

Appropriate Assessment Screening Report and Natura Impact Statement

Letterkenny Rd, Lifford, Co. Donegal

For:



January - May 2022



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Executive Summary

Introduction

Background

Blackstaff Ecology Ltd was appointed by Carlin Planning to undertake an Appropriate Assessment (AA) Screening Report and Natura Impact Statement (NIS) of a proposed development situated at the edge of Lifford town, Co. Donegal, on the north-eastern side of the Letterkenny Road—"the Site". The work was commissioned in relation to a proposed recreational facility including two sports pitches and enabling infrastructure together with a wastewater pumping station and access roadway. The Site measures approximately 4.5 ha and is located at Irish Grid ref H 33052 99101 (illustrated in Figure 1).

Statement of Authority

- This report was prepared and undertaken by Dr Florentine Spaans BSc MSc PhD MRSB, reviewed by Dr Brian Sutton BSc PhD CEnv MCIEEM and approved by Cormac Loughran MSc CEnv MCIEEM of Blackstaff Ecology Ltd.
- 3. Dr Spaans was awarded a PhD in Ecology by Queen's University, Belfast. Prior to working at Blackstaff Ecology, she worked as a Plant Health Inspector in Forest Service for 3 years. During this time, she planned and carried out surveillance of quarantine organisms harmful to plants across Northern Ireland. In so doing she gained experience of conducting vegetation surveys in varied habitats. She also worked as a research assistant at Queen's University, Belfast and has been responsible for fieldwork and sampling for various ecological projects.
- 4. Dr Sutton was awarded a PhD in Environmental Science by the University of Ulster. Prior to working at Blackstaff Ecology, he worked as a member of the Habitat Survey Team of the Environment and Heritage Service (now the Northern Ireland Environment Agency) for two years. Following this, he worked as a consultant ecologist for AECOM Ltd for 15 years, carrying out habitat, bird and mammal surveys for a wide range of governmental and private clients. Projects undertaken were at a range of scales, from small private developments to major infrastructure projects. Brian has been a Principal Ecologist at Blackstaff Ecology for the past six years.
- 5. Cormac Loughran is a Chartered Environmentalist (CEnv) and a full member of the Chartered Institute of Ecology and Environmental Management (MCIEEM). Cormac has worked professionally as a Consultant Ecologist for the past twelve years. He holds an MSc (Distinction) in Environmental Management from the University of Ulster and has extensive experience in a broad range of flora and fauna surveys. He has undertaken and coordinated the EcIAs for numerous infrastructure developments.
- 6. Cormac is also an experienced field naturalist and prior to his consultancy work, he worked as a warden/ranger for The National Trust on a number of important nature reserves between 1995 and 2004. These included Crom Estate in County Fermanagh and Murlough NNR and Slieve Donard in County Down. Cormac therefore also has a wide range of habitat management experience including broadleaved woodland, wetland, dune grassland, wet and dry heathland and blanket bog.



Legislative Context

7. The legislative context of Appropriate Assessments is summarised below.

The EU Habitats and Birds Directives

- 8. The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora,

 "The Habitats Directive", and Directive 2009/147/EC on the conservation of wild birds "The Birds Directive" provide for the legal protection of habitats and species of European importance.
- 9. The assessment of impacts is required for any plan or project that has the potential to have effects on any Designated European Site i.e. Special Area of Conservation (SAC) or Special Protection Area (SPA), The Habitats Directive was formulated as a direct result of the continuous deterioration of natural habitats and the increasing impacts on wild species arising in the most part as a result of development and agricultural activity. The main aim of the EC Habitats Directive is to promote the maintenance of biodiversity by requiring Member States to take measures to maintain or restore natural habitats and wild species at a favourable conservation status, introducing robust protection for those habitats and species of European importance.
- 10. The Habitats Directive introduces the 'Precautionary Principle" approach towards proposals whereby projects can only be permitted having ascertained that there is not likely to be any significant impact on the conservation status of the designated site. Article 6 of the Directive has three main provisions. This structure provides for a clear distinction between Article 6(1) and (2) which define a general regime while Article 6(3) and (4) define the procedures to be applied to specific circumstances and establish the requirement for Appropriate Assessment.
- 11. Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect Natura 2000 sites:
 - "3. Any plan or project not directly connected with or necessary to the management of the 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 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 a 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.
 - Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest."
- 12. Article 6 reflects the overall aim of the Habitats Directive of "promoting biodiversity by maintaining or restoring certain habitats and species at 'favourable status' within the context of Natura 2000 sites" while taking into account economic, social, cultural and regional requirements as a means to achieving sustainable development.



