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DUBLIN PORT COMPANY

Dublin Harbour Capital Dredging
Application for Derogation under Regulation 54 European Communities
(Birds and Habitats) Regulations 2011



Dublin Harbour Capital
Dredging
F01
22 May 2026

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REPORT

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1 BACKGROUND

1.1 Previous Derogations

This proposal seeks derogations under Regulation 54 of European Communities Birds and Natural Habitats Regulations 2011, as amended to allow Dublin Port Company to undertake dredging activities consented under the Foreshore Act, 1933 (Ref: FS007164) as part of the Dublin Harbour Capital Dredging (DHCD) Project. FS007164 commenced on 13th December 2023, and remains in force for a period of 8 years. The Dumping at Sea Permit issued by the EPA (S0033-01) on 17th December 2024 permits capital dredging in Dublin Harbour during the winter months (October to March), and the proposed DHCD works will be completed over a number of winter seasons. The first dredging campaign as part of the DHCD Project was completed in Q1 2026.

Derogations in relation to this Project in respect of Annex IV marine species have previously been granted by National Parks and Wildlife Service:

- DER-CET-2025-06 (1st January to 31st December, 2025)
- DER-OTTER-2025-15 (1st January to 31st December, 2025)
- DER-CET-2026-01 (1st January to 31st March, 2026)
- DER-OTTER-2026-01 (1st January to 31st March, 2026)

Returns Forms and all required documents have been submitted in relation to the above derogations on completion of the works authorised by the relevant derogations.

This current proposal seeks to secure the required derogations for the next phase of the Dublin Harbour Capital Dredging Project for relevant Annex IV marine species to cover the winter dredging season during the period **October 2026 to March 2027 inclusive**.

1.2 Project Context

The Dublin Port Masterplan 2040 was first published in 2012 and was reviewed in 2018. The Dublin Port Masterplan 2040 presents a vision for future operations at the Port in order to plan for sustainable growth and changes in facilitating seaborne trade in goods and passenger movements to and from Ireland and the Dublin Region in particular. The Masterplan is being implemented through a series of capital development projects.

The Alexandra Basin Redevelopment (ABR) Project is the first major strategic infrastructure development project from Dublin Port's Masterplan 2040, involving the construction of approximately 3km of quay walls, deepening of the harbour basin and channel to accommodate larger sea going vessels as well as works associated with the conservation of the port's Victorian industrial heritage. An Coimisiún Pleanála (ACP – formerly An Bord Pleanála) granted a 10 year permission for the ABR Project on 8th July 2015 (Ref: 29N.PA0034) and works commenced in November 2016.

The MP2 Project is the second strategic infrastructure development project from the Masterplan. It focuses on the use of existing port lands at the eastern end of the North Port estate. When complete, it will provide additional capacity for almost one-third of the projected increases in Dublin Port's Ro-Ro and Lo-Lo traffic to 2040. ACP granted Planning Permission for the MP2 Project 1 July 2020 (ABP-304888-19) and works commenced in 2022.

The third and final strategic infrastructure development project to complete the Dublin Port Masterplan 2040 is the 3FM Project, which is focused on developing additional port capacity on port owned brown-field lands on the Poolbeg Peninsula. An application for planning permission is currently lodged with ACP.

The Dublin Harbour Capital Dredging Project supports the Masterplan infrastructure projects by bringing forward key elements of the capital dredging works required to create the required depth of the navigation channel, basins and berthing pockets to allow for the safe passage and berthage of vessels of deeper draught

expected to visit Dublin Port. Consent under Sections 3 and 10 of the Foreshore Act, 1933 (as amended) has been granted to Dublin Port Company by the Minister of Housing, Local Government and Heritage for the purpose of these capital dredging operations (Ref: FS007164). The Foreshore Consent is granted with conditions attached and Condition 31.8 (Section 3) requires that the Licensee shall:

“Ensure that loading and dumping of dredge spoil and Material shall not commence until the Licensee obtains a derogation under Regulation 54 of the European Communities Birds and Natural Habitats Regulations 2011, as amended”.

Regulation 54 provides for issue of a derogation licence in respect of compliance with the requirements of Regulations 51 (strict protection of Annex IV animals), 52 (strict protection of Annex IV Plants) and 53 (taking of Annex V fauna and flora).

Only the provisions of Regulation 51 are relevant to this derogation application. Strict protection as set out in Regulation 51 states that a person who in respect of the species referred to in *Part 1* of the *First Schedule*:

- (a) deliberately captures or kills any specimen of these species in the wild,
- (b) deliberately disturbs these species particularly during the period of breeding, rearing, hibernation and migration,
- (c) deliberately takes or destroys eggs of those species from the wild,
- (d) damages or destroys a breeding site or resting place of such an animal, or
- (e) keeps, transports, sells, exchanges, offers for sale or offers for exchange any specimen of these species taken in the wild, other than those taken legally as referred to in Article 12(2) of the Habitats Directive,

shall be guilty of an offence.

Regulation 51 applies to fauna listed in Part 1 of the First Schedule i.e. all species listed in Annex IV of the Habitats Directive. The relevant Annex IV species that occur in Ireland’s marine waters include:

- All Irish cetaceans (whales, dolphins, and porpoise);
- Eurasian otter; and,
- All marine turtles.

All species listed under Annex IV with the potential to be impacted by the Dublin Harbour Capital Dredging Project are assessed below. Ecological surveys have been undertaken to assess the local populations of these species, the locations frequented, and the frequency at which they occur, and the findings are presented below.

Strict protection of these species has been central to the planning, design and development of the Dublin Harbour Capital Dredging Project from its inception. Key relevant studies, and supporting environmental and ecological information that provide a basis for this proposal and decision making process, and on which the text draws heavily include:

- Dublin Harbour Capital Dredging Project – EIAR (Dublin Port Company, 2021a)
- Dublin Harbour Capital Dredging Project - Screening for Appropriate Assessment & Natura Impact Statement (Dublin Port Company, 2021b)
- Dublin Port Masterplan (including the 2018 review) and the related Strategic Environmental Assessment (SEA) and Natura Impact Statement (NIS) in conjunction with the Environmental Impact Assessment Report
- Alexandra Basin Redevelopment Management Plan (ABR) Strategic Environmental Assessment (SEA) and Natura Impact Statement (NIS) in conjunction with the Environmental Impact Assessment Report.
- MP2 Strategic Environmental Assessment (SEA) and Natura Impact Statement (NIS) in conjunction with the Environmental Impact Assessment Report
- Annex IV Risk Assessment – Dublin Harbour Capital Dredging Project Foreshore Consent Application Ref. No. FS007164. Report to Department of Housing, Local Government and Heritage. Hartley Anderson Ltd, August 2022
- Harbour Porpoise SAC Survey (Berrow and O’Brien 2013)
- ABR & MP2 Marine Mammal monitoring surveys and reports (2016 – 2025)

- Ecological Survey for Otter and Badger (RPS, 2025a)
- Dublin City Otter Survey - An Action of the Dublin City Biodiversity Action Plan 2015-2020. Triturus Environmental Ltd. for Dublin City Council (August 2019)
- Marine Mammal Monitoring – Visual and acoustic monitoring in ABR and MP2 Dredging Campaign Reports (IWDG, 2016-2024)
- Strict Protection of Animal Species – Guidance for Public Authorities on the Application of Articles 12 and 16 of the EU Habitats Directive to development/works undertaken by or on behalf of the Public Authority. NPWS Guidance Series 2, 2021
- Guidance on the Strict Protection of Certain Animal and Plant Species under the Habitats Directive in Ireland. National Parks and Wildlife Guidance Series 1. DHLGH, 2021
- NPWS Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters – January 2014. DAHG, 2014
- Doyle, T.K. (2007). Leatherback Sea Turtles (*Dermochelys coriacea*) in Irish waters. Irish Wildlife Manuals No. 32. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin, Ireland.

