# Annex IV Risk Assessment Proposed extension of Port Pier, Inver, Co. Donegal

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for

**Donegal County Council** 

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#### 1.0 Introduction

This Annex IV Risk Assessment Report has been prepared by Jessica Devlin MSc. Project Management and Environmental Services, on behalf of Ayesa for Donegal County Council for the purpose of obtaining statutory permissions pertaining to proposed extension of Port Pier, Inver, Co. Donegal.

EU countries must establish systems of strict protection for animal and plant species which are particularly threatened, and which are listed in Annex IV of the Habitats Directive. Article 12 and 13 of the Habitats Directive relates to the establishment of a system of strict protection for certain animal and plant species, while Article 16 provides for derogations from these provisions under limited circumstances. Article 12, 13 and 16 of the Habitats Directive are transposed into Irish law by Regulation 51, 52 and 54 of the Birds and Habitats Regulations of 2011, respectively.

The animal species listed in Annex IV, which occur in Ireland, are:

- the otter
- all bat species
- all cetaceans (whales and dolphins)
- the natterjack toad
- marine turtles
- the Kerry slug

The plant species listed in Annex IV, which occur in Ireland, are:

- the Slender Naiad
- Yellow Marsh Saxifrage
- the Killarney Fern

Each of these species is strictly protected in Ireland and a person who deliberately captures, kills or disturbs a specimen in the wild, or who damages or destroys a breeding site or resting place of such an animal, is guilty of an offence.

As an Annex IV species may be found throughout the country, the protection of these species is not restricted in geographical terms and is not necessarily associated with areas subject to a specific nature designation.

This risk assessment is intended to comply with the provisions of Article 12 of the Habitats Directive in relation to the protection afforded to relevant Annex IV species; it appraises proposed activities, for the Port Pier Extension Inver, Co. Donegal. It also proposes mitigation measures where there is a possibility of interactions with bats, testudines (marine turtles) and cetaceans (whales, dolphins and porpoises), seals (pinnipeds), Otter (Lutra lutra) basking sharks (Cetorhinus maximus). A Marine Mammal Risk Assessment can be seen in Appendix 1.

# 2.0 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 south 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 49.9m x 10.1m in an easterly direction. An additional area of approximately  $1121m^2$  behind the existing pier will be reclaimed using predominantly dredged material. Information was provided by DCC and Ayesa describing how works will be implemented with site layout drawings, see figure 2.1 and 2.2. A construction method statement 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...."

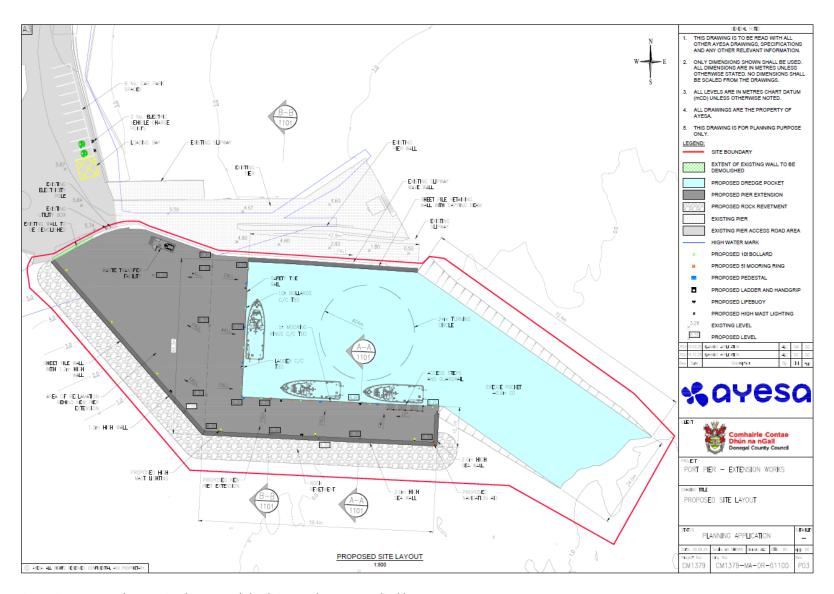


Figure 2.1 Proposed extension layout and dredging pocket, as supplied by Ayesa.



Figure 2.2 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.

# Operation

Operational activities at the pier will not differ significantly from current day. Effects from the operational phase are not anticipated, it is a small rural pier of low intensity activity and do not require further assessment (Devlin 2023).

# 3.0 Guidance and data sources

Collins, J. (ed.) (2023) Bat surveys for professional ecologists: Good practice guidelines (4<sup>th</sup> edition). The Bat Conservation Trust London. ISBN 978-1-7395126-0-6.

