

**APPROPRIATE ASSESSMENT
NATURA IMPACT STATEMENT**

**IN ACCORDANCE WITH THE REQUIREMENTS OF
ARTICLE 6(3) OF THE EU HABITATS DIRECTIVE**

**Proposed Extension
Port Pier, Inver, Co. Donegal**

Compiled by
Jessica Devlin BSc. MSc.

For

Ayesa (formerly ByrneLooby)

on behalf of
Donegal County Council

JESSICA DEVLIN
PROJECT MANAGEMENT &
ENVIRONMENTAL SERVICES

FINAL

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Report produced by:

Jessica Devlin, BSc. Geology (Hons), MSc. Applied Environmental Science. Project Management & Environmental Services, 5 Pheasant Park, Donegal Town, Co. Donegal, Ireland.

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1.0 Introduction

This Natura Impact Statement (NIS) report has been prepared by Jessica Devlin, Project Management and Environmental Services on behalf of Ayesa and Donegal County Council for the purpose of a statutory permissions pertaining to the extension of Port Pier, Inver, Co. Donegal.

This report has been compiled to provide the competent authority with adequate information to make an Appropriate Assessment (AA) of the Project under Article 6(3) of the Habitat Directive. The NIS will assist the competent authority in determining whether or not the proposed development will adversely affect the integrity of any Natura 2000 sites, either alone or in combination with other plans and projects, taking into account their conservation objectives. The report should be read in conjunction with the Screening for Appropriate Assessment Report (Devlin, 2023)

The purpose of this NIS is to provide an examination, analysis and evaluation of the potential impacts of the proposed development on Natura 2000 sites and to present findings and conclusions with respect to the proposed development in light of the best scientific knowledge in the field.

It considers the implications of the proposed development, on its own and in combination with other plans or projects, for Natura 2000 sites in view of the conservation objectives of those sites. It includes a scientific examination of evidence and data to identify and assess the implications of the proposed development for any Natura 2000 sites in view of the conservation objectives of those sites. It considers whether the proposed development, by itself and in combination with other plans or projects, would adversely affect the integrity of Natura 2000 sites. In reaching a conclusion in this regard consideration is given to any mitigation measures necessary to avoid or reduce any potential negative impacts.

1.1 Appropriate Assessment process

The introduction of the EU Birds Directive and the Habitats Directive in 1979 and 1992 respectively, made member states legally obliged to establish a Natura 2000 network of sites of highest biodiversity importance for rare and threatened habitats and species. This comprises Special Areas of Conservation (SACs, including candidate SACs), and Special Protection Areas (SPAs, including proposed SPAs). SACs are selected for the conservation of Annex I habitats (including priority types which are in danger of disappearance) and Annex II species (other than birds). SPAs are selected for the conservation of Annex I birds and other regularly occurring migratory birds and their habitats. The annexed habitats and species for which each site is selected correspond to the qualifying interests of the sites; from these the conservation objectives of the site are derived.

Articles 6(3) and 6(4) of the Habitat Directive 92/43/EEC require an Appropriate Assessment of plans and projects to prevent significant adverse effects on Natura 2000 sites. The Assessment must determine whether the plan or project is likely to have significant effects on the site and whether these effects will adversely affect the integrity of the site in terms of its nature conservation objectives.

Article 6(3) of the Habitats Directive states 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. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.”

The assessment can be broken down into 4 main stages:

Stage 1 - Screening: Results of preliminary impact identification and assessment of significance of impacts.

Stage 2 - Appropriate Assessment: Assessment of the impact on the integrity of the site(s) and assessment of mitigation measures (NIS Report).

Stage 3 - Assessment of alternative solutions.

Stage 4 - Imperative Reasons of Overriding Public Interest (IROPI): IROPI test and assessment of compensatory measures.

2.0 Statement of authority

Jessica Devlin

Jessica graduated from the National University of Ireland, Galway in 1997 with a BSc. honours degree in Geology and obtained a MSc. in Applied Environmental Science from Queens University Belfast in 2001. She attained a National Certificate in Eco-Tourism, from Sligo Institute of Technology in 2005 and in 2014 completed Geographical Information Systems for Environmental Investigations, University College Dublin.

Over the years, Jessica has gained a wide range of experience in research, consultancy and project management with particular emphasis on sustainable development in freshwater, marine and coastal environments.

As field scientist with the Queens University Marine Station in Portaferry, Jessica carried out habitat surveys with respect to the decline of salmonid populations in Northern Ireland Rivers. She progressed to research assistant with Queens University and the Department of Agriculture & Rural Development. As project manager for the Donegal County Council - Marine & Water Leisure Programme, she managed projects on sustainable development of the marine leisure product. Jessica also worked with the University College Cork Coastal and Marine Research Centre in partnership with Donegal County Council and the University of Ulster, as manager of the Donegal element of a North West Europe Interreg Project called IMCORE (Innovative Management of Europe's Changing Coastal Resource). For the past 11 years Jessica has been self-employed working as a project manager and environmental consultant, specialising in freshwater, marine, coastal and environmental projects. Her client base is wide reaching from state agencies to community groups, individuals, angling clubs and private developers.

3.0 Methods

Liaison with:

Alan McCready and Cathal Sweeney, Donegal County Council;

Steve Gegan, Niel Verwoerd, Duan Viljoen and Padhraic O'Connor of Ayesa;

Gerry McCafferty, Inland Fisheries Ireland;

Simon Berrow, Irish Whale and Dolphin Group;

Margot Cronin, Marine Institute;

Laura Brophy, Marine Institute and

Emmet Johnston, National Parks and Wildlife Service.

Site visit and walkover surveys on 25 April 2023.

Desk research (see section 10): online data available on Natura 2000 sites and protected habitats/species as held by the National Parks and Wildlife Service (NPWS) from www.npws.ie, including conservation objectives documents, supporting documents and Article 17 data.

Information request to NPWS - site specific data and research regarding sensitive species and habitats.

Data request to Marine Institute.

Online data available on protected and invasive species as held by the National Biodiversity Data Centre (NBDC) from www.biodiversityireland.ie.

Information on www.catchments.ie and www.epa.ie with regard to water quality.

Information on groundwater resources and groundwater quality in the area available from www.epa.ie and www.gsi.ie.

This report has been prepared using the following guidance. A full list of research sources and references can be seen in section 10.

- Dept. of Environment Heritage and Local Government (2009) Appropriate Assessment of plans and projects, Guidance for planning authorities.
- European Commission Environment DG (2001) Assessment of plans and projects significantly affecting Natura 2000 sites, Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC November 2001.
- *Guidelines for Ecological Impact Assessment in the UK and Ireland* (Chartered Institute of Ecology and Environmental Assessment, 2018 and as updated September 2019)

4.0 Project proposals

Port Pier, Inver is located on the northwestern shoreline of Inver Bay in southwest Donegal between the towns of Killybegs and Donegal Town. It is owned and maintained by Donegal County Council. Activity at Port Inver has increased and diversified over the years, however the pier facilities have not improved to any degree. Modern vessels have been introduced and require better facilities to maintain and care for them.

In order to improve the amenity provided by the pier, Donegal County Council (DCC) are proposing to construct an extension to the existing pier to accommodate the recent increased activity and improve facilities at the pier. Works will involve the dredging of an area to the east of the pier, piling and associated construction works.

Ayesa has been appointed by DCC as the Engineers for the design of the pier extension. The extension will include the addition of two sections: 44.5m x 10.1m to the south and 49.3m x 10.1m in an easterly direction. An area of approximately 1121m² behind the existing pier will be reclaimed using predominantly the dredged material. Information was provided by DCC and Ayesa describing how works will be implemented with site layout drawings, see figure 4.1 and 4.2. A construction method statement (see appendix 1) has been developed, see extract below:

"...The pier structure will consist of two parallel rows of sheet piles adequately tied back with tie-rods. Dredge material will be used as fill between the sheet piles. The top layer of fill will be selected engineered fill. The pier structure will be capped with a concrete deck.

The following sequence describes the construction of the Pier:

- *Sheet piles will be driven into the seabed as shown on the drawings, using an excavator or crane fitted with a vibratory pile hammer (or similar).*

- *The sheet piles tie-back system will be installed, which will consist of a series of tie-rods and waling beams.*
- *The pier will be filled with material either from the dredging operation or selected fill imported from commercial sources.*
- *The fill will be compacted in layers (approximately 300mm) using a 5t roller (or similar).*
- *Selected engineering fill will be used in the top 900mm, to create a base layer for the concrete slab.*
- *The selected fill will be compacted in layers (approximately 300mm) using a 5t roller (or similar).*
- *A reinforced concrete capping slab will be constructed on top of the sheet piles and engineered fill. This will involve installing rebar cages, shuttering, and concrete casting.*
- *Quayside services such as lighting, drainage, and utilities shall be installed in accordance with relevant standards and regulations.*

Considerations During Construction

All construction activities that have the potential to generate excessive noise or vibration shall be carried out during permitted hours. Noise levels shall be limited to:

- *75 DBA between 8.00hrs – 20.00hrs (Mon to Sat).*
- *45 DBA for all other times.*

....

Vibration monitoring shall be carried out during piling operations to ensure that vibration levels are kept within acceptable limits.

A dredge pocket will be created, as indicated on the drawings, using an excavator. The dredging operation will either be conducted in the dry during low water, or a barge will be required to support the excavator when the site is inundated with water.

The dredged/excavated material will be used as fill for the new pier extension, if suitable. Furthermore, the area behind the pier will also be reclaimed using the dredged material. The excavator will either dump the dredged material directly between the sheet piles, or it will be loaded onto tipper trucks for transportation. A hopper barge may be required to load and transport the material when the site is inundated. Approximately 3500m³ of material will be dredged.

If excess dredge material is available, or if the dredge material is unsuitable for use as fill, the material will be transported and disposed of at a suitable landside facility. The dredge material will first be stored in a bunded area and allowed to dry prior to transportation...."



Figure 4.2 Proposed location of site compound to the north of the existing pier outlined in black.

Construction is anticipated to take place during 2024 / 2025 within a 6 month period; dredging is likely to take 2-3 weeks and piling activities 2-3 months assuming 4-8 piles per day.

5.0 Appropriate Assessment Screening outcomes

Zone of influence

The approach to screening is likely to differ somewhat for plans and projects, depending on scale and on the likely effects and should include any Natura 2000 sites within the likely zone of impact of the plan or project. The zone of influence of a proposed development is the geographical area over which it could affect the receiving environment in a way that could have significant effects on the Qualifying Interests of a Natura 2000 site. This should be established on a case-by-case basis using the Source-Pathway-Receptor framework and not by arbitrary distances (such as 15 km) (OPR, 2021).

In the case of sites with water dependent habitats or species, and a plan or project that could affect water quality or quantity, for example, it may be necessary to consider the full extent of the upstream and/or downstream catchment.” (NPWS, 2009)

In this case due to the scale and location of the project on the shores of Inver Bay, Natura 2000 sites within (if any), along and outside the Bay have been included in the zone of influence, see figure 5.1.

The Natura 2000 sites were then assessed in terms of whether a Source - Pathway - Receptor relationship existed, and screened out accordingly. Where no Source - Pathway- Receptor relationship is considered to exist these Natura 2000 sites are screened out and will not be discussed further in this report, see table 5.1.

The project is not in a Natura 2000 site but is hydrologically linked to Donegal Bay (Murvagh) SAC, Donegal Bay SPA and St. Johns Point SAC. The project is also in an area where Annex IV and Annex V species are known to occur.

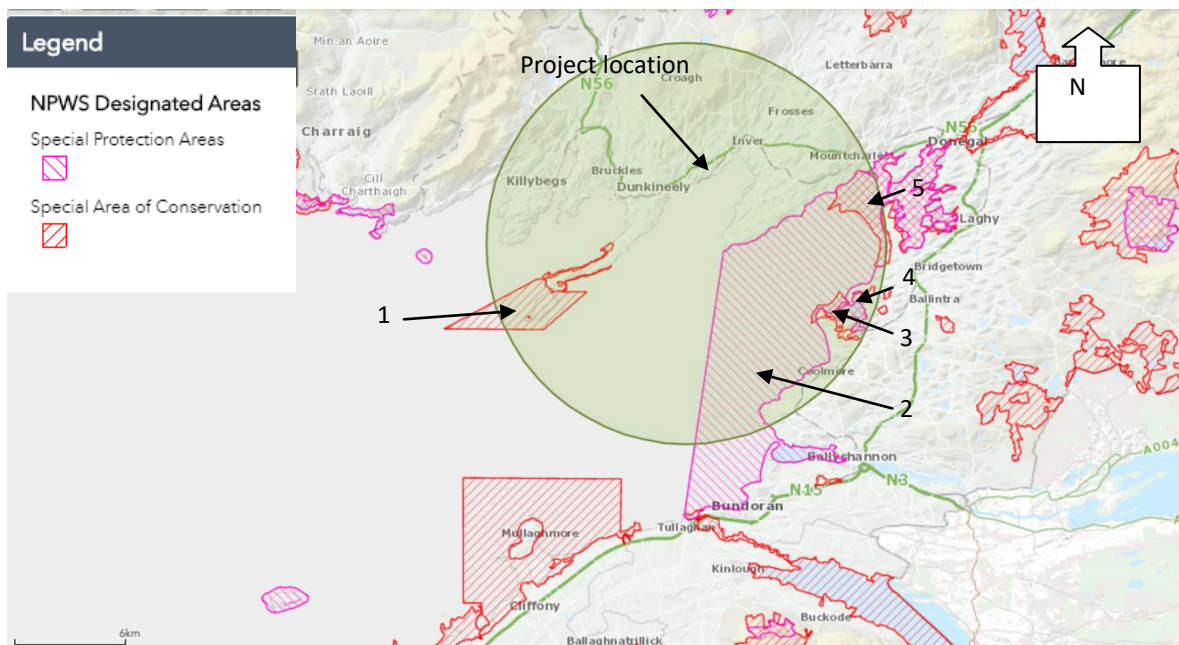


Figure 5.1 Zone of influence: Natura 2000 Sites around Inver Bay, Co. Donegal. (Map source: www.npws.ie accessed 04 May 2023 © ESRI, © OSI)

Map Ref	Natura 2000 Site / (Site Code) / Distance from project (km)	Source Pathway Receptor Relationship Yes/No Screened IN/ OUT
1	St John's Point (000191) 7km Large shallow inlets and bays [1160] Reefs [1170] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] Alkaline fens [7230] Limestone pavements [8240] Submerged or partially submerged sea caves [8330] Euphydryas aurinia (Marsh Fritillary) [10]	Yes, remote hydrological link with sensitive marine QI's. No S-P-R with terrestrial QI's. Screened IN for Marine QI's.
2	Donegal Bay SPA (004145) 4km Great Northern Diver (Gavia immer) [A003] Light-bellied Brent Goose (Branta bernicla hrota) [A046] Common Scoter (Melanitta nigra) [A065] Sanderling (Calidris alba) [A144] Wetland and Waterbirds [A999]	Yes, remote hydrological link with the SPA: Screened IN.
3	Durnesh Lough SAC (000138) 9km Coastal lagoons [1150] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410]	No, S-P-R relationship not considered to exist with Coastal Lagoons due to the distances involved and dilution factor of the bay and the protected nature of the lagoon. Molinia Meadows are not in the project location. Screened OUT.
4	Durnesh Lough SPA 9km Whooper Swan (Cygnus cygnus) [A038] Greenland White-fronted Goose (Anser albifrons flavirostris) [A395]	No, S-P-R relationship not considered to exist due to the distances involved and the preferred habitat of the species is within Durnesh Lough. Screened OUT.
5	Donegal Bay (Murvagh) SAC (000133) 6km Mudflats and sandflats not covered by seawater at low tide [1140] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Dunes with Salix repens ssp. argentea (Salicion arenariae) [2170] Humid dune slacks [2190] Phoca vitulina (Harbour Seal) [1365]	Yes, Remote hydrological and acoustic link with mobile species: Harbour Seal. S-P-R relationship not considered to exist with other habitats due to the distances involved and dilution factor of the bay. Screened IN for Harbour Seal.

Table 5.1 Initial screening of Natura 2000 sites and the Qualifying Interests within zone of influence

Special Areas of Conservation (SAC) with potential for significant effects	Special Protected Areas (SPA) with potential for significant effects
St John's Point (000191) Donegal Bay (Murvagh) SAC (000133)	Donegal Bay SPA (004145)

Table 5.2 Summary of Natura 2000 sites screened in for further assessment.