The proposal below follows the decision making process set out in NPWS Guidance on Strict Protection of Animal Species (2021):

- Stage 1 – Use of existing information to establish probability of the protected animal being present in the area affected by the works
- Stage 2 - Ecological Survey
- Stage 3 – Examination of impacts and satisfactory alternatives
- Stage 4 – Application for Regulation 54 Derogation Licence

2 STAGE 1 - USE OF EXISTING INFORMATION TO ESTABLISH PROBABILITY OF THE PROTECTED ANIMAL BEING PRESENT IN THE AREA AFFECTED BY THE DUBLIN HARBOUR CAPITAL DREDGING WORKS

2.1 Project Description

Dublin Port is the largest Port in Ireland. The Northern Lands and Southern Lands of Dublin Port (Dublin Port Estate) comprise an area of 265 ha of land entirely within the ownership of Dublin Port Company. The entire Port Estate comprises 309 ha, including the lands at the Dublin Inland Port.

The proposed Dublin Harbour Capital Dredging Project comprises capital dredging works within the Dublin Harbour area of Dublin Port. The proposed area to be dredged is in the western upstream section of the inner Port area, lying entirely within the Foreshore of the inner Liffey Channel between the Northern Lands of Dublin Port and the Southern Lands of Dublin Port (Figure 1). Until recently, Dublin Port's navigation channel and fairway was maintained to a standard depth of -7.8m CD. The main navigation channel between the Western Oil Jetty and Dublin Bay has now been deepened to -10.0m CD under the permitted Alexandra Basin Redevelopment (ABR) Project (ABP Ref. 29N.PA0034) to enable the safe passage of larger vessels bringing freight and passengers to and from the Port.

The proposed capital dredge area for which Foreshore Consent FS007164 has been granted subject to conditions, is defined by the 'red line' boundary illustrated in Figure 1. The site area is 27 ha (excluding the area of the licenced offshore disposal site).

As illustrated in Figure 1, the Dublin Harbour Capital Dredging Project consists of the following elements:

- Deepening of the navigation channel from -7.8m CD to -10.0m CD between the North Wall Quay Extension and the Western Oil Jetty, including deepening of riverside Berth 35 (Ocean Pier) to -10.0m CD and widened to 50m.
- Deepening of Alexandra Basin East from -7.8m CD to -10.0m CD with Berths 36 and 37 widened to 50m and Berths 38, 39 and 40 deepened to -11.0m CD and widened to 50m.
- Deepening of the Oil Basin from -7.8m CD to -10.7m CD with Berths OB1 and OB2 widened to 50m.
- Deepening of the Ferryport Basin from -7.8m CD to -10.0m CD.
- Widening of South Port Berths 42, 43, 44, 45, 46 and 47 to 50m.
- Removal of ridge between the navigation channel and the Poolbeg Oil Jetty (Berth 48) to -10.0mCD.

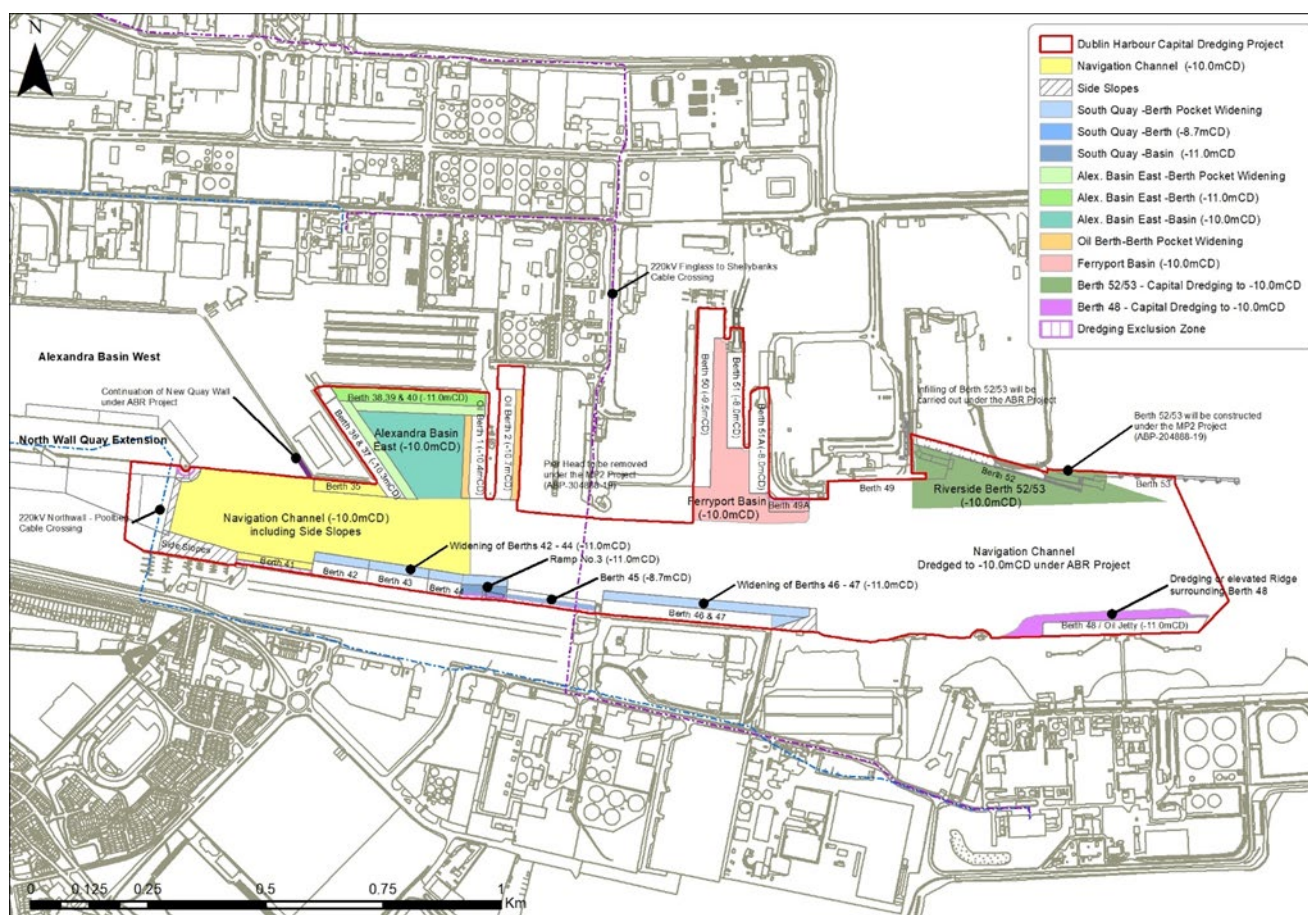


Figure 1 Dublin Harbour Capital Dredging Project Site Location Map

The total dredge volume is estimated to be 500,000m³. The material to be dredged comprises clays, silts, sands and gravels with occasional cobbles. No dredging of rock is required. Capital dredging operations are restricted to the winter seasons (October to March) and will be spread over a number of years. The Foreshore Licence (FS007164) has a term of 8 years from the date of execution, 13th December 2023. The Dumping at Sea Permit (S0033-01) has an execution date of 17th Dec 2024, and ends 31st March 2030. This derogation application is aligned with the permitted periods.