13. These requirements are implemented in the Republic of Ireland by the European Communities (Birds and Natural Habitats) Regulations 2011. These regulations consolidate the European Communities (Natural Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats) (Control of Recreational Activities) Regulations 2010, as well as addressing transposition failures identified in various Court of Justice of the European Union (CJEU) judgements.

Stages of Appropriate Assessment

- 14. The following guidance was referenced regarding the stages of Appropriate Assessment:
 - 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, referred to as the "EC Article 6 Guidance Document (EC2000)"
 - Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities.
 Department of the Environment, Heritage and Local Government publication (December 2009) referred to as "DEHLG (2009)"
 - Appropriate Assessment Screening for Development Management, OPR Practice Note PN01.
 Office of the Planning Regulator March 2021 hereafter referred to as "OPR (2021)"
- 15. Appropriate Assessment comprises up to four stages:

Stage One: Screening

The process which 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 are likely to be significant. Four steps are described as part of the screening process in OPR (2021):

Step 1: Description of proposed development and site characteristics. This stage considers the nature and extent of the proposed development and characteristics of the immediate environment by providing a brief description.

Step 2: Identification of relevant European sites. Potentially relevant European sites are listed according to their geographical proximity, hydrological connections and other characteristics and vulnerabilities that link the site of development to the European site.

Step 3: Assessment of likely significant effects using the Source-Pathway-Receptor model. This determines whether or not there is a pathway of effect on the qualifying interests of the European sites. The Source-Pathway-Receptor model is described in detail in OPR (2021).

Step 4: Screening determination and possible outcomes. This is a clear statement of the conclusion reached and the basis upon it was reached. If significant effects can be ruled out then it is not necessary to proceed to Stage two. If significant effects are certain, likely or uncertain then Stage two must be completed.

Stage Two: Appropriate Assessment

The 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 structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts. A Stage 2 report is usually referred to as a Natura Impact Statement (NIS).

Stage Three: Assessment of Alternative Solutions

The process which examines alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the European site.

Stage Four: Assessment where no alternative solutions exist and where adverse impacts remain

An assessment of compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed.

16. The Habitats Directive promotes a hierarchy of avoidance, mitigation and compensatory measures.
First, the plan should aim to avoid any impacts on European sites by identifying possible impacts early



in the plan-making process and avoiding such impacts. Second, mitigation measures should be applied, if necessary, during the AA process to the point where no adverse impacts on the site(s) remain. If the plan is still likely to result in impacts on European sites, and no further practicable mitigation is possible, then it must be rejected. If no alternative solutions are identified and the plan is required for imperative reasons of overriding public interest (IROPI test) under Article 6(4) of the Habitats Directive, then compensation measures are required for any remaining adverse effect.

Stage 1 - Screening

Description of the Proposed Development

17. The proposed development site off the Letterkenny Road (N14), Lifford, Co. Donegal (Irish Grid ref H 33052 99101; location map in Annex 1 is situated on the western side of Lifford town, to the northeast of Letterkenny Road, across from The Commons. The proposal is for a recreational facility and enabling infrastructure. This would include two sports pitches (one of 7350sqm one of 2400sqm) with associated floodlighting, club house and car parking, together with a wastewater pumping station (WwPS) and road infrastructure. The WwPS infrastructure will include a roadway, footpaths, cycleways, associated street lighting, storm drainage and a proposed new access onto the N14 National Primary Road, a right-hand turning lane.

Table 1. Summary table outlining site features and project description.

