Inspector's Report ABP-304662-19

Development	Proposed dredging of material for flood relief works along the River Finn.
Location	Townlands of Ballybofey and Stranorlar, Co. Donegal.
Local Authority	Donegal County Council
Type of Application	Application for approval made under Section 177(AE) of the Planning and Development Act, 2000 (local authority development requiring appropriate assessment)
Observer(s)	Ballybofey & Stranorlar Integrated Community Company.
Date of Site Inspection	8th June 2019
Inspector	Sarah Lynch.

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1.0 Introduction

1.1. Donegal County Council is seeking approval from An Bord Pleanála to undertake works including the removal of silt, gravels and boulder deposits at three locations within the River Finn, which is a designated Special Area of Conservation, upstream and downstream of the main Ballybofey / Stranorlar Bridge and the Drennan Bridge in Co. Donegal.

1.2. There are several other designated European sites (SPAs and SACs) in proximity to the proposed works (see further analysis below). A Natura Impact Statement (NIS) and application under Section 177AE was lodged by the Local Authority on the basis of the proposed development's likely significant effect on a European site.

1.3. Section 177AE of the Planning and Development act 2000 (as amended) requires that where an appropriate assessment is required in respect of development by a local authority the authority shall prepare an NIS and the development shall not be carried out unless the Board has approved the development with or without modifications. Furthermore, Section 177V of the Planning and Development Act 2000 (as amended) requires that the appropriate assessment shall include a determination by the Board as to whether or not the proposed development would adversely affect the integrity of a European site and the appropriate assessment shall be carried out by the Board before consent is given for the proposed development.

2.0 Proposed Development

2.1. The proposal includes the removal of silt, gravels and boulder deposits at three locations within the River Finn as follows:

- Location 1 - is an area located behind Jacksons Hotel in Ballybofey. Whereby it is stated that a large gravel bank has emerged due to the deposition of river gravels and sediments at this location. It is proposed to remove these gravels to below ambient river levels. It is proposed that these gravels will be used for the creation of suitable spawning salmon habitat within the 3 areas of the River Finn subject to removal of materials.
- Location 2 – is located under the main Ballybofey / Stranorlar Bridge. It is stated that large deposits have built up within two arches of the bridge and

along of c. 15 metres downstream of these arches. Works in this area are proposed to remove the silt and sediment deposits from the effected arches of the bridge. It is stated that this material is to be removed to a bunded deposition area onsite for ongoing treatment due to the existence of invasive plant material such as Himalayan Balsam within these sediments.

- Location 3 – comprises an area of large boulders and rubble under the Drennan Bridge on the River Finn. These boulders are stated as being very large and are located upstream of the bridge. An further area of rubble and stones are also proposed for removal and are locate downstream of the Drennan Bridge.

2.2. **Accompanying documents:**

- NIS
- Plans and particulars demonstrating location and details of proposed works.

Further Information

- A request for further information was submitted addressing issues relating to the following:
    - The full extent of the proposed works along the full length of the route.
    - Full details of all access routes into the river.
    - The location of all invasive species present along the river banks shall be mapped. All proposed access routes shall be overlaid on these maps.
    - Details of the composition of the proposed cofferdam and materials to be used.
    - Details of the proposed platform required to enable construction of the cofferdam. The location of this platform shall indicate whether there is any potential interface with existing invasive species in the area.
    - The locations of Annex I/II species and habitats for which the site is designated in relation to the proposed works and clearly demonstrating the boundary of the proposed works in relation to the location of these Annex I/II species and habitats and any required separation distances.

These details shall be clearly mapped and shall be presented at a scale no less than 1:500.

- Clearly demonstrate locations where there is any potential interface with the proposed works and the existing Annex I/II species/habitats.
- Details of the location and composition of the proposed bunded area in which invasive species will be stored. Details of any treatment of invasive species should also be provided.
- Details of the location and composition of the proposed settlement tank and silt sock.
- Details of the location of the proposed vegetated area in which water from the settlement tank is to be discharged to. Details of proposed discharge rates are also to be provided.
- Detailed methodology for the proposed construction works having regard to the information requested above. Specific environmental mitigation measures shall also be included. Any habitat damage/loss should be addressed in the NIS. In combination effects shall also be identified and assessed in relation to the other flood relief works proposed at this location.
- Details in relation to the significance of the sites identified for dredging to the otter are required. The level of site use by otter and the level of significance of that use within the context of the wider SAC should be clearly defined. The NIS should also clearly assess the predicted 'post project' change, risk and impacts to riverbank and in stream habitats/species arising from the proposed works.
- Specific details of mitigation measures to prevent pollution during the operational and maintenance phase of the project.
- Re-advertisement of the further information submitted.

3.0 **Site and Location**

3.1. The development works are located within the River Finn SAC and will occur both upstream and downstream of the Ballybofey Stranorlar bridge and the Drennan

Bridge. The River Finn is part of the Finn (Donegal)_60 river sub basin and the Finn Donegal_SC_030 sub catchment which is within the Foyle catchment.

3.2. As mentioned above, this area of the river is within the development boundary of Ballybofey and Stranorlar. The works area is bounded to the north west by MacCumhail Park GAA club and to the south west by a car park and open grasslands and to the north east by St. Marys National school and St. Marys Church. A number of commercial buildings are present at the riverbank directly to the east, south of the Ballybofey / Stranorlar Bridge.