The project proposal has been assessed in the Screening process in terms of the likely impacts the proposal may have, before mitigation, on the Natura 2000 sites in the area. The significance of impacts identified has been determined. The assessment undertaken in terms of the proposed development concludes that there is potential for the project to significantly impact on the following designated sites:

St John's Point (000191)

Donegal Bay (Murvagh) SAC (000133)

Donegal Bay SPA (004145)

The project has been assessed in terms of the likely impacts the proposal may have on the Natura 2000 sites in the area. The significance of impacts identified has been determined. It has been determined that, although the project works will be temporary and relatively small in the wider context of the marine environment, in the absence of mitigation, the project may pose a risk to: marine habitats, the conservation objectives of St John's Point SAC (000191), Donegal Bay SPA (004145), Donegal Bay (Murvagh) SAC (000133) and other Annex species occurring in the bay. Potential impacts are summarized in table 5.3.

After works are completed the operational phase is unlikely to cause any significant negative effects or to impact the Natura 2000 sites in the area. Activity will not be significantly different to those occurring at this time. The pier is not within a Natura 2000 site and the activity there is low risk and low intensity.

Cumulative impacts

There are a number of active aquaculture licences in Inver Bay. Proposed works are small relative to Inver Bay and temporary in nature; there is some potential for cumulative effects during the construction phase if sedimentation or a pollution incident were to occur.

Step 2 of the Appropriate Assessment process was therefore undertaken with further assessment of the likely impacts of the project and assessment of mitigation measures.

Potential impacts pertain to the construction phase to include the following:

Potential effects on	Potential Impact				Cumulative
	Habitat degradation due to hydrological impacts	Disturbance, displacement or injury	Reduction in species density	Introduction of Invasive Alien Species	
St John’s Point (000191):Marine QI’s ONLY					
Large shallow inlets and bays [1160]	Yes	Yes	Yes	Yes	Yes
Reefs [1170]	Yes	No	Yes	Yes	Yes
Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]	Yes	No	Yes	Yes	Yes
Submerged or partially submerged sea caves [8330]	Yes	No	Yes	Yes	Yes
Donegal Bay SPA (004145):					
Great Northern Diver (Gavia immer) [A003]	Yes	Yes	Yes	No	No
Light-bellied Brent Goose (Branta bernicla hrota) [A046]	Yes	Yes	Yes	No	No
Common Scoter (Melanitta nigra) [A065]	Yes	Yes	Yes	No	No
Sanderling (Calidris alba) [A144]	Yes	Yes	Yes	No	No
Wetland and Waterbirds [A999]	Yes	Yes	Yes	No	No
Donegal Bay (Murvagh) SAC (000133):					
Phoca vitulina (Harbour Seal) [1365]	Yes	Yes	Yes	No	Yes
Other Annex Species					
Cetaceans	Yes	Yes	Yes	No	Yes
Pinnipeds	Yes	Yes	Yes	No	Yes
Megafauna	Yes	Yes	Yes	No	Yes
Salmonid	Yes	Yes	Yes	Yes	Yes
Otter	Yes	Yes	Yes	No	Yes
Bats	Not applicable	Yes	Yes	No	No

Table 5.3 Outcome of screening assessment; potential to impact, QI's, SCI's and Annex species at risk of effects from the project proposal.

6.0 Results

This section explores the current baseline status of the site and surrounds including water quality and locations of habitats and species deemed at risk in the Screening assessment.

6.1 Site description (Fossitt description in brackets)

A walkover survey of the site was undertaken on the 25th of April 2023 by Jessica Devlin MSc. in line with CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester. This was a rapid assessment of the ecological features present, or potentially present, within a site and its surrounding area (the zone of influence) in relation to the project. On this occasion this incorporated a desk study and walkover survey. All habitat types were classified using the Guide to Habitats in Ireland (Fossitt, 2000). The objective of the survey was to scope out the site and to determine where the focus of any additional assessment should be.

Port Pier is in the townland of Port, Inver, Co. Donegal, off the L-1565-2 local road, just off the main N56 national road. The site was visited on an outgoing tide, in sunny conditions on the 25th April 2023, see plates 1-4. The project site is located at and existing pier (CC1 Sea walls, piers and jetties) within Inver bay (MW2 sea inlets and bays). The beach surrounding area is a mosaic of sheltered rocky shores (LR3), mixed sediment shore (LS5) and stone walls (BL1). The upper shore is dominated by serrated wrack (*Fucus serratus*). Rocks and boulders are scattered throughout the site. Construction of a sea wall along the recently constructed slipway, was underway at the time of the site visit, and rock armour had been removed to one side, this will be reinstated after works are complete (2023, *pers comm.* Paddy Curran, DCC on 25th April.) Looking from the pier, visibility in the water was clear showing a sandy bottom with some outcrop. There was a strong unpleasant smell.



Plate 1. Looking north from the existing pier.

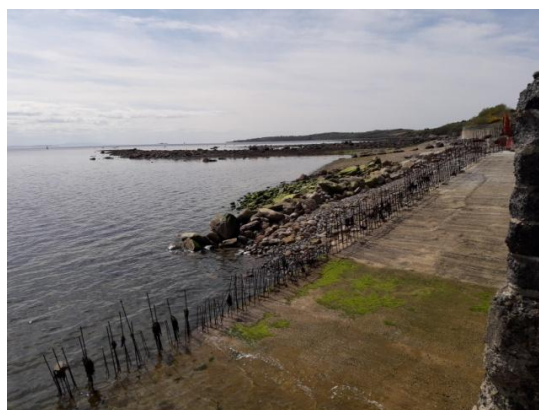


Plate 2. Looking southwest up the new slipway towards site for extension.



Plate 3. Looking northeast towards existing pier, from site of proposed pier extension.



Plate 4. Looking east towards proposed dredge area from site of proposed extension.

6.2 Hydrology

Inver Bay is a substantial body of water directly connected to the Atlantic, there is a large tidal influx of seawater from the Atlantic into the Bay, with access to the pier is restricted at low tide. There appears to be a good hydroactive system, with good flushing capacity.

Water Framework Directive water status:

For the reporting period 2018 -2022 Coastal water quality status is unpolluted, as is the Eany Water Estuary (epa.ie). WFD status for Inver Bay is High and The Eany River (Eany _020) is classified as Good (catchments.ie).

6.3 Sediment sampling

The site is in a rural area with low intensity fishing activity; the pier serves local vessels and the shellfish farms further out towards St. John's Point. It is therefore unlikely that significant contamination has occurred at the site.

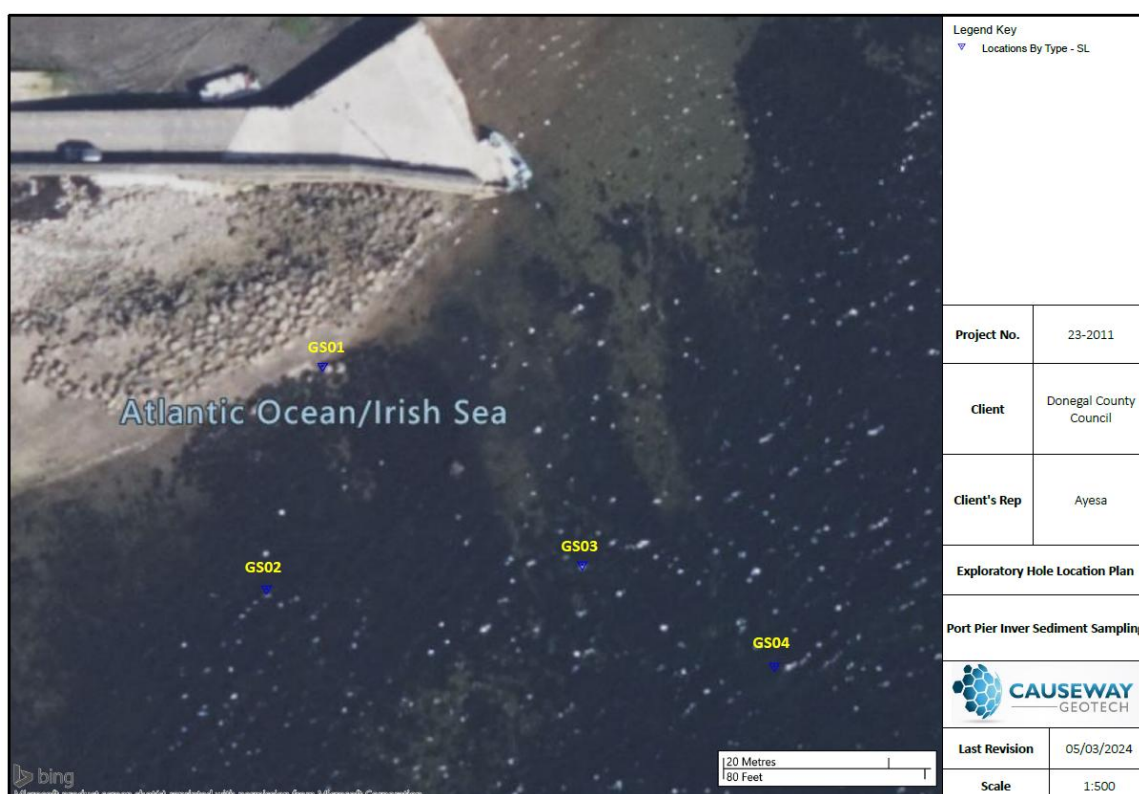


Figure 6.1 Sediment Sampling Sites at Port Pier, Inver (Extract from Geotech, 2024, appendix 2)

As a precaution proposed dredge material has been sampled and analysed (see figure 6.1 and Causeway Geotech, 2024, appendix 2). Sediments were found to be marine beach deposits: typically silty, occasionally gravelly sands with sandy gravels closer to shore. According to the *Guidelines for the assessment of dredge material for disposal in Irish waters*, sediments sampled are classified as Class 1:- Contaminant concentrations less than level 1. Uncontaminated: no biological effects likely. They have been deemed suitable for dumping at sea which requires a higher criterion, than that for landfill. They therefore do not pose a risk in terms of pollution or contamination of the Bay and the marine environment.

6.4 Protected habitats and species in the vicinity of the project

6.4.1 St. John's Point SAC

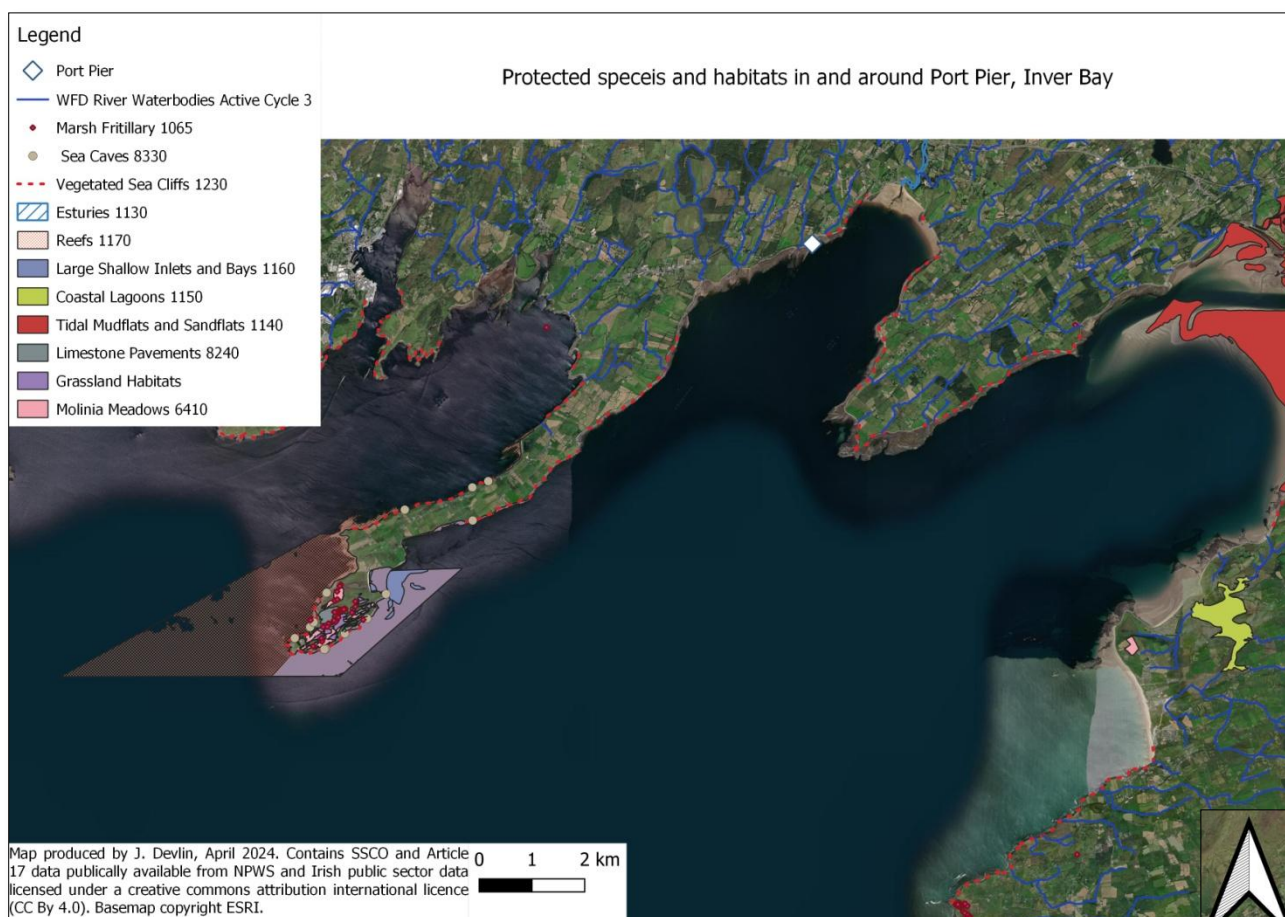


Figure 6.1 Project location in relation to Conservation Objective and Article 17 habitats and species in St. John's Point, Inver Bay, Donegal Bay and McSwynes Bay.

St. John's Point site is important for both terrestrial and marine habitats. The project is removed from the terrestrial habitats and there is no Source Pathway Receptor relationship between the project and these qualifying interests, they have been screened out (Devlin, 2023). Marine habitats include: Large shallow inlets and bays [1160], Reefs [1170], Submerged or partially submerged sea caves [8330] and Vegetated Sea Cliffs [1230], see figure 6.1.

According to the Standard Data form on <https://natura2000.eea.europa.eu/expertviewer/> St John's Point has very good examples of circalittoral rock communities that are exposed to wave action and contain a number of rare and uncommon species. Most notable are the shallow circalittoral communities that are characterized by the sea fan, *Eunicella verrucosa*, and its associated ophistobranch, *Tritonia nilsodhneri*, which are common, although both are close to the northern limits of their range. Rare species include the sponge, *Bienna variantia*, the anemone, *Aureliania heterocera*, and the red alga *Odontalia dentata*. Additional interesting records for the area include the seaslug *Hancockia uncinata*, the nocturnal crab *Bathynectes longipes*, and the anthozoans *Paraerythropodium coralloides* and *Parazoanthus anguicomus*. Recent survey suggests that a series of small caves stretches along the south-east coast of the infralittoral and circalittoral reef from Black Rock to Portnagh Rock. These also shelter rare species. The shallow bay sediment communities in the site range from being sheltered from, and exposed to, wave action. They are principally composed of maerl gravel formed by *Lithothamnion corallioides* and populated by rare burrowing anemones (*Aureliania heterocera*) and

starfish (*Luidia sarsi*). The maërl-dominated community complex is considered to be keystone community that is of considerable importance to the overall ecology and biodiversity of a habitat by virtue of its physical complexity (NPWS, 2015).

