Nicholas O'Dwyer Ltd

Supporting Information for Screening for Environmental Impact Assessment

Rosslare Coastal Erosion & Flood Relief Scheme (CEFRS)

81587

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TABLES

FIGURES

ACRONYMS AND DEFINITIONS

Acronym	Definition
AA	Appropriate Assessment
CEFRS	Coastal Erosion and Flood Relief Scheme
COs	Conservation Objectives
CPT	Cone Penetration Tests
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EPA	Environmental Protection Agency
ERT	Electrical Resistivity Tomography
EU	European Union
HSE	Health, Safety and Environment
MARA	Maritime Area Regulatory Authority
MBES	Multibeam Echo Sounder
MUL	Maritime Usage Licence
NIS	Natura Impact Statement
NOD	Nicholas O'Dwyer Ltd
NPWS	National Parks and Wildlife Service
PTS	Permanent Threshold Shift
SAC	Special Areas of Conservation
SBP	Sub-Bottom Profiler
SI	Site Investigations
SISAA	Screening for Appropriate Assessment
SPA	Special Protection Areas
S-P-R	Source-Pathway-Receptor
SSC	Suspended Sediment Concentrations
SSCO	Site-Specific Conservation Objectives
SSS	Side-Scan Sonar
TTS	Temporary Threshold Shift

1 INTRODUCTION

1.1 Overview

Wexford County Council (WCC) intends to apply to the Maritime Area Regulatory Authority (MARA) for a Maritime Usage Licence (MUL) to conduct marine site investigations and environmental surveys within two areas adjacent to the townlands of Burrow and Hopeland (area A), and adjacent to the townlands of Warren Lower, Warren Middle, Doogans Warren, Rosehill and Hill of Sea (area B), in the vicinity of Rosslare, Ireland (Figure 2.1)

This report has been prepared as part of the MUL application process. The proposed survey works are designed to provide high quality baseline data that will contribute to site selection and any subsequent design, Environmental Impact Assessment Report (EIAR), and Appropriate Assessment (AA), undertaken for the Rosslare Coastal Erosion and Flood Relief Scheme (CEFRS) project; in the event that a site is taken forward to the planning/consenting stage.

1.2 Purpose of this report

The objective of this report is to provide information to assist the Competent Authority in screening the proposed maritime usage to determine if an Environmental Impact Assessment (EIA) is required.

1.3 Statement of Authority

This report has been prepared by RSK on behalf of WCC. The technical competence of the authors is outlined below:

Andrew Bendell is an Associate Director within RSK's International Projects Group Marine Team. He has over 25 years of experience in marine environmental surveying and consulting. He holds an honours degree in Marine Biology and Oceanography and a Masters degree in Marine Resource Development and Protection. He has particular experience in marine ecology surveys, and the subsequent analysis and reporting of marine survey data for Environmental Impact Assessment (EIA) projects, and AA and Annex IV species reports.

Jordan Featherstone is a Graduate Marine Consultant within the RSK's International Projects Group Marine Team in RSK. She has over 5 years of experience in the marine environmental field. She holds an honours degree in Ocean Science and Marine Conservation, and a Masters degree in Environmental Consultancy. She has contributed to numerous marine environmental projects including marine site visits, marine sample and data collection, AA Screening and EIA chapters.

This Supporting Information for Screening for Environmental Impact Assessment (SISEIA) report has been prepared in compliance with the legislative and policy requirements described below.

2 PROJECT DESCRIPTION

2.1 Site location

The MUL area covers a total area of 16.47 km^2 and is split into two separate areas of 0.74 km^2 (area A) and 15.73 km^2 (area B). The works described in this application relates solely to the Site Investigations (SI) and environmental sampling works within the proposed MUL Area (Figure 2.1). Marine SI and environmental surveys are required to inform preliminary design and facilitate environmental assessment in advance of a development application for the Rosslare CEFRS project.

