

# SCREENING FOR APPROPRIATE ASSESSMENT TECHNICAL REVIEW

FS007084 Donegal County Council Dredging and Beach Nourishment at Magheraroarty Pier, Co Donegal



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Prepared by: Prepared for:

RPS Department of Housing, Local Government and Heritage

Dublin | Cork | Galway | Sligo

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The Registered office of each of the above companies is West Pier
Business Campus, Dun Laoghaire, Co. Dublin, A96 N6T7















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## 1 INTRODUCTION

## 1.1 Project Overview

Donegal County Council have submitted a foreshore license application for the annual dredging and beach nourishment of Magheraroarty Pier (Dooey Strand), Gortahork, Co. Donegal. The project involves the relocation of sand material from the area of accretion (Magheraroarty Harbour) to an intertidal area on the strand which experiences natural erosion from wave, wind and longshore drift action. Magheraroarty Harbour is located within a Natura 2000 designated site, Ballyness SAC (001090), and adjacent to Falcarragh to Meenlaragh SPA (004149). Over the winter months sand continues to be transported along Dooey Strand and deposited along the berthing face of the pier.

A maximum volume of 20,000 tonnes per annum of deposited sand is to be removed from the Harbour and dumped onto an intertidal zone encompassing an area of 12.7 Ha. The annual maintenance dredging of Magheraroarty Harbour is required to maintain navigational depth to -2.5m Chart Datum (CD) for the Tory Island ferry, commercial fishing boats and charter boats in the local area.

The dredging is scheduled to take place at low tide over a 5–6-day period during the equinoctial-spring tides in March/April each year. Completing the dredging work over the spring tide will allow access to the entire berthing area. The sand is to be excavated by 360-degree tracked excavators working at low tide and loading articulated dumpers. The sand will be brought to the adjacent beach, where it will be spread evenly using a 360-degree low bearing tracked excavator. The beach nourishment area and haulage route will be mapped out in advance. The work is restricted by the tide therefore there will be no build-up of sediment along Dooey Strand during the 5-6-day period of works. It is expected that the total duration of works on-site will be 6 days (mobilisation, preparation, spreading and demobilisation) with 4 days of dredging activity during that period.

No plant or equipment will be parked on the beach overnight or outside working hours. Access to the beach will be restricted during the works usually 4 hours over the 5-6-day period. Works will be advertised on local radio and signs posted to notify users.

Prior to the commencement of works an Ecological Clerk of Works is to be consulted to ensure that environmental protection measures are adhered to, and that all haul routes for material and the area for nourishment are clearly delineated.

A full description of the proposed project is provided in **Table 3.1**. This report presents the findings of a technical review and Screening for Appropriate Assessment (AA) by RPS on behalf of the Department of Housing, Local Government and Heritage (DHLGH) of the Donegal Co. Council Foreshore Licence Application (FLA).

# 1.2 Application Documents

The applicant submitted the following documents as part of the application:

- Foreshore Application.
- Shore Based Dredging and Beach Nourishment at Magheraroarty Harbour Details & Methodology.
- Marine Sediment Characterisation Magheraroarty Pier Dredging and Disposal includes sediment sampling and analysis.
- Marine Intertidal Survey to inform Appropriate Assessment.
- Screening Report for Appropriate Assessment.
- Natura Impact Statement.
- Correspondence with Marine Institute re "Sampling/analysis requirements for Dredged sediments (see Appendix 1 of the 'Marine Sediment Characterisation Report').
- Correspondence with NPWS (ref correspondence dated 20/12/2020) in relation to requirements to prepare an NIS and a brief outline on issues to be addressed.
- EPA Dumping at Sea Application Material Analysis Report form data.
- Drawings/Maps as follows:

- Drawing No 001 'Magheraroarty Harbour Location Map' at scale 1:20000 on A3.
- Drawing No 002 Rev 1 'Magheraroarty Harbour Dredging, Traffic and Nourishment Locations' at Scale 1:5000 on A3.
- Drawing No 200a Rev 1 "Magheraroarty Harbour Dredging Location" at scale 1: 2000 on A3 (dredge area delineated in red outline).
- Drawing No 003 "Magheraroarty Admiralty Map" NTS.
- Drawing No 004 "Foreshore Licence Map" at Scale 1:5000 on A3 (with proposed dredge and nourishment areas delineated in red outline).
- Photographs (ref Plates 1-15 in the "Marine Intertidal Survey document).