3.3. The riverbanks are largely grassed with various vegetation present on both sides. A number of large trees are present along the south western bank separating the river from existing development at this location. The bank is also populated on both sides by tall stands of Japanese Knotweed and Himalayan Balsam.

4.0 Planning History

4.1. There is no recently recorded history for this site.

5.0 EIA screening

5.1. Legislative Provisions

5.2. There is no provision under Section 177AE of the Planning and Development Act 2000, as amended to require Environmental Impact Assessment or to carry out a formal EIA Screening Determination for a Local Authority Project which was submitted to the Board under this section of the Act.

5.3. **National Policy**

Implementing the National Flood Risk Policy 2018

Ballybofey / Stanorlar is identified as a relief scheme that is planned.

National Planning Framework

The National Planning Framework – Ireland 2040, which seeks to ensure flood risk management in accordance with best practice.

Draft Regional Spatial and Economic Strategy for the Northern and Western Regional Assembly.

- **Objective 21** Local Authorities, DHPLG, OPW, and other relevant Departments and agencies to work together to implement the recommendation of the CFRAM programme to ensure that flood risk management policies and infrastructure are progressively implemented.
- **Objective 197** Support the delivery of flood defence works planned by OPW to be implemented in the short-term.
- **Objective 206** Prioritising investment to improve storm water infrastructure to improve sustainable drainage and reduce the risk of flooding in the urban environment.

Donegal County Development Plan 2018-2024

- Policy F-P-6: It is a policy of the Council to consider the development of long and short-term flood remediation works, including embankments, sea defences, drainage channels, and attenuation ponds to alleviate flood risk and damage to livelihoods, property and business subject to environmental considerations including potential impact on designated shellfish water and, fresh water pearl mussel catchment areas, compliance with Article 6 of the Habitats Directive, best practice in Coastal Zone Management and the Marine Resource and Coastal Management policies of this Plan.

Seven Strategic Towns Local Area Plan 2018-2024

- Section 5.4.2 Opportunity Sites Located Within or Adjacent to The Town Centres - Opportunity Site 1 was one of a number of sites specifically assessed in more detail in the SFRA report on the LAP, owning to its strategic location within the town centre. Almost the entire site is identified as lying within Flood Zone A and reported occurrences of storm sewers surcharging during flood events on the River Finn have been referenced in the report.
- Policy SO2: To enhance and develop Ballybofey-Stranorlar by 2024 so as to enhance its reputation as a sporting centre of excellence and as a key centre of recreation and hospitality for the County. In addition, the Twin Towns will have an enhanced reputation also as an attractive place to live and work on

foot of expanded residential and retail facilities and on foot also of strategic infrastructural improvements to the town.

- Policy F-P-6: It is a policy of the Council to consider the development of long and short-term flood remediation works, including embankments, sea defences, drainage channels, and attenuation ponds to alleviate flood risk and damage to livelihoods, property and business subject to environmental considerations including potential impact on designated shellfish water and, fresh water pearl mussel catchment areas, compliance with Article 6 of the Habitats Directive, best practice in Coastal Zone Management and the Marine Resource and Coastal Management policies of this Plan.
- Policy F-P-7: It is a policy of the Council not to permit developments which would hinder the maintenance of river or drainage channels.

Sub Basin Catchment

- The River Finn is part of the Finn (Donegal)_60 river sub basin and the Finn.

6.0 Prescribed Bodies

6.1. Department of Culture, Heritage and the Gaeltacht:

Response dated 19th July 2019 in relation to application –

- Insufficient information to assess the adequacy of the screening reports concluding statement or mitigation measures with regard to Otter. The level of site use by otter and the level of significance of that use within the context of the wider SAC should be clearly defined.
- It is not appropriate for mitigation measures to be agreed post consent. The detail of any proposed mitigation measures must be available as part of the assessment. Details are required in relation to the cofferdam construction and approach and the access routes.
- NIS should clearly assess the predicted post project change, risks and impacts to river bank and in stream habitats/species arising from works proposed.
- Electro fishing should be undertaken by a competent and experienced operator with a suitable qualification.

The Department submitted an additional comment in relation to Donegal County Council's response to the further information request which was received **29th November 2019**. The issues raised can be summarised as follows:

- The Department has concerns that the NIS does not clearly assess the predicted post project change, risk and impacts to the riverbank and instream habitats/species arising from the works proposed.
- The removing and replacing proposed quantities of gravel and stone on the variable instream velocities that underpin the conditions supporting adjacent and downstream Salmonid spawning areas and juvenile / nursery habitat remains unquantified.
- Insufficient mitigation has been outlined to ensure that no reasonable scientific doubt remains as to the absence of adverse effects.
- No flow rates or hydrological impacts have been estimated at the identified gravel removal locations and or the salmon spawning areas.
- Best practice would include modelling of predicted changes.
- The method of ensuring an approximate flow rate that replicates 300-600 mm/s at newly formed gravel habitat sites is unclear.
- The mobilization of suspended solids outside of coffer dam areas has not been mitigated or addressed.
- The extent of invasive species on site and in the silt deposits to be removed requires the POW EP 17B Spread of Water based Invasive Species (High Security) procedure to be carried out.
- The current NIS lacks complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the works proposed on the River Finn SAC.

6.2. **Department of Communications, Climate Action and Environment, GSI.**

Response received on 28th November 2019. It is recommended that data sets available within the GSI website are used in the assessment of the proposed works. In areas where deep flood walls are present it can have an effect on groundwater and cause flooding of basements. No comment in relation to NIS.