6.4.2 Donegal Bay SPA

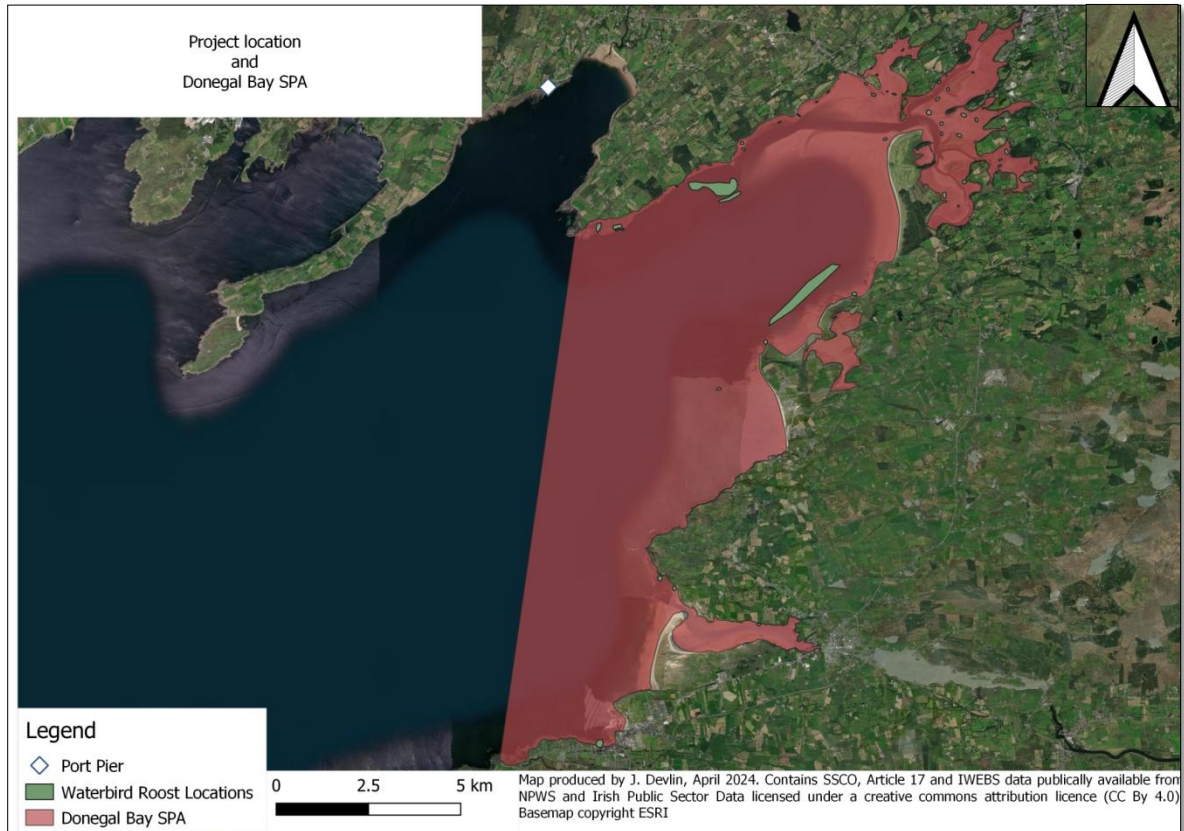


Figure 6.2 Project location in relation to Donegal Bay SPA and wildfowl roost locations within the Natura 2000 site.

Donegal Bay SPA is approximately 15 km along its north-east/ south-west axis, with a width of 3 km to over 8 km, see figure 6.2. It provides extensive habitat for waterfowl. The inner bay has numerous small, grassy islands and areas of salt marsh. It has a diversity of marine biotopes and supports a range of macroinvertebrates and bivalves. Much of the shoreline is rocky or stony which varies from well-developed littoral reefs to shingle or cobble beaches. Donegal Bay supports an excellent diversity of wintering wildfowl, especially species associated with shallow bays; it is considered to be of high ornithological importance. Two species have populations of international importance (Great Northern Diver and Light-bellied Brent Goose) and a further two species have populations of national importance (Common Scoter and Sanderling) (NPWS, 2012a)

6.4.3 Donegal Bay (Murvagh) SAC

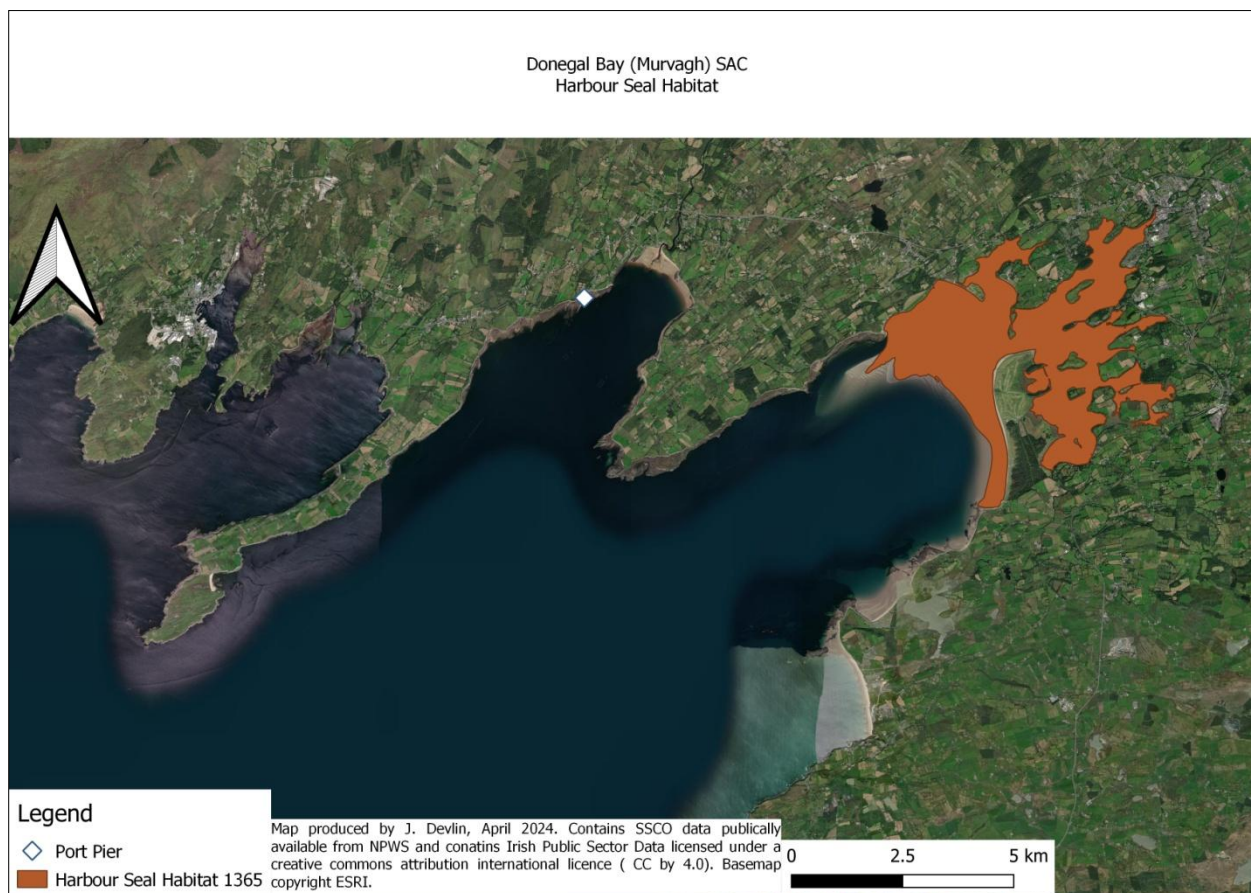


Figure 6.3 Project location in relation to Donegal Bay (Murvagh) SAC and harbor seal habitats within the Natura site.

Donegal Bay (Murvagh) SAC is situated in the inner part of Donegal Bay. It is an estuarine system; the inner bay is very sheltered, and represents the main estuarine intertidal area within the site, receiving water from a number of rivers and streams including the River Eske which flows out through Donegal Town and the Laghy River. The SAC site has large expanses of intertidal sand and mud flats, channels, saltmarsh, sand dunes and sandy and shingle beaches. There are two separate dune systems located within the SAC: Mullanasole (Murvagh) and Mountcharles. It is also home to the harbour seal *Phoca vitulina*, this qualifying interest has been screened in for further assessment (Devlin 2023).

Harbour Seal and other pinnepeds

In Ireland grey seals (*Halichoerus grypus*), harbour seals (*Phoca vitulina*) and the Eurasian Otter (*Lutra Lutra*) are protected under the Wildlife Act (1976) and amendments (2000-2023). The Act applies out to the 12 nm limit of Irish territorial waters. Under the EC Habitats Directive the grey seal, harbour seal and Eurasian Otter are listed under Annex II, which identifies these species of community interest and whose conservation requires the designation of SACs. It is an offence to hunt, injure or wilfully interfere with, disturb or destroy the resting or breeding place of a protected species (except under license or permit from the Department).

Harbour is a successful aquatic predator that feeds on a wide variety of fish, cephalopod and crustacean species. For individual harbour seals of all ages intervals between foraging trips in coastal or offshore waters

are spent resting ashore at terrestrial or intertidal haul-out sites, or in the water (NPWS, 2012c). Current haul out sites described in Donegal Bay (Murvagh) SAC are broadly within the following areas: sandbank areas in inner Hassan's Point, at St. Ernan's Island, to the west of Rooney's Island and east of Rossilly adjacent to Inishnevin, see figures 6.3 and 6.4. Harbour seal count data obtained in 2010 (143 individuals) from inner Donegal Bay continues to demonstrate the sites importance on both regional and national scales. Recorded maximum counts were lower than in the previous year (209 individuals), this may have been compounded to an extent by the restricted visibility of haul-out groups in the survey area (NPWS, 2011d).

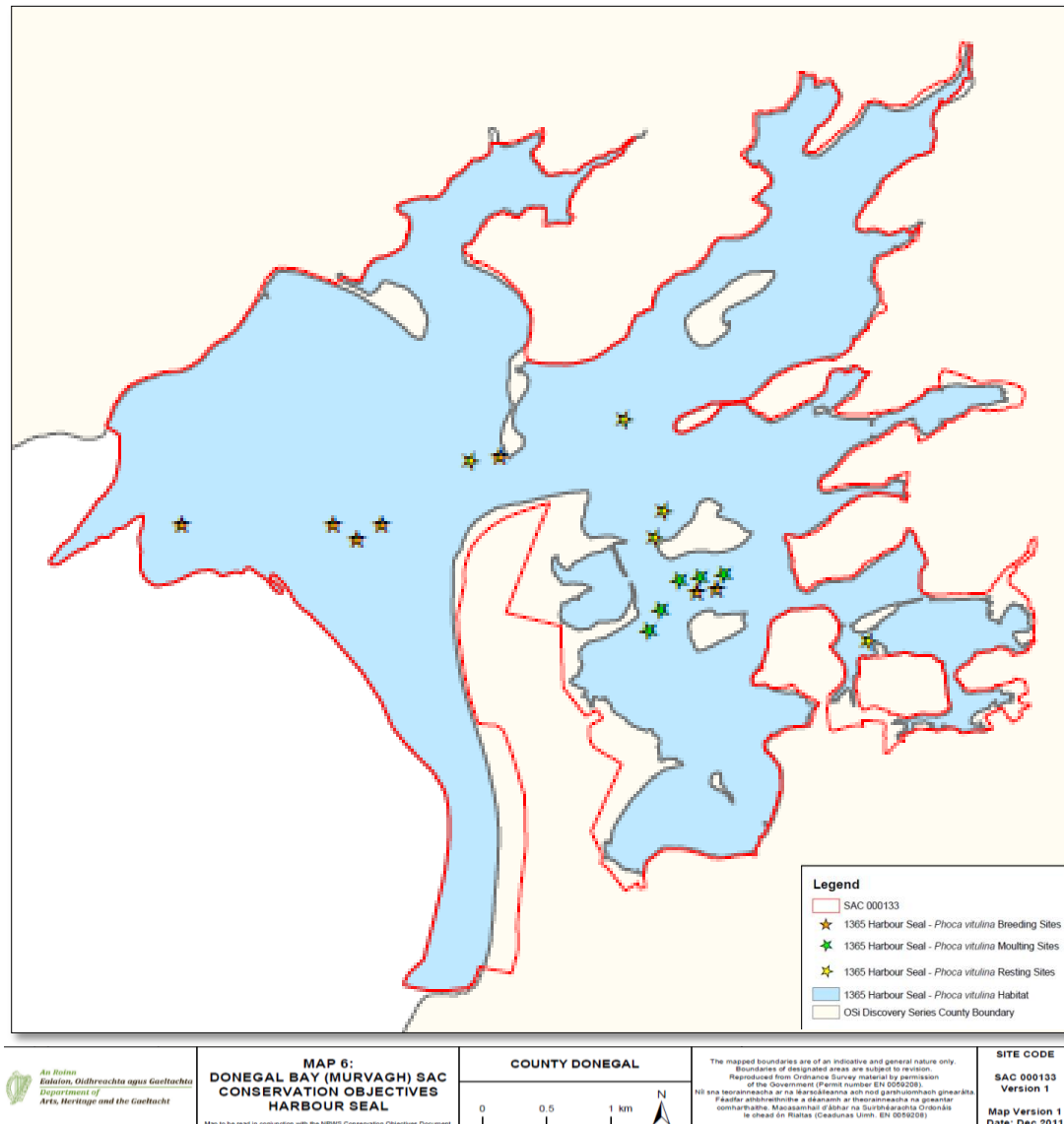


Figure 6.4. Extract from Donegal Bay (Murvagh) SAC Conservation Objectives Marine Supporting Document. Breeding, moulting and resting sites of Harbour Seal in Donegal Bay (NPWS, 2011b).

Harbour seal and grey seal haul out sites have also been recorded on the south-eastern side of St. John's Point see figure 6.5 and Annex IV Risk assessment report appendix 3 for further detail.

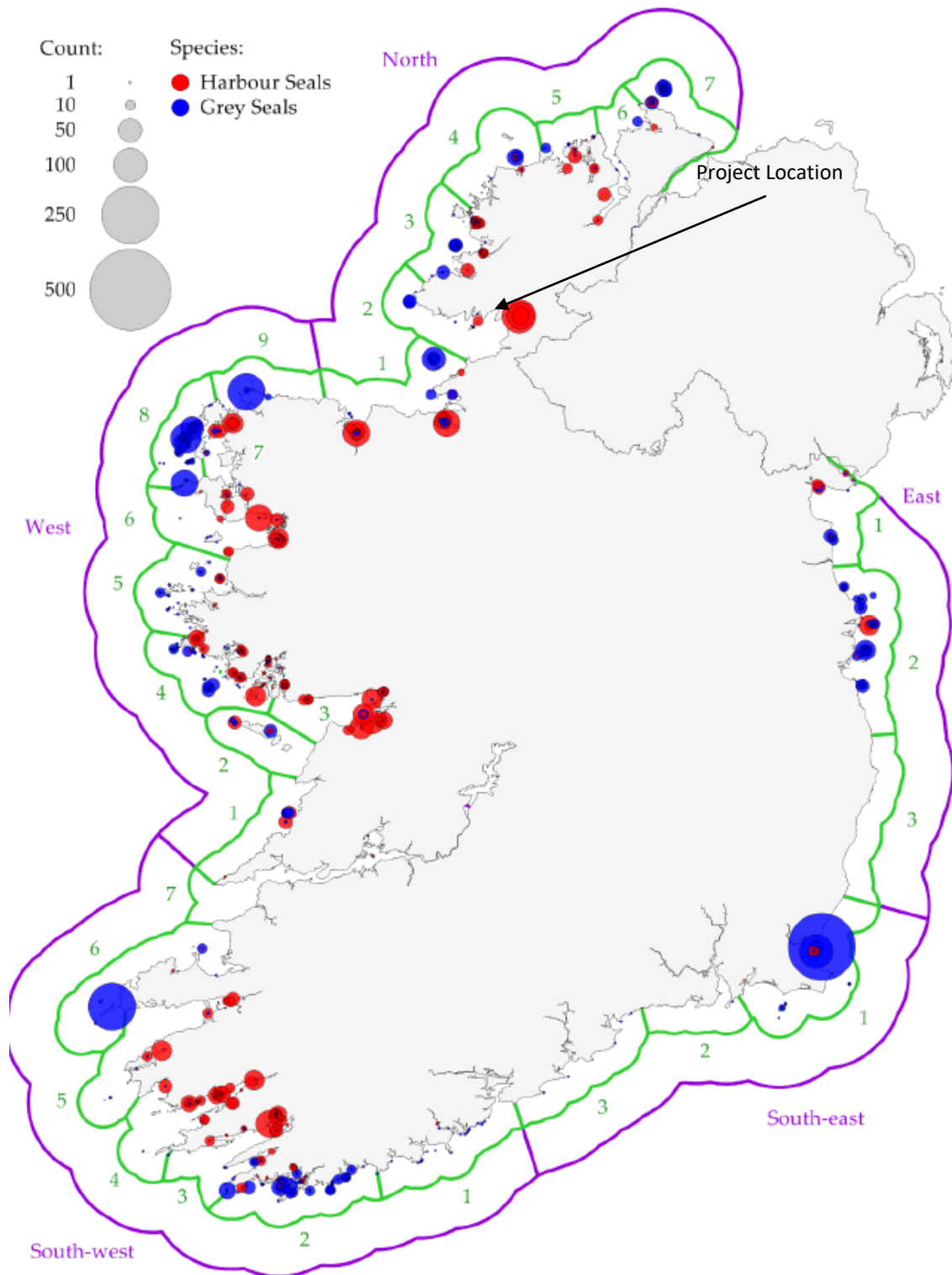


Figure 6.5 Numbers and distribution of Harbour Seals (red circles) and Grey Seals (blue circles) in Ireland in August 2017 and August 2018. The displayed symbol size represents the recorded group size with count guides given in the Legend (top left) (Morris & Duck, 2019).