The above documents were considered as part of this technical review, in addition to observations from prescribed bodies.

#### 1.3 **Relevant Legislation**

Under Article 6 (3) of the EU Habitats Directive (92/43/EEC) and the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended), project proponents are required to provide sufficient information to enable a designated public authority to undertake a Screening for Appropriate Assessment (AA) to determine whether or not the proposed project (either alone or in-combination with other projects) is likely to have significant effects on the conservation objectives of designated Natura 2000 (or European) sites1. Where significant effects of the project cannot be screened out, the public authority can request the project proponent to submit a Natura Impact Statement (NIS) to inform the AA for the project.

The European Communities (Birds and Natural Habitats) Regulations 2011 (as amended), outlines the requirements for Screening for AA under Regulation 42(1) and 42(2), as follows:

- 42. (1) A screening for Appropriate Assessment of a plan or project for which an application for consent is received, or which a public authority wishes to undertake or adopt, and which is not directly connected with or necessary to the management of the site as a European Site, shall be carried out by the public authority to assess, in view of best scientific knowledge and in view of the conservation objectives of the site, if that plan or project, individually or in combination with other plans or projects is likely to have a significant effect on the European site.
- (2) A public authority shall carry out a screening for Appropriate Assessment under paragraph (1) before consent for a plan or project is given, or a decision to undertake or adopt a plan or project is taken.

In addition to the requirement to consider potential effects of a plan or project on Natura 2000 sites under Article 6(3) of the Habitats Directive, the Directive requires consideration of the potential effects on species listed under Annex IV of the Directive (termed Annex IV species). Under Article 12, Annex IV species are afforded strict protection throughout their range, both inside and outside of designated protected areas.

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<sup>&</sup>lt;sup>1</sup> In Ireland, designated European sites include Special Areas of Conservation (SACs), designated due to their significant ecological importance for species and habitats protected under Annexes I and II respectively of the Habitats Directive, and Special Protected Areas (SPAs), designated for the protection of bird species protected under Annex I of the EU Birds Directive (Council Directive 2009/409/EEC).

## 2 TECHNICAL REVIEW METHODOLOGY

As discussed in **Section 1.3**, the relevant legislation requires that project proponents provide sufficient information to enable a designated public authority to undertake a Screening for Appropriate Assessment (AA) to determine whether or not the proposed project (either alone or in-combination with other projects) is likely to have significant effects on the conservation objectives of designated European site.

The documentation submitted by the applicant was reviewed to assess whether it includes the following:

- Robust scientific information and analysis including the reasoning and justifications for the conclusion.
- Compliance with the tests and standards of AA as presented in European and national guidance.
- The assessment is carried out on the entirety of information submitted as part of consent application.
- A robust scientific assessment on the likelihood of significant effects.

This technical review and Screening for AA has been undertaken with regard to the appropriate legislation, guidance and departmental circulars.

## 3 SCREENING FOR APPROPRIATE ASSESSMENT

## 3.1 Management of European sites

The proposed site investigation activities are not directly connected with or necessary to the management of any European site.

## 3.2 Description of the project/proposal and local site characteristics

**Table 3.1** provides a description of the proposed project, site characteristics and details of consultation with prescribed bodies. It is considered that adequate project detail has been provided by the applicant.

Table 3.1 Description of the project/proposal and local site characteristics

#### Description of the project/proposal and local site characteristics:

a. File Reference No:

FS007084

Brief description of the project or plan:

The proposal is for the annual dredging and beach nourishment of Magheraroarty Beach (Dooey Strand), Gortahork, Co. Donegal.

The works comprise the dredging and relocation of clean brown sand from a 0.62 Ha area of accretion within Magheraroarty Harbour to along a 12.7 Ha intertidal area on the strand. Dooey Strand is approximately 3km long with an extensive intertidal area, measuring approximately 80 Ha. The amount of sand to be removed will depend on accretion during winter storm events. A maximum of 20,000 tonnes per annum of recently deposited sand is to be removed from a channel beside the harbour and returned to a marked location on Dooey Strand as part of the process of beach nourishment.