The capital dredging works will be carried out using a trailing suction hopper dredger (TSHD) and/or a backhoe dredger. No overspill of the hopper will be permitted during the loading operations to minimise the amount of suspended solids within the River Liffey channel during the loading operations. When working within the navigation channel, the TSHD will also work in the direction of flow to avoid any potential of creating elevated levels of suspended solids across the River Liffey.

There will also be a requirement for a back-hoe dredger mounted on a barge to carry out small scale elements of the dredging works, notably for areas where the TSHD cannot reach or where the material is too stiff to be removed by the TSHD. This material is either pulled into the track of the TSHD for collection or loaded into a separate hopper barge which is taken directly to the licenced offshore site for disposal of the dredged material.

It is proposed to dispose of the dredge spoil at a licenced offshore disposal site located to the west of the Burford Bank at the approaches to Dublin Bay (Figure 2). A Dumping at Sea Permit (S0033-01) has been granted by the EPA for this activity. All capital dredging operations will take place within the period October to March inclusive.

The area potentially affected by the Capital Dredging Project is therefore taken to be Dublin port inside the north and south Bull Walls, and the area of the dump site in Dublin Bay.

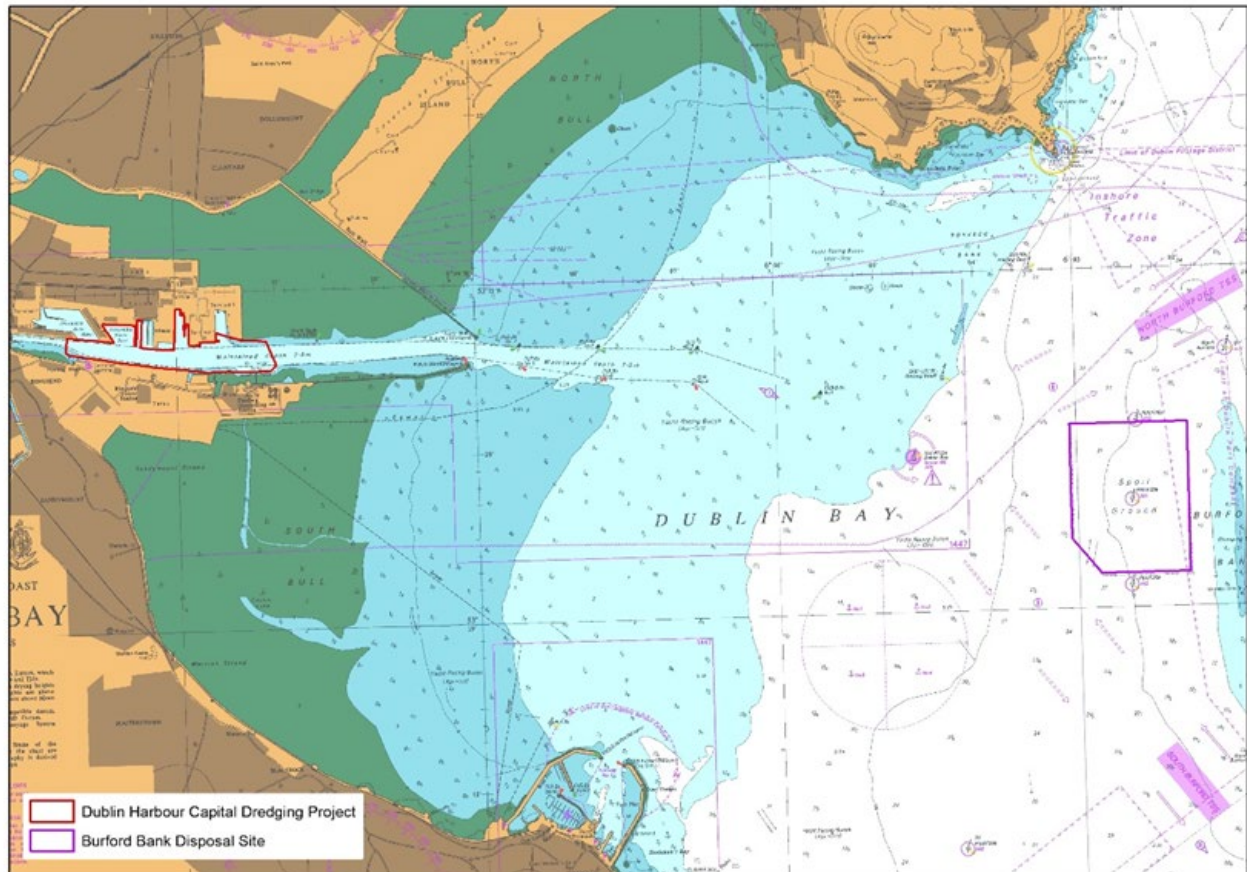


Figure 2 Location of Licenced Spoil Grounds at Burford Bank

2.2 Probability of Annex IV Species being present

Otter (*Lutra lutra*) has been recorded in the port area, although the area has been ranked poorly in terms of frequency of otter signs and activity by comparison with upstream catchments (Macklin *et al.*, 2019; RPS, 2025a). Otter does not occur at the offshore dump site at Burford Bank.

Dolphins, whales and porpoises (cetaceans) are all listed in Annex IV of the Habitats Directive. Of the 27 species of cetacean recorded to date in Ireland, four occur regularly within or adjacent to Dublin Bay: the harbour porpoise (*Phocoena phocoena*); bottlenose dolphin (*Tursiops truncatus*); minke whale (*Balaenoptera acutorostrata*); and common dolphin (*Delphinus delphis*). Of these only harbour porpoise and bottlenose dolphins regularly come into Dublin Bay (RPS, 2025c; IWDG, 2023). Harbour porpoise is the most consistently reported cetacean species observed during the maintenance and capital dredging programmes associated with Dublin Port since 2017. It has been sighted in the Liffey estuary sporadically. Other species, such as humpback whale (*Megaptera novaengliae*) and killer whale (*Orcinus orca*), are occasionally recorded off the Dublin coastline.