6.5 Other relevant Annex species:

In Ireland, cetaceans (whale, dolphins and porpoises), grey seals (*Halichoerus grypus*), harbour seals (*Phoca vitulina*) and the Eurasian Otter (*Lutra Lutra*) are protected under the Wildlife Act (1976) and amendments (2000-2023). The Act applies out to the 12 nm limit of Irish territorial waters. All cetaceans and otter are also included in Annex IV of the EC Habitats Directive, as species 'in need of strict protection'. Under this Directive, the harbour porpoise (*Phocoena phocoena*), bottlenose dolphin (*Tursiops truncatus*), grey seal, harbour seal and Eurasian Otter are listed under Annex II, which identifies these species of community interest and whose conservation requires the designation of SACs. It is an offence to hunt, injure or wilfully interfere with, disturb or destroy the resting or breeding place of a protected species (except under license or permit from the Department).

To date 25 species of cetaceans have been recorded in Irish waters, the harbour porpoise (*Phocoena phocoena* L.) is the most widespread and abundant cetacean species in Irish waters (Rogan and Berrow 1996, as cited in Berrow *et al* 2014) and the grey seal and harbour/common seal are regularly occurring. Otter are frequently occurring around rivers, lakes and coastlines. Harbour seal is a qualifying interest of Donegal Bay (Murvagh) SAC. An Annex IV Risk Assessment report (including a Marine Mammal Risk Assessment) has been carried out, see appendix 3 for full detail.

Cetaceans

The NBDC database shows a wide range of cetacean species within Inver Bay Donegal Bay and McSwynes Bay.

The Irish Whale and Dolphin Group operate an online validated database of cetacean sightings and other megafauna including basking sharks and sea turtles. Data was procured from the Irish Whale and Dolphin Group in order to map the sighting records over the past decade, around the proposed works to include Inver Bay, Donegal Bay, McSwynes Bay and St. John's Point out to a distance of approximately 20km, see figure 6.6.

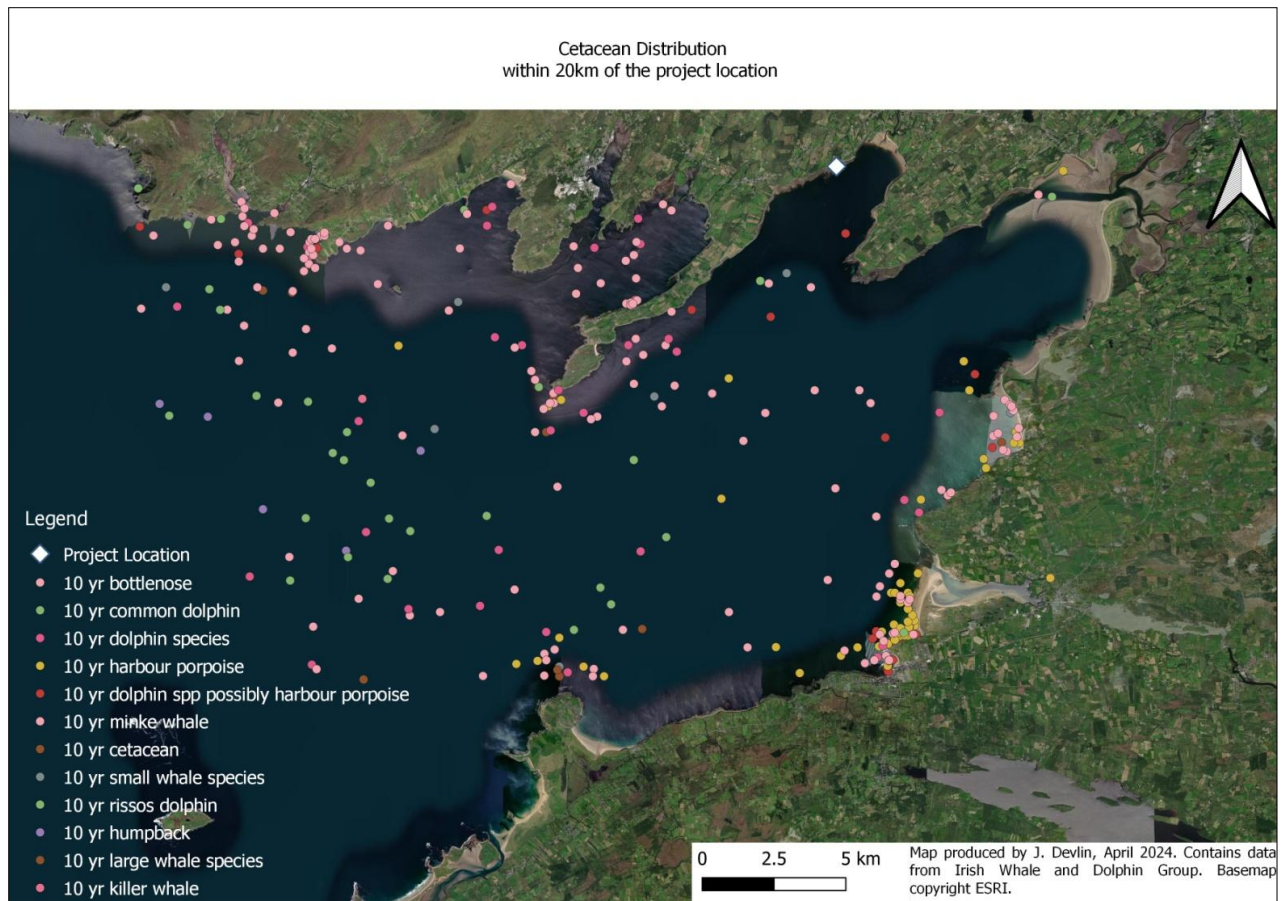


Figure 6.6 Map of cetacean distribution 2013-2022 in and around Inver Bay, St. John's Point, McSwynes Bay and Donegal Bay. Data provided by the Irish Whale and Dolphin Group.

It can be seen from the data that there is a significant amount of cetacean activity within the area. Bottlenose dolphins, common dolphins, minke whale, harbour porpoise and other unidentified whale and dolphin species have been recorded in the vicinity of the project location.

337 sightings (mostly casual) were recorded and verified in the 10 yrs 2013-2022, comprising 8 species, of which the biggest no. are of bottlenose dolphin at 1,436 followed by 897 common dolphin, 678 dolphin of undetermined species, 190 harbour porpoise and 75 possible porpoise, 71 minke whale, 21 undetermined cetacean species, 8 undetermined whale species, 7 rissos dolphin, 5 humpback whale, 2 killer whale and 2 Fin whale. 3,436 individuals were recorded in total; a breakdown of individuals recorded can be seen in table 6.1.

Individuals Recorded	Species
1436	bottlenose
897	common dolphin
678	dolphin spp
190	harbour porpoise
75	dolphin poss harbour porpoise
71	minke whale
21	cetacean species
8	whale species
7	rissos
5	humpback whale
3	large whale species
2	killer whale
2	large fin

Table 6.1 Breakdown of individual cetaceans recorded within 20km of the project area 2013-2022 by species, in descending order. Data provided by Irish Whale and Dolphin Group.

The Fair Seas report was published in June 2022. It presents 16 Areas of Interest for marine protected area (MPA) designation in Irish waters. The network of Areas of Interest for MPA designation covers just under 36% of Ireland's Maritime Area.

An Area of Interest is defined as a key biodiversity hotspot for one or more species of conservation interest. The area between Sligo and Donegal is one of these Areas of Interest (Fair Seas, 2022); the Port Pier project is within this area, see figure 6.5.

Five species groups were considered in the Fair Seas study: (1) cetaceans (marine mammals in the order Cetacea, e.g. whales and dolphins); (2) seabirds; (3) elasmobranchs (sharks, skates and rays and chimaeras); (4) commercially exploited species; and (5) seabed features (Fair Seas, 2022).

In summary, from the data sources accessed it is clear that there is significant marine mammal activity in the wider area around Port Pier, Inver Bay, St. John's Point, McSwyne's Bay and Donegal Bay.

The number of Otter sightings is low, with none in recent years. It is however likely Otter frequent the nearby Rivers, and may commute along the coastline.

Harbour seals are a qualifying interest of Donegal Bay (Muvagh) SAC and numbers continue to demonstrate the sites importance on both regional and national scales (NPWS, 2011). Harbour seals use a haul out site on the south eastern side of St. John's point. Grey seals also have a haul out site on the south eastern side of St. John's point though lower numbers were recorded, than harbour seals.

The most regularly occurring cetacean species occurring in the area is the bottlenose dolphin followed by the common dolphin, other dolphin of undetermined species, harbour porpoise and possible porpoise, minke whale, undetermined cetacean species, undetermined whale species, rissos dolphin, humpback whale, killer whale and fin whale.

Marine mammal sightings were located away from the area of the proposed works i.e. 2km+.

Megafauna

According to IWDG data 2013 to 2022 there have been 41 individual sightings of basking sharks in the wider area (20km distance) from the project location see figure 6.7. There are no records of any other megafauna during this timeframe.

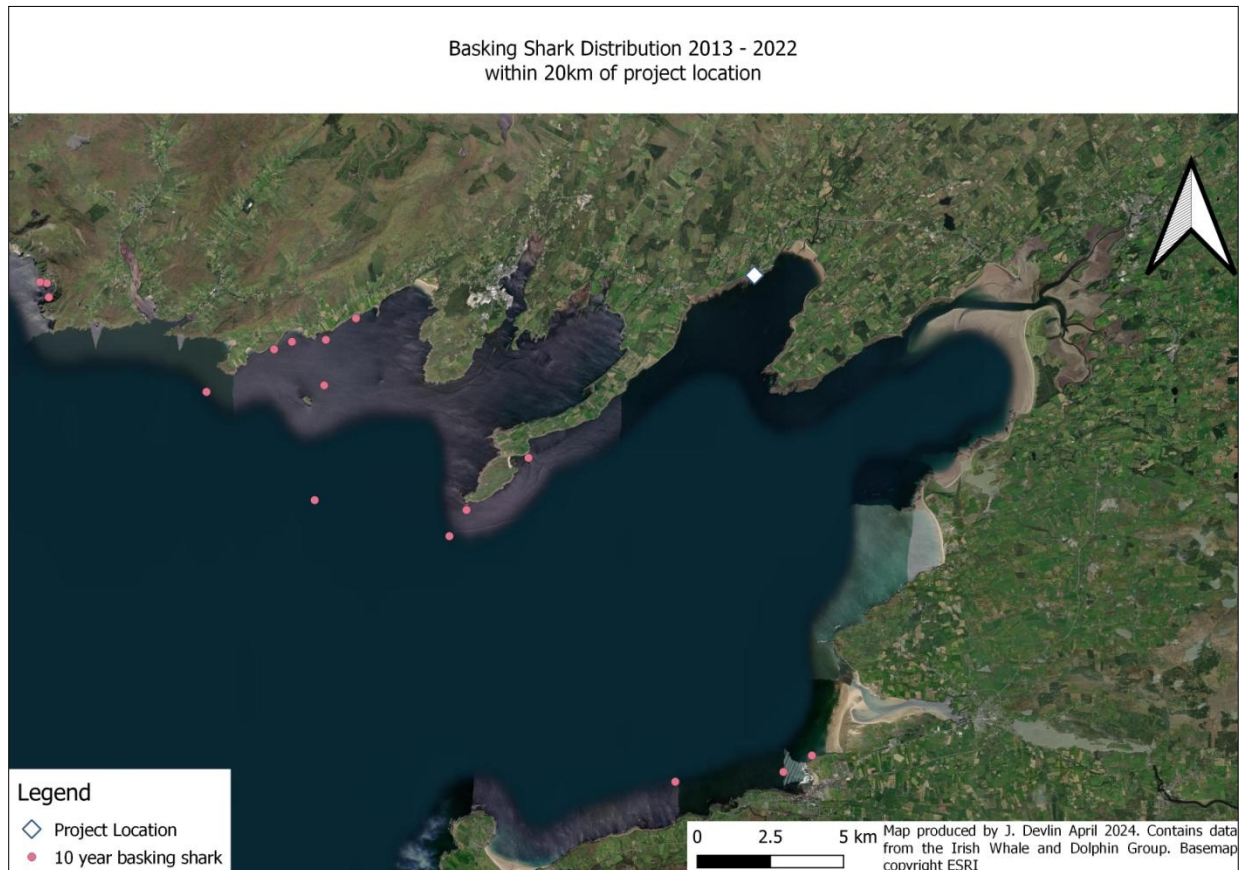


Figure 6.7 Basking shark distribution in and around Inver Bay, St. John's Point, McSwynes Bay and Donegal Bay 2013-2022. Data provided by the Irish Whale and Dolphin Group.

Basking sharks have not been sighted within the last decade within very close proximity to the project location; however that does not necessarily mean they do not occur there. Anthropogenic noise and vibration has the potential to injure basking sharks, and to disturb and displace them from the area, with the potential to interfere with feeding and or breeding patterns should they occur in the vicinity of the project.

Bats

Bats, and their breeding and resting places, are protected under the Wildlife Acts. All bat species are also listed on Annex IV of the EU Habitats Directive, the Lesser horseshoe bat also listed on Annex II. All species of bats in Ireland are listed as "least concern" in the Ireland Red List No. 12: Terrestrial Mammals.

A daytime bat walkover was undertaken in accordance with current accepted guidance: Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edn). The Bat Conservation Trust, London. and Aughney et al (2008) Bat Survey Guidelines: Traditional Farm Buildings Scheme. The Heritage Council, Áras na hOidhreachta, Church Lane, Kilkenny.

The wider habitat is likely to support a variety of bat species, including widespread species such as common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmaeus*) and species that favour open landscape in which to forage, such as Leisler's (*Nyctalus leisleri*) and Daubenton's bat (*Myotis daubentonii*).

Landscape within the immediate vicinity of the project comprises the coastline and Inver bay. The approach road to the pier has gappy hedgerow and open grassland habitats. Features include terraced housing, a small stone barn, a derelict shed (no roof) and concrete coast wall which leads to some stone ruins (no roof). A lone sycamore tree is growing near the entrance to the pier.

The barn and the sycamore tree provide low suitability potential habitat, connectivity with suitable foraging habitat is low – moderate; the building and tree are somewhat removed from neighbouring hedgerows, and occur at the end of a lane, that has gappy hedgerow on one side and the beach/sea on the other, there is no significant deciduous woodland in the area.

Other buildings and ruins are of negligible suitability due to their state of dereliction. A non intrusive internal and external inspection of the buildings and tree beside the pier was undertaken during daylight to determine the potential for bats and establish, if possible, whether bats are using the buildings/tree or have been using them in the past. They were examined for evidence of bats e.g. droppings, urine stains, smell, dead bats and remains of food. No obvious signs were seen.