Two 360° low bearing tracked excavators will be used to excavate a channel along the berthing face of the pier, with the sand being redeposited to the adjacent Dooey Strand via articulated dump trucks and spread evenly also using tracked excavators. Works will be carried out between the beginning of March and end of April. As they are tidally restricted, one low tide per day will be worked on, over a maximum of 6 days (refer to Shore Based Dredging and Beach Nourishment at Magheraroarty Harbour Details & Methodology, p.4). Previous campaigns have demonstrated that the sand deposited on the foreshore is generally levelled by tidal action with the deposited sand being naturally dispersed on the incoming and outgoing tidal cycles. The track for the trucks will be staked out, and both excavators and trucks will be parked off the beach outside of working hours. Signage about the works will be posted in the area in the week prior to work commencing and notifications will be advertised on local radio notifying users of the restrictions and timings of closures in place.

Annual maintenance dredging of Magheraroarty harbour is required to maintain navigable depths to -2.5m Chart Datum for the Tory Island ferry, commercial fishing boats and charter boats of the local area.

c. Brief description of site characteristics:

The subject site is within the boundary of Ballyness Bay SAC (001090), and adjacent to Falcarragh to Meenlaragh SPA (004149). Situated in north west Donegal, Ballyness Bay SAC is a large shallow coastal marine complex with extensive sand flats and is designated for a range of habitats including estuaries, mudflats and sandflats, and sand dunes. The bay is almost completely cut off from the open sea by two large sand dune covered spits.

The most extensive QI for the Ballyness bay is mudflats and sand, on the foreshore of the SAC (Dooey Strand) the substrate comprises medium to fine sand with a low species diversity and abundances known as a mobile sand community complex. The four distinguishing species of the complex are the bivalve *Angulus tenuis*, amphipod *Urothoe brevicornis*, polychaete *Scolelepis* (*Scolelepis squamata* and an oligochaete Enchytraeidae indet. They are not uniformly distributed and are generally low in abundance within Ballyness Bay (NPWS, 2014a; NPWS, 2014b).

The Dooey sand dunes are highly dynamic and have grown to a considerable height near the tip of the spit - they contain what is probably the largest unvegetated sand dune in the country. The succession of vegetation types across the spit and the topographical features make this area of special interest. The following four coastal habitats are included in the

## Description of the project/proposal and local site characteristics:

qualifying interests for the site (\* denotes a priority habitat, (Houston, 2008)): Embryonic shifting dunes (2110); Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) (2120); Fixed coastal dunes with herbaceous vegetation (grey dunes) (2130)\*; Humid dune slacks (2190) (NPWS, 2014 C).

All four habitats are associated with sand dune systems and are found in close association with each other. Perennial vegetation of stony banks, *Salicornia* flats, Atlantic salt meadows and Mediterranean salt meadows were also recorded within the SAC, however, these habitats are not listed as a qualifying interest for this site.

Falcarragh to Meenlaragh SPA is adjacent to the site and is designated for the Corncrake (*Crex crex*) which uses the grasslands between April to August on a yearly basis. This SPA is located along the coastline encompassing three areas of mixed agricultural grassland to the eastern and western sides of the adjacent Ballyness Bay SAC. It is one of a suite of sites along the western seaboard that is regularly utilised by breeding corncrake. Corncrake winter in southern and eastern Africa, migrating northwards to arrive on their breeding grounds from early April onwards, departing again in August and September. They require the cover of tall vegetation throughout their breeding cycle and are strongly associated with meadows which are harvested annually, where they nest and feed. Annual cutting of these meadows creates a sward which is easy for the birds to move through. Falcarragh to Meenlaragh SPA is of high ornithological importance as it supports a nationally important population of corncrake, a globally threatened species. Corncrake is listed in Annex I of the E.U. Birds Directive.

d. Relevant prescribed bodies consulted: e.g., DHLGH (NPWS), EPA, OPW Engineering Inspector of DHLGH, Inland Fisheries Ireland, Marine Survey Office, Marine Institute, the Department of Agriculture, Food and the Marine (DAFM), and the Sea Fisheries Protection Authority. Environment Protection Agency, and The Underwater and Archaeology Unit/National Parks and Wildlife Services.

e. Response to consultation:

Responses were received by all of the prescribed bodies mentioned in (d) above. Overall responses to the consultation were positive with no observations containing substantive comments relating to environmental issues that may occur as a result of the project being received.

No public submissions were received.