STEP 1. Description	of the proposal and local site characteristics
File Reference No	Not known
Brief description of the project	The development site off the Letterkenny Road (N14), Lifford, Co. Donegal (Irish Grid ref H 33052 99101; location map in Annex 1). The proposal is for a recreational facility and enabling infrastructure. This would include two sports pitches (one of 7350sqm one of 2400sqm) with associated floodlighting, club house and car parking, a wastewater pumping station and road infrastructure consisting of roadway, footpaths, cycleways, associated street lighting, storm drainage and a proposed new access onto the N14 National Primary Road, including the provision of a right-hand turning lane. The sports pitches and the roadway would be situated a minimum of 5 m away from drainage ditches which connect to the River Finn SAC and River Foyle SAC. The proposal would also necessitate the removal of several lengths of hedgerow along the field boundaries.
Brief description of site character- istics	The Site is situated on the western side of Lifford town, across from The Commons. The site currently lies across five agricultural fields of improved grassland bounded by mainly native species-rich hedgerows. Much of the adjacent land consists of agricultural fields but a petrol station borders the site to the south and individual residential houses and gardens line the N14 to the west and south. Drainage ditches mark the northern site boundary, their waters flowing into the River Deele around 470 m to the north and from there into the River Finn SAC around 990 m downstream. The River Finn SAC is contiguous with the River Foyle SAC and ASSI along the border between Northern Ireland and the Republic of Ireland. An area of former peatland that has been converted into pasture lies adjacent to the site to the north. Scattered gorse scrub grows near the ditch to the north-east of the site. A strip of amenity grassland with a line of planted trees and a native species-rich hedgerow lies alongside the Letterkenny Road. The site lies on a variety of mostly poorly draining acid soils, including gleys, podzols, peaty lithosols and alluvial soils. The land is known to be subject to flooding in wet weather.
Relevant prescribed bodies consulted	DEHLG (NPWS); EPA
Response to consultation	None received to date



European Sites within the project Zone of Influence

- 18. The site of the proposed development is not situated in or immediately next to any Natura 2000 sites. The proposed development is not related to nor is necessary for the management of any European site. European designated sites within a potential zone of influence of the site of the proposed development are listed in Table 1.
- 19. The zone of influence around the site was determined based on the geography and topography of the area, taking into account sub-catchment areas and waterways. The figure in Annex 2 includes a 15 km buffer around the site mainly as a clear indication of scale.

Table 2. European sites (SACs and SPAs) in the potential zone of influence of the proposed development. Qualifying interests for each site are taken from the data sheets prepared by the NPWS. *European priority habitat.

for each site are taken from the data sheets prepared by the NPWS. *European priority habitat.				
STEP 2. Identification of relevant Natura 2000 sites using Source-Pathway-Receptor model and compilation of information on Qualifying Interests and conservation objectives.				
European site name and code	Qualifying Interests	Distance from proposed develop- ment	Connections (Source-Pathway- Receptor)	Consider -ation for further screen- ing
The River Finn SAC (IE002301)	 Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] Northern Atlantic wet heaths with Erica tetralix [4010] Blanket bogs (* if active bog) [7130] Transition mires and quaking bogs [7140] Salmo salar (Salmon) [1106] Lutra lutra (Otter) [1355] 	570 m E	Yes (i) The site is in the same catchment and is hydrologically connected through drains to the River Deele, to the N of the Site, which flows into the River Finn SAC ca. 990 m downstream. and (ii) Wastewater from the site will be pumped to the Lifford WwTP which discharges into the River Foyle	Yes
River Foyle and Tributaries SAC (UK0030320)	 Salmo salar (Salmon) [1106] Lutra lutra (Otter) [1355]Atlantic salt meadows (Glauco Puccinellietalia maritimae) [1330] Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation 	600 m E	Yes (i) The site is in the same catchment and is hydrologically connected through drains to the River Deele, to the N of the Site, which flows into the River Foyle and Tributaries SAC ca. 5.5 km downstream. and (ii) Wastewater from the site will be pumped to the Lifford WwTP which discharges into the River Foyle	Yes
Moneygal Bog SAC (UK0030211)	• Active raised bogs* [7110]	13.2 km SW	No The SAC is designated for peatland habitat and lies a significant distance upstream from the site	No