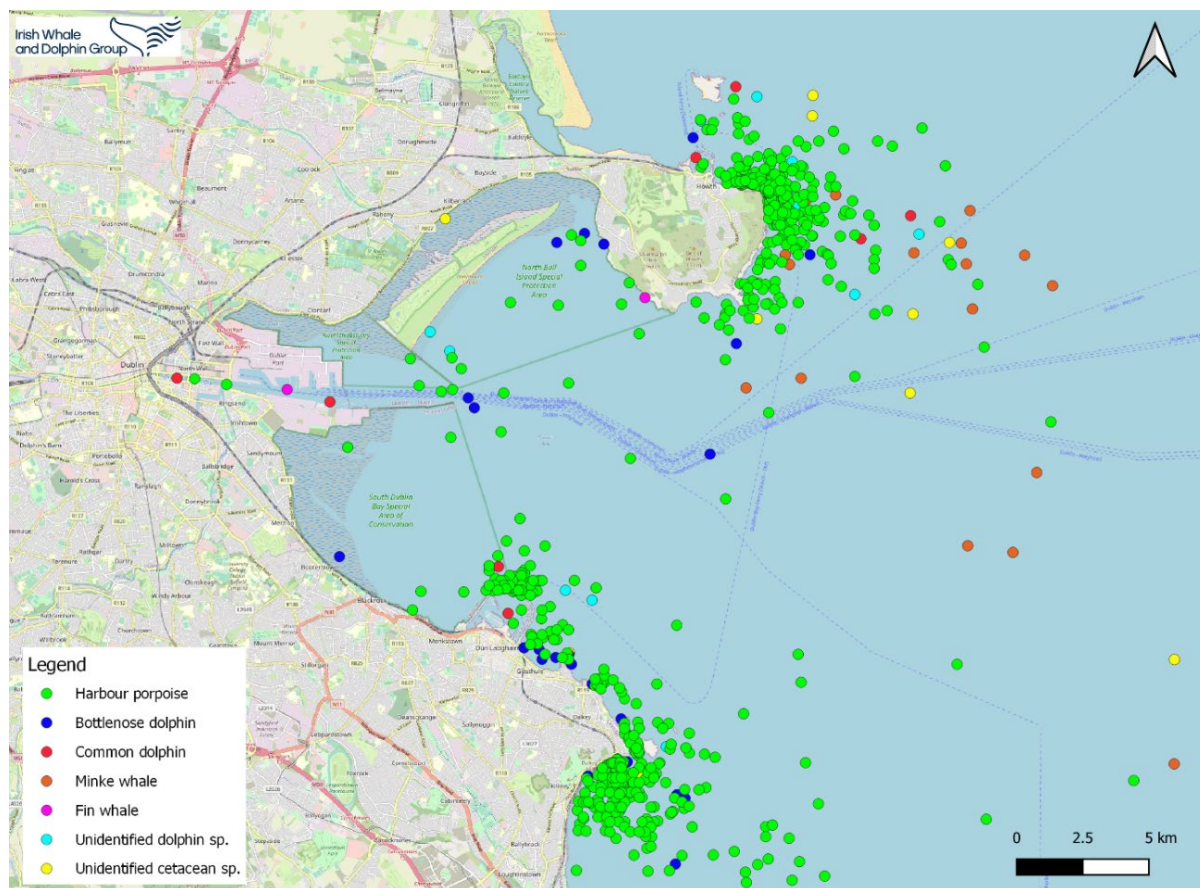


Figure 3 Cetacean sightings Dublin Bay and Coastal Waters 2013-2023 (IWDG, 2023)

Five species of marine turtle have been recorded in Irish waters (King and Berrow 2009; Botterell *et al.*, 2020) including: Leatherback (or Leathery) turtle (*Dermochelys coriacea*), loggerhead (*Caretta caretta*), Kemps Ridley (*Lepidochelys kempii*), Hawksbill (*Eretmochelys imbricata*) and green turtle (*Chelonia mydas*). Hawksbill and Green turtle are very rare and no sightings have been recorded in the Irish Sea (Biodiversity Maps, <https://maps.biodiversityireland.ie/Map>, accessed May 2026). Kemps Ridley has not been recorded in the Irish Sea in the past 55 years, and Loggerhead has only been recorded on three occasions, one of these records being a dead individual at Kilbarrack Strand in Dublin Bay in 2004.

Only one marine turtle is regularly observed in Irish waters, the leatherback turtle (*Dermochelys coriacea*). Sightings of leatherbacks can occur anywhere in Irish coastal waters, but are more likely to occur in higher numbers off the south and west coasts of Ireland. It is most commonly recorded in the boreal summer months (Botterell *et al.*, 2020). Transient and foraging individuals occur in Irish waters, but breeding grounds are in warm tropical waters. Abundance estimates in Irish waters are difficult but numbers may be extremely low, and the species may be less numerous in the Irish Sea (Doyle, 2007). Leatherbacks are generally present during summer months, peaking in August when water temperatures are higher, and therefore highly unlikely to be present during capital dredging campaigns which are undertaken in the winter season. In the 26 year period since 2000, the National Biodiversity Data Centre has only nine records of *Dermochelys coriacea* between Wicklow Head and Dundalk, and none of these occur in the proposed dredging or spoil disposal area, or in Dublin Bay. All five species of marine turtles reported in Ireland are listed on Annex IV of the EU Habitats Directive. However, given the rarity of their occurrence they have not been taken forward for further consideration in subsequent stages of this assessment.

Therefore, information suggests that within Dublin Port there is a possibility of otter and harbour porpoise being present. There is also a possibility of harbour porpoise and other species of whale and dolphin being present at the dump site at Burford Bank. Further details of ecological surveys undertaken to assess the local

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populations of these species, the locations frequented, and the frequency at which they occur, are summarised below.

3 STAGE 2 – ECOLOGICAL SURVEY

3.1 Ecological Surveys

Annex IV species that are afforded strict protection and that have been identified above as potentially being present in the project area are considered below. These include Otter, Whales and Dolphins, and Harbour Porpoise.

3.1.1 Otter

Otter Surveys carried out for Dublin City Council's Dublin City Otter Survey, 'An Action of the Dublin City Biodiversity Action Plan 2015-2020' covered habitats along 44.7km of the Dublin City coastline, including Dublin Port (Macklin *et al.*, 2019). Spraints were identified on quay steps near Poolbeg Lighthouse, but surveys failed to identify any otter signs on North Bull Island and throughout much of Dublin Port and Merrion Strand. Three holts were recorded in secluded areas of the Tolka Estuary to the north of Dublin Port, one of which was inactive. The port area was typified by low levels of otter seclusion due to high levels of human activity. The low frequency of otter signs in the port and surrounding coastal habitats ranked near the bottom of areas surveyed for otter signs/activity.

Ecological surveys have also been undertaken for Otter in the Dublin Port area between June 2022 and February 2023; in April 2023; between January and May 2024; December 2024, January 2025; and February 2025 (Dublin Port Company, 2022; RPS, 2025a). A further walk-over and boat survey has been carried out on 29th April 2026 since completion of the first DHCD works campaign and included the identification of potential sites for installation of artificial otter holts. The area surveyed covers almost the entirety of the Dublin Port estate and additional coastal areas on the southern Poolbeg peninsula. Surveys recorded the locations of otter holts, couches, slides, spraints, paths, feeding sites and prints, and included a boat survey in January 2025.

Evidence for presence of otter has been documented by way of holts, couches, spraints and occasional sightings. Figure 3 shows the locations of holts/couches and spraints identified in recent surveys and anecdotal indications of presence (RPS, 2025a). Of the holts identified, only one holt on the northern boundary of the Port estate in Tolka Estuary, was found to be active in 2025 (a single male otter recorded on trail-cam). No evidence of natal holts was found. Occurrence of spraints and reported anecdotal sightings suggest some otter activity throughout the port area. Significant predation by an otter at the nesting tern colony on the CDL Dolphin in the Liffey channel was recorded on trail-cam in 2021, resulting in no Common or Arctic Tern chicks fledging that season, and required predation preventative measures (Boland *et al.*, 2022).