# 3.3 Identification of relevant European sites

The applicant provided two AA Screenings, one as a standalone document dated November 2019 and the second within the NIS document, which is dated December 2020. Slightly different methods were applied in each screening report. For example, in the 2019 AA Screening, the applicant identified all European sites within a 10 km buffer of the proposed project as potentially relevant, whereas the December 2020 report identified all sites within a 15 km buffer of the project. The 2019 reported screened out Falcarragh to Meenlaragh SPA from further consideration in the assessment of likely significant effects, whereas the 2020 report screened the site in for further assessment. For completeness, all sites identified by the applicant in the 2020 report have been provided in the table below. The current Screening for AA considers that as a precautionary measure, Falcarragh to Meenlaragh SPA should be taken forward for further assessment of likely significant effect. A weblink to each site's conservation objectives is provided in **Table 3.2** below.

Table 3.2 Identification of relevant European sites using Source-Pathway-Receptor model and compilation of information on Qualifying Interests (QI) and Special Conservation Interests (SCI) and conservation objectives

European Site (code)	List of Qualifying Interest (QI)/ Special Conservation Interest	Distance from proposed development (km)	Connections (Source- Pathway-Receptor)	Considered further in screening Y/N
Ballyness Bay SAC [001090]	Seven coastal habitat QIs, including one priority habitat - Fixed coastal dunes with herbaceous vegetation (grey dunes).  Ballyness Bay SAC, Conservation Objectives	Within	Yes. Project site is located on the outer face of the Ballyness bay SAC.	Yes
Falcarragh to Meenlaragh SPA [004149]	1 SCI species (Corn crake <i>Crex crex</i> )  Falcarragh to Meenlaragh Conservation Objectives	Adjacent to	Yes. Adjacent to the site, therefore direct avenue of connectivity for disturbance to Corncrake.	Yes
Inishbofin, Inishdooey and Inishbeg SPA [004083]	5 SCI species Inishbofin, Inishdooey and Inishbeg Conservation Objectives	2.1	No direct avenue of connectivity. Although hydrologically connected though the north west Atlantic, this also represents a large buffer to any potential negative effects on integrity of this site	No
Gweedore Bay and Islands SAC [001141]	Twenty-one costal habitat QIs, including one priority habitat- Machairs Gweedore Bay and Islands, Conservation Objectives	3.3	No direct avenue of connectivity. Although hydrologically connected though the north west Atlantic, this also represents a large buffer to any potential negative effects on integrity of this site	No
Horn Head and Rinclevan SAC [000147]	Four Annex II features, six coastal habitat QIs, including two priority habitats - Fixed coastal dunes with herbaceous vegetation (grey dunes) and Machairs  Horn Head and Rinclevan,  Conservation Objectives	7.1	No direct avenue of connectivity. Although hydrologically connected though the north west Atlantic, this also represents a large buffer to any potential negative effects on integrity of this site	No
Muckish Mountain SAC	Two Coastal habitat QIs  Muckrish Mountain SAC, Conservation Objectives	9.0	No direct avenue of connectivity with the site	No
Cloghernagore Bog and Glenveagh National Park SAC	There are three Annex II QIs and 10 terrestrial features with one priority habitat – Blanket bogs (if active bog) <u>Cloghernagore Bog and Glenveagh National Park SAC, Conservation Objectives</u>	9.1	No direct avenue of connectivity with the site	No
Derryveagh and Glendowan Mountains SPA	Five SCI species  Derryveagh and Glendowan Mountains, Conservation Objectives	9.1	No direct avenue of connectivity with the site	No

European Site (code)	List of Qualifying Interest (QI)/ Special Conservation Interest	Distance from proposed development (km)	Connections (Source- Pathway-Receptor)	Considered further in screening Y/N
West Donegal Coast SPA	Eight SCI species  West Coast, Conservation Objectives	9.8	No direct avenue of connectivity. Although hydrologically connected though the north west Atlantic, this also represents a large buffer to any potential negative effects on integrity of this site	No
West Donegal Islands SPA	Five SCI species  West Donegal Islands, Conservation Objectives	10.0	No direct avenue of connectivity. Although hydrologically connected though the north west Atlantic, this also represents a large buffer to any potential negative effects on integrity of this site	No
Tory Island Coast SAC	Five coastal habitat QIs, including one priority habitat- Coastal lagoons  Tory Island Coast SAC, Conservation  Objectives	10.6	No direct avenue of connectivity. Although hydrologically connected though the north west Atlantic, this also represents a large buffer to any potential negative effects on integrity of this site	No
Fawnboy Bog and Lough Nacung SAC	Three Annex I habitats with one priority habitat – Blanket bogs (if active bog) including one Annex II species  Fawnboy Bog and Lough Nacung. Conservation Objectives	11.8	No direct avenue of connectivity	No
Tory Island SPA	Four SCI species  Tory Island SPA, Conservation Objectives	12.0	No direct avenue of connectivity. Although hydrologically connected though the north west Atlantic, this also represents a large buffer to any potential negative effects on integrity of this site	No
Sessiagh Lough SAC	Two terrestrial habitat QIs Sessiagh Lough, Conservation Objectives	13.7	No direct avenue of connectivity	No