European Commission (2021) Brussels, 12.10.2021 C(2021) 7301 final Commission notice Guidance document on the strict protection of animal species of Community interest under the Habitats Directive.

Department of Housing, Local Government and Heritage (2021) Guidance on the Strict Protection of Certain Animal and Plant Species under the Habitats Directive in Ireland. National Parks and Wildlife Service Guidance Series 1.

Mullen, E., Marnell, F. & Nelson, B. (2021) *Strict Protection of Animal Species*. National Parks and Wildlife Service Guidance, No. 2. National Parks and Wildlife Service, Department of Housing. Local Government and Heritage.

CIEEM (2013) Competencies for Species Survey: Eurasian Otter.

Online data available on European sites and protected habitats/species as held by the National Parks and Wildlife Service (NPWS) from www.npws.ie, including conservation objectives documents and Article 17 data.

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

Online data available on Irish Whale and Dolphin Group members page.

List not exhaustive see section 11 for full list of references and sources.

# 4.0 Annex IV species in the project area

The site was assessed for the likelihood of presence of Annex IV species in and around the project location

Annex IV species	Habitat or species Present/ Absent
Otter (lutra lutra)	No suitable habitat present for breeding/resting – potential for commuting and foraging.
All bat species	Low potential suitability for roosting habitats in small stone barn and 1 sycamore tree. c. 50m from construction works. Negligible habitat in stone ruins behind the site.  Low potential suitability for commuting and foraging.  No signs of Bats were noted at the time of site visit.
All cetaceans (whales and dolphins)	Yes – see Appendix 1 for details of Marine Mammals recorded within 20Km of the site.
The natterjack toad	Not present.
Marine turtles	Not likely to be present. IWDG data 2013 – 2022: no marine turtles recorded within 20km of project location.
The Kerry slug	Not present.
The Slender Naiad	No suitable habitat – not present.
Yellow Marsh Saxifrage	No suitable habitat – not present.
The Killarney Fern	No suitable habitat – not present.

Site visits were carried out on 25 April 2023. The species most likely to be present are Otter, Bats and cetaceans, these are discussed further in section 5.0, 6.0 and 7.0.

# 5.0 Otter

Otter (*Lutra lutra*), and their breeding and resting places, are protected under the Wildlife Acts. Otter are also listed on Annex II and Annex IV of the EU Habitats Directive. Otter was previously listed as "near threatened" in Ireland in the Ireland (Marnell *et al.*, 2009), however following a revised assessment in Marnell *et al.* (2019) its conservation status is now listed as "least concern". It is believed that this is due to population recovery (Marnell *et al.*, 2019) and Ireland is a stronghold for Otter, and they are widespread and relatively common throughout the island (Reid et al., 2013).

Assessment of suitable Otter habitat in the area surrounding the project site was carried out to determine Otter activity (if any). The identification of spraint and holts is the standard method for determining Otter activity in a particular area. Footprints can be used as an indicator of activity if the conditions are right for leaving prints. Suitable habitat a distance of 150m surrounding the proposed development site was surveyed to ensure breeding holts were not in the project vicinity (NPWS, 2009). Potential habitat was not identified and repeat surveys of potential Otter habitat were not deemed necessary. No mitigation with respect to habitat loss required.

The number of Otter sightings in the area is low, see appendix 1, with none in recent years; however it is possible they commute and forage around the area. Activity (if any) is likely to be occasional. Though the risk is low, disturbance, displacement and potential hearing injury from loud construction activities like piling are possible if otter are in the vicinity of works, see MMRA appendix 1.

In general, according to NRA guidance 2009, disturbance effects from construction would not be expected to extend beyond 150m. Otter are largely nocturnal species and may be impacted by noise or vibration during the day if they are resting in the area when construction is ongoing.

Being inquisitive animals, they may investigate the work site, or conversely, they may be alarmed and be diverted from their normal paths on to a more dangerous route to avoid the construction site. As a result there are many possible hazards that could be fatal to animals such as being hit by or caught in machinery.

If Otter are in the vicinity of dredge works increased turbidity in the immediate area may cause some difficulty for Otter.

During operation, activities at the pier are not likely to have a significant effect on Otter. Unpublished observations by Kruuk and colleagues indicate that Otters will rest under roads, in industrial buildings, close to quarries, and at other sites close to high levels of human activity. These observations clearly indicate that 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). Potential effects of the project in the operational phase, alone or in combination with others, in terms of disturbance or displacement are not significant.

# Mitigation to avoid effects from disturbance and displacement during construction

MMO to be employed as per Marine Mammal Risk Assessment in Appendix 1.

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 to be deployed around the dredge area.