Lough Swilly SAC	 Estuaries [1130] Coastal lagoons [1150] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] Old sessile oak woods with llex and Blechnum in the British Isles [91A0] 	15.2 km NW	No There is no hydrological connection as the site lies in a different catchment. The site also does not lie along any obvious connecting routes for otter between catchments.	No
Lough Swilly SPA	 Lutra lutra (Otter) [1355] Great Crested Grebe (Podiceps cristatus) [A005] Grey Heron (Ardea cinerea) [A028] Whooper Swan (Cygnus cygnus) [A038] Greylag Goose (Anser anser) [A043] Shelduck (Tadorna tadorna) [A048] Wigeon (Anas penelope) [A050] Teal (Anas crecca) [A052] Mallard (Anas platyrhynchos) [A053] Shoveler (Anas clypeata) [A056] Scaup (Aythya marila) [A062] Goldeneye (Bucephala clangula) [A067] Red-breasted Merganser (Mergus serrator) [A069] Coot (Fulica atra) [A125] Oystercatcher (Haematopus ostralegus) [A130] Knot (Calidris canutus) [A143] Dunlin (Calidris alpina) [A149] Curlew (Numenius arquata) [A160] Redshank (Tringa totanus) [A162] Greenshank (Tringa nebularia) [A164] Black-headed Gull (Chroicocephalus ridibundus) [A179] Common Gull (Larus canus) [A182] Sandwich Tern (Sterna sandvicensis) [A191] Common Tern (Sterna hirundo) [A193] Greenland White-fronted Goose (Anser albifrons flavirostris) [A395] Wetland and Waterbirds [A999] 	15.7 km NW	No The site is remote from the SPA and does not support wetland habitats likely to be used by significant numbers of any of the SPA designation species/populations.	No
Lough Foyle SPA (IE004087)	 Red-throated Diver (Gavia stellata) [A001] Great Crested Grebe (Podiceps cristatus) [A005] Bewick's Swan (Cygnus columbianus bewickii) [A037] Whooper Swan (Cygnus cygnus) [A038] Greylag Goose (Anser anser) [A043] Light-bellied Brent Goose (Branta bernicla hrota) [A046] Shelduck (Tadorna tadorna) [A048] Wigeon (Anas penelope) [A050] Teal (Anas crecca) [A052] Mallard (Anas platyrhynchos) [A053] Eider (Somateria mollissima) [A063] 	30 km NNE	Yes Weak hydrological and ecological connection	Yes



	 Red-breasted Merganser (Mergus serrator) [A069] Oystercatcher (Haematopus ostralegus) [A130] Golden Plover (Pluvialis apricaria) [A140] Lapwing (Vanellus vanellus) [A142] Knot (Calidris canutus) [A143] Dunlin (Calidris alpina) [A149] Bar-tailed Godwit (Limosa lapponica) [A157] Curlew (Numenius arquata) [A160] Redshank (Tringa totanus) [A162] Black-headed Gull (Chroicocephalus ridibundus) [A179] Common Gull (Larus canus) [A182] Herring Gull (Larus argentatus) [A184] Wetland and Waterbirds [A999] 			
Lough Foyle SPA (UK9020031)	 Whooper Swan (Cygnus cygnus) [A038] Light-bellied Brent Goose (Branta bernicla hrota) [A046] Bar-tailed Godwit (Limosa lapponica) [A157] Wetland and Waterbirds [A999] 	30 km NNE	Yes Weak hydrological and ecological connection	Yes

Assessment of Effects

- 20. The likely significance of effects of the proposed project on a Natura 2000 site and its conservation objectives has been assessed taking into account the source-pathway-receptor model. The source is defined as the individual elements of the proposed project that have the potential to impact on the Natura 2000 site, its qualifying features and its conservation objectives. The pathway is defined as the means or route by which effects arising from a source can migrate to the receptor. The receptor is defined as the Natura 2000 site and its qualifying features. Each element can exist independently however a potential impact is created where there is a linkage between the source, pathway and receptor.
- 21. The development may have an effect on four European sites as determined through the presence of a potential pathway of effect. This assessment aims to identify all potential direct and indirect impacts that may result in significant effects on the conservation objectives of a European site.



Table 3. Table outlining possible direct or indirect effects of the project on any relevant Natura 2000 site.

STEP 3. Assessment of Likely Significant Effects

(a) Identify all potential direct and indirect impacts that may have an effect on the conservation objectives of a European site, taking into account the size and scale of the project

Impacts

Construction phase e.g:

- Vegetation clearance; removal of (parts of) hedgerows and some trees
- Surface water runoff from soil excavation/ infill/landscaping (including borrow pits); landscaping associated with sports pitches and infill with road construction)
- Impact on groundwater/dewatering; construction on site may change water flow and volume
- Storage of excavated/construction materials; materials stored near waterways could affect European sites
- Invasive species; Himalayan balsam is known to be present on site and is easily spread during construction

Possible Significance of Impacts: (duration/magnitude etc.)

The River Finn SAC and The River Foyle and Tributaries SAC

There is potential for temporary adverse effects on water quality and flow of the waterways along the site boundary, resulting from silt-laden surface runoff during the construction phase related to soil excavation, vegetation clearance, landscaping and contaminated surface water runoff. These waterways discharge into the River Foyle less than 1 km to the east, to eventually enter Lough Foyle ca. 30 km to the north. A reduction in water quality can result in biotic conditions unfavourable to Atlantic salmon and otter, which are qualifying interests of The River Finn SAC and The River Foyle and Tributaries SAC.