In coastal areas, otters usually alternate between marine and freshwater habitats (Macklin *et al.*, 2019), and require sources of freshwater to wash saltwater off their coats prior to resting in their coastal holts. The River Dodder/Grand Canal, and the River Tolka are the nearest freshwater sources to potential Holts 1 and 2, with an approximate separation distance of 3 km. These sources of freshwater are not realistically connected to potential holt locations over land, and therefore it is considered that the holts are likely to act as short-term resting holts or couches only. They are not suitable for breeding or natal purposes (RPS, 2025a). It is highly likely that any otters frequenting the Port area of the Liffey are based in holts located within freshwater rivers such as the Dodder and Tolka, and potentially further upstream in the Liffey.

Typically, otter resting sites are in places where the risk of direct physical disturbance is low (Chanin, 2003). The areas along the Dublin Port Estate coastal boundaries and berms are typically busy locations, likely with too much human/industrial activity for long-term otter holting. The waterside environment along much of the Port is comprised of vertical quay walls, mainly constructed from stone or concrete. There are very few crevices or cavities in these vertical structures which would be suitable as otter resting places. Cavities were shallow and located below the highwater mark, and therefore would be inundated for periods of the day and not suitable for otter holting. Anecdotal observations suggest that some locations sufficiently removed from port activity may provide opportunistic above ground resting locations (couches) for short periods.

Therefore, evidence suggests that while Dublin Port area is frequented by otters, presence is low by comparison with other upstream areas. Resting places are sporadically used and infrequent, and there is no evidence of natal holts in the area.



Figure 4 Locations of otter holts, spraints and sightings in Dublin Port during recent surveys

Potential impacts and suitable alternatives are considered below in relation to otter presence in Dublin Port. Otters do not occur at the offshore spoil disposal site which is 6.75km east of the harbour mouth.

3.1.2 Cetaceans

Dublin Port Company's Dublin Harbour Capital Dredging Project EIAR (2021a) has presented an ecological impact assessment for marine mammals. Relevant details are presented here. A variety of whale, dolphin and porpoise species regularly occur in Dublin Bay and along the Dublin coast. All these cetaceans are entitled to strict protection under EU legislation (Annex IV of the EU Habitats Directive).

Only harbour porpoise (*Phocoena phocoena*) is known to occasionally occur within the port area. This has been confirmed by sightings during Marine Mammal (MM) watches as part of Dublin Port Company dredging and construction activities. MM Watches for capital dredging campaigns between 2017 and 2022 have reported just over 1,000 sightings of marine mammals (including seals). Of these only about 10 sightings of harbour porpoise have been recorded in the Port area i.e. inside the north and south Bull Walls.

Whales and Dolphins

A number of whale and dolphin species occur off the Dublin coast. The Irish Whale and Dolphin Group (IWDG) have co-ordinated a Cetacean Sighting Scheme since 1991, which validates and logs all cetacean sightings available. This IWDG database was used to prepare cetacean distribution maps for the EIAR assessment (EIAR Section 7.2).

Bottlenose dolphin and minke whale are frequently recorded in, or adjacent to, Dublin Bay. Bottlenose dolphins have been reported throughout the year, though mainly in the summer and from all along the coast, but mainly off Howth Head and especially from Dún Laoghaire and south to Wicklow. Most sightings are of small groups though occasionally large groups of greater than 20 dolphins occur but usually only for short periods. A small group of 3 individual bottlenose dolphins frequented Killiney Bay from August 2010 to August 2012. Bottlenose dolphins off Dublin are part of the highly mobile coastal population which has been recorded all around the Irish coast and some individuals reported off Scotland (O'Brien *et al.*, 2009; Robinson *et al.*, 2012). Surprisingly, there was no evidence of movement between the east coast of Ireland and Wales, which holds a large number of this species. This highly mobile Irish coastal population is thought to number between 200-400 individuals.

Risso's dolphin were regularly recorded to the south of Dublin Bay, in the spring and early summer for a number of consecutive years from 1999 to 2006 but have not been recorded regularly since 2013. They were likely part of a wider Irish Sea population whose occurrence is associated with the presence of squid, which may be an unpredictable food source.

Minke whales occur seasonally, especially off north County Dublin from Howth Head to Lambay Island and on the Kish Bank. They are usually solitary but up to 5 have been seen foraging in the same area at any one time.

Common dolphin and humpback whales have also been recorded. Common dolphins are thought to be more abundant in the Irish Sea in the summer and tend to occur further offshore than bottlenose or Risso's dolphins. They have been recorded from Rockabill to Dun Laoghaire. Single humpback whales were recorded in July for two consecutive years in 2010 and 2011 off north Dublin and are thought to be increasing in number in Irish coastal waters, suggesting they may be more frequently observed off Dublin in future years.

Harbour Porpoises

Cetaceans rarely occur within Dublin Port harbour area. During marine mammal monitoring for dredging and construction campaigns since 2017, harbour porpoise is the only cetacean that has been recorded to occur in Dublin Port, and only on seldom occasions. Marine Mammal Watches carried out for dredging campaigns since 2017 have recorded over 1,000 sightings of marine mammals, of which only about 10 sightings of harbour porpoise were in the Port harbour area (ABR & MP2 Projects Environmental Monitoring Reports Year 1 to Year 9: 2017 to 2025).

The Rockabill to Dalkey Island SAC (003000) lies to the east of Dublin Port and includes harbour porpoise as a qualifying interest. The licensed dredge spoil disposal site lies within the Rockabill to Dalkey Island SAC but comprises less than 1% of the SAC area. In 2024, the Codling Fault Zone SAC (003015), and Lambay Island SAC (000204) were amended to include harbour porpoise as a qualifying interest. Lambay Island SAC overlaps with the Rockabill to Dalkey Island SAC. Codling Fault Zone SAC is located approximately 24km east of Howth Head, Co. Dublin within the Irish Sea.

Dedicated harbour porpoise surveys off County Dublin were first carried out in 2008, when a density of 2.03 porpoises/km² in North County Dublin, and 1.19 Porpoises/km² in Dublin Bay were estimated (Berrow *et al.*, 2008). Subsequent to SAC designation as the Rockabill to Dalkey Island SAC in 2011, surveys of the site were carried out in 2013 and 2016 and yielded density estimates of 1.44 and 1.55 porpoises/km² respectively (Berrow and O'Brien 2013; O'Brien and Berrow 2016). Calves consistently accounted for around 7% of the porpoises surveyed. These figures equate to abundance estimates of between 391 and 424 in Rockabill to Dalkey Island SAC and 138 in Dublin Bay. They confirm that Dublin Bay, and especially North County Dublin, provide some of the most important habitats for harbour porpoise in Ireland. This is reflected in the frequency of harbour porpoise sightings in Dublin Bay during dredging campaign MM watches, typically running at 25% to 30% of MM sightings outside the port area.

Dublin Port Company marine mammal monitoring programmes have led to a significant increase in our knowledge of harbour porpoise in Dublin Harbour, Dublin Bay and in the surrounding area. In addition to visual monitoring, a programme of continuous static acoustic monitoring (SAM) in several locations at the spoil grounds, and at a control location in Scotsman's Bay has been in place since 2017.