Atlantic Salmon (*Salmo Salar*)

Atlantic salmon populations are listed in Annex II of the EU Habitats Directive (92/43/EEC). Atlantic Salmon is also listed as an Annex V species, whereby Member States must ensure that their exploitation and taking in the wild is compatible with maintaining them in a favourable conservation status. Internationally the protection and conservation of salmon is managed through North Atlantic Salmon Conservation Organization (NASCO). Irish salmon stocks have been managed on a river-by-river basis since 2007 with conservation limits (CL) based on maximum sustainable yield (MSY) (White *et al.* 2016). The Wild Salmon and Sea Trout Tagging Scheme Regulations 2018 (S.I. No. 585 of 2018) along with the Conservation of Salmon and Sea Trout bye-laws provides protection to both of these species in Ireland. Inland Fisheries Ireland (IFI) is the statutory body with the responsibility for the protection, development and management of the inland fishery resource within the State.

Each river has an individual CL which is the number of adult salmon required to maintain a healthy population of wild Atlantic Salmon. Rivers exceeding 100% of CL are open for salmon angling with a total allowable catch in place. In the absence of a surplus on a river, Catch and Release (C&R) options are set for rivers meeting between 50% -100% of their Conservation Limit.

The Eany River rises in the Blue Stack Mountains and flows in a southwesterly direction flowing into the sea at Inver Bay. It is primarily a spate river and was one of the more productive salmon fisheries in the region (IFI, 2011). The Eany is directly managed by the Inland Fisheries Ireland. The river provides grilse angling in summer. There is a fish counter on the system; up until 2007, the Eany exceeded its CL consistently, data from 2007 onwards shows a decline in upstream runs which is a major concern for this fishery and it is currently catch and release only (DECC, 2023). Salmon use Inver Bay as a migratory route; smolts tend to leave the Eany system in March to May, and migratory fish return from July to December to spawn (2023, *pers comm.* Gerry McCafferty, IFI, on 24th April).

7.0 Assessment of impacts

To determine fully how the project may potentially impact the relevant qualifying interests of the Natura 2000 sites a better understanding of the species and habitats in question is required. Information has been collated from conservation objectives documents and supporting documentation, as detailed in section 10. Table 7.1 details general habitat and species requirements. The pressures and threats to these habitats and species have also been identified. The pressures and threats that the project may contribute to are highlighted in bold.

Relevant Qualifying Interests of St. John's Point SAC, Donegal Bay (Murvagh) SAC & Donegal Bay SPA with potential to be impacted	Habitat description / Species requirement	Identified pressures and threats
St. John's Point SAC		
Large shallow inlets and bays [1160]	Large shallow inlets and bays is a large physiographic feature that may wholly or partly incorporate other Annex I habitats including reefs and sea caves within its area. The following community complexes are found in St. John's Point SAC: Intertidal coarse sediment with <i>enchytraeid oligochaetes</i> and <i>Scolecopsis squamata</i> community complex; Maërl-dominated community; Sand to mixed sediment with <i>polychaetes</i> and <i>Edwardsia spp.</i> community complex; Intertidal reef community complex; <i>Laminaria</i> -dominated community complex; Subtidal reef with echinoderms and sponges community complex	Threats identified in the Natura standard data form included scuba diving and snorkelling (additional threats related to terrestrial habitats, which do not apply in this instance) Other threats include. Marine Pollution Direct disturbance, damage, removal of habitats resulting in the reduction or death of marine communities Introduction of non native invasive species and pathogens.
Reefs [1170]	Reefs are rocky marine habitats or biological concretions that rise from the seabed. They are generally subtidal but may extend as an unbroken transition into the intertidal zone, where they are exposed to the air at low tide. Intertidal areas are only included within this Annex I type where they are connected to subtidal reefs. Reefs are very variable in form and in the communities that they support. Two main types of reef can be recognised: those where animal and plant communities develop on rock or stable boulders and cobbles, and those where structure is created by the animals themselves (biogenic reefs). Rocky reefs are extremely variable, both in structure and in the communities they support. A wide range of topographical reef forms meet the EU definition of this habitat type. The reefs at St. John's point include the following community complexes: Intertidal reef community complex <i>Laminaria</i> -dominated community complex	

Relevant Qualifying Interests of St. John's Point SAC, Donegal Bay (Murvagh) SAC & Donegal Bay SPA with potential to be impacted	Habitat description / Species requirement	Identified pressures and threats
	Subtidal reef with echinoderms and sponges community complex	
Submerged or partially submerged sea caves [8330]	Submerged or partially submerged sea caves are caves that are situated under the sea or opened to it, at least at high tide, including partially submerged sea caves. Their bottom and sides harbour communities of marine invertebrates and algae. The sea caves at St. John's point include the following community complex: <i>Laminaria</i> -dominated community complex	
Vegetated Sea Cliffs [1230]	Vegetated sea cliffs are steep slopes fringing hard or soft coasts, created by past or present marine erosion, and supporting a wide diversity of vegetation types with variable maritime influence. Exposure to the sea is a key determinant of the type of sea cliff vegetation. At St. John's point the rocks are richly fossiliferous. The sea cliffs can reach heights of up to 20m and are composed of Carboniferous limestone with a series of crevice ledges and a splash zone.	
Donegal Bay (Murvagh) SAC		
[1365] Harbour Seal <i>Phoca vitulina</i>	The harbour seal is a marine mammal species which occurs in estuarine, coastal and offshore waters but also utilises a range of intertidal and terrestrial habitats for important functions such as breeding, moulting, resting and social activity. It is a successful aquatic predator that feeds on a wide variety of fish, cephalopod and crustacean species. Its aquatic range for foraging and inter-site movement extends into continental shelf waters. When hauling out ashore harbour seals tend to prefer comparatively sheltered locations where exposure to wind, wave action and precipitation are minimised.	Harbour seals are most vulnerable to disturbance during periods when time is spent ashore or in shallow waters . This is immediately prior to and during the annual breeding season, which takes place predominantly during the months of May-July. Pups are born on land, usually on sheltered shorelines, islets and uninhabited islands removed from the risk of predation and human interference.
Donegal Bay SPA		
[A003] Great Northern Diver <i>Gavia immer</i> wintering	<u>Great Northern Divers</u> are able to forage successfully in deeper waters and can therefore occur up to 10km offshore.	The main threats to Waterfowl and wetlands leading to displacement and /or reduction in numbers are: Habitat modification: activities that modify discreet areas or the overall habitat(s) in terms of
[A046] Light-bellied Brent Goose <i>Branta bernicla hrota</i> wintering	<u>Brent Geese</u> are grazers, their principal supporting habitat is Intertidal mud and Sand flats (when foraging), and they are	

Relevant Qualifying Interests of St. John's Point SAC, Donegal Bay (Murvagh) SAC & Donegal Bay SPA with potential to be impacted	Habitat description / Species requirement	Identified pressures and threats
[A065] Common Scoter <i>Melanitta nigra</i> wintering [A144] Sanderling <i>Calidris alba</i> wintering [A999] Wetland	known for their preference for foraging in intertidal areas with the Eelgrass <i>Zostera</i> sp. During winter and when feeding, <u>Common Scoters</u> are generally distributed in shallow coastal waters with a depth of no more than 20m. They are most often distributed across areas where there is a sandy substratum, linked to the distribution of their favoured prey of bivalve molluscs. <u>Sanderling</u> often forage along the tide line, where they rush in and out with the waves searching for small prey, such as sandhoppers. Sanderlings are shorebirds characteristic of sandy shorelines. Wetland habitat is an important resource for waterbird species that make up the total waterbird assemblage. These species may include those that utilise the site during passage, those that are present in months of the year outside of the non-breeding season or species that use the site at certain times only (e.g. as a cold weather refuge).	how one or more of the listed species use the site (e.g. as a feeding resource). Disturbance: anthropogenic disturbance that occurs in or near the site, and is either singular or cumulative in nature. Activities include: bait digging, aquaculture activities, walking, motorised vehicles, hand gathering of molluscs. Significant habitat change or increased levels of disturbance within habitats in the hinterland areas of the SPA.
Other Annex Species and habitats/protected species: Marine Mammals: Cetaceans, grey seals (<i>Halichoerus grypus</i>), and the Eurasian Otter (<i>Lutra Lutra</i>) Megafauna: basking sharks	Marine Mammals (cetaceans and seals) and basking sharks use the wide marine environment. There is a wide diversity of habitats available from the relatively shallow <200m continental shelf to the deep waters >2000m off the west coast of Ireland. Seals breed around the shorelines of Ireland and have a wide range of habitat in coastal and offshore waters for foraging and commuting to haul out sites. Otter are frequently occurring around rivers, lakes and coastlines. Otters prefer rivers and streams which provide good cover and plenty of food. The preferred option is to run along the bank especially if moving upstream, against the flow of water. Otters tend to use the bank that is free of obstructions and so it may only have low lying vegetation with a path indicating its use by Otters (NPWS, 2009). Otter can use the coastline to forage.	Threats include anthropogenic disturbance from noise, water pollution and habitat destruction, unsustainable fishing, entanglement, Plastic pollution, Climate change/ecological crisis.

Relevant Qualifying Interests of St. John's Point SAC, Donegal Bay (Murvagh) SAC & Donegal Bay SPA with potential to be impacted	Habitat description / Species requirement	Identified pressures and threats
	Otters are very flexible in their use of resting sites and do not necessarily avoid 'disturbance' in terms of noise or proximity to human activity (Chandin, 2003).	
Atlantic Salmon (<i>Salmo salar</i>) [1106]	Salmonid populations have distinct requirements at each stage of their lifecycle. They need cool, clean, flowing water with adequate pool and riffle sequences, and suitable gravel for survival. Their lifecycle begins with spawning when the adult fish return to their native river to lay redds in gravel beds. The eggs remain in the redd throughout winter and hatch in spring as alevins. As alevins they depend on a yolk sac for primary nutrition until they become fry/ parr when they feed mainly on invertebrates. As smolt, usually after around 2 years, they migrate to sea in spring, returning to their river of origin to spawn as adults during the autumn and winter months.	Threats include: Deterioration of quality of freshwater environment: water quality, spawning gravels, temperature, barriers to spawning grounds (including noise/vibration). Factors causing mortality at sea such as diseases and parasites, marine pollution, availability of prey, predator populations and climate change.
Bats	Many bat roosts are used only seasonally as bats have different roosting requirements at different times of the year. During the summer, females of all species gather in colonies to give birth and rear their young; these maternity roosts are often in places warmed by the sun. During the winter bats hibernate, often in places that are sheltered from extremes of temperature. Many species of bats are closely associated with the built environment, both for breeding and hibernation and some species have rarely been recorded anywhere else. Bats need to be able to move freely around the countryside between roosts and feeding areas. Research has shown that many species, particularly the smaller ones, follow linear features, such as hedges, tree-lines or waterways, and are reluctant to cross wide open spaces (NPWS 2016).	Threats include: Disturbance Works associated with development or building work are likely to lead to an increase in human presence at the site, extra noise and changes in the site layout and local environment Roost modification: Modifications to roost sites, which includes the construction of new entrances, the reduction of roost space available to the bats, changes to ventilation and air-flow etc., can have a significant impact on the bats' use of the roost and thus damage it. Roost loss: The impact of the loss of roosts on bat populations is poorly understood and difficult to study, though it is believed to be an important factor in the decline of bat populations generally. For

Relevant Qualifying Interests of St. John's Point SAC, Donegal Bay (Murvagh) SAC & Donegal Bay SPA with potential to be impacted	Habitat description / Species requirement	Identified pressures and threats
		some species which are known to move between roosts, and which rely less heavily on sites with special characteristics, the loss of a single maternity or hibernation roost may be less critical than for more specialised species. Fragmentation and isolation: The loss of linear features, leaving roosts isolated in the landscape can thus be damaging. Post-development interference: increased human activity around a roost (NPWS, 2016)

Table 7.1 Habitats and species with potential to be impacted, habitat description and species requirements and identified pressures and threats.

From the assessment in table 7.1, the project has the potential to exacerbate the threats and pressures identified for St. John's Point: Marine QI's, Donegal Bay (Murvagh) SAC: Harbour seals, and Donegal Bay SPA wintering wildfowl (if project activity occurs in winter) and other Annex species: Marine Mammals, Atlantic Salmon and Bats, and other protected megafauna: basking shark.

7.1 Habitat degradation due to hydrological impacts

Potential effects on: St. John's Point Marine QI's, marine mammals (cetaceans, harbour seal and Otter), basking shark, wildfowl and Atlantic Salmon.

The main pathway for transporting sediments from the development site is via storm/surface water runoff during construction and release of potentially contaminated sediments during the dredging process

Construction

Emissions to air, soil and water during site preparation and construction activities: While temporary in nature, construction operations can, sometimes, result in pollution or sedimentation incidents, which can impact negatively on habitat quality. Inadvertent release of suspended solids (from excavation, movement of soils, and construction materials) and other pollutants and hydrocarbons into Inver Bay could contribute to nutrient enrichment and sedimentation, and could also impact on the water quality.

An acute pollution incident could have significant effects on Qualifying Interests, potentially causing death and/or pollution and degradation of marine habitats and feeding sources.

If this pathway is eliminated then this risk is reduced significantly. Other pollutants that could enter the system via percolation through soils or groundwater require careful site management, in particular hydrocarbon, fuel, chemicals and any other hazardous materials on site.

Dredging activities

During dredging operations, there will be a localised increase in turbidity within c.50-100m of the excavator. This will generate a localised dredge plume in the immediate vicinity of the works. This is a temporary impact; once dredging is completed some of the material will settle out and be deposited on the sea bed and some will remain in suspension within the water column, before settling.

Generally speaking disturbing and removing sediments from the sea bed carries with it some risk of releasing pollutants and contaminants, if they are present in the sea bed. The site is in a rural area with low intensity fishing activity; the pier serves local vessels and aquaculture farms further out towards St. John's Point. It is therefore unlikely that significant contamination has occurred at the site.

As a precaution proposed dredge material has been sampled and analysed (see Causeway Geotech, 2024 see appendix 2) and according to the *Guidelines for the assessment of dredge material for disposal in Irish waters*. Sediments sampled are classified as Class 1:- Contaminant concentrations less than level 1. Uncontaminated: no biological effects likely. They have been deemed suitable for dumping at sea which requires a higher criterion, than that for landfill. They therefore do not pose a risk in terms of pollution or contamination of the Bay and the marine environment.

Operation

Operation at the Pier is unlikely to change significantly. The pier use is tidal and the site is in a hydro-active location with good flushing capacity. Current water quality status (unpolluted) is unlikely to change.

7.1.1 Mitigation measures: Habitat degradation due to hydrological impacts

- Independent Marine Mammal Observer to be employed as per Marine Mammal Risk Assessment in appendix 3.

A construction method statement has been prepared by Ayesa (see appendix 1). This contains measures to manage risk on site and to mitigate against potential impacts including:

- Silt curtains will be deployed to contain the silt plume generated by dredge activities.
- Sediment retention ponds will be created.
- Spill prevention and spill response procedures will be implemented.

See tables 7.2 and 7.3 for a full suite of measures to be included in the contractors Construction and Environmental management Plan.

7.1.2 Residual effects: hydrological impacts

St. John's Point Qualifying interests: Marine habitats will be protected by silt curtains other measures in construction method statement (see appendix 1) and table 7.2 and 7.3 from any unlikely impact from the dredge plume. There is no risk of contamination from dredge material.

MMO will ensure no adverse effects to marine mammals or basking shark in the vicinity of works.

Wintering wildfowl (if present), Atlantic Salmon and their habitat will be protected from silt plume by use of silt curtains and other on site mitigation measures.

With mitigation the Port Pier Extension will not pose a risk to the conservation objectives, or the conservation condition, of the QI habitats or species of St. John's point SAC, Donegal Bay (Murvagh) SAC and Donegal Bay SPA, Annex IV, Annex II and Annex V species, see appendix 4 There are no residual direct or indirect impacts associated with the proposed development that could adversely affect the integrity of the SACs and SPA, or other Annex species.

7.2 Noise and vibration causing disturbance, displacement or injury

Potential effects on marine mammals (cetaceans, harbour seal and Otter), basking shark, wildfowl, Atlantic Salmon and bats.

An Annex IV Risk Assessment (including MMRA) can be seen in appendix 3.

Construction

There is a high level of activity and noise on a construction site. Sources include noise and activity from, increased human activity, increased heavy traffic to and from site, excavation machinery, dredging and piling during construction processes. All this increased activity and noise will potentially have a significant impact on species using the adjacent coastal site through indirect habitat loss caused by disturbance. Construction activity on site will not be permanent and activity levels will vary greatly during the construction period. Disturbance events are temporary in nature.