During the construction phase, there is an increased risk of spreading the non-native invasive species Himalayan balsam (*Impatiens glandulifera*) due to soil disturbance along waterways or movement of propagules on construction vehicles. It may spread further downstream along the River Deele from where it may eventually spread to the River Finn SAC or be introduced directly to the SAC by machinery. Himalayan balsam is already known to be present at various locations along the River Foyle downstream of the Site (NBDC, 2022). However, additional introductions can increase the rate of its spread and increase density of cover. This could potentially have an impact on qualifying interests of the SAC and invasive species have been identified as a threat to the conservation objectives of both European sites.

The two European sites are contiguous. However, the presence of More Island at the confluence of the River Deele and River Foyle means there is less likelihood of the River Foyle and Tributaries SAC being affected by the proposed development than the River Finn SAC.

Lough Foyle SPA (IE and UK)

The hydrological connection to the Lough Foyle sites is indirect and weak. Intervening land use and the separation distance of >30 km means that water quality in the European sites will not be negatively affected by any contaminants, such as silt from site clearance and other construction activities, if such an event were to occur, due to dilution and settling out over such a distance.

Operational phase:

- Surface water runoff containing contaminant or sediment; surface water will drain into a stream with a hydraulic connection to European sites
- Changes to water/groundwater due to drainage or abstraction; water flow and volume on site may change without mitigation
- Presence of people, vehicles and activities; the site will be more accessible and contain roads and

The River Finn SAC and The River Foyle and Tributaries SAC

Water quality may also be affected during the operational phase due to surface water and storm water run-off contaminated by hydrocarbons or other substances and anticipated regular soil disturbance related to maintenance of sports pitches.

The wastewater from the club house will be pumped to Lifford WwTP which discharges into the River Foyle. The WwTP has been operating beyond its capacity but is undergoing a major upgrade and a second facility is being built to cope with future increased volumes. The discharge from the club house is likely to be extremely low as it is for recreational use only and the new WwTP facilities are likely to be operational by the time construction on the site is completed.



parking space

 Potential for accidents or incidents; increased human activity and the presence of a wastewater pumping station The site is partially located in a flood plain but the WwTP is to be located above the waterline. Spillage incidents around the pumping station or sewage network are unlikely but could have acute short-term damaging effects on water quality and biological activity if they do occur.

There is a potential for contamination of surface water flows with hydrocarbons and chemical pollutants due to parking spaces, traffic and activity associated with the recreational space. This would be a long-term low-level effect that could affect the European sites further downstream.

Flow of water from the site into the existing waterways could also be affected due to the presence of hard surfaces and associated decreased percolation. Change in water flow rates has been identified as a threat to the conservation objectives of the SACs. However, the relative volume of water discharged into the River Foyle from the site is small enough to be unlikely to cause significant effects.

There is potential for disturbance and dispersal of Himalayan balsam due to increased amenity use of the site. This may have a minor but potentially significant long-term impact.

Lough Foyle SPA (IE and UK)

The hydrological connection to the Lough Foyle sites is indirect and weak. Intervening land use and the separation distance of >30 km means that water quality in the European sites will not be negatively affected by any contaminants, such hydrocarbon spills or increased wastewater discharge, due to dilution and settling out over such a distance.

In-combination/Other

• Surface water runoff containing contaminant or sediment; pollution effects could be exacerbated should a number of other projects happen in the same watershed at the same time.

The River Finn SAC and The River Foyle and Tributaries SAC

While the population in the catchment area is growing only slowly and may actually decrease, additional supply into the old WwTP before upgrades are completed will cause overload problems and impact on water quality of the SACs. However, the timing of the project makes overload concerns unlikely.

The development is located in the extensive catchment of the River Foyle, which includes several urban settlements, including Derry/Londonderry and Strabane. There is potential for incombination effects of both acute short-term pollution events and long-term low-level contamination of surface waters affecting local waterways to have significant effects on the qualifying interests of both SACs.

If multiple and repeated new introductions of Himalayan balsam from various sites were to occur over the medium to long-term, it would increase the rate of its spread and increase density of cover. This would have an impact on qualifying interests of the SAC. Large patches of this species are associated with increased soil erosion which can affect the quality of water and have adverse effects on both otter and fish.