SAM is independent of weather conditions once deployed and thus ensures high quality data is collected but only at a small spatial scale. SAM can distinguish porpoise vocalisations from dolphin, and can also identify feeding buzzes which can provide information on feeding rates. The SAM data has been analysed to determine the influence of seasonal, diel and tidal patterns on porpoise occurrence at the monitoring sites.

SAM has only rarely indicated the presence of dolphin at the spoil grounds. However it shows that harbour porpoise are continuously present at the spoil grounds (almost 100% of monitoring days). There was a clear increase in detections during the winter months while dredging operations were ongoing. This was consistent across numerous dredging campaigns, and suggests that there has been no displacement of porpoise from the spoil grounds during disposal of dredged spoil. The highest presence was detected at all locations during the winter months, during the hours of darkness (incl. dusk), and across a range of tidal cycles and phases (RPS, 2024).

Potential impacts and suitable alternatives are considered below in relation to whales, dolphins and porpoises at the spoil grounds, and in relation to harbour porpoise presence in Dublin Port.

4 STAGE 3 – EXAMINATION OF IMPACTS AND SATISFACTORY ALTERNATIVES

4.1 Examination of Impacts and Satisfactory Alternatives

4.1.1 Alternatives

Assessment of reasonable alternatives is mandatory under the EIA Directive and is addressed in Chapter 4 of the Dublin Harbour Capital Dredging Project EIAR. The process allows for adjustment to minimise environmental impact thus minimising project significant effects on the environment. Satisfactory alternatives are those which allow project implementation while protecting Annex IV species at the same time. Plan/strategic level alternatives have been considered in the preparation of Dublin Port's Masterplan, reviewed 2018. Only Dublin Harbour Capital Dredging Project level alternatives are relevant here.

The key objective of the project is to bring forward for consent key elements of the capital dredging works required to create the required depth of the navigation channel, basins and berthing pockets as set out in the Dublin Port Masterplan 2040, reviewed 2018. The location, size and scale of the required capital dredging is determined by the existing port infrastructure and consented port Infrastructure under the ABR Project and MP2 Project.

The project level design and technology evolution focussed on alternatives for the loading and disposal stages taking into account the following key factors:

- Dredging methodology; and
- Environmental impacts.

Seven mechanical and hydraulic dredging alternatives were considered. The preferred option was use of a Backhoe Dredger and/or a Trailing Suction Hopper Dredger (TSHD). The majority of loading will be by use of TSHD which allows over-spill to be prevented whilst loading within the inner Liffey channel (Dublin Harbour). Monitoring undertaken during the ABR Project has shown that loading operations within Dublin Harbour using a TSHD has had no significant impact on water quality (RPS, 2025c; RPS, 2025b).

Disposal and re-use alternatives for the dredged marine sediments were also considered including beneficial re-use, disposal on land, incineration, and disposal at sea.

Beneficial re-use or disposal on land is not possible due largely to the unsuitability of the sediments to be dredged, technical issues, and/or the lack of suitable opportunities. There are no suitable incineration facilities in Ireland capable of accepting the proposed type or quantity of dredge spoil. The dredge spoil would therefore need to be transported to mainland Europe. This option is considered to be unreasonable and has been ruled out due to prohibitive cost and having regard to the proximity principle.

Disposal at sea at the offshore disposal site to the west of the Burford Bank has been selected to keep the sands and gravels deposited at the site within the natural Dublin Bay sediment cell. Over time, the fine sand fraction will migrate from the site, particularly as a result of storm action, and will remain part of the natural coastal processes regime of Dublin Bay. The site is also dispersive with respect to silts and clays. Silts and clays deposited at the offshore disposal site will be dispersed in a north-south direction to the wider Irish Sea. Use of this site would have no discernible environmental impact within Dublin Bay or on the qualifying interests of the Rockabill to Dalkey Island SAC, or any other SAC.

Chemical and eco-toxicological analyses of the sediment has shown that it is Class 1 and therefore suitable for disposal at sea. Dredge disposal activities currently undertaken at Burford Bank, in relation to Dublin Port, will continue to take place in compliance with existing Foreshore Licences and Dumping at Sea Permits. The environmental, social and economic consequences of this will continue as they presently exist. Environmental monitoring during previous capital and maintenance dredging projects, reported in the Annual Environmental Reports (AERs) available on EPA's Website, has shown that they did not cause any discernible increase in turbidity above recorded background levels.

The environmental impact of dredging and the disposal activities is described in detail within the EIAR (see Chapter 7 Biodiversity, Flora and Fauna, Chapter 9 Water Quality, Chapter 12 Underwater Noise, Chapter 13 Coastal Processes and Chapter 14 Cultural Heritage). The assessments have concluded that disposal of the dredged marine sediments will have no discernible environmental impact within Dublin Bay or on the qualifying interests of the Rockabill to Dalkey Island cSAC, or any other SAC.

The licenced offshore disposal site has been proven to be suitable for the safe disposal of dredge spoil arising from the Dublin Harbour Capital Dredging Project. The site also has the advantage that it is dispersive for clays and silts, but sands and gravel are retained within the natural Dublin Bay sediment cell (see section on Environmental Enhancement - Sediment Cell Maintenance above). This has been identified as a feasible re-use option for the coarser portion of the dredged materials.

There are no other licenced offshore disposal sites within the Greater Dublin Bay Area. The opening of a new disposal site further offshore would have no additional environmental benefit. On the contrary, it would lead to unnecessary increases in energy usage to transfer the dredged marine sediments from the dredging area to the disposal site; it would lose sands and gravels from the natural Dublin Bay sediment cell and it may have a greater impact on fisheries interests.

The Dublin Harbour capital dredging and disposal operations are proposed to take place over winter seasons, between 2025 and 2030, with no more than 500,000m³ of spoil being disposed of in total. Dredging will primarily be carried out by a Trailing Suction Hopper Dredger (TSHD) with some support by backhoe for constricted locations or localised patches of difficult sediments.

Potential impacts on Annex IV species are considered next and include direct and indirect effects. They relate to noise, sediments, collision, and displacement, and consider loading operations in Dublin Port and dumping of sediment at the spoil grounds.

4.1.2 Impacts

As outlined in section 2.1 Project Description, capital dredging will be carried out primarily by TSHD, possibly with support of a backhoe dredger in some areas. An estimated 500,000m³ of dredge spoil will be disposed of at the Burford Bank dump site spread over multiple winter seasons during the course of the dredging project.

The potential impacts that could arise from the capital dredging and disposal operations are:

- Underwater noise impacts
- Increased turbidity levels
- Vessel-strikes

These potential impacts are considered below in terms of injury, disturbance or displacement of Annex IV species, and appropriate mitigation measures identified as required.

Otter

Potential impacts on otter are only relevant for dredge loading operations in the port area.

Underwater hearing sensitivity is significantly reduced in otters compared to pinnipeds and other marine mammals, and otter hearing is primarily adapted to receive airborne sounds. A Trailer Suction Hopper Dredger (TSHD) will be used for dredging. Robinson *et al.*, (2011), found that emitted sound levels from TSHDs at frequencies below 500 Hz were similar to a deep-draft draught cargo ship travelling at a moderate speed. Marine mammals, including coastal otters, are tolerant of shipping noise, being repeatedly exposed to many vessels, small and large. TSHD transits between loading and dumping locations will not add significantly to the vessel traffic in the port area which experiences about 50 vessel movements per day. Underwater noise transmission loss in Dublin Port is significant due to the shallow water and the prevalence of silts and sands on the seabed of the port. Noise generated by operation of the TSHD is unlikely to have any significant impact on otters.

