than a borehole, spring or well specified in paragraph (a) or (b),
- (d) 20m of a lake shoreline,
- (e) 15m of exposed cavernous or karstified limestone features (such as swallow-holes and collapse features),
- (f) subject to sub-article (13), 5m of any surface waters (other than a lake or surface waters specified at paragraph (a) or (b)), or
- (g) the distance specified in sub-article 2(f) shall be increased to 10m for a period of two weeks preceding and two weeks following the periods specified in Schedule 4.

(3) Notwithstanding the requirements of sub-articles (2)(a), (2)(b) and (2)(c), the following distances shall apply-

- (a) 30m from the abstraction point in the case of any surface waters, bore-hole, spring or well used for the abstraction of water for human consumption in a water scheme supplying 10m³ or more of water per day or serving 50 or more persons,
- (b) 15m from the abstraction point in the case of any borehole, spring or well used for the abstraction of water for human consumption other than a borehole, spring or well specified in paragraph (a).

16 [31]

- (4) Sub-article (3) shall only apply in situations where a local authority has completed a technical assessment of conditions in the vicinity of the abstraction point, including taking into account variation in soil and subsoil conditions, the landspreading pressures in the area, the type of abstraction, available water quality evidence and the likely risk to the water supply source and the local authority has determined that the distance does not give rise to a risk to the water supply and a potential danger to human health.
- (5) A local authority may decide to apply the landspreading restriction to the upstream catchment area and to the close proximity downstream of the abstraction point in the case of any surface waters.
- (6) A local authority may, in the case of any particular abstraction point and following consultation with the Agency, specify a greater distance to that specified in sub-articles (2) or (3) where, following prior investigations, the authority is satisfied that such distance is appropriate for the protection of waters being abstracted at that point. The distance so specified shall be determined by the local authority using an evidence-based approach which takes into account the natural vulnerability of the waters to contamination from land spreading, the potential risk to human health arising from the landspreading activity as well as the water quality evidence, including information on water quality trends.
- (7) Notwithstanding the provisions of sub-articles (2), (3) and (6) a local authority shall as soon as may be practicable, following prior investigations and following consultation with the Agency, specify an alternative distance, including a landspreading exclusion area where necessary, in the case of a water abstraction for human consumption in a scheme supplying 10m³ or more of water per day, or serving 50 or more persons, where—
 - (a) on the basis of the results of monitoring carried out for the purposes of Article 7 of the European Communities (Drinking Water) (No. 2) Regulations 2007 (S.I. No. 278 of 2007), the quality of water intended for human consumption does not meet the parametric values specified in Part I of the Schedule of those Regulations or the quality of water constitutes a potential danger to human health, and it appears to the local authority that this is due to the landspreading of organic fertilisers or soiled water in the vicinity of the abstraction point, or
 - (b) investigations undertaken by Irish Water as part of the management of a water supply scheme indicate that the landspreading activity presents a significant risk to the drinking water supply or a potential danger to human health having regard to catchment factors in the vicinity of the abstraction point including but not limited to slope, vulnerability, and hydrogeology, the scale and intensity of land spreading pressures, the type of water supply source and water quality evidence, including information on water quality trends.
- (8) A distance specified by a local authority in accordance with sub-articles (3), (5), (6) and (7) may be described as a distance or distances from an abstraction point, a hydrogeological boundary or topographical feature or as an area delineated on a map or in such other way as appears appropriate to the authority.

[31] 17

(9) In relation to sub-articles (6) and (7), "prior investigations" means, in relation to an abstraction point, an assessment of the susceptibility of waters to contamination in the vicinity of the abstraction point having regard to—

- (a) the direction of flow of surface water or groundwater, as the case may be,
- (b) the slope of the land and its runoff potential,
- (c) the natural geological and hydrogeological attributes of the area including the nature and depth of any overlying soil and subsoil and its effectiveness in preventing or reducing the entry of harmful sub-stances to water, and
- (d) where relevant, the technical specifications set out in the document "Groundwater Protection Schemes" published in 1999 (ISBN 1-899702-22-9) or any subsequent published amendment of that document.