Lough Foyle SPA (IE and UK)



	The hydrological connection to the Lough Foyle sites is indirect and weak. Intervening land use and the separation distance of >30 km means that water quality in the European sites is unlikely to be affected by the proposed development either alone or in combination with other projects.
(b)Describe any likely changes to the	European site:
 Changes in key indicators of conservation status value (water or air quality etc.); Changes to areas of sensitivity or threats to QI; Interference with the key relationships that define the structure or ecological function of 	The site of the proposed development is not situated in or immediately next to any Natura 2000 sites and thus there is no likelihood of direct impacts on any such sites. However, several potential significant indirect effects were identified. The River Finn SAC and The River Foyle and Tributaries SAC In the event that water pollution were to occur at either construction
the site	or operational stages, this could result in silt or chemical discharges directly to the local minor watercourse which discharges into the River Foyle and eventually Lough Foyle. Such an event has potential to impact significantly upon the water quality of the SAC which could, in turn, affect the conservation objectives of the site having regard to the characteristics and sensitivities of the qualifying interests to changes in water quality and levels of sedimentation. These effects could occur both in isolation or in-combination. There is potential for dispersal of an invasive non-native species from the site of development to the European sites due to soil disturbance along waterways or movement of propagules on construction vehicles. Invasive species have been identified as a threat to the conservation objectives of both European sites.
-	ary to reach a conclusion that likely significant effects can be ruled out
at screening?	
X Yes No	While best practice construction methods are to be employed these measures were not taken into account during the screening process as they are not to be relied upon to reach a conclusion of no likely significant effects on any European site.
	o.gsant and any European site.

Screening Determination

STEP 4: Screening Determination Statement

The assessment of significance of effects: Describe how the proposed development (alone or incombination) is/is not likely to have significant effects on European site(s) in view of its conservation objectives

On the basis of the design information provided by the client, which is considered adequate to undertake a screening determination and having regard to:

- the nature and scale of the proposed development on fully enclosed land;
- the intervening land uses and distance from European sites; and
- the weak, indirect and direct hydrological connections with regard to the Source-Pathway-Receptor model,

It is concluded that the proposed development, individually or in-combination with other plans or projects, is likely to have a significant effect on the above listed European sites, in view of the said sites' conservation objectives.

An appropriate assessment is, therefore, required to determine if adverse effects on site integrity



can be excluded in view of the conservation objectives of The River Finn SAC and the River Foyle and Tributaries SAC.				
	Tick as Appropriate:	Recommendation		
i) It is clear that there is no likelihood of significant effects on a European site		The proposal can be screened out: Appropriate assessment not required		
(ii) It is uncertain whether the proposal will have a significant effect on a European site		Request further information to complete screening Request NIS Refuse Planning Permission		
(iii) Significant effects are likely	x	X Request NIS☐ Refuse Planning Permission		
Signature and Date of Recommending Officer				
Signature and Date of the Decision Maker				

Stage 2 – Appropriate Assessment (NIS)

Introduction

- 22. In relation to the proposed development of a recreational facility and enabling infrastructure off the Letterkenny Road (N14), Lifford, Co. Donegal, including two sports pitches (one of 7350sqm one of 2400sqm) with associated floodlighting, club house and car parking, a wastewater pumping station and road infrastructure consisting of roadway, footpaths, cycleways, associated street lighting, storm drainage and a proposed new access onto the N14 National Primary Road, the Stage 1 (screening) report concluded that there is no likelihood of direct impacts of the proposed project on any Natura 2000 site but that indirect and cumulative significant effects are likely in relation to effects on water quality of The River Finn SAC and The River Foyle and Tributaries SAC if no mitigation takes place. Further, it was concluded that cumulative effects of the proposed development by itself on water quality of Lough Foyle SPA (IE) and Lough Foyle SPA (UK) are unlikely. Risk of water pollution has been identified as a threat to the conservation objectives of both The River Finn SAC and The River Foyle and Tributaries SAC. Finally, an increased likelihood of the spread of non-native invasive species to The River Finn SAC was identified.
- 23. In light of the above risk of adverse impacts, a Stage 2 Appropriate Assessment is required for the proposed project, which will permit assessment of measures that will be taken to prevent effects on the conservation objectives of the two Natura 2000 sites. An assessment of potential mitigations is given below.

Assessment of possible effects

The River Finn SAC

24. A clear source-pathway-receptor link exists between the site of the proposed development and part of The River Finn SAC; surface water run-off enters drains which flow into the River Deele ca. 470 m



to the north, which in turns flows into a part of the River Foyle within the River Finn SAC ca. 990 m to the east.