## 3.4 Assessment of Likely Significant Effects

#### Table 3.3: Assessment of Likely Significant Effects

#### **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 under the following headings:

(duration/magnitude etc.)

the conservation objectives of a European site.

Impacts Possible Significance of Impacts:

#### Construction phase e.g.

- Vegetation clearance
- Demolition
- Surface water runoff from soil excavation/infill/landscaping (including borrow pits)
- · Dust, noise, vibration
- · Lighting disturbance
- Impact on groundwater/dewatering
- Storage of excavated/construction materials
- Access to site
- Pests

The project proposal states that the plants (excavators and articulated dump trucks) will access the harbour via an established route. The area for dredging, transport of material and nourishment/ redistribution site will be predefined by a walkover, coordinates marked using a handled GPS and track route and nourishment site physically marked out with wooden stakes. In the days prior to the works commencing, signage and notifications will be put in place to inform public and other stakeholders of the area's closure and time scales involved. There are no other pre-operation techniques involved. These pre-operation impacts are considered temporary and given that the works are within an operational harbour and beach used for recreation (NPWS 2014a), these small-scale activities are unlikely to affect

#### Operational phase e.g.

- Direct emission to air and water
- Surface water runoff containing contaminant or sediment
- Lighting disturbance
- Noise/vibration
- Changes to water/groundwater due to drainage or abstraction
- Presence of people, vehicles and activities
- Physical presence of structures (e.g., collision risks)
- Potential for accidents or incidents

The AA Screening supplied by the applicant does not fully outline all potential direct and indirect impacts from the operational phase of the proposed project. Based on the project description provided, the current Screening for AA has considered the following potential operational phase impacts of the project:

- Removal of substratum at dredge site: This impact involves the removal of low diversity sub-littoral habitat type to a maximum depth of -2.5m and a maximum volume of 20,000 tonnes, redistributing the material further up the beach. The dredge channel next the pier is predefined in terms of width, depth, maximum volume and dredging period (1 low tide cycle per day for a period of 4 days between the months of March to April with all works on-site taking up to 6 days).
- Placement of sediment at the nourishment site (habitat alteration): The sediment to be dredged is clean brown sand which has been tested for contaminants and found to be well under any Irish contaminant action levels. The mudflat and sandflat habitat at the dredge site and the nourishment area is classified as a Mobile Sand Community Complex (NPWS 2014b). The proposed even spread of the accumulated sediment in the nourishment area is 2cm (20mm) max depth. The proposed annual dredging represents a temporary disturbance to this complex.

The re-distribution of the sediment at the nourishment site must be carried out with due care, as the sand from the beach is essential for the net accretion at Dooey strand which in turn influences the development of the sand dune complex, a significant QI within Ballyness SAC.

- <u>Physical disturbance to habitats:</u> The site is on an exposed dynamic beach front, the species of which have low sensitivity to hydrological change, or physical pressures. The beach is frequently used for recreational and semi-commercial purposes (vans driven down onto the sands at low tides). Although articulated trucks will be used to transport the sand to the nourishment area, the proposed activity represents a temporary disturbance to this complex.
- Impacts to water quality: Accidental spillages leading to contamination from machinery through improper management are a possibility either during refuelling, oil or hydraulics leaks.

The redistribution of the dredged sediment at the proposed nourishment site could lead to smothering of the benthic infauna in vicinity, which

#### **Assessment of Likely Significant Effects**

could lead to an impoverished habitat. Although the species in mobile sand community complex in the area are known to be low in abundance and relatively tolerant of increased sediment levels (NPWS 2014b)

 <u>Physical presence:</u> Due to the proposed timing of the dredge works (March- April) and use of articulated trucks there is a possibility for disturbance to the Falcarragh to Meenlaragh SPA, specifically the corncrake (*Crex crex*).