Marine mammals and basking shark

Dredging Activities:

Marine dredging is the excavation of substratum from the seabed and disposing of it at a different location. Dredging activity usually occurs in a fixed area for a prolonged period of days or weeks. Therefore it has the potential to introduce continuous anthropogenic sound at levels that may impact upon marine mammal individuals and/or local populations and the risk of acoustic impacts associated with this activity should be considered to ensure good environmental management.

Dredging produces continuous broadband low frequency sound below 1kHz with Sound Pressure Levels (SPLs) between 168-186 dB re 1µPa @ 1m (Todd et al 2015). This research supports NPWS guidance which state that static seabed-related activities such as dredging, while generally of less concern, may produce underwater sound at sound pressure levels up to 190 dB re: 1 µPa and at frequencies overlapping marine mammal hearing, thereby increasing the potential for auditory masking, avoidance and other disturbance effects (DAHG, 2014).

Direct effects to marine mammals in the project area are possible. A grab dredger or backhoe dredger is proposed for this project. This will be moored when operational and will work from a floating barge when the site is inundated.

A crane is used to lower a clamshell bucket or bucket into the water which scrapes the material off the sea bed. Once closed the bucket is brought to the surface and sediment deposited either directly into the new pier structure or onto a separate barge. Works will take place in very shallow coastal waters; while collisions are possible, they are unlikely due to the fact that the dredger will be moored and stationary.

Noise by grab dredgers varies substantially with stage (Todd *et al*, 2015). Dickerson *et al* (2001 as cited in Todd *et al* 2015) measures SPLs at 0.15km from a grab dredger throughout the entire process. The loudest SPLs of 124dB re 1µPa @ 1m were recorded at peak frequencies of 0.16kHz, when the bucket made impact with the sea floor. The low Source Levels (SL) produced whilst dredging suggest physical injury to auditory systems of marine mammals is unlikely; more probable are masking and behavioural effects.

Piling:

Pile driving is a static activity that usually takes place in a fixed location for a prolonged period of days or weeks, depending on the scale of development. It therefore, has the potential, in most circumstances, to introduce persistent anthropogenic sound at levels that may impact upon marine mammal individuals and/or populations, and would constitute an important conservation risk (DAHG 2014). : *Pile driving strikes have generally been reported to produce low frequency pulse sounds of several tens of Hz to several thousand Hz (and up to approximately 20 kHz), with some technologies introducing underwater sound at comparatively high*

sound pressure levels exceeding 220 dB re: 1 µPa, see table 5.1 and 5.2. This presents the possibility of permanent hearing injury (i.e., PTS), temporary hearing loss (i.e., TTS) or other injury for some marine mammals in close proximity to such operations. The multiple pulses of some pile driving works can also be detected at received levels (RL) well exceeding ambient sound (>120 dB re: 1 µPa) more than 10km from the operating source, sufficiently high therefore to potentially cause significant behavioural disturbance to marine mammals at distances of several kilometres, DAGH 2014.

With regard to piling, Robinson *et al* 2012 (as cited in Todd *et al*, 2015) took measurements around a 5m diameter pile in water 15-20m depth. Hydraulic hammers with typical strike energies of 1000kj were used, for which the majority of noise was <10kHz. Results estimated that the noise level at 0.1kHz was >60dB above background at 380m from the pile, reducing to <40dB above background at 5km. While this methodology differs from that being used at Port pier, which is of a smaller scale and in shallower waters, using sheet piles, it demonstrates that if in close proximity to piling activity Temporary Threshold Shift (TTS) and Permanent Threshold Shift (PTS) is a potential threat to marine mammals.

Wintering wildfowl

The proposed works are outside the Donegal Bay SPA. There are no known roost sites in the area. Any birds that are likely to frequent the area are likely to use it for feeding and foraging for example sanderling and common scoter. Habitats are not particularly suitable for Brent Geese or Great northern Diver the latter tends to forage in deeper waters out to sea.

Any birds in the area may be temporarily displaced due to noise from construction; however protected wildfowl are only present during winter months. Works will be temporary. Tidal mudflats are common around the inner Donegal bay area, so there is ample suitable alternative habitat in the surrounding area for temporarily displaced birds, should they occur near the project location. It is reasonable to assume that during periods of low or no activity on site birds will continue to use the local habitats as normal. Significant impacts are not likely.

Atlantic Salmon

Knowledge on hearing abilities of Atlantic Salmon and potential impacts of underwater noise such as pile driving is incomplete (Harding *et al*, 2016). Atlantic salmon are known to detect low frequency acoustic stimuli below 380 Hz (Hawkins & Johnstone, 1978 as cited in Harding *et al*, 2016), coinciding with the dominant frequencies produced during impact piling operations (100 Hz to 2 kHz; Bailey *et al.*, 2010; Hawkins *et al.*, 2015 as cited in Harding *et al*, 2016).

In his study of pile driving associated with the removal and reconstruction of a jetty at a busy harbor in the North East of Scotland, adjacent to an important Atlantic salmon river Hawkins (2005) concludes that noise from pile driving in the harbor was high enough to be detected by salmon in the river, at considerable distances from the source. The levels of sound from both percussive and vibro-piling were well above the hearing thresholds of the fish. As salmon could not be observed during this exercise, it was not possible to determine whether salmon reacted adversely to the sounds. However, he found there was a risk that their upstream migration may have been delayed or prevented with consequent effects upon spawning populations. The measurements indicated that any pile driving within the river itself would have the potential to injure or induce hearing loss in salmon and might have adverse effects upon their behavior.

The Port Pier Project has the potential to interact with two life stages of the Atlantic Salmon; the concerns being the impact pile driving may have on the smolt stage, when the juvenile salmon move from freshwater to the feeding grounds in the sea, and the adult spawning migration when adults return to their natal river to spawn. Piling may impact salmon populations by delaying or preventing migration to and from the Eany River.

Bats

Suitable habitat is not within the project location; low suitability habitat occurs to the rear of the project some 50m distance from works. It was concluded that overall the site was of negligible to low suitability in terms of roost potential and commuting and foraging potential. The site does not appear to be, or to have been used by bats, and there will be no loss or fragmentation of habitat.

The survey work is considered sufficient to give confidence in a negative result (likely absence) of a significant roost within the buildings, such as a maternity roost, for if such a roost was present, evidence would be expected. However, the possibility that the building is used by small numbers of bats or itinerant bats throughout the summer months cannot be ruled out. It is unlikely that the conservation status of bats could be significantly impacted by the project; Works are short term, and will not directly impact the habitat, and nocturnal activities foraging/ commuting will not be restricted or impacted in any way.

Operation

Operation at the Pier is unlikely to change significantly. The normal intensity of activity during project operational phase will be significantly lower than that of the time-limited construction phase. No mitigation required.

7.2.1 Mitigation measures: Noise and vibration causing disturbance, displacement or injury

- Wildfowl, harbour seal and Annex IV and V species

Marine mammals and basking sharks

NPWS 'Guidance to manage the risk to marine mammals from man-made sound sources in Irish waters – January 2014' (NPWS, 2014) recommended that stated mitigation procedures for dredging and piling are followed and monitored by a suitable qualified Marine Mammal Observer (MMO).

A qualified and experienced marine mammal observer (MMO) shall be appointed to monitor for marine mammals and to log all relevant events using standardised data forms (as presented in appendix 7; NPWS, 2014).

Pre-start monitoring for both dredging and Piling and Ramp-Up Procedures for piling, see MMRA appendix 1

Otter: In addition to above, as per Annex IV Risk assessment see appendix 3, a preconstruction survey should be undertaken to determine if there are any signs of holt / couch/ habitat in active use.

Wildfowl

Ramp up procedures as per MMRA will give birds in the area warning of works.

Atlantic Salmon

Salmon use Inver Bay as a migratory route, smolts tend to leave the Eany system in March to May, and migratory fish return from July to December (2023, *pers comm.* Gerry McCafferty on 24th April).

Ideally piling should take place outside of smolt stage and spawning season. If this is not possible due to operational requirements, piling will only take place during daylight hours, because migratory movement usually occurs in the hours of darkness.

Ramp up procedures as per MMRA will give Salmon in the area warning of works.

A bubbler curtain will be used around the immediate area of pile driving in order to reduce noise dispersal into the aquatic environment.

A vibrating hammer will be used for pile driving in order to reduce noise generation and propagation.

It is reasonable to assume that during periods of low or no activity on site, fish will continue to use the route unhindered.

Bats

As per Annex IV risk assessment, see appendix 3, a Preliminary Roost Assessment of the small barn and sycamore tree be undertaken to determine if any bat activity or presence e.g. itinerant bats. If bats are found to be present, NPWS must be contacted and works cease immediately until mitigation requirements are assessed. If deemed necessary, works may either be paused until bats vacate the roost, or a derogation license will be sought from NPWS for the removal and relocation of bats, under license by an experienced ecologist and relocated to a bat box, see Annex IV Risk Assessment appendix 3.

Operation

There is already a pier at this location. The normal intensity of activity during project operational phase will be significantly lower than that of the time-limited construction phase. The operational phase of the project is unlikely to have any significant effects on QI and SCI interests in terms of disturbance, displacement or injury.

No mitigation required.

7.2.2 Residual effects: Noise and vibration causing disturbance, displacement or injury

With mitigation, the Port Pier Extension will not pose a risk to the conservation objectives, or the conservation condition, of the QI habitats or species of St. John's point SAC, Donegal Bay (Murvagh) SAC and Donegal Bay SPA, Annex IV and Annex V species, see appendix 4. There are no significant residual direct or indirect impacts associated with the proposed development that could adversely affect the integrity of the SACs and SPA, or other Annex species.

7.3 Habitat degradation due to the spread of the invasive species, disease and pathogens

Biosecurity is the prevention of disease-causing agents or invasive species entering or leaving any place where they can pose a risk to plants, animals or humans. Biosecurity is therefore a key aspect to protecting or native biological diversity.

It is unfortunately incredibly easy to inadvertently spread non native invasive species, diseases and animals, great care must be taken when entering into sensitive environments, so as not to introduce or spread them. For example, a visiting boat which has been used in another waterbody containing invasive species can carry this species in, if it hasn't been sufficiently disinfected and dried out. The likelihood of cross-contamination in this case is high.

The vectors and pathways by which non-native invasive species are transported are many, and result from the diverse array of human activities which operate over a range of scales. Primary introductions often result from the accidental transport, for example visiting boats or equipment. Secondary introductions result from the expansion of a species from the initial place of establishment. Secondary spread will normally include a wider range of vectors that may act either separately or together (Stokes et al., 2004).

Once an invasive species or disease enters or leaves any aquatic space it can pose a risk to our ecosystems and biodiversity. Both pose different implications and are hard to remediate and eradicate. Fish parasites,

pathogens and diseases represent a significant threat to the health status of our water bodies. The introduction or transfer of such pathogens or diseases has the potential to wipe out large populations of fish in affected waters or catchments (IFI, 2010).

7.3.1 Mitigation measures: Habitat degradation due to the spread of the invasive species, disease and pathogens

Biosecurity measures to avoiding the introduction or spreading of non-native invasive species and pathogens will be integrated into the daily operating procedures on site.

Construction

When importing materials from outside a site there is always a risk of importing unwanted elements such as seed or spores from invasive plants for example, Japanese knotweed or Rhododendron. Every effort will be made to ensure imported material is clear of contaminants and comes from a known reliable source.

In the coastal / marine environment

Works will comply with IFI *Guidance on Biosecurity*, 2010 and CAISIE Guidelines 2022: *Control of Aquatic Invasive Species and the restoration of Natural Communities in Ireland*.

Any plant or machinery to be used in the intertidal area will be washed down at a designated offsite location prior to mobilising.

All boats, equipment, footwear should be inspected for attached plant or animal material before entering or leaving. If found, it should be removed before entering the intertidal area, and disposed of carefully. It must not be discarded in or around the site.

All equipment, boats and footwear should be cleaned and disinfected (e.g. 1% solution of Virkon® Aquatic or another proprietary disinfectant product) at the water's edge or as soon as possible before/after entering / leaving. If no disinfectant is available, all equipment and clothing should be allowed to dry fully, for at least 24 hours before returning to a watercourse (IFI, 2022).

Operation

A biosecurity protocol should be established for Port Pier to reduce the risk of introduction and spread of disease-causing agents or invasive species.

7.3.2 Residual effects: invasive species, disease and pathogens

With mitigation the Port Pier Extension will not pose a risk to the conservation objectives, or the conservation condition, of the QI habitats or species of St. John's point SAC, Donegal Bay (Murvagh) SAC and Donegal Bay SPA, Annex IV and Annex V species, see appendix 4. There are no residual direct or indirect impacts associated with the proposed development that could adversely affect the integrity of the SACs and SPA, or other Annex species.

7.4 Reduction in species density

A reduction in species density in St. John's Point SAC would be as a consequence of sedimentation, pollution, release of contaminants during dredging and the introduction of invasive species.

A reduction in species density in Donegal Bay (Murvagh) SAC, Donegal Bay SPA and for Atlantic Salmon would be as a consequence of sedimentation, pollution, release of contaminants during dredging and the

introduction of invasive species, and disturbance, displacement or injury of a species while feeding, breeding or commuting to a feeding/breeding area.

7.4.1 Mitigation measures: Reduction in species density

The mitigation measures pertaining to habitat degradation due to hydrological impacts (see section 7.1), disturbance, displacement or injury of marine mammals (see section 7.2), and invasive species, disease and pathogens (see section 7.3) will also mitigate in this instance.

7.4.2 Residual effects: Reduction in species density

With mitigation the Port Pier Extension will not pose a risk to the conservation objectives, or the conservation condition, of the QI habitats or species of St. John's point SAC, Donegal Bay (Murvagh) SAC and Donegal Bay SPA, Annex IV and Annex V species, see appendix 4. There are no residual direct or indirect impacts associated with the proposed development that could adversely affect the integrity of the SACs and SPA, or other Annex species.

A full suite of site specific mitigation measures are detailed in table 7.2 and 7.3. **NOTE MITIGATION FOR ALL ECOLOGICAL AND NATURA 2000 aspects have been included in the table to ensure continuity across the project.**

A project-specific Construction and Environmental Management Plan (CEMP) will developed by the contractor, this should include the mitigation measures listed in table 7.2 and 7.3.

7.5 Mitigation measures

Mitigation measures for **ALL ECOLOGICAL AND NATURA 2000 aspects of the project**

Preconstruction surveys

Preconstruction survey	Location	Survey objective	Survey timing/seasonality	Licence required for survey?	Specification for surveyors
Bats	Stone building and lone tree.	Preliminary roost assessment: to determine if any bat activity or presence e.g. itinerant bats.	Preliminary roost assessment (PRA) any time of year	No	BCT guidance (Collins 2023)
Otter	Within 200m radius of project location.	Determine if signs of holt / couch/ habitat in active use.	Any time of year (Allow time c. 1 month for licensing and receptor site identification, if required)	No	Surveys to adhere to NRA guidance 2009

Table 7.2 Pre construction surveys

Mitigation measures – consolidated table with full suite of measures

Source	Pathway	Receptor	Mitigation Measure	Residual effect / Significance of potential impact
Construction site: Construction and environmental management plan (CEMP) should be implemented in full.				
Noise and vibration	Acoustic (in air)	Otter (<i>Lutra lutra</i>)	Preconstruction survey Otter: If active holt is found NRA (2009) guidance to be followed: <i>"Pre-construction otter surveys should be undertaken prior to the commencement of any works in order to identify any changes in otter activity, holt locations. It is important to ensure that no new holts have been created in the intervening period.</i> <i>Where more than 36 months has elapsed between the time of a statutory approval of a development and the initiation of the construction phase, an appropriate level of resurvey will be required - because the baseline data may have altered during the intervening period. This will allow adjustments to be made to the mitigation strategy specified in the CEMP, where appropriate.</i> <i>No works should be undertaken within 150m of any holts at which breeding females or cubs are present. Following consultation with NPWS, works closer to such breeding holts may take place - provided appropriate mitigation measures are in place, e.g. screening and/or restricted working hours on site.</i> <i>No wheeled or tracked vehicles (of any kind) should be used within 20m of active, but non-breeding, otter holts. Light work, such as digging by hand or scrub clearance should also not take place within 15m of such holts,</i>	No residual effect anticipated.