- 25. A second pathway exists where wastewater is pumped to the Lifford Wastewater Treatment Plant (WwTP) which discharges into the River Foyle. While the WwTP has been operating beyond its capacity for some time, substantial upgrades and new facilities are underway which will boost capacity.
- 26. There is a risk of contaminants entering the drains and the pollutants having unknown, possibly toxic or sub-toxic, effects on fish and the invertebrate prey of otter. The risk of pollution during the construction phase includes silt and waste generated by excavations, infill and landscaping, and contamination from stored excavated and construction materials, including chemicals. During the operational phase possible pollutants include hydrocarbons from hard surfaces and contamination from municipal waste. It is proposed to place a wastewater pumping station above the flood line but flooding is frequent in the area and unusually high flooding cannot be ruled out from affecting the pumping station.
- 27. As Himalayan balsam is present on the Site, there is a risk of it spreading to the SAC through seeds or vegetative parts being washed downstream through disturbance caused by the proposed works or through transmission via machinery used on Site. Increased frequency and density of Himalayan balsam can negatively affect otter habitat by supplanting native species and leaving large bare areas in winter once it dies back. Large patches of this species are thus also associated with increased soil erosion which can affect the quality of water and have adverse effects on both otter and fish.
- 28. Although population growth is slow in the catchment, several coincident pollution events, such as sewage overflow during flooding (flooding occurs frequently in Lifford), may have significant temporary effects on water quality of the SAC and can have a big impact on its biota.

The River Foyle and Tributaries SAC

- 29. The source-pathway-receptor link is much weaker between the Site and The River Foyle and Tributaries SAC as the Deele River discharges into the River Foyle where it is split in two by Island More. The water from the Site does not reach The River Foyle and Tributaries SAC until ca 5.5 km downstream. Any pollution carried from the Site would have been substantially diluted but effects on water quality cannot be ruled out, particularly if in combination with other sources of pollution. A second pathway exists where wastewater is pumped to the Lifford Wastewater Treatment Plant (WwTP) which discharges into the River Foyle. While the WwTP has been operating beyond its capacity for some time, substantial upgrades and new facilities are underway which will boost capacity.
- 30. The risk of invasive non-native plant species spreading from the Site to The River Foyle and Tributaries SAC is likewise substantially reduced by the presence of Island More.

Mitigation measures

General and pre-commencement measures

- 31. A CEWMP will be drawn up to incorporate industry best practices and will be strictly adhered to.
- 32. The main pollutants of site water during construction phase are silt, fuel/oil, concrete and chemicals. Suitable storage and containment measures will be implemented to prevent pollution.



33. Set procedures and designated wash-out areas will be provided, or alternatively vehicle wash-out will be prohibited if a suitable wash-out area is not identified.

Erosion and sediment control

- 34. The existing drains and water courses running through and around the site will be fenced off using silt fencing and plant and machinery will be kept outside an 5 m exclusion zone for the duration of construction works.
- 35. Temporary measures will be put in place to remove sediments, oils and pollutants. Fuels, oils, greases and hydraulic fluids will be stored in bunded compounds well away from the watercourse.
- 36. Watercourse banks will be left intact if possible. If they have to be disturbed, all practicable measures will be taken to prevent soils from entering the watercourses.
- 37. No muck, dirt, debris or other material shall be disposed on the public road or verge by machinery or vehicles travelling to or from the site during construction phase.
- 38. A vegetated buffer strip will be retained around waterways during the operational phase and fenced off to prevent access to those using the recreational facility.

Storage of materials

- 39. Materials will be ordered and delivered to site on an "as needed" basis in order to prevent over supply to site.
- 40. Drums, oil and chemicals will be stored on an impervious base and within a secured bund.
- 41. Topsoil and/or spoil heaps will be located at least 10m away from water courses.
- 42. The Main Contractor will ensure that surface and ground waters are adequately protected from contamination by waste temporarily stored on development prior to disposal.