Sediment plumes generated during dredging have been shown to be local and settle/disperse rapidly (RPS, 2025b). Otter foraging is frequently in the shallow littoral area and thus unlikely to be impacted by dredging operations. TSHDs will not operate in such locations and the likelihood of collision or injury to otters is negligible.

Otters are crepuscular and usually active in early morning and late evening. Holts and potential resting places have been mapped and are outside the area of the capital dredging project operations, and no natal holts have been identified in the area. The holts are sufficiently distanced and screened from the proposed works so that any disturbance or impact is very unlikely.

In June 2026, Dublin Port Company, after consultation with NPWS, installed two artificial holts along the northern boundary of its estate at Tolka Estuary. Additional sites for holt installation have been identified and will be pursued in the context of an otter management plan which will be developed in consultation with NPWS and other stakeholders in the wider port area.

Mitigation in the form of a Marine Mammal Monitoring Plan (MMMP) (CEMP, 2025) will be implemented by trained and experienced Marine Mammal Observers (MMOs) throughout the project and for all dredging activities in accordance with the requirements of NPWS Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters (2014). This includes the implementation of a 500m monitoring zone for marine mammals (including otter). Dredging operations may only commence when the MM Observer has confirmed that no marine mammals are present in the monitoring zone for a period of at least 30 minutes.

A Dredging Management Plan (DMP) will be implemented to mitigate potential impacts (CEMP, 2025). Mitigation measures to reduce sediment plumes will include no overflow from the dredger when it is dredging in the harbour area. The dredger will also work in the direction of current flow to prevent development of a silt curtain in the channel. When operating in the River Liffey Channel, the TSHD pumps will be switched off when the drag head is being lifted and returned from the bottom as the dredger turns between successive lines of dredging to minimise the risk of fish entrainment.

A maximum of 4,100m³ of sediment and entrained water will be loaded into the dredger's hopper for each loading/dumping cycle, equivalent to approximately of 2,030 tonnes (wet weight). This will limit silt escape at the loading site and potential impacts at the spoil dumping grounds.

Dredging will be limited to winter months (October to March inclusive). The staging of dredging operations over multiple winter seasons, and the relatively small areas to be dredged in any single annual campaign, will minimise dredging impacts and allow biotic elements to recover.

The first phase of the Dublin Harbour Capital Dredging Project was completed in March 2026 and monitoring has shown no impact on otters. Continued implementation of all mitigation measures in future phases will ensure no significant impact on use of the port area by otters.

Harbour Porpoises/Whales/Dolphins

Harbour porpoise may rarely enter the harbour area and could therefore be potentially exposed to impacts of dredge loading operations. However, the extremely low frequency of such an event and the implementation of the MMMP, including a 500m mitigation zone, will ensure no impact on harbour porpoise during dredge loading operations.

The spoil disposal site is situated within the Rockabill to Dalkey Island SAC which includes Harbour porpoise as a qualifying interest. The Dublin Harbour Capital Dredging Natura Impact Statement (Dublin Port Company, 2021b) found that the possibility of likely significant habitat loss effects, and water quality and habitat deterioration effects can be excluded for this European site, even without consideration of mitigation measures. The possibility of likely significant underwater noise and disturbance effects cannot be excluded for this European site, without consideration of mitigation measures.

As shown by the monitoring programmes implemented by Dublin Port Company, harbour porpoise occur on virtually a daily basis at the designated spoil grounds. The main potential impacts during dumping of dredged spoil at the proposed disposal site is disturbance of porpoise, although SAM data suggests that harbour

porpoise detections actually increase at the spoil grounds during capital dredging campaigns, and indeed dumping may provide increased foraging opportunities.

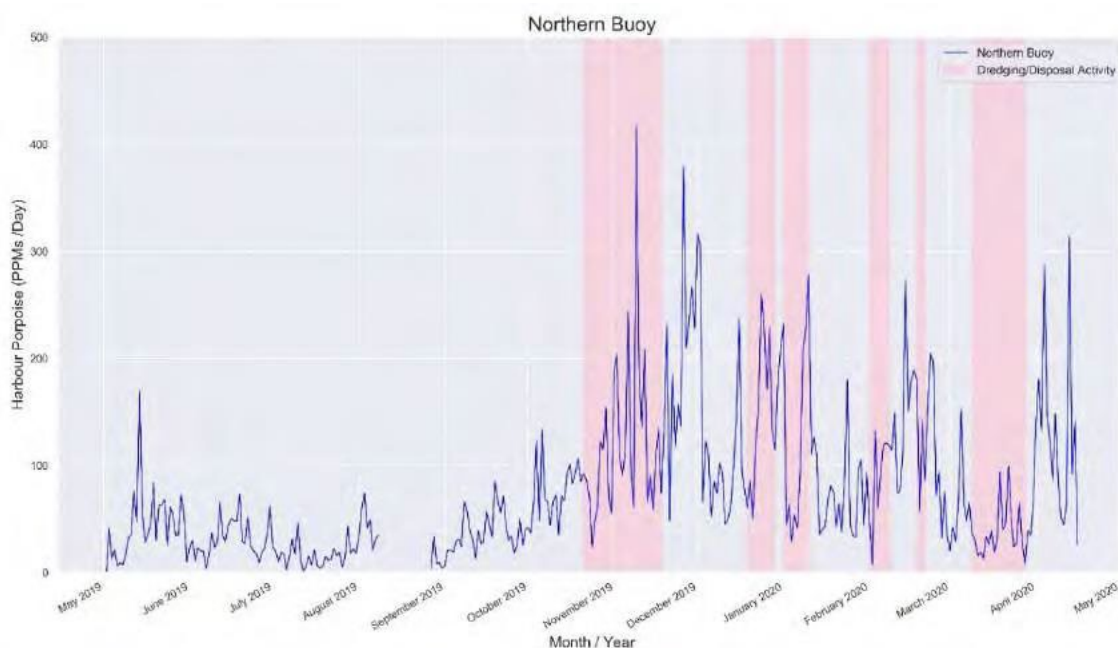


Figure 5 Number of harbour porpoise detections per day recorded at the north of the spoil grounds. Red columns indicate periods of capital dredging campaigns (2019-2020).

Dredging will be carried out by TSHD. Studies have found that maximum source noise levels from the various activities associated with TSHD dredging (including the dredging process, transit to the disposal site, placement, pumping and rainbowing) do not produce sounds louder than those produced by the dredger during transit (De Jong *et al.*, 2010). Note that spoil discharge at the disposal site during the Dublin Harbour Capital Dredging Project will be by release below water through doors in the vessel's hull. Trailing Suction Hopper Dredgers produce broadband sound between 20-1000 Hz and the highest levels occur during loading. Evans (2000) suggests that dredging activities produce sounds varying from 172-185 db re 1 μ Pa at 1 metre over the broadband range 45 Hz to 7 kHz. Underwater noise measurements at approximately 90m from dumping activity was very slightly above the disturbance threshold for harbour porpoise (RPS, 2016), but was still below the general behavioural threshold for marine mammals of 160 dB re 1 μ Pa SPLRMS adopted by NOAA.