#### Residual effects on Otter

Following the implementation of mitigation measures, there are no residual effects on Otters arising from the proposed development, either alone or in combination with other plans or projects. The conservation status of Otter will not be affected in any away.

See MMRA appendix 1 for further detail.

#### **6.0** 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.

Information was collected to determine the need for Bat surveys.

Google Maps satellite imagery was used to assess the value of the surrounding habitat for bats in the area at a landscape scale (5km), including any potentially important habitat corridors (linear habitat features), feeding grounds or potential roost opportunities, such as large expanses of woodland. The features and habitats immediately surrounding the site (local area) were also assessed at a finer scale as these influence the likely presence of bats within the project site.

Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape were applied according to professional judgment.

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 due to the location; 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 native 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.

It was concluded that overall the site was of negligible to low suitability in terms of roost potential and commuting and foraging potential see table 6.1. 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. However if small numbers of bats or itinerary bats were present during construction they could be disturbed during activities such as piling, which has the potential to cause significant noise and vibration.

# Mitigation to avoid effects from disturbance and displacement or Bats during construction

As a precaution a preconstruction survey should be undertaken to ensure bats are not present prior to the commencement of construction, in particular loud activities such as piling. 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. Bat boxes if required should follow guidance from Bat Conservation Ireland (2015). Bats & Bat Boxes: Guidance Notes for Agrienvironmental Schemes. August 2014. Updated January 2015.

#### Residual effects on Bats

Following the implementation of mitigation measures, there are no residual effects on Bats arising from the proposed development, either alone or in combination with other plans or projects. The conservation status of Bats will not be affected in any away.

Suitability	Description Roosting habitats	Commuting and foraging habitats
None	No habitat features on site likely to be used by any roosting bats at any time of the year. (i.e. complete absence of all crevices / suitable shelter at all ground / underground levels).	No habitat features on site likely to be used by commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade protection for flight lines or generate / shelter insect populations available to foraging bats).
Negligible	No obvious habitat features on site likely to be used by roosting bats; however a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.	used by commuting or foraging bats; however
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic coo/stable hibernation site, but could be used by individual hibernating bats).  A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat.  Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	commuting such as lines of trees and scrub or linked back gardens.

High	A structure with one or more potential roost	Continuous, high-quality habitat that is well
	sites that are obviously suitable for use by	connected to the wider landscape that is likely
	larger numbers of bats on a more regular	to be used regularly by commuting bats such
	basis and potentially for longer periods of	as river valleys, streams, hedgerows, lines of
	time due to their size, shelter, protection,	trees and woodland edge.
	conditions and surrounding habitat. These structures have the potential to support high conservation status roosts e.g. maternity of classic cool/stable hibernation sites.	High-quality habitat that is well connected to
		Site is close to and connected to known roosts.
		<u> </u>

Table 6.1 Guidelines for assessing the potential suitability of proposed development sites for bats (Collins, 2023).

# 7.0 Cetaceans and basking sharks

In Ireland, cetaceans (whale, dolphins and porpoises) 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 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*), 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 willfully interfere with, disturb or destroy the resting or breeding place of a protected species (except under license or permit from the Department).

New regulations giving legal protection to basking sharks mark a huge step forward in conserving the globally threatened species. As of October 3rd 2022, basking sharks in Irish waters are legally protected under Section 23 of Ireland's Wildlife Act.

There is a large amount of marine mammal activity in the wider area around Inver Bay, St. John's Point, McSwynes Bay and Donegal Bay. Based on the number of sightings for the region and the type of works proposed (dredging and piling), in the absence of mitigation, it is possible that the project could directly affect marine mammals in the area. A detailed Marine Mammal Risk Assessment can be seen in Appendix 1.

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

Table 7.1 Breakdown of individual cetaceans and basking sharks recorded within 20km of the project area 2013-2022 by species, in descending order. Data provided by Irish Whale and Dolphin Group.

As with marine mammals there is potential to impact basking sharks during construction works. According to IWDG data from 2013 to 2022, 41 individual basking sharks have been sighted in the 20kms around the project location, see figure 7.1.