6.3. **Observations**

6.4. An observation was received from a local resident, the observation supports the proposed works and requests that additional works are carried out at the footbridge 200 metres up stream of the works at Jackson Bridge.

7.0 Assessment

7.1. Under the provisions of Section 177AE (6) of the Planning and Development Act, 2000 (as amended), the Board is required to consider the following in respect of this type of application:

- The likely consequences for the proper planning and sustainable development of the area;
- The likely effects on the environment; and,
- The likely impact on any European sites.

The likely consequences for the proper planning and sustainable development of the area

7.2. As outlined above consent is sought by Donegal County Council for works including removal of silt, gravels and boulder deposits at three locations within the River Finn. It is stated by the Council that Ballybofey and Stranorlar were included as an area for further assessment within the CFRAM study. The proposed works are part of a Minor Works application and are deemed as essential maintenance (silt and gravel removal) to prevent flooding in the town as part of an overall emergency plan where the town is at risk of flooding.

7.3. It is further stated that the works will still be of benefit to the final solution for the town when a scheme from the CFRAM Final Flood Risk Management Plan is prioritised. The proposed development is a short-term measure to help prevent flooding in the town during storm events such as what occurred in December 2015.

7.4. It is of note that the lands within which the works are proposed are within the development boundary of Ballybofey and Stranorlar and the lands are zoned for both a Masterplan area and town centre. It is the policy of the Council under policy F-P-6 of the Seven Strategic Towns LAP 2018-2024 to protect these lands from flooding and consider flood remediation works in order to ensure that the town and associated

development lands are adequately protected. The proposed works are therefore in accordance with the provisions of the local area plan for the area.

The likely effects on the environment

7.5. The proposed works include the removal of silt and gravels from the riverbed in three locations that are adjacent to existing salmon breeding grounds. Additional works will include the excavation of a bunded area 20 metres from the riverbank in which excavated silts contaminated with invasive plant species will be stored and treated. Infrastructure required to carry out the proposed works include the use of a cofferdam to allow for instream works, a settlement tank and silt sock for the treatment of extracted water and the use of various machinery.

7.6. It is proposed to remove fish areas blocked off by the proposed cofferdams prior to dewatering by means of electro-fishing which will be carried out under licence.

7.7. The main issues of concern in relation to the proposed works in the context of environmental impacts relate to the following, impacts on the SAC and qualifying interests will be assessed under the Appropriate Assessment Section below:

- Spread of Invasive Plant Species
- Impacts on water quality
- Construction works and machinery

Spread of Invasive Plant Species

7.8. As mentioned above the proposed works include the removal of silt and gravels, some of which contain invasive plant species, from the River Finn. Contaminated material will be placed into a bunded area 20 metres from the riverbank whereby invasive plant species present in the material will be treated with herbicides for a period of 5 years.

7.9. The Board sought further information in relation to the location of the proposed access routes relative to the location of the existing invasive species present throughout the site and in relation to the extraction and treatment of contaminated silts and gravels from the river to a bunded area.

7.10. In response to this request aerial images indicating the proposed access routes by line and the presence of invasive plant species by dot were submitted and included within the revised NIS. The identification of invasive plants by way of a dot on aerial

photography fails to provide an adequate level of detail in relation to the coverage of the plants.

7.11. Whilst carrying out a site inspection I noted discrepancies in the information submitted on the aerial images. I noted significant stands of Japanese Knotweed at locations where access routes are proposed and where there is little room to provide for adequate separation distances. It is of note that the Department of Culture, Heritage and the Gaeltacht have also raised concerns in relation to the extent of invasive species on site and in the silt deposits to be removed.

7.12. Based on the information submitted the applicant has not adequately indicated how these invasive species will be avoided. The works, therefore, raise the risk that invasive plant species could be spread beyond the site by the wheels of vehicles disturbing it along both access routes and within the works area. The provision of appropriate exclusion zones is imperative to prevent the spread of such invasive plant species within the site and throughout the adjacent Natura 2000 site.

7.13. In addition to the foregoing, I have serious concerns in relation to the location of the proposed bunded treatment area 20 metres from the riverbank. The location of this bunded area on the riverside of the existing flood embankment is significantly vulnerable to flooding. This element of the development has the potential to significantly exacerbate the spread of such invasive plants throughout the River Finn SAC and beyond during times of flood and significantly increase sedimentation and chemical pollution to the river by mobilising chemically treated solids within the bunded area into the river channel, such impacts on water quality are examined further in Section 7.15 below.

7.14. Having regard to the foregoing and in the absence of adequately scaled drawings and the submission of an invasive species management plan, I am unable to properly determine with any significant degree of certainty that the proposed works would not result in the spread of the Japanese Knotweed, Himalayan Balsam, Himalayan knotweed and Rhododendron within the River Finn SAC I therefore consider the proposed works to be unacceptable in this regard.

7.15. **Water Quality**

7.16. Having regard to the foregoing, I have serious concerns in relation to the potential for significant environmental impacts to arise as a consequence of the proposed

treatment bund. The quantity of material to be deposited within the bunded treatment area has not been provided. Nor has any information in relation to the type and quantity of herbicides to be used for treatment of plants. As mentioned above this bund is to be located c. 20 metres from the river on the riverside of a flood embankment, where significant flooding has occurred. The location of this bund is therefore significantly vulnerable to flood whereby flood waters could mobilse the sediment, chemicals and plant fragments within this bund downstream of this area of the river and within the surrounding flood plain.