Even without the implementation of mitigation measures, the likelihood of impacts on cetaceans and any significant effect is extremely low. Implementation of mitigation in the form of NPWS Guidance (2014) and operation of an appropriate Mitigation Zone will reduce this potential impact further.

Sound exposure levels from dredging operations are below the threshold that may result in injury to Harbour Porpoise, Whales and Dolphins, although disturbance due to noise generated by dredging, and from the physical presence of the dredging vessel have the potential to cause low level disturbance, masking or behavioural impacts. However, the presence of a single additional vessel and the associated noise produced is very unlikely to have any significant impact on marine mammals, particularly in an underwater noise environment which is already subject to significant shipping traffic.

The risk of injury or mortality is considered extremely low as marine mammals are exposed to considerable vessel traffic on a daily basis, and they are alert to their presence and are highly mobile. The dredge vessel is slow moving and not able to turn quickly, thus any animals in the area would have sufficient time to avoid any collisions, injury or mortality. The likelihood of the TSHD releasing dredged material on top of a marine mammal is extremely low. The duration of the release of dredged material is very short (typically <1 minute) and the vessel slows to 1 or 2 knots during spoil release, giving ample opportunity for avoidance.

Increased turbidity resulting from dumping at the spoil grounds is unlikely to have a direct effect of marine mammals but may have an indirect effect through impacts on prey (Todd *et al.*, 2015). Harbour porpoise use echolocation to navigate and locate prey and thus foraging efficiency would not be affected by increased turbidity. In fact SAM data suggests that harbour porpoise detections increase at the spoil grounds during capital dredging campaigns, and spoil disposal may provide increased foraging opportunities. Sediment plume monitoring during dumping operations has shown that plumes settle and dissipate rapidly (within minutes) and there is no lasting impact on water clarity (RPS, 2025b).

The diet of harbour porpoise is poorly known but believed to consist of small benthic or demersal fish such as gobies, sandeels, whiting and other gadoids and pelagic species such as herring and sprat when available (Rogan, 2008). Small shoaling fish occur regularly in the diet of small cetaceans and their occurrence at the spoil dumping site could be affected during dredging operations. However, no long-term impacts on fish distribution or abundance are predicted (EIAR Section 7.1), thus the likelihood of indirect impacts on prey abundance and distribution is low. Any displacement resulting from indirect impacts on available prey will be short-term and very local, with fish returning to the area at the completion of dumping activity. Marine mammals are likely to recover from any temporary disturbance within hours or days.

The NIS (Dublin Port Company, 2021b) has determined that the likelihood of impacts on Harbour porpoise without mitigation is moderate. However, with the implementation of mitigation measures, there are no residual impacts predicted. The Dublin Harbour Capital Dredging NIS has found that mitigation through implementation of the MMMP and the DMP as necessary will ensure no adverse effects upon the integrity of any European site and no scientific doubt remains as to the absence of such effects.

The first phase of the Dublin Harbour Capital Dredging Project was completed in March 2026 and monitoring has shown no impact on cetaceans or any Annex IV species. Continued implementation of all mitigation measures in future phases will ensure no significant residual impacts from the proposed dredging operations on Annex IV species in the area.

5 STAGE 4 – APPLICATION FOR REGULATION 54 DEROGATION

5.1 Application for Regulation 54 Derogation License

The Dublin Harbour Capital Dredging Project is a key supporting element of the infrastructural development of Dublin Port which is being developed in accordance with the Dublin Port Company's Masterplan to increase its capacity to 77.2m gross tonnes by 2040. In the absence of this project the port would fail to provide for future anticipated growth. This would have a critical impact upon national and regional economies, particularly by way of trade, employment and associated taxes for societal benefit. This in turn, will undermine the port's ability to contribute towards achieving the sustainable transport objectives of National Port Policy.

The activities and the areas of operation of the Dublin Harbour Capital Dredging Project have been described under STAGE 1 above. The project involves dredging to deepen parts of the navigation channel, berthing pockets and basins within Dublin Harbour. Dredging is to be staged over a number of winter seasons (October to March) and the total volume of dredge material for removal is estimated at 500,000m³. The first phase of dredging was completed between 13th February and 17th March 2026 and complied with the relevant Regulation 54 Derogations granted in all respects.

Detailed project environmental assessments in an EIA and a NIS have been completed. These have confirmed that the project when implemented with recommended appropriate mitigation will not have any significant environmental impacts, including on sites of European importance and their conservation objectives, nor on Annex IV species in need of strict protection.

Strict protection as set out in Regulation 51 states that a person who in respect of the species referred to in *Part 1 of the First Schedule*:

- (a) deliberately captures or kills any specimen of these species in the wild,
- (b) deliberately disturbs these species particularly during the period of breeding, rearing, hibernation and migration,
- (c) deliberately takes or destroys eggs of those species from the wild,
- (d) damages or destroys a breeding site or resting place of such an animal, or
- e) keeps, transports, sells, exchanges, offers for sale or offers for exchange any specimen of these species taken in the wild, other than those taken legally as referred to in Article 12(2) of the Habitats Directive,

shall be guilty of an offence.

To address the possibility that the project may result in temporary disturbance of otter, or whales, dolphins and porpoises, and may therefore contravene Regulation 51(e) above, this document has been prepared in support of an application to the Minister for a Derogation Licence in accordance with Regulation 54 of European Communities (Birds and Natural Habitats) Regulations 2011.

A range of possible alternatives for project implementation have been set out and considered in the EIAR (Chapter 4). At project level these relate to options for dredging methodology, both loading and dumping operations. They are considered in terms of technical issues, feasibility and environmental benefits. Notwithstanding findings of no significant environmental impact in EIA and NIS assessments, there remains a possibility that the project alternative chosen may result in some temporary disturbance of Annex IV species, and there is no other satisfactory alternative for proceeding with the project with less potential impact.

The nature of any such disturbances has been described in STAGE 3 Impacts above. Any such impacts would involve temporary, localised disturbance and be of very short duration. They would not be detrimental to the maintenance of population(s) of the Annex IV species listed at a favourable conservation status in the species' natural range.

In relation to Otter the Dublin Harbour Capital Dredge Project will not result in any decline in terrestrial or aquatic habitat. Neither will there be any loss of holts or couching sites. There will be no significant decline in prey species, and no increase in barriers to connectivity.

In relation to Whales, Dolphins and Porpoise the Dublin Harbour Capital Dredge Project will not introduce any barriers to restrict long-term species range to site use, although short-term or temporary restriction of access to small areas within the site may occur. The project will not lead to increases in human activities that could adversely affect cetaceans at the site such as an increase in underwater noise, deterioration in water quality, or feeding opportunities.

The first phase of dredging was completed between 13th February and 17th March 2026 and complied with the relevant Regulation 54 Derogations granted in respect of that dredging campaign in all respects.

Therefore, the net result of granting a derogation licence in respect of the Dublin Harbour Capital Dredging Project would be neutral for the relevant species i.e. otter, whales, dolphins and porpoises.

A derogation is therefore requested to cover the forthcoming phase of the Dublin Harbour Capital Dredging Project from 1st October 2026 to 31st March 2027.

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