(10) Where a local authority specifies a distance in accordance with either of sub-articles (3), (5), (6) or (7) the authority shall, as soon as may be—

- (a) notify the affected landowners, Irish Water, the Agency and the Department of Agriculture, Food and the Marine of the distance so specified,
- (b) send to the Agency a summary of the report of any investigations undertaken and the reasons for specifying the alternative distance,
- (c) make an entry in the register maintained in accordance with Article 30(6), and
- (d) publish and maintain on the local authority website an updated schedule of setback distances specified for each drinking water supply.

(11) The requirements under sub-article (10) shall apply in the case of each public water supply and supplies for which the local authority has supervisory authority.

(12) The Agency may issue advice and/or direction to a local authority in relation to any requirements including requirements for technical assessments and prior investigations arising under sub-articles (2), (3), (4), (5), (6), (7), (8) or (9) and a local authority shall comply with any such advice or direction given.

18 [31]

(13) Notwithstanding sub-article (2)(f), organic fertiliser or soiled water shall not be applied to land within 10m of any surface waters where the land has an average incline greater than 10% towards the water.

Requirements as to manner of application of fertilisers, soiled water etc

18. (1) Livestock manure, other organic fertilisers, effluents, soiled water and chemical fertilisers shall be applied to land in as accurate and uniform a manner as is practically possible.

(2) Organic and chemical fertilisers or soiled water shall not be applied to land in any of the following circumstances—

- (a) the land is waterlogged;
- (b) the land is flooded or likely to flood;
- (c) the land is snow-covered or frozen;
- (d) heavy rain is forecast within 48 hours, or
- (e) the ground slopes steeply and there is a risk of water pollution having regard to factors such as surface runoff pathways, the presence of land drains, the absence of hedgerows to mitigate surface flow, soil condition and ground cover.

(3) A person shall, for the purposes of sub-article (2)(d), have regard to weather forecasts issued by Met Éireann.

(4) Organic fertilisers or soiled water shall not be applied to land—

- (a) by use of an umbilical system with an upward-facing splashplate,
- (b) by use of a tanker with an upward-facing splashplate,
- (c) by use of a sludge irrigator mounted on a tanker, or
- (d) from a road or passageway adjacent to the land irrespective of whether or not the road or passageway is within or outside the curti-lage of the holding.

(5) Subject to sub-article (6), soiled water shall not be applied to land—

- (a) in quantities which exceed in any period of 42 days a total quantity of 50,000 litres per hectare, or
- (b) by irrigation at a rate exceeding 5 mm per hour.

(6) In an area which is identified on maps compiled by the Geological Survey of Ireland as "Extreme Vulnerability Areas on Karst Limestone Aquifers", soiled water shall not be applied to land—

- (a) in quantities which exceed in any period of 42 days a total quantity of 25,000 litres per hectare, or
- (b) by irrigation at a rate exceeding 3 mm per hour unless the land has a consistent minimum thickness of 1m of soil and subsoil combined.

(7) For the purposes of sub-article (6), it shall be assumed until the contrary is shown that areas so identified as "Extreme Vulnerability Areas on Karst Limestone Aquifers" do not have a consistent minimum thickness of 1m of soil and subsoil combined.

Periods when application of fertilisers is prohibited

19. (1) Subject to this Article, the application of fertiliser to land is prohibited during the periods specified in Schedule 4.