7.17. The ecological and chemical status of the River Finn at this location is currently poor and has been identified as being at risk and under pressure within the sub catchment analysis. The Water Framework Directive requires waterbodies to reach good status and that status in all waters does not deteriorate. Thus, the location of this proposed bund in such close proximity to the river and in the absence of any information in relation to the proposed quantities of silt to be removed and the quantity and type of chemicals to be used prevents a proper definitive assessment of the potential risks to water quality within the River Finn.

7.18. In addition to the foregoing, the Department of Culture, Heritage and the Gaeltacht have raised concerns in relation to the mobilisation of sediments outside the proposed cofferdam and the potential for impacts to arise which would seriously affect the qualifying interests of the River Finn. These issues will be assessed in detail within the Appropriate Assessment below. The Department has also raised concerns in relation to the lack of information pertaining to the quantities of gravel to be extracted from the river and the quantities that are to be reused within the river. No predictive modelling of the river flows and velocities has been submitted and as such it is not possible to determine whether these changes will have any impact on the life cycle of salmon which utilise this section of the river for breeding.

7.19. Based on the lack of information submitted I am not satisfied that the applicant has adequately demonstrated that the proposed development will not give rise to water pollution and increased sedimentation which would deteriorate the water quality of the River Finn SAC further. Whilst I acknowledge the merits of the proposed works in seeking to alleviate flooding in the area, the significant lack of information provided does not allow for an adequate assessment of impacts, I therefore consider the proposed works to be unacceptable in this regard.

7.20. **Construction works and machinery**

7.21. During the initial assessment of the proposed works it was apparent that insufficient information had been submitted by the applicant in relation to a number of items, some of which will be discussed in detail within the Appropriate assessment of this report below. Additional information was specifically requested in relation to the proposed cofferdam and any interface that this structure would have in relation to the qualifying interests of the River Finn. The applicant has stated in their response that the proposed cofferdam will be a water filled structure that will be walked onto the site and as such will have limited impact on the riverbed or to species and habitats proximate to the proposed works.

7.22. Whilst I acknowledge that a water filled structure will minimise any environmental damage to both the riverbed and the surrounding area, both during set up and whilst in use, it is not possible, based on the information submitted and in the absence of adequately scaled drawings, to determine whether adequate separation distances can be achieved in relation to the proposed works and the existing salmon redds present. Impacts on salmon will be examined within the Appropriate Assessment section below, however it is important to note at this juncture that the development has significant potential to give rise to impacts on these species during construction and operation works.

7.23. **Access**

7.24. The proposed works will be carried out at various locations to both the north and south of the river to the east and west of the main Ballybofey/Stranorlar bridge and further downstream at Drennan Bridge. Access to the southern bank, west of the Ballybofey/Stranorlar bridge will be gained through the existing access road at the Sean Mac Cumhails GAA grounds. An access route to the south east of the Ballybofey and Stranorlar is shown at the Community Gardens which is accessed via a local road known as Chestnut Road to the south of the N15. An additional entrance is proposed further to the south east of Chestnut road at Millbrae bridge. Access to works at Drenna Bridge will be accessed from lands on either side of the bridge off the Millbrae Road. Sight visibility at all of these access points is adequate and unobstructed.

7.25. However, whilst the aforementioned access points are adequate, I note that in some instances the access routes proposed will require machinery to operate and travel past

clusters of invasive plant species. Given the poor quality of information submitted in this regard whereby measurements cannot clearly be identified, it is not possible to properly determine as to whether adequate separation distances can be achieved in order to prevent the spread of these invasive plant species.

7.26. It is of further note that details of the proposed access to works at the northern bank to the west of the GAA grounds have been shown from the riverbank but not beyond. Based on the information provided it is not possible to ascertain the suitability of this access.

7.27. Whilst I consider many of the access points to be acceptable in terms of the point of access from the surrounding public road network, insufficient details have been submitted in relation to the proposed access routes relative to the location of invasive plant species present throughout the works site. In the absence of such information and in the absence of full access route details in relation to works at the northern bank, I cannot properly determine the suitability of all of the proposed access points and routes within the site. I therefore consider the proposed access points and route to be unacceptable given the lack of clarity provided.

7.28. **The likely significant effects on a European site:** The areas addressed in this section are as follows:

- Compliance with Articles 6(3) of the EU Habitats Directive
- The Natura Impact Statement
- Appropriate Assessment

7.29. The Habitats Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) of this Directive requires that 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. The competent authority must be satisfied that the proposal will not adversely affect the integrity of the European site. The likely significant effects on the two Natura 2000 sites is dealt with under the AA section below.

8.0 **Appropriate Assessment**

8.1. The NIS dated 18th October 2019 has been prepared by Woodrow Consultants on behalf of Donegal County Council.

8.2. The NIS prepared by Woodrow Consultants describes the proposed development, its receiving environment and relevant European Sites in the zone of influence of the development. It was informed by surveys, a desk top study, maps and ecological and water quality data from a range of sources. Section 3.1.2 of the NIS details that the following surveys were carried out as follows:

- A detailed terrestrial invasive species survey was carried out on the 27th & 28th September 2018. An aquatic invasive species survey was carried out on the 24th September 2018. The survey revealed that four non-native species are present and include, Himalayan Balsam, Himalayan Knotweed, Japanese Knotweed, and Rhododendron.
- Macroinvertebrate sampling took place in the areas upstream and downstream of the proposed works.
- Suitability surveys for Qualifying Interests such as Salmon and Otter were also carried out on the 24th and 25th September 2018.
- An Otter survey was carried out on the 28th September using standard surveying techniques. The survey discovered prints and a potential holt, it was considered likely that Otter may forage in this area but not construct breeding holts due to the urban nature of the area. The potential nesting holt is located to the north of the GAA across the river on the northern bank.
- River habitat surveys were also carried out to determine the general characteristics of the river.