Source	Pathway	Receptor	Mitigation Measure	Residual effect / Significance of potential impact
			<i>except under licence."</i> Night working should be suspended in areas where otters are thought to be active. A derogation licence is required if for any unforeseen reasons an otter holt has to be disturbed or destroyed. MMO to be employed as per Marine Mammal Risk Assessment in Appendix 3 All construction pits and trenches will be covered outside of construction hours to avoid animals such as Otters becoming trapped within and injured and/or killed. Machinery and equipment should be made safe, or cordoned off with temporary fencing at the end of the working day. Silt curtains will be deployed to contain the silt plume generated by dredge activities.	
Noise and vibration	Acoustic (in air)	Bats	Preconstruction survey: Preliminary Roost Assessment. If bats are found to be present, NPWS must be contacted and works cease immediately until mitigation requirements are assessed. If deemed necessary, works may either be paused until bats vacate the roost, or a derogation license will be sought from NPWS for the removal and relocation of bats, under license by an experienced ecologist and relocated to a bat box.	No residual effect anticipated.
Noise and vibration	Acoustic (in water and in air)	Marine mammals and basking shark	An independent marine mammal observer (MMO) will carry out observations from land and monitor the area for marine mammals during piling and dredging	No significant residual effect

Source	Pathway	Receptor	Mitigation Measure	Residual effect / Significance of potential impact
			operations and implement the NPWS guidelines. The MMO will assume the collective role of protected species observers (PSOs), and will implement NPWS guidelines with regard to basking shark and any other protected megafauna that should occur during works.	anticipated.
Noise and vibration	Acoustic (in water)	Atlantic Salmon	Piling should take place outside of smolt stage (March to May) and spawning season (July to December). If this is not possible due to operational requirements piling will only take place during daylight hours, because migratory movement usually occurs in the hours of darkness. Ramp up procedures as per MMRA will give Salmon in the area 'warning' of works. A bubbler curtain will be used around the immediate area of pile driving in order to reduce noise dispersal into the aquatic environment. A vibrating hammer will be used for pile driving in order to reduce noise generation and propagation.	No significant residual effect anticipated
Silt curtains	Entanglement	Donegal Bay (Murvagh) SAC, marine mammals (cetaceans, harbour seal and Otter), basking shark.	Silt curtains will be deployed around the proposed dredge area prior to the commencement of works. The MMO will be present before and during this activity to ensure that no inquisitive marine mammals/fish get entangled in the curtains.	No residual effect anticipated
Sediment retention ponds	Runoff from Installation	St. John's Point SAC Marine QI's, Donegal Bay (Murvagh) SAC, Donegal Bay SPA. Marine mammals (cetaceans, harbour seal and Otter), basking shark, wildfowl and Atlantic Salmon. Marine environment	Works will be carried out in dry weather and low water where practicable. Portable settlement area can be used if required e.g. siltbuster.	No residual effect anticipated

Source	Pathway	Receptor	Mitigation Measure	Residual effect / Significance of potential impact
Compound: Contamination from hazardous materials - oils, fuels, chemicals. Materials storage, stockpiling.	Run off and spills	St. John's Point SAC Marine QI's, Donegal Bay (Murvagh) SAC, Donegal Bay SPA. Marine mammals (cetaceans, harbour seal and Otter), basking shark, wildfowl and Atlantic Salmon. Marine environment	Spill prevention and spill response procedures will be implemented. The proposed compound location is a dedicated area of hard standing. The compound will be developed for the safe storage of materials: A bunded storage area will be located in a designated area within the compound and will be provided for the duration of the construction period for the storage of oils, fuels, chemical and other hazardous materials. If any oil or fuel is stored in the area, it will be kept in a bunded area (providing 110% capacity of the largest stored unit). Chemicals will have individual separate bunds and storage areas. Associated waste materials will be transported by registered carriers, and disposed of to appropriately licensed sites. Drip trays will be supplied for static machinery. Spill kits will contain 10 terrestrial oil booms (80mm diameter x 1000mm) and a plastic sheet, upon which contaminated soil can be placed to prevent contamination of groundwater. Refuelling of plant/machinery will be undertaken in designated areas on an impermeable surface within the compound area. Refuelling will always be carried out in a controlled manner with absorbent materials available to clean up any spillages. All machinery/equipment will be well serviced and in good working condition. Machinery/equipment will be	No residual effect anticipated

Source	Pathway	Receptor	Mitigation Measure	Residual effect / Significance of potential impact
			inspected daily for leaks of hydrocarbons. Any faulty machinery/equipment will be repaired / replaced immediately. Stockpiles of materials will be located in a designated area. Surface areas of stockpiles will be kept to a minimum to reduce area of surfaces exposed to wind pickup. Where appropriate, windbreak netting/screening will be positioned around material stockpiles and vehicle loading/unloading areas. Stockpiles will be covered during periods of heavy rainfall e.g. impermeable mats (plastic sheeting). During dry or windy weather, material stockpiles and exposed surfaces will be covered. Silt fencing will be established at the toe of stockpiles and around the compound area, as required. Procedures will be set in place to respond to any emergency incidents which may occur on the Site. All appropriate staff will be trained and made aware of the pollution and spill contingency procedures set in place. In the event of an incident the IFI, NPWS, and the Environment Protection Agency will be notified immediately.	
Haulage routes, vehicles and construction traffic	Run off from construction site	St. John's Point SAC Marine QI's, Donegal Bay (Murvagh) SAC, Donegal Bay SPA. Marine mammals (cetaceans, harbour seal and Otter), basking shark, wildfowl and	Designated routes and parking areas will be identified. Vehicles carrying loose soil, aggregate and workings will be sheeted at all times. Appropriately designed vehicles for materials handling will be used. All construction plant and equipment will be maintained	No residual effect anticipated

Source	Pathway	Receptor	Mitigation Measure	Residual effect / Significance of potential impact
		Atlantic Salmon. Marine Environment.	in good working order and not left running when not in use. Regular inspection and cleaning of local roads and site boundaries to check for dust deposits, and removal as required.	
Site preparation removal of dredged materials handling and use in construction.	Sediment plume, run off from construction site.	St. John's Point SAC Marine QI's, Donegal Bay (Murvagh) SAC, Donegal Bay SPA. Marine mammals (cetaceans, harbour seal and Otter), basking shark, wildfowl and Atlantic Salmon. Marine environment.	Prior to construction/ dredging: Designated area for storage of dredge material. Silt fencing on the ground and silt curtains to be installed around the dredge area within the sea. There will not be any sediment / material removal from the site, all sediment/dredge material will be reused and stockpiled if required on site. If not used it will be removed to licensed landfill.	No residual effect anticipated.
Excavation to install pier.	Run off from construction site. Noise.	St. John's Point SAC Marine QI's, Donegal Bay (Murvagh) SAC, Donegal Bay SPA. Marine mammals (cetaceans, harbour seal and Otter), basking shark, wildfowl and Atlantic Salmon. Marine environment.	Large excavation works to be done in dry weather. Excavated material to be loaded onto lorries/dumper truck for immediate reuse or stockpiling in designated area. MMO to be employed as per Marine Mammal Risk Assessment in Appendix 3.	No residual effect anticipated.
Contaminated water.	Run off from construction site. Pollution.	St. John's Point SAC Marine QI's, Donegal Bay (Murvagh) SAC, Donegal Bay SPA. Marine mammals (cetaceans, harbour seal and Otter), basking shark, wildfowl and Atlantic Salmon.	Sediment retention ponds will be used to treat water; this will be appropriately sized to treat the development and will be designed to cope with a 1 in 10 year storm event of 14hour duration. If dewatering is required the water will be pumped to the Sediment retention ponds to allow sediment to settle before water is reused or discharged. A vehicle wash will be connected to the Sediment	No residual effect anticipated.

Source	Pathway	Receptor	Mitigation Measure	Residual effect / Significance of potential impact
		Marine environment.	retention ponds where water will be treated prior to release. All drain inlets that could receive storm water and runoff (outside the site perimeter) from the site will be protected using drain covers, and maintained. During construction the site will be serviced by portaloos. These will be serviced regularly by a licensed contractor.	
Concrete	Run off from construction site. Pollution.	St. John's Point SAC Marine QI's, Donegal Bay (Murvagh) SAC, Donegal Bay SPA. Marine mammals (cetaceans, harbour seal and Otter), basking shark, wildfowl and Atlantic Salmon. Marine environment.	Pouring concrete will not be carried out during periods of heavy rainfall. Premix concrete lorries will deliver all concrete to site, which will be pumped directly into the required area. Vehicles will leave immediately after delivery. Strictly no washing of concrete premix lorries will be permitted on site.	No residual effect anticipated.
Dirty vehicles and equipment	Run off from construction site. Pollution.	St. John's Point SAC Marine QI's, Donegal Bay (Murvagh) SAC, Donegal Bay SPA. Marine mammals (cetaceans, harbour seal and Otter), basking shark, wildfowl and Atlantic Salmon. Marine environment.	A designated wheel wash will be provided as necessary, the water from which will be directed to the Sediment retention pond. A designated area will be allocated for the washing of other equipment; the dirty water from same will be contained and redirected to the Sediment retention pond.	No residual effect anticipated.
Emergency Event	Run off from construction site, Spills, damage to equipment	St. John's Point SAC Marine QI's, Donegal Bay (Murvagh) SAC, Donegal Bay SPA. Marine mammals (cetaceans,	All operatives pre, during and post construction will be made fully aware of the environmental sensitivities in the area and the procedures to follow in the event of an emergency or pollution incident.	No residual effect anticipated.

Source	Pathway	Receptor	Mitigation Measure	Residual effect / Significance of potential impact
		harbour seal and Otter), basking shark, wildfowl and Atlantic Salmon. Marine environment.	If an emergency event should arise (e.g. an extreme weather event), with the capability of generating additional erosion and sediment laden runoff the necessary equipment required in responding to this event will be stored on site. Staff will be trained in the use and application of these temporary emergency measures which may involve: Impermeable matting, silt fences, mulching and portable settlement tanks. In the event of an incident the NPWS and the Environment Protection Agency will be notified immediately.	
Biosecurity				
Importation of Invasive species, disease and pathogens	Importing materials, equipment, machinery, boats	St. John's Point SAC Marine QI's, Donegal Bay (Murvagh) SAC, Donegal Bay SPA. Marine mammals (cetaceans, harbour seal and Otter), basking shark, wildfowl and Atlantic Salmon. Marine environment.	When importing materials from outside a site there is always a risk of importing unwanted elements such as seed or spores from invasive plants for example, Japanese knotweed or Rhododendron. Every effort will be made to ensure imported material is clear of contaminants and comes from a known reliable source. In the coastal / marine environment Works must comply with IFI <i>Guidance on Biosecurity</i> 2010 and CASIE guidelines 2022 <i>Control of Aquatic Invasive Species and the restoration of Natural Communities in Ireland</i> Any plant or machines to be used in the intertidal area will be washed down at a designated offsite location prior to mobilising. All boats, equipment, footwear should be inspected for attached plant or animal material before entering or leaving. If found, it should be removed before entering the intertidal area, and disposed of carefully and should not be discarded in or around the site.	No residual effect anticipated.

Source	Pathway	Receptor	Mitigation Measure	Residual effect / Significance of potential impact
			All equipment, boats and footwear should be cleaned and disinfected (e.g. 1% solution of Virkon® Aquatic or another proprietary disinfectant product) at the water's edge or as soon as possible before/after entering / leaving. If no disinfectant is available, all equipment and clothing should be allowed to dry fully, for at least 24 hours before returning to a watercourse (IFI, 2022).	
Operation	Runoff, Marine activity	St. John's Point SAC Marine QI's, Donegal Bay (Murvagh) SAC, Donegal Bay SPA. Marine mammals (cetaceans, harbour seal and Otter), basking shark, wildfowl and Atlantic Salmon. Marine environment.	Biosecurity protocol (if not already established) at Port Pier.	No residual effect anticipated.

Table 7.3 Mitigation measures for **ALL ECOLOGICAL AND NATURA 2000** aspects of the project

8.0 Residual effects

The project has been assessed in terms of the potential for residual effects which may affect reaching specified targets in the Conservation Objectives for the **relevant qualifying interests of St. John's Point SAC, Donegal Bay (Murvagh) SAC and Donegal Bay SPA**, see appendix 4. All other qualifying interests were screened out (Devlin, 2023).

After mitigation the potential for the project to significantly impact on the following designated sites and Annex species has been removed:

- St. John's Point SAC resulting in effects on Large shallow inlets and bays [1160], Reefs [1170], Submerged or partially submerged sea caves [8330] and Vegetated Sea Cliffs [1230].
- Donegal Bay (Murvagh) SAC (000133), resulting in effects on [1365] Harbour Seal *Phoca vitulina*, in Donegal Bay;
- Donegal Bay SPA (004151), resulting in effects on [A003] Great Northern Diver *Gavia immer* (wintering), [A046] Light-bellied Brent Goose *Branta bernicla hrota* (wintering), [A065] Common Scoter *Melanitta nigra* (wintering), [A144] Sanderling *Calidris alba* (wintering), [A999] Wetlands.
- Annex IV: Marine Mammals, Bats
- Annex II and V: Atlantic Salmon
- Wildlife Act: Basking Shark

Residual impacts pertaining to the project are not anticipated.

9.0 Cumulative impacts

The potential for cumulative impacts to arise from the project proposal is regulated and controlled by the environmental policies and objectives of statutory bodies with a role in the licensing and management of activities in Inver Bay and surrounding area. Activities of note include coastal development, aquaculture and small scale fishing and recreational activities

Donegal County Council; policy NH-P-1 of the County Donegal Development Plan 2018-2024 states the following:

"It is a policy of the Council to ensure that development proposals do not damage or destroy any sites of international or national importance, designated for their wildlife/habitat significance in accordance with European and National legislation including: SACs, Special SPAs, NHAs, Ramsar Sites and Statutory Nature Reserves"

Any existing/proposed plan or project that could potentially affect Natura 2000 sites, in combination with the proposed development, must adhere to the overarching environmental policies of the County Development Plan and Local Area Plans.

These policies aim to ensure the protection of the Natura 2000 sites within the zone of influence of the proposed project and include the requirement for any future plans or projects to undergo Screening for Appropriate Assessment and/or Appropriate Assessment (NIS) to examine and assess their effects on Natura 2000 sites, alone and in combination with other plans and projects.

There are no other planning applications of a similar nature pending in the immediate vicinity of the project area at the time of writing.

In 2021 the Maritime Area Planning Act established a new marine planning system consisting of a new licensing and development management regime from the high water mark to the outer limit of the State's continental shelf, administered by An Bord Pleanála, the coastal local authorities and the Maritime Area Regulatory Authority (MARA).

MARA (under the aegis of the Department of Housing, Local Government and Heritage) facilitates a streamlined consenting process for developers, and a route for developers to the planning system, by assessing applications for Maritime Area Consents (MACs).

An Bord Pleanála and the coastal local authorities are responsible for granting development permissions. Development is subject to a single comprehensive environmental assessment by the relevant planning authority. MACs are required before any planning applications are made, and may be granted following assessment of the applicant and the proposed project. A MAC is required before applying for development in a maritime area; it gives applicant the right to occupy a part of the maritime area, provided all other necessary approvals are secured.

Licenses for Aquaculture in Inver Bay have been issued by the Department of Agriculture, Food and the Marine (DAFM) to include shell fish and fin fish aquaculture. The bay and wider ocean off the northwest coast is used for line and trawl fishing (both Irish and International)(Marineatlas.ie, 2024). Killybegs harbour is the main fishing harbor for the area. Port pier is used by local fishers and fish farming.

In 2012, the Marine Institute was tasked by DAFM, to undertake a series of assessments with regards to the impacts that Ireland's aquaculture practices and operations are having on the Natura 2000 network of sites under Irish control and responsibility. No Anthropogenic impacts were noted in the intertidal or subtidal area of St John's Point SAC (Merc 2012 (a) and (b)).

As part of this NIS assessment, a data request was made to the Marine Institute for recent water sampling and biota sampling results and Laura Brophy of the Marine Institute was consulted regarding same. There are no result of note to cause concern with regard to the results for Water sampling results (2016, 2019 and 2021), or Biota results in 2008, 2009, 2010, 2012 and 2023 (2023, *pers com.* Laura Brophy, 04 July).