2.2 Description of the works

2.2.1 Overview

The objective of the proposed surveys is to provide high-quality data that can contribute to a reliable baseline for project design and development, as well as informing the EIAR. While the exact scope of the SI works will be refined as the project design progresses, it is not yet possible to confirm precisely which surveys will ultimately be required. The scope of works represents a realistic worst-case envelope of standard marine site investigation activities. All works are temporary, localised and reversible in nature, with no permanent infrastructure or lasting alteration to the seabed. Accordingly, the surveys listed below are currently considered potentially necessary (see Table 2.1); including:

- drop-down camera survey
- geophysical survey, including:
    - magnetometer
    - Sub-Bottom Profiler (SBP)
    - Side-Scan Sonar (SSS)
    - Multibeam Echo Sounder (MBES)
    - marine refraction seismic
    - marine Electrical Resistivity Tomography (ERT)
- boreholes
- Cone Penetration Tests (CPTs)
- grab samples
- surface water samples
- intertidal walkover survey
- intertidal core samples
- archaeological surveys and other investigations (i.e. underwater inspections, walkovers, metal detectors, dive surveys)
- deployment of metocean monitoring buoys to collect physical oceanographic data.

These works are collectively referred to as the SI works throughout this report. Indicative sampling locations within the MUL area are intended to support the development of flood relief measures along Burrow Road and coastal erosion protection measures at Rosslare Strand (i.e. groynes, revetments, beach nourishment). It should be noted that all locations

shown for sampling within the proposed MUL Area are indicative and may be subject to a degree of change on-site.