8.3. The report concluded that, taking into account the project design and the implementation of mitigation measures identified in the NIS, the proposed development will not result in adverse effects on the integrity of any Natura 2000 site.

8.4. Having reviewed the NIS and the supporting documentation, I am generally satisfied that it provides adequate information in respect of the baseline conditions, identifies the potential impacts, uses best scientific information and knowledge and provides

details of mitigation measures. I am satisfied, that the information provided is generally sufficient to allow for appropriate assessment of the development.

Stage 1 Screening

8.5. Notwithstanding the submission of a NIS, it is prudent to review the screening process to ensure alignment with the sites brought forward for AA and to ensure that all sites that may be affected by the development have been considered.

8.6. Having regard to the information and submissions available, nature, size and location of the proposed development and its likely direct, indirect and cumulative effects, the source pathway receptor principle and sensitivities of the ecological receptors, the following European Sites are considered relevant to include for the purposes of initial screening for the requirement for Stage 2 appropriate assessment on the basis of likely significant effects**.**

Table 1. European sites considered for Stage 1 screening

European Site Name & Code	**Distance**	**Qualifying Interest**	**Source-pathway-receptor**	**Considered further in screening**
River Finn SAC 002301	26.8 m	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]	Direct hydrological link.	**Yes** - Potential for significant effects arising from disturbance of Salmon breeding grounds, increased sedimentation of the river, contaminated surface water, runoff from construction and operation

				and potential to disturb otters. Potential to spread invasive species.
Croaghonagh Bog SAC 000129	C. 10km south east	Blanket Bogs (Active) [7130]	No pathway exists	**No**
Lough Foyle SPA 004087	44kkm	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] Red-breasted Merganser (Mergus serrator) [A069] Oystercatcher (Haematopus ostralegus) [A130] Golden Plover (Pluvialis apricaria) [A140] Lapwing (Vanellus vanellus) [A142] Knot (Calidris canutus) [A143]	River Finn discharges to River Foyle	**No** The potential for impact arising from the spread of invasive species is unlikely given the distance from the SPA.

		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]		
North Inishowen Coast SAC 002012	c. 72km	Mudflats and sandflats not covered by seawater at low tide [1140] Perennial vegetation of stony banks [1220] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Machairs (* in Ireland) [21A0] European dry heaths [4030] Vertigo angustior (Narrow-mouthed Whorl Snail) [1014] Lutra lutra (Otter) [1355]	River Finn discharges to the Inishowen Coast	**No** No potential for effects given the separation distance of the works from the SAC.
Hemptons Turbot Bank SAC 002999	c.84km	Sandbanks which are slightly covered by sea water all the time [1110]	River Finn discharges to the Inishowen Coast	**No** No potential for effects given the separation distance of the works from the SAC.

Inishtrahull SAC & SPA 000154 & 004100	c.77km	SPA Shag (Phalacrocorax aristotelis) [A018] Barnacle Goose (Branta leucopsis) [A045] Common Gull (Larus canus) [A182 SAC Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]	River Finn discharges to the Inishowen Coast.	**No** No potential for effects given the separation distance of the works from the SPA & SAC and the dilution and dispersion factor provided by the sea.
Cloghernagore bog and Glenveagh National Park SAC 002047	C. 21km	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260] Northern Atlantic wet heaths with Erica tetralix [4010] European dry heaths [4030] Alpine and Boreal heaths [4060] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] Blanket bogs (* if active bog) [7130] Depressions on peat substrates of the Rhynchosporion [7150] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Margaritifera margaritifera (Freshwater Pearl Mussel) [1029] Salmo salar (Salmon) [1106] Lutra lutra (Otter) [1355]	This SAC is up stream of the proposed works, no pathway therefore exists.	**No**

		Trichomanes speciosum (Killarney Fern) [1421]		
Derryveagh and Glendownan Mountains SPA 004039	C. 23km	Red-throated Diver (Gavia stellata) [A001] Merlin (Falco columbarius) [A098] Peregrine (Falco peregrinus) [A103] Golden Plover (Pluvialis apricaria) [A140] Dunlin (Calidris alpina schinzii) [A466]	This SPA is up stream of the proposed works.	**No**
Foyle and Tributaries SAC (NI) UK0030320	c. 14.7km	Lutra lutra Salmo salar Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation	River Finn discharges to River Foyle	**Yes -** There is potential for impact arising from the spread of invasive species and pollution event from spillage during works.
Magilligan SAC (NI) UK0016613	64km	2130 "Fixed coastal dunes with herbaceous vegetation (""grey dunes"")" 2170 Dunes with Salix repens ssp. argentea (Salicion arenariae) 2190 Humid dune slacks 110 Embryonic shifting dunes 2120 "Shifting dunes along the shoreline with Ammophila arenaria (""white dunes"")" 1065 Marsh fritillary butterfly *Euphydryas (Eurodryas, Hypodryas) aurinia* 1395 Petalwort *Petalophyllum ralfsii*	Hydrological Link present	No potential for impact due to separation distance of works from SAC.