Other activities in Inver bay include recreational activities like kayaking and scuba diving. Scuba diving occurs off St. John's point and has been identified as a low ranking pressure / threat to St. John's point SAC.

With regard to the project proposed, it has been determined that, after mitigation, there will be no residual effects on the Natura 2000 sites within the zone of influence of the project. As the proposed development itself will not have any residual effects on the conservation objectives of any Natura 2000 sites; considering the environmental policies outlined above, Marine Institute findings, the existing water quality in the Bay, the temporary nature of the project works, and considering the mitigation measures described in Section 7, there is no potential for the proposed to adversely affect the integrity of any Natura 2000 sites in combination with any other plan or project.

Cumulative impacts are therefore not likely.

10.0 Conclusion

Donegal County Council (DCC) is proposing to construct an extension to Port pier, Inver, Co. Donegal. Works will involve the dredging of 3,500m³ to the south of the existing pier, sheet piling and associated construction works. The project is not within a Natura 2000 site, however a hydrological and acoustic link is considered to exist with St John's Point SAC (000191), Donegal Bay SPA (004145), Donegal Bay (Murvagh) SAC (000133) , as well as with other Annex species frequenting the bay.

Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the qualifying interests of Donegal Bay SPA, the potential impacts, and whether or not the predicted effects would affect the conservation objectives that support the conservation condition of the SCIs, it has been concluded that the proposed development (with mitigation) does not pose a risk of adversely affecting (either directly or indirectly, alone or in combination with other plans or projects) the integrity of Donegal Bay SPA.

Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the qualifying interests of St. John's Point SAC and Donegal Bay (Murvagh) SAC, the potential impacts, and whether or not the predicted effects would affect the conservation objectives that support the conservation condition of the QIs, it has been concluded that the proposed development (with mitigation) does not pose a risk of adversely affecting (either directly or indirectly, alone or in combination with other plans or projects) the integrity of St. John's Point SAC and Donegal Bay (Murvagh) SAC.

It has also been concluded that the proposed development (with mitigation) does not pose a risk of adversely affecting (either directly or indirectly, alone or in combination with other plans or projects) Annex IV, Annex II Annex V species, or species protected under the the Wildlife Act (1976) and amendments (2000-2023).

There are no other Natura 2000 sites, Annex habitats or species at risk of effects from the proposed development.

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Appendix 1 Construction Method Statement

Appendix 2 Geotech Dredged Sediment Analysis Report

Appendix 3 Annex IV Risk Assessment

Appendix 4 Assessment of Residual Effects

Assessment of residual effects on relevant attributes and conservation targets, as per NPWS documentation and appropriate assessment notes (where available) for St. John's Point SAC, Donegal Bay (Murvagh) SAC, Donegal Bay SPA and Annex species.

Conservation Objective	Attribute, Target & Interpretation of target (TNo.) (NPWS, 2015) where available	Mitigation Measures	Residual effect?
St. John's Point SAC			
Objective 1: To maintain the favourable conservation condition of Large shallow inlets and bays	Target 1: The permanent habitat area is stable or increasing, subject to natural processes. This habitat also encompasses the Annex I habitat Reefs. Targets for this habitat should be addressed in its own right. T1: This target refers to activities or operations that propose to permanently remove habitat from the site, thereby reducing the permanent amount of habitat area. It does not refer to long or short term disturbance of the biology of a site. Target 2: Maintain the extent of the maërl-dominated community complex, subject to natural processes. T2: The maërl-dominated community complex is considered to be keystone community that is of considerable importance to the overall ecology and biodiversity of a habitat by virtue its of their physical complexity, e.g. it serves as important nursery grounds for commercial and non-commercial species. Any significant anthropogenic disturbance to the extent of this community complex should be avoided. The area given below is based on spatial interpolation and therefore should be considered indicative: - Maërl-dominated community complex - 23ha Target 3 Conserve the high quality of the maërl-dominated community complex, subject to natural processes. T3. Every effort should be made to avoid any death to living maërl. Any significant anthropogenic	Yes, Construction management plan proposed to include measures in table 7.2 and 7.3. deemed sufficient to protect receiving environment. No risk from dredge material (Geotech, 2024, see appendix 2). No risk to ecology, structure or function of the site.	No residual effect on Objective 1.

Conservation Objective	Attribute, Target & Interpretation of target (TNo.) (NPWS, 2015) where available	Mitigation Measures	Residual effect?
	disturbance to the quality of the maërl-dominated community (i.e. volume of live maërl, thallus structure) should be avoided. Target 5 Conserve the following community types in a natural condition: Intertidal coarse sediment with enchytraeid oligochaetes and <i>Scolecopsis squamata</i> community complex; Sand to mixed sediment with polychaetes and <i>Edwardsia</i> spp. community complex; Intertidal reef community complex; Laminaria-dominated community complex; Subtidal reef with echinoderms and sponges community complex. T5 The estimated areas of these communities given below are based on spatial interpolation and therefore should be considered indicative: - Intertidal coarse sediment with enchytraeid oligochaetes and <i>Scolecopsis squamata</i> community complex - 2ha - Sand to mixed sediment with polychaetes and <i>Edwardsia</i> spp. community complex - 3ha - Intertidal reef community complex – 25ha - Laminaria-dominated community complex – 37ha - Subtidal reef with echinoderms and sponges community complex – 138ha Significant continuous or ongoing disturbance of communities should not exceed an approximate area of 15% of the interpolated area of each community type, at which point an inter-Departmental management review is recommended prior to further licensing of such activities. Proposed activities or operations that cause significant disturbance to communities but may not necessarily represent a continuous or ongoing source of disturbance over time and space may be assessed in a context-specific manner giving due consideration to the proposed nature and scale of activities during the reporting cycle and the particular resilience of the receiving habitat in		

Conservation Objective	Attribute, Target & Interpretation of target (TNo.) (NPWS, 2015) where available	Mitigation Measures	Residual effect?
	combination with other activities within the designated site.		
Objective 2: To maintain the favourable conservation condition of Reefs in St John's Point SAC	Target 1. The permanent area is stable or increasing, subject to natural processes. T1. The area of this habitat represents the minimum estimated area of reef at this site and underestimates the actual area due to the many areas of sheer and steeply sloping rock within the reef habitat. This target refers to activities or operations that propose to permanently remove habitat from the site, thereby reducing the permanent amount of habitat area. It does not refer to long or short term disturbance of the biology of a site. Target 2. The distribution of reefs is stable or increasing, subject to natural processes This target refers to activities or operations that propose to permanently remove reef habitat, thus reducing the range over which this habitat occurs within the site. It does not refer to long or short term disturbance of the biology of reef habitats. Target 3 Conserve the following community types in a natural condition: Intertidal reef community complex; Laminaria-dominated community complex; Subtidal reef with echinoderms and sponges community complex. T3. The estimated areas of the communities within the Reefs habitat given below are based on spatial interpolation and therefore should be considered indicative. In addition, as this habitat contains significant areas of sheer and steeply sloping rock, the mapped community extents will be underestimated: - Intertidal reef community complex – 65ha - Laminaria-dominated community		No residual effect on Objective 2.

Conservation Objective	Attribute, Target & Interpretation of target (TNo.) (NPWS, 2015) where available	Mitigation Measures	Residual effect?
	complex –209ha - Subtidal reef with echinoderms and sponges community complex –595ha This target relates to the structure and function of the reef and therefore it is of relevance to those activities that may cause disturbance to the ecology of the habitat. Significant continuous or ongoing disturbance of communities should not exceed an approximate area of 15% of the interpolated area of each community type, at which point an inter-Departmental management review is recommended prior to further licensing of such activities. Proposed activities or operations that cause significant disturbance to communities but may not necessarily represent a continuous or ongoing source of disturbance over time and space may be assessed in a context-specific manner giving due consideration to the proposed nature and scale of activities during the reporting cycle and the particular resilience of the receiving habitat in combination with other activities within the designated site.		
Objective 3: To maintain the favourable conservation condition of Submerged or partially submerged sea caves in St John's Point SAC	Target 1: The distribution of sea caves occurring in the site is stable, subject to natural processes. The distribution of all sea caves in this SAC has not yet been fully evaluated T1. This target refers to activities or operations that propose to permanently remove sea cave habitat thus reducing the range over which this habitat occurs within the site. It does not refer to long or short term disturbance of the biology of sea cave habitats. Target 2: Human activities should occur at levels that do not adversely affect the ecology of sea caves at the site. T2. This target relates to proposed activities or operations that may		No residual effect on Objective 3.

Conservation Objective	Attribute, Target & Interpretation of target (TNo.) (NPWS, 2015) where available	Mitigation Measures	Residual effect?
	result in the deterioration of key resources (e.g. water quality) that are likely to drive or influence community structure of sea caves in the site. In the absence of complete knowledge on these elements in this site, such considerations should be assessed where appropriate on a case-by-case basis. Target 3: Conserve the following community type in a natural condition: Laminaria-dominated community complex. T3: The estimated area of this community complex within the Submerged or partially submerged sea caves habitat is unknown but is likely to cover any available hard substrate. This target relates to the structure and function of the reef and therefore it is of relevance to those activities that may cause disturbance to the ecology of the habitat. Significant continuous or ongoing disturbance of communities should not exceed an approximate area of 15% of the interpolated area of each community type, at which point an inter-Departmental management review is recommended prior to further licensing of such activities. Proposed activities or operations that cause significant disturbance to communities but may not necessarily represent a continuous or ongoing source of disturbance over time and space may be assessed in a context-specific manner giving due consideration to the proposed nature and scale of activities during the reporting cycle and the particular resilience of the receiving habitat in combination with other activities within the designated site.		
[1230] Vegetated Sea Cliffs	The National survey and assessment of the conservation status of Irish sea cliffs, state that the vegetated sea cliffs at St. John's point are at favourable conservation status.	Yes, See table 7.3 Biosecurity measures to avert inadvertent spread of invasive to vegetated sea cliffs.	No residual effect on Vegetated Sea Cliffs.
Donegal Bay (Murvagh)SAC			

Conservation Objective	Attribute, Target & Interpretation of target (TNo.) (NPWS, 2015) where available	Mitigation Measures	Residual effect?
Objective 1: To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide in the Donegal Bay (Murvagh) SAC.	Target 1: The permanent habitat area is stable or increasing, subject to natural processes. T1: refers to activities or operations that propose to permanently remove habitat from a site, thereby reducing the permanent amount of habitat area. It does not refer to long or short term disturbance of the biology of a site. Target 2: Conserve the following community types in a natural condition: Estuarine fine sands dominated by polychaetes and oligochaetes community complex; and Intertidal muddy sand to sand dominated by polychaetes, bivalves and crustaceans community complex. T2: Significant continuous or ongoing disturbance of communities should not exceed an approximate area of 15% of the interpolated area of each community type. Proposed activities or operations that cause significant disturbance to communities but may not necessarily represent a continuous or ongoing source of disturbance over time and space may be assessed in a context-specific manner giving due consideration to the proposed nature and scale of activities during the reporting cycle and the particular resilience of the receiving habitat in combination with other activities within the designated site.	No, sufficient distance from project location No S-P-R considered to exist.	No residual effect on T1. No residual effect on T2.
Objective 2: To maintain the favourable conservation condition of harbour seal in Donegal Bay (Murvagh) SAC.	Target 1: Species range within the site should not be restricted by artificial barriers to site use. T1. This target may be considered relevant to proposed activities or operations that will result in the permanent exclusion of harbour seal from part of its range within the site, or will permanently prevent access for the species to suitable habitat therein. It does not refer to short-term or temporary restriction of access or range. Target 2: The breeding sites should be	Yes, See table 7.3 Mobile species likely to frequent the area. MMO as per NPWS guidelines.	No residual effect on T1. No permanent exclusion.

Conservation Objective	Attribute, Target & Interpretation of target (TNo.) (NPWS, 2015) where available	Mitigation Measures	Residual effect?
	maintained in a natural condition. T2: This target is relevant to proposed activities or operations that will result in significant interference with or disturbance of (a) breeding behaviour by harbour seal within the site and/or (b) aquatic/terrestrial/intertidal habitat used during the annual breeding season. Operations or activities that cause displacement of individuals from a breeding site or alteration of natural breeding behaviour, and that may result in higher mortality or reduced reproductive success, would be regarded as significant and should therefore be avoided. Target 3: The moult haul-out sites should be maintained in a natural condition. T3: This target is relevant to proposed activities or operations that will result in significant interference with or disturbance of (a) moulting behaviour by harbour seal within the site and/or (b) aquatic/terrestrial/intertidal habitat used during the annual moult. Operations or activities that cause displacement of individuals from a moult haul-out site or alteration of natural moulting behaviour to an extent that may ultimately interfere with key ecological functions would be regarded as significant and should therefore be avoided. Target 4: The resting haul-out sites should be maintained in a natural condition. T4: This target is relevant to proposed activities or operations that will result in significant interference with or disturbance of (a) resting behaviour by harbour seal within the site and/or (b) aquatic/terrestrial/intertidal habitat used for resting. Operations or activities that cause displacement of individuals from a resting haul-out site to an extent that may ultimately interfere with key ecological functions would be		No residual effect on T2, T3, T4. Project located away from SAC and other haul out sites.

Conservation Objective	Attribute, Target & Interpretation of target (TNo.) (NPWS, 2015) where available	Mitigation Measures	Residual effect?
	regarded as significant and should therefore be avoided. Target 5: Human activities should occur at levels that do not adversely affect the harbour seal population at the site. T5: Proposed activities or operations should not introduce man-made energy (e.g. aerial or underwater noise, light or thermal energy) at levels that could result in a significant negative impact on individuals and/or the population of harbour seal within the site. This refers to both the aquatic and terrestrial/intertidal habitats used by the species in addition to important natural behaviours during the species' annual cycle. This target also relates to proposed activities or operations that may result in the deterioration of key resources (e.g. water quality, feeding, etc) upon which harbour seals depend. In the absence of complete knowledge on the species ecological requirements in this site such considerations should be assessed where appropriate on a case-by-case basis. Proposed activities or operations should not cause death or injury to individuals to an extent that may ultimately affect the harbour seal population at the site.		No significant residual effect on T5. MMO to operate as per NPWS guidelines. .
Donegal Bay SPA			
Objective 1: To maintain the favourable conservation condition of the waterbird Special Conservation Interest species listed for SPA.	Target 1: The long term population trend for each waterbird Special Conservation Interest species should be stable or increasing. There should be no significant decrease in the range, timing or intensity of use of areas by the waterbird species of Special Conservation Interest, other than that occurring from natural patterns of variation. T1: Waterbird populations are deemed to be unfavourable when they have declined by 25% or more, as assessed by the most recent population trend analysis.	Yes, mitigation measures proposed to protect the receiving marine environment during construction and operation. Ramp up procedures to 'warn' of works See Table 7.3 for full details on mitigation measures.	No residual effect on T1: Works outside SPA.

Conservation Objective	Attribute, Target & Interpretation of target (TNo.) (NPWS, 2015) where available	Mitigation Measures	Residual effect?
Objective 2: To maintain the favourable conservation condition of the wetland habitat at Donegal Bay SPA as a resource for the regularly-occurring migratory waterbirds that utilise it.	Target 1: The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 10,461 ha, other than that occurring from natural patterns of variation. T1: The boundary of this SPA includes the core wetland area known as Donegal Bay. Objective 2 seeks to maintain the permanent extent of this wetland habitat, which constitute an important resource for regularly-occurring migratory waterbirds. The maintenance of the 'quality' of wetland habitat lies outside the scope of Objective 2. However, for the species of Special Conservation Interest, the scope of Objective 1 covers the need to maintain, or improve where appropriate, the different properties of the wetland habitats contained within the SPA.		No residual effect on T2: The boundary/extent of the SPA will not be affected by the proposal.
Other Annex Species			
	Cetaceans, and Basking Sharks	Yes , see table 7.2 and 7.3, MMO	No significant residual effects
	Otter	Yes, Preconstruction survey, MMO	No residual effects
	Bats	Yes, preconstruction survey.	No residual effects
	Atlantic Salmon	Yes, see table 7.3	No significant residual effects

Table 1. Assessment of residual effects on attributes and conservation targets, as per NPWS documentation and appropriate assessment notes (where available) for St. John's Point SAC, Donegal Bay (Murvagh) SAC, Donegal Bay SPA and Annex Species.