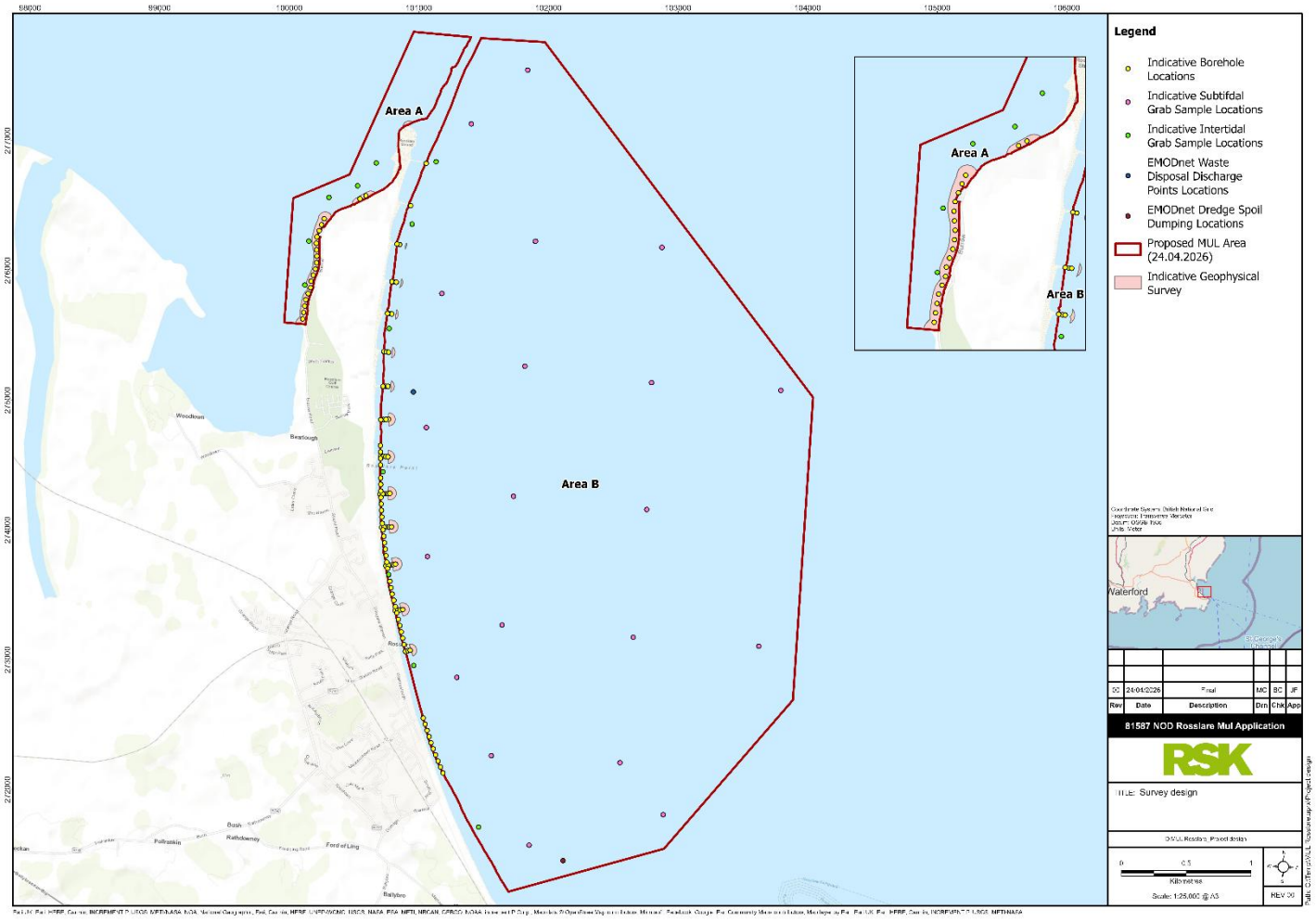

Figure 2.1: Indicative geophysical survey and sampling locations within the MUL area

The following drawings have been prepared in support of the MUL application to the MARA and are included in this assessment to provide further project details description to support the screening assessment for AA:

- proposed MUL area map
- proposed survey design map
- SI indicative table of coordinates.

The exact technical specification of the equipment to be used will not be known until the survey contract has been awarded. However, descriptions of typical equipment and survey parameters have been used within this report.

Predicted duration of the surveys and survey footprint is outlined in Table 2.2.

It is noted that the requirement for additional and more refined works may arise as the SI works progress and are analysed. This may include areas of particular interest using more targeted techniques and/or refined borehole locations and quantities.

There will be no permanent structures and all SI works will be temporary in nature. The moving marine plant will remain on site for the duration of the works.

2.2.2 Site investigations schedule

The intention is to begin SI activities as soon as feasible following MUL award. Timing of the SI activities is dependent on many factors including weather, tidal flows, availability of vessels and the award and any conditions of the MUL. The award of the MUL will have a direct effect on the timing of SI activities. The duration of the SI works is approximately 16 weeks and are currently scheduled to begin in Q3 2026, with an anticipated deployment of metocean buoys for a maximum duration of 6 months. Individual activities within this period will be of substantially shorter duration (with the exception of the metocean monitoring buoy), and not all activities will occur concurrently. The proposed licence duration is requested for 3 years to account for potential delays in the consenting process.

A description of the proposed equipment to be used is given below and summarised in Table 2.1.

2.2.3 Survey vessel

A multipurpose workboat will be used, based on a suitable vessel being available at the time of mobilisation. It is considered that a shallow draught vessel, suitable for survey support and operations requiring frequent manoeuvring in confined waters will be used. A suitable vessel in the range of 16 m with a shallow draught and gross tonnage of ~45 is assumed.

Table 2.1: Description of proposed works

Survey	Method	Method details	Sampling effort
Geophysical (up to 16 weeks)	SSS	SSS is a device that transmits sound pulses that provide the information required to map the seabed. It differs from MBES in that SSS has a finer beam width and smaller footprint to MBES and therefore higher resolution. It is generally towed behind the vessel very close to the seabed and emits fan-shaped acoustic pulses directed down toward the seafloor which are recorded as a series of cross tracks. The sound frequencies used by side-scan sonar generally range from 100 to 1000 kHz; higher frequencies yield better resolution but less range.	SSS may be used across area A and B of the proposed MUL area where required, to a suitable percentage coverage as part of the geophysical survey. This activity is anticipated to occur within daylight hours over a period of up to 10 days.
	Magnetometer	A magnetometer is used to identify magnetic anomalies and hazard mapping for metal obstructions, shipwrecks and unexploded ordnance on the surface and in the shallow sub-surface. The Geometrics G-882 can be taken as an indicative equipment example. It is a passive device (i.e. it does not emit any sound waves into the marine environment) the sensor responds to local variability in magnetic field. The magnetometer will be towed behind a small survey vessel using 20 m spacing of main lines and cross lines at 100 m spacing.	Magnetometer survey may be undertaken across area A and B of the proposed MUL area where required, to a suitable percentage coverage. This activity is anticipated to occur within daylight hours over a period of up to 10 days.
	SBP – parametric	SBP is used to develop an image of the subsurface, identifying different strata encountered in the shallow sediments. The proposed equipment comprises a Knudsen Chirp system or similar which transmit a sweep of frequencies (e.g. 2-10 kHz) in a single pulse. Depending on the profile of the seabed (rock, sand, mud etc.) and level of compaction, the energy reflected back can be related to the sub-bottom composition; which would be used in both nearshore and offshore areas.	Parametric SBP may also be used across area A and B of the proposed MUL area where required, to a suitable percentage coverage as part of the geophysical survey. This activity is anticipated to occur within daylight hours over a period of up to 10 days.