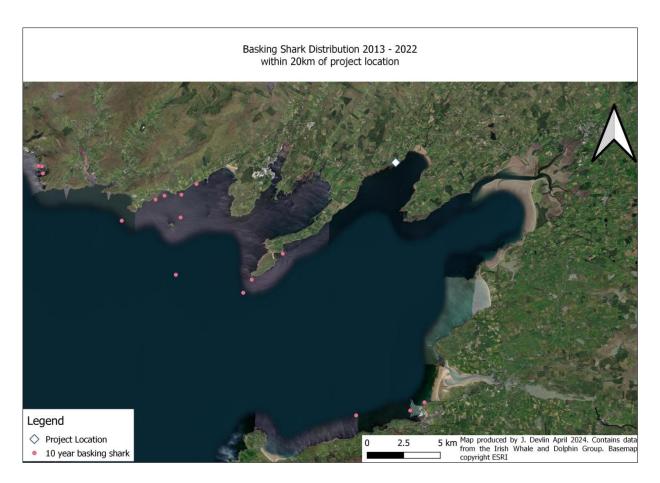


Figure 7.1 Map of basking shark distribution in and around Inver Bay, St. John's Point, McSwynes Bay and Donegal Bay 2013-2022. Data provided by the Irish Whale and Dolphin Group.

Basking sharks have not been sighted within the last decade within 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.

The Port Pier extension proposal is a small scale project of relatively short duration (c. 6 months). There is no ongoing dredging proposed, and the quantities of dredge materials are small, 3,500m3. Works will take place in the dry for the most part, and dredge material will be used in the construction of the pier or removed to landfill. The project is not in close proximity to marine mammal breeding or haul out sites.

#### Mitigation to avoid effects from disturbance, displacement and injury of marine mammals and basking shark

As discussed in the MMRA, Appendix 1, it is recommended to adopt the NPWS guidelines. An independent marine mammal observer (MMO) will carry out observations from land and monitor the area for marine mammals during piling and dredging operations and implement the NPWS guidelines.

#### Residual effects on marine mammals and basking shark

The proposed works, with mitigation, are considered unlikely to present a risk to marine mammals. 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, as stated in the Marine Mammal Risk Assessment Appendix 1 of this report. No significant residual effects anticipated.

# 8.0 Water quality

Dredge material has been sampled and analysed (see Causeway Geotech (2024) 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 higher criteria than that for landfill.

# Mitigation to avoid water quality effects

Without mitigation there is potential for pollution from the construction site to impact on marine Annex IV species and prey availability.

A construction method statement has been prepared which includes mitigation measures to mitigate potential pollution risks to include silt curtains, sediment retention ponds, spill prevention and spill response procedures.

The mitigation measures in the construction method statement will provide adequate protection in terms of construction and operation phase water quality effects. A full suite of measures is included in section 7 of the Natura Impact Statement.

# Residual effects on water quality

Following the implementation of measures to avoid effects on water quality, there are no residual effects on Annex IV species or basking shark arising from the proposed development, either alone or in combination with other plans or projects.

# 9.0 Assessment of significance

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.

The Annex IV species which are most likely to occur within the zone of influence of the project have been assessed: these include Otter, bats, cetaceans and basking shark. While there is some risk of disturbance, displacement and auditory injury from the project, mitigation is sufficient to negate potential impacts and effects. These are summarised in tables 9.1 and 9.2. Potential pollution risks are also mitigated against in the construction method statement, and section 7 of the NIS. Residual impacts from the project are not anticipated.

# 9.1 Mitigation Measures

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 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 9.1 Preconstruction surveys

Source	Pathway	Receptor	Mitigation Measure	Residual effect / Significance of potential impact
			Preconstruction survey  MMO to be employed as per Marine Mammal Risk Assessment in Appendix 1	
Construction dredging and piling	Construction site and Marine	Otter	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.	No residual impact anticipated.
	environment		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	No residual impact anticipated.
Noise and vibration	Acoustic (in water and in air)	Cetaceans 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 operations and implement the	No residual impact anticipated

Source	Pathway	Receptor	Mitigation Measure	Residual effect / Significance of potential impact
			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.	
Construction site	Runoff	Marine environment	Construction management plan should be implemented in full. See section 7 of NIS for full suite of measures.	No residual impact anticipated.

Table 9.2 Source - Pathway - Receptor relationship with ANNEX IV species, mitigation measures and potential for residual effects.

# 10.0 Conclusion

The proposed extension of Port Pier, Inver, Co. Donegal has been assessed in terms of its risk to Annex IV species in the vicinity of the project, and its ability to impact significantly on them. It has been concluded that with mitigation there will be no residual effects on the Annex IV species that are likely to occur; namely Otter, Bats and cetaceans. Basking shark (after mitigation) will also not suffer any residual effects from the project.

#### 11.0 References

European Commission (2021) Brussels, 12.10.2021 C(2021) 7301 final Commission notice Guidance document on the strict protection of animal species of Community interest under the Habitats Directive

Department of Housing, Local Government and Heritage (2021) Guidance on the Strict Protection of Certain Animal and Plant Species under the Habitats Directive in Ireland. National Parks and Wildlife Service Guidance Series 1.

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Appendix 1 Marine Mammal Risk Assessment