8.7. The NIS submitted screens out all Natura 2000 sites except River Finn SAC, on the grounds that they are removed from the development and will not be affected by disturbance. The lack of any hydrological linkages (i.e. they are located in a different groundwater body) is cited for Croaghonagh Bog SAC thus precluding any impacts on water quality. This approach seems reasonable. However, I consider there is a potential to impact the Foyle and Tributaries SAC, which is hydrologically connected to the River Finn through the spread of invasive plant species and possible pollution arising from spillage during construction.

8.8. Therefore, based on my examination of the NIS report and supporting information, the scale of the proposed development, its likely effects by way of disturbance to salmon breeding redds, potential to spread invasive species throughout the River Finn SAC, and Foyle and Tributaries SAC and potential to contaminate the River Finn SAC by way of water pollution and sedimentation from surface water runoff, I would conclude that a Stage 2 Appropriate Assessment is required for River Finn SAC and Foyle and Tributaries SAC.

Stage II Appropriate Assessment

8.9. The following Appropriate Assessment of the implications of the proposed works alone and in combination with other relevant plans and projects will be carried out in relation to the following European sites in view of their conservation objectives:

- River Finn SAC
- Foyle and Tributaries SAC.

8.10. Notwithstanding that the Foyle and Tributaries SAC is not assessed in the NIS, I note that the conservation objectives for both include salmon and otter. The River Finn flows into the Foyle, as such the impacts identified in relation to the River Finn SAC also apply to the Foyle and Tributaries SAC. Therefore, no further information is required to inform the Appropriate Assessment on the Foyle and Tributaries SAC.

8.11. The NIS submitted by Donegal County Council concluded that the proposal will not beyond reasonable scientific doubt, adversely affect the integrity of any European Site either directly or indirectly.

8.12. The following is a summary of the objective scientific assessment of the implications of the project on the qualifying interest features of the European sites using the best scientific knowledge in the field. All aspects of the project which could result in significant effects are assessed and mitigation measures designed to avoid or reduce any adverse effects are considered and assessed.

8.13. **Potential for direct and indirect effects**

8.14. It is important to note at this juncture that the River Finn is one of the Country's most important salmonid rivers and salmon is a qualifying interest of the River Finn SAC. A number of salmon redds have been identified within the River Finn adjacent to the proposed works. These spawning gravels are identified within the Site's Conservation Objectives as attributes of the SAC and the conservation objective target for this particular attribute is 'no decline'.

8.15. Similarly, otters are a qualifying interest of the River Finn SAC and are present in the vicinity of the proposed works. Prints were observed along the riverbanks and a resting holt or crouching area was noted on the northern bank of the river. Crouching areas are an attribute of this SAC and the target for these attributes is also for no decline to occur.

8.16. Due to the location and nature of the proposed works I consider that Salmon and Otter specifically are the qualifying interests at risk from the proposed development within both the River Finn SAC and the Foyle and Tributaries SAC.

8.17. The conservation objectives for the River Finn SAC and Foyle and Tributaries SAC aim to maintain or restore the favourable conservation condition for habitats and/or species at these sites. The maintenance of habitats and species within the Natura 2000 sites at favourable condition will contribute to the overall maintenance of favourable conservation status of those species at a national level.

8.18. The NIS submitted acknowledges that the proposed works will give rise to a potential for both direct and indirect significant impacts and proposes measures to mitigate these impacts.

8.19. Having regard to the NIS submitted, the nature and scale of the proposed work and the location of salmon and otter habitat relative to the proposed works I consider that the development has the potential to give rise to the following direct and indirect effects:

i) Disturbance to salmon redds, and breeding habitats as a result of dredging and deposition of gravels within the river bed.

ii) Spread of invasive plant species throughout the Natura 2000 network as a result of works and construction of bunded area adjacent to riverbank and,

iii) the potential for deterioration in water quality as a result of works on site and /or as a result of spreading invasive plant species such as Japanese Knotweed due to increases in sedimentation as a result of such spread.

8.20. The impact of these effects will be discussed in detail within the integrity test section in the context of proposed mitigation measures.

8.21. **Potential in-combination effects.**

8.22. The NIS refers to 2 no. projects in the context of in-combination effects within the NIS. An existing storm water outflow is present at Water lane immediately adjacent to the main Ballybofey bridge which is proposed to undergo reconstruction to accommodate a large 525mm diameter outflow pipe that discharges to the River Finn. This project is scheduled for construction in 2020. There is currently an application for flood relief works within the River Finn. These works will comprise the removal of vegetation along the riverbanks, construction of manholes and trial holes and the installation of concrete stands to cater for mobile pumps.

8.23. The in-combination assessment deals only with the proposed reconstruction of the existing storm water outflow and flood relief works but does not include other plans or projects which may be relevant for example the development of masterplan areas as identified within the Seven Strategic Towns Local Area Plan (Ballybofey -Stranorlar) 2018-2024.

8.24. The NIS submitted, concluded that there would be no cumulative / in-combination effects arising from the proposed development.

8.25. Having regard to the foregoing, I consider that in-combination effects have not been properly assessed. In the absence of such information I cannot adequately determine whether the potential for in-combination effects are likely to arise.

8.26. **Mitigation Measures**

8.27. It is of note that standard mitigation measures are outlined within the NIS submitted, such measures include the restriction of machinery in the aquatic zone, works restricted to dry areas and the use of a settlement tank for pumped water from areas confined by a cofferdam. Redistribution of gravels to provide spawning areas for salmon is also proposed. Additional mitigation includes the treatment of any material contaminated by invasive plant species such as Japanese Knotweed within a bund area located 20 metres from the river. No details have been included as to how this area is to be protected during times of flood.