(2) Sub-article (1) shall not apply in relation to the application to land of—

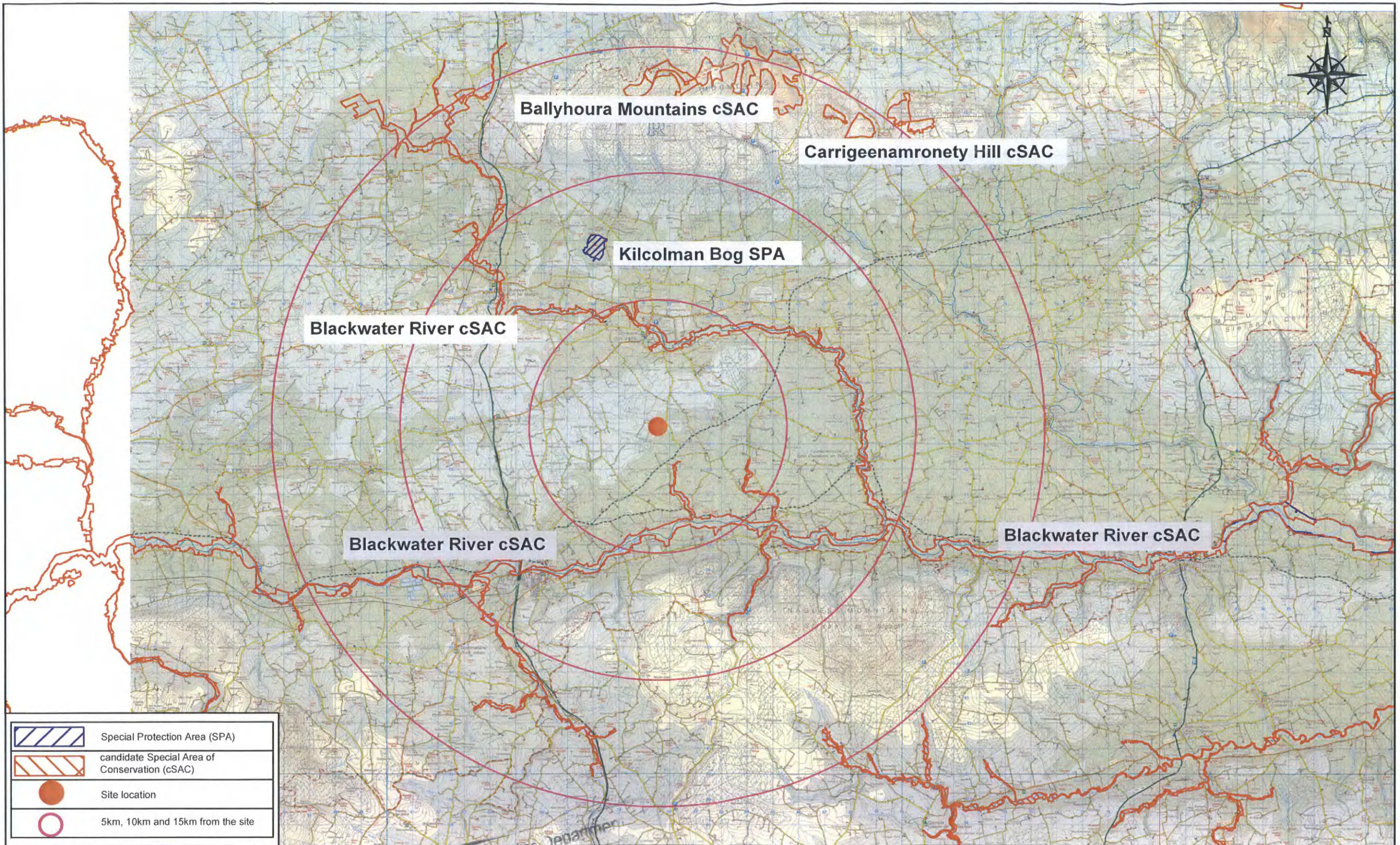
- (a) soiled water, or
- (b) chemical fertilisers to meet the crop requirements of Autumn-planted cabbage or of crops grown under permanent cover, or
- (c) fertilisers whose application rate or usage rate is less than 1kg per hectare of available nitrogen or phosphorus.

Limits on the amount of livestock manure to be applied

20. (1) The amount of livestock manure applied in any year to land on a holding, together with that deposited to land by livestock, shall not exceed an amount containing 170 kg of nitrogen per hectare.

(2) For the purposes of sub-article (1), the amount of nitrogen produced by livestock and the nitrogen content of livestock manure shall be calculated in accordance with Tables 6, 7 and 8 of Schedule 2 except in the case of pig manure or poultry manure where a different amount is specified in a certificate issued in accordance with Article 32 in relation to that manure.

(3) For the purposes of sub-article (1), the area of a holding shall be deemed to be the eligible area of the holding.



	Special Protection Area (SPA)
	candidate Special Area of Conservation (cSAC)
	Site location
	5km, 10km and 15km from the site

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Pig Fattening House and Associated Structures
 Annakisha Pig Farm, Doneraile, Co. Cork

Figure 1: Designated sites (Natura 2000)

Drawn: MH	Checked: MH	Approved: MH
Project no: 051	Status: Final	Scale: 1: 200k @ A4
Sheet no: 1 of 1	Revision: 1	Date: 17.11.2014