Disposal of waste

- 43. All waste materials (where necessary, after in-situ reuse and recycling options have been fully considered) will be disposed of off-site, under the appropriate Duty of Care and subject to approvals/consents from the relevant statutory bodies.
- 44. The Main Contractor will prepare a detailed inventory of construction based hazardous waste generated, such as tars, adhesives, sealants and other dangerous substances, and these will be kept segregated from other non-hazardous waste to prevent possible contamination. Arrangements will be made for such substances for disposal in a safe manner to an authorized disposal site or by means acceptable to the relevant Authority.
- 45. The Main Contractor will ensure that the excavation works are carried out in accordance with best standard practice and excavation materials are well segregated to minimize any potential cross-contamination.
- 46. There is no known contaminated soil present on the site but in the event that contamination is discovered during the course of construction the excavated material will be required to be disposed



of in a licensed landfill site.

47. Municipal waste collection services will be provided to residents during the operational phase.

SuDS

48. The surface water runoff quality and quantity will be controlled through a SuDS strategy for the site. Permeable paving is to be put in place for private parking spaces. Swales will be placed along roads in open space areas and bioretention will be encouraged through tree pits in open areas. The surface water run-off from the development will pass through a series of SuDS devices which such as Filter drains and Geocellullar SUDs tank infrastructure which will be located beneath the sports pitches adjacent to the watercourse and will attenuate outflows to equate to the greenfield outflows from the undeveloped site. A bypass petrol interceptor will be installed to mitigate the 'first flush' rainfall from the proposed roadway and the car park. The stormwater infrastructure will convey flows to the watercourse at the eastern site of the proposed pitches.

Pollution prevention measures around the wastewater pumping station

- 49. The pumping station is to be located at an elevation above the flood line.
- 50. The connecting wastewater treatment plant is to have sufficient capacity for all the effluent from the projected development.
- 51. A permanent vegetated buffer strip planted with native species will be created and maintained around the pumping station.
- 52. The wastewater pumping station will only be used once upgrades to the Lifford Wastewater Treatment Plant have been completed to a level that ensures there will be no overloading. The upgrades are being done under planning ref: 2051105 and are due to be completed in Summer 2022.

INNS management plan

- 53. An invasive species management plan will be drawn up, outlining measures to be taken to prevent the spread of Himalayan Balsam from the Site and the introduction of other INNS to the Site.
- 54. Permanent fencing will be erected to leave an inaccessible buffer around watercourses. Existing vegetation will be retained and the buffer strip will be left as undisturbed as possible.
- 55. All machinery and vehicles that were operated within a 10 m buffer from the waterways will be thoroughly cleaned to remove all soil and plant materials before being moved off Site.

Assessment of significant effects after mitigation

56. The mitigations are designed to prevent any contamination of surface water during both the construction phase and the operational phase and in case of flooding events. If the mitigations are observed, the risk of water contamination or spread of non-native invasive species from the site having an effect on any qualifying interests of The River Finn SAC or The River Foyle and Tributaries SAC can be deemed negligible both in isolation or in combination with other projects.



Conclusion

57. With the proposed mitigations, any adverse effects on Natura 2000 sites will be avoided. It is not deemed necessary to continue to Stage 3 of Appropriate Assessment to examine alternative ways of achieving the objectives of the project without affecting the integrity of the European sites.

References

EC (2013): *Interpretation Manual of European Habitats.* EUR 28. European Commission, DG Environment, Brussels.

DCSDC (2021): *Population Projections*. Derry and Strabane District Council Statistics. https://www.derrystrabane.com/Subsites/Derry-and-Strabane-Statistics/Population

NBDC (2022): National Biodiversity Data Centre database https://maps.biodiversityireland.ie/ Last accessed: 25/01/2022

NPWS (2009): Appropriate Assessment for plans and projects in Ireland; guidance for Planning Authorities. Environment, Heritage and Local Government (NPWS 2009)

NPWS Natura 2000 site descriptions, data sheets and conservation objectives; https://www.npws.ie/protected-sites

NPWS (2014): Conservation Objectives: Lough Foyle SPA 004087. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

NPWS (2017): Conservation Objectives: River Finn SAC 002301. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

OPR (2021): Appropriate Assessment Screening for Development Management, OPR Practice Note PN01. Office of the Planning Regulator March 2021

DCC (2016): Lifford Local Area Plan 2007-2013. Donegal Country Council.

DCC (2018): County Donegal Development Plan 2018-2024; Donegal Country Council. https://www.donegalcoco.ie/services/planning/planningpolicy/county%20donegal%20development%20plan%202018-2024%20(as%20vari/">https://www.donegalcoco.ie/services/planning/planningpolicy/county%20donegal%20development%20plan%202018-2024%20(as%20vari/")



Appendix 1

Figure 1: Natura 2000 Designated Sites Map