8.28. All mitigation measures will be assessed in relation to the potential for likely significant effects on the River Finn SAC and Foyle and Tributaries SAC within the following integrity test.

The integrity Test

8.29. I have considered the NIS along with the information submitted with the application and have had regard to the mitigation measures outlined. Potential for impacts to arise in relation to the leakage of oils and diesels or other such contaminates from construction vehicles has been dealt with within the mitigation measures outlined in Section 6 of the NIS submitted. All machinery will be checked prior to entering the works area and all fuel, lubricants and hydraulic fluids will be kept in a secure bunded area in excess of 50 metres from the river.

8.30. Machines will not enter the SAC until dewatering has occurred and spill kits and hydrocarbon nappys will be in place for machines that are operating within the site.

8.31. These mitigation measures are standard in nature and are known to be effective. I am therefore satisfied that the mitigation measures outlined in relation to hydrocarbon contamination of soils and waters and siltation in relation to excavation and dewatering works are acceptable.

8.32. However, as mentioned above I have concerns in relation to the spread of invasive plant species along the riverbank and beyond and impacts on both water quality as a result of increased sedimentation and habitat disturbance due to the location of cofferdams and removal and redistribution of gravels within the river.

8.33. The spread of invasive species such as Himalayan Knotweed weed and Japanese Knotweed results in a significant potential for increased levels of siltation arising during

winter months due to the instability in riverbanks created by the presence of these plants.

8.34. This increase in siltation has the potential to significantly impact salmon which are highly susceptible to changes in siltation and water quality. As mentioned above Salmon are a qualifying interest of both the River Finn SAC and the Foyle and Tributaries SAC and there are a significant number of breeding redds present within the River Finn directly adjacent to the proposed works.

8.35. It is proposed to remove silt infested material to a bunded area for treatment located 20 metres from the riverbank. It is stated within Section 6.6 of the NIS that this material will be treated through the method of foliar application. As mentioned within the assessment above, no details are submitted in relation to the protection of this area in times of flood. In the absence of such information I consider there to be a residual risk of spreading invasive plant species and increasing siltation and chemical pollution to the river arising from the proximity of the proposed bund to the river. This bunded area is vulnerable to floods whereby material contained within the bund could enter the river channel via flood waters and spread downstream.

8.36. Access routes are shown to conflict with stands of invasive plant species and no details of whether these plants are to be removed or avoided are submitted. The applicant was requested by way of further information to provide plans of an adequate scale to accurately demonstrate the location and extent of invasive plant species within the application site in relation to the proposed works and failed to do so. The applicant was also requested to submit an invasive species management plan in order to determine accurately the potential to spread such plants within the Natura 2000 network and also failed to do so.

8.37. In addition to the foregoing the Department of Culture, Heritage and the Gaeltacht within their submission to the application have raised serious concerns in relation to the mobilisation of suspended solids outside of the cofferdam area and the impacts that this can have on salmon. Additional concerns have been raised by the department in relation to the impact that the removal and replacing of gravel and stone on the variable instream velocities that under pin the conditions supporting adjacent and downstream salmonid spawning areas and juvenile / nursery habitats. No information

has been submitted by the applicant in relation to the quantities of material to be moved and no flow rates or hydrological impacts have been estimated.

8.38. In the absence of such information I consider that the NIS lacks definitive findings sufficient to remove all reasonable scientific doubt as to the effects on the qualifying interests of the River Finn SAC or the Foyle and Tributaries SAC in view of the sites conservation objectives.

8.39. Disturbance to Otter was also noted as a potential impact, as otters are a qualifying interest of the River Finn SAC and the Foyle and Tributaries SAC. The NIS states within Section 4.2.4 that an Otter survey was carried out and revealed some signs of Otter using the area for commuting and foraging. A potential resting holt was detected on the northern bank, north of the GAA football field. It is of note that no works are proposed in the areas of the potential resting holt.

8.40. It is further stated within this section that use of the area proximate to the proposed works by Otter would be limited due to the urban nature of the site. The works area is also used by walkers and therefore the level of disturbance created would discourage otters.

8.41. The NIS also discusses the potential for indirect impacts on the Otter via negative impacts on water quality. Such impacts on water quality would lessen the availability of aquatic species for Otters to feed on.

8.42. It is important to note that impacts on the quantity of salmon within the river as a result of increases in sedimentation and/or siltation and changes in velocity and flows as outlined above will have a direct effect on the otter population of the area by virtue of decreasing food supplies.

8.43. Thus, on the basis of the information provided with the application, including the Natura Impact Statement, and in light of the assessment carried out, I cannot be satisfied that the proposed development individually, or in combination with other plans or projects would not be likely to have a significant effect on European site No. 002301 and UK0030320, in view of the site's Conservation Objectives. In such circumstances the Board is precluded from granting approval/permission.