In summary, operational impacts with the potential to affect European sites are removal of substrate, habitat alteration, water quality and physical disturbance.

#### In-combination/Other

Planning permission was granted on the 13/08/2019 (REF 19/50962) to lonal Pobal Rabhairtaigh for an extension to an existing car park and children's play area construction which is located 180m from the site. As there is no spatial overlap with the proposed dredging or beach nourishment activities, it is highly unlikely that there will be any impacts that will result in an in-combination effect. There are no other proposed foreshore licence applications with the potential to act in-combination with the proposed project.

Existing fisheries, recreational and seasonal activities occur around Magheraroarty Pier, however, as no significant increase in activity or volume is predicted, these are considered part of the baseline of activities rather than plans or projects for the purposes of this assessment.

(b) Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on the Natura 2000 Sites

Describe any likely changes to the European site:

Examples of the type of changes to give consideration to include:

- Reduction or fragmentation of habitat
  area
- · Disturbance to QI species.
- Habitat or species fragmentation.
- Reduction or fragmentation in species density.
- 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.

#### **Ballyness Bay SAC**

The following QIs of the SAC are not considered to have a potential impact pathway:

- Estuaries: The closest estuary is 1.8km to the south of the site. There
  are no avenues for direct or indirect effects on this habitat as a result of
  the project activities
- Humid dune slacks: This feature is not noted within or near to the site.
   The closest humid dune slack feature is found over 2.75km to the North east at Finlay's Bar, where the proposed activity has no avenue for connectivity with this feature.
- Geyer's whorl snail (Vertigo geyeri): This species is found in a specific location on the inner bay, where the proposed activity has no avenue for connectivity with this feature.

The habitat QIs of the SAC in proximity to the proposed project and therefore with a potential impact pathway are:

- Mudflats and sandflats not covered by seawater at low tide.
- Embryonic shifting dunes.
- Shifting dunes along the shoreline with Ammophila arenaria (white dunes).
- Fixed coastal dunes with herbaceous vegetation (grey dunes)\*.

Reduction of habitat area through removal of substratum: The removal of the substratum will only occur at the berth facing side of the harbour wall. The sediment that is being removed from the harbour wall is a result of longshore erosion along Dooey Strand and the resultant deposition. The results from the benthic infaunal analysis agree with the site description on NPWS (NPWS, 2014b) that the mudflat and sandflat QI here is comprised of a mobile sand community complex and the ensuing fauna are low in abundance and species diversity. The impact to this habitat type is temporary in nature, and recoverable – therefore there will be no likely significant effect.

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#### **Assessment of Likely Significant Effects**

<u>Habitat alteration at beach nourishment site:</u> The proposed methodology involves the spreading of the dredged material to a maximum depth of 20mm over the course of up to 6 days (dredging for 4 days and spreading for up to 6 days) with the incoming and outgoing tide working to flatten/further spread the deposits. The deposition will be unlikely to adversely affect the immediate area as it is temporary in nature. Therefore, there will be no likely significant effect.

Coastal feature alteration: The Embryonic shifting dunes [2110], Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) [2120] and Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]\*, are sensitive to trampling, mechanical clearing of sand, damage from farming, recreational activities and loss of habitat. As the dunes are adjacent to the area of beach nourishment incorrect operational procedures could lead to inaccurate sediment deposition which could lead to a net depletion of material feeding into the dunes. Therefore, there is the potential for likely significant effect.

#### Abrasion/disturbance at the surface of the substratum:

#### Mudflats and sandflats

Abrasion or disturbance of the surface sediments from mechanical activity on the surface and placement activity has the potential to cause erosion on the beach due to the movement of vehicles across the foreshore. Therefore, there is likely to be a significant effect.

#### Sand dunes

The Embryonic shifting dunes [2110], Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) [2120] and Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130], are sensitive to trampling, mechanical clearing of sand, damage from farming, recreational activities and loss of habitat. Although the dunes are adjacent to the area of beach nourishment no sand will be removed from that area and no trucks or JCBs will have a route that is close enough to adversely affect the dunes, therefore there will be no likely significant effect.