Survey	Method	Method details	Sampling effort
	SBP – boomer	A SBP boomer is an instrument used to image sediment layers beneath the seafloor. The Applied Acoustics AA301 is an indicative example of a boomer, the instrument consists of a piezo electric plate transducer mounted on a surface tow catamaran frame. Reflected sound signals are recorded using a separate hydrophone such as the Applied acoustics HYD-360/08 (50 m). The Boomer SBP operates in a frequency range of 0.5 kHz to 5 kHz, with sound pressure levels in the range of 205-211 dB re1µPa @ 1m which would be used in the nearshore shallower area. The SBP will be towed behind a small survey vessel using 20 m spacing of main lines and cross lines at 100 m spacing.	A SBP boomer may also be used across area A and B of the proposed MUL area where required, to a suitable percentage coverage as part of the geophysical survey. This activity is anticipated to occur within daylight hours over a period of up to 10 days.
	SBP - sparker	A SBP sparker is an instrument used to image sediment and rock layers beneath the seafloor, it has a similar purpose to that of the boomer described above but is designed when deeper penetration is required. The applied Acoustics Dual 400 Tip is an indicative example of a sparker system used in sub-bottom profiling. Reflected sound signals are recorded using a separate hydrophone such as the Applied acoustics HYD-360/08 (50 m) or a multi-channel hydrophone such as the Geometrics GeoEel LH-16™ Digital Streamer. The sparker source has a frequency range of between 0.5-5 kHz and sound pressure levels in the range of 205-211 dB re1µPa @ 1m. The SBP will be towed behind a small survey vessel using 20 m spacing of main lines and cross lines at 100 m spacing.	A SBP sparker may also be used across area A and B of the proposed MUL area where required, to a suitable percentage coverage as part of the geophysical survey. This activity is anticipated to occur within daylight hours over a period of up to 10 days.
	MBES	A bathymetric survey will be conducted using multibeam echo sounders, a type of sonar frequently used to map bathymetry. These systems may be mounted on a dedicated survey vessel or towed behind a smaller vessel, depending on site conditions and water depths. Multibeam systems emit wide acoustic	MBES may also be used across area A and B of the proposed MUL area where required, to a suitable percentage coverage as part of the geophysical survey. This activity is anticipated to occur within daylight

Survey	Method	Method details	Sampling effort
		signals to generate high-resolution images, creating three-dimensional maps of the seabed. Line spacing will be between 5 and 20 m, depending on depth. The operating frequencies emitted from MBES will be 300-700 kHz, with a peak operating frequency of approximately 400 kHz. Exposure time is approx. 0.05 ms per 1 ms for multibeam operating with 200-400 kHz, or 0.05 per 0.3 ms for higher frequencies (>400 kHz). Sound pressure levels will be approximately 215-220 dB re 1µPa @ 1m.	hours over a period of up to 10 days.
	Marine Refraction Seismic	Marine refraction surveys use controlled seismic sources, such as air guns or weight drops, to generate seismic waves that travel through sediment and rock layers. Arrays of hydrophones or geophones deployed on the seabed record the refracted seismic waves as they bend and travel along subsurface interfaces. By analysing the travel times and velocities of these refracted waves, detailed models of sediment thickness, bedrock depth, and structural features can be developed. Airgun impulse energy is mostly concentrated within low frequencies, with peak frequencies between 5-90 kHz. Source levels are predicted to be within the range of 186-220 dB re 1µPa @1m.	Marine Refraction Seismic surveys may be undertaken across both areas of the MUL to a suitable percentage coverage as part of the geophysical survey. This activity is anticipated to occur within daylight hours over a period of up to 8 days.
	Marine ERT	ERT surveys are conducted to investigate the electrical properties of subsurface sediments and rocks, used to image the subsurface beneath the seabed or coastline by measuring variations in electrical resistance. The technique involves deploying a series of electrodes along the seabed, either towed or fixed. As a non-invasive, non-seismic geophysical method, marine ERT produces no significant underwater noise and has