Table 2 AA summary matrix – River Finn SAC

River Finn SAC, site code: 002301

Summary of likely significant effects

- **Habitat Loss**
- **Water Quality and water dependant habitats**
- **Disturbance**

Conservation Objectives: To maintain or restore the favourable conservation status of habitats and species of community interest

		Summary of Appropriate Assessment			
Qualifying Interest feature	**Conservation Objectives Targets and attributes**	**Potential adverse effects**	**Mitigation measures**	**In-combination effects**	**Can adverse effects on integrity be excluded?**
Salmo salar (Salmon) [1106]	Number and distribution of redds	Increase in siltation due to spread of invasive plant species. Increase in sedimentation and changes in velocities and flows within the river which can disturb spawning grounds.	Removal of contaminated material.	Additional flood relief works on riverbank and additional development in the area.	No

Overall conclusion: Integrity test

Following the implementation of mitigation, the construction and operation of this proposed development may adversely affect the integrity of this European site and reasonable doubt remains as to the absence of such effects due to the lack of certainty regarding the provision of an adequate buffer zone between the proposed works and the existing invasive plant species on the river bank, the lack of an Invasive Species Management Plan and the lack of information in relation to the quantities of silt to be stored within the bunded area and the quantity and type of treatment to be applied and the lack of details in relation to the protection of this bund during times of flood.

Table 3. AA summary matrix – Foyle and Tributaries SAC

Foyle and Tributaries SAC, site code: **UK0030320**

Summary of likely significant effects

- **Habitat Loss**
- **Water Quality and water dependant habitats**
- **Disturbance**

Conservation Objectives: To maintain or restore the favourable conservation status of habitats and species of community interest

		Summary of Appropriate Assessment			
Qualifying Interest feature	**Conservation Objectives Targets and attributes**	**Potential adverse effects**	**Mitigation measures**	**In-combination effects**	**Can adverse effects on integrity be excluded?**
Salmo salar (Salmon) [1106]	To maintain favourable conditions.	Increase in siltation due to spread of invasive plant species.	Removal of contaminated material to bund.	Additional flood relief works on riverbank and additional development in the area.	No

Overall conclusion: Integrity test

Following the implementation of mitigation, the construction and operation of this proposed development may adversely affect the integrity of this European site and reasonable doubt remains as to the absence of such effects due to the lack of certainty regarding the provision of an adequate buffer zone between the proposed works and the existing invasive plant species on the river bank, the lack of an Invasive Species Management Plan and the lack of information in relation to the quantities of silt to be stored within the bunded area and the quantity and type of treatment to be applied and the lack of details in relation to the protection of this bund during times of flood.

9.0 Recommendation

Having regard to the foregoing assessment, I consider that based on the information submitted and in particular the absence of an Invasive Species Management Plan, the applicant has failed to adequately demonstrate that the proposed development would not give rise to the spread of invasive species present within the works areas, and by failing to quantify the changes in velocities and flows within the river and adequately mitigate against the impact of flooding on the proposed bunded treatment area, has failed to demonstrate that the development would not adversely salmon and otter populations within the SAC. The applicant has therefore not adequately demonstrated that the proposed development would not adversely affect the integrity of the European Sites no. 002301 and UK0030320, in view of the sites Conservation Objectives. I therefore consider the proposal to be unacceptable in this regard and recommend that permission is refused.

Reasons and Considerations

In coming to its decision, the Board had regard to the following:

(a) the EU Habitats Directive (92/43/EEC),

(b) the Water Framework Directive (2000/60/EC)

(c) the European Union (Birds and Natural Habitats) Regulations 2011-2015,

(d) the likely consequences for the environment and the proper planning and sustainable development of the area in which it is proposed to carry out the proposed development and the likely significant effects of the proposed development on a European Site,

(e) the conservation objectives, qualifying interests and special conservation interests for the River Finn SAC (002301), the Foyle and Tributaries SAC (NI)(UK0030320).

(f) the policies and objectives of the Donegal Development Plan, 2013-2019, and the Seven Strategic Towns Local Area Plan 2018-2024.

(g) the nature and extent of the proposed works as set out in the application for approval,

(h) the information submitted in relation to the potential impacts on habitats, flora and fauna, including the Natura Impact Statement,

(i) the submissions and observations received in relation to the proposed development, and

(j) the report and recommendation of the person appointed by the Board to make a report and recommendation on the matter

Appropriate Assessment:

The Board agreed with and adopted the screening assessment and conclusion carried out in the inspector's report that the River Finn SAC (site code: 002301) and the Foyle and Tributaries SAC (site code: UK0030320) are the European sites for which there is a likelihood of significant effects.

The Board considered the Natura Impact Statement and all other relevant submissions and carried out an appropriate assessment of the implications of the proposal for the River Finn SAC (site code: 002301) and the Foyle and Tributaries SAC (site code: UK0030320), in view of the Sites Conservation Objectives.

In completing the assessment, the Board considered, in particular, the

i. Likely direct and indirect impacts arising from the proposal both individually or in combination with other plans or projects, specifically upon the River Finn SAC (site code: 002301) and the Foyle and Tributaries SAC (site code: UK0030320),

ii. Mitigation measures which are included as part of the current proposal,

iii. Conservation Objective for these European Sites, and

iv. Views of the Department of Culture Heritage and the Gaeltacht.

In completing the AA, the Board accepted and adopted the Appropriate Assessment carried out in the inspector's report in respect of the potential effects of the proposal on the integrity of the aforementioned European Sites, having regard to these sites Conservation Objectives.

Thus, the Board is not satisfied that the applicant has demonstrated that the proposal would not adversely affect the integrity of the European Sites in view of the sites Conservation Objectives, as this proposal would entail development which has the potential to spread invasive plant species throughout the Natura 2000 sites, change the flows, velocities and sedimentation levels within the River SAC and significantly impact and disturb salmon spawning habitat within the River Finn SAC.

In overall conclusion, the Board is not satisfied that the proposed development would not adversely affect the integrity of the European Site in view of the site's Conservation Objective.

Sarah Lynch
Planning Inspector

4th February 2020