#### Changes in water quality

#### Contaminants

The results of the sediment testing showed that no Irish Action level 1 levels were for reached for any of the standard suite of contaminates (metals, organochlorines, total extractable hydrocarbons, organotin and Sigma 16 Polycyclic Aromatic Hydrocarbons (PAHs)), demonstrating that the site has "clean brown sand". The removal of the sediment and subsequent placing will not release any heavy metals, hydrocarbons or PCBs into the surrounding environ.

#### Smothering and siltation rate changes

Although suspended sediments and smothering was not directly addressed in the applicant's AA Screening, the proposed activity's scale and timing (occurring at low tide) reduces the likelihood of a sediment plume occurring. Smothering of the QI due to the redistribution of the sand is unlikely to have a negative impact on the area as Mobile Sand Community Complexes are noted as having low diversity and abundance levels with species that are generally tolerant of short-term smothering events<sup>2</sup>. As the deposition of the dredged material will be of a shallow depth (max 20mm) over a sufficient area (12.7 ha), will be temporary and of a limited duration, this impact is not considered to be significant enough to undermine the conservation objectives therefore there will be no likely significant effect.

<sup>&</sup>lt;sup>2</sup> https://www.marlin.ac.uk/habitats/detail/1184

#### **Assessment of Likely Significant Effects**

#### Falcarragh to Meenlaragh SPA

#### Disturbance

Google Maps shows that the SPA is in close proximity to residential areas, and adjacent to the existing access road to Magheraroarty Pier and the Tory Island Ferry. The area around Falcarragh to Meenlaragh SPA is used extensively for both recreational and farming activities including walking, dog-walking, quad bikes, grazing by cattle and sheep. Within this context of existing human activity at the site, and given the temporary duration of the project, it is highly unlikely there will be disturbance significant enough to undermine the conservation objectives of the SPA.

(c) Are 'mitigation' measures necessary to reach a conclusion that likely significant effects can be ruled out at screening?

Yes / No

No. The NIS contains a section called 'Mitigation Measures', these will be required to avoid or reduce any effects on a European site. These measures are not relied upon to reach a conclusion of no likely significant effect described in section (b) of this table.

## 3.5 Screening Determination

#### **Screening Determination Statement**

#### The assessment of significance of effects:

Describe how the proposed development (alone or in-combination) is/is **not likely** to have **significant** effects on European site(s) in view of its conservation objectives.

On the basis of the information supplied by the applicant, and information publicly available on the NPWS website, and having regard to:

- · The overlap and proximity of dredging and deposition activities to QIs of Ballyness Bay SAC, and
- The uncertainty at the screening stage around deposition procedures on or close to sand dune habitat,

this Screening for AA Technical Review has determined that, in the absence of mitigation measures, likely significant effects could not be ruled out for the following QIs at Ballyness Bay SAC:

- Mudflats and sandflats not covered by seawater at low tide [1140],
- Embryonic shifting dunes [2110],
- Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120],
- Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130].

It is concluded that the proposed project, individually or in-combination with other plans or projects, is likely to have a significant effect on Ballyness Bay SAC, in view of the sites' conservation objectives. An AA of the project is therefore required to determine if adverse effects on site integrity can be excluded in view of the conservation objectives of the site. An NIS has been provided by the applicant to inform the AA and is reviewed by RPS in the accompanying NIS review report.

#### Conclusion: Tick as appropriate: Recommendation: (i) It is clear that there is no The proposal can be screened out: Appropriate likelihood of significant effects on a assessment not required. European site. (ii) It is uncertain whether the ☐ Request further information to complete screening proposal will have a significant ☐ Request NIS effect on a European site. ☐ Refuse planning permission ☑ Request NIS (iii) Significant effects are likely. $\overline{\mathbf{V}}$ ☐ Refuse planning permission

## 4 ARTICLE 12 ASSESSMENT

Under Article 12 of the Habitats Directive, Annex IV species are afforded strict protection throughout their range, both inside and outside of designated protected areas.

An assessment on the impact of the proposed project on Annex IV species was undertaken by RPS. Annex IV includes all species of cetacean which occur in Ireland.

Given the nature, scale and duration of the works it is concluded that the proposed project will not give rise to significant impacts to species listed under Annex IV of the Habitats Directive.

## 5 REFERENCES

European Commission (2002) Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. Luxembourg: Office for Official Publications of the European Communities. 76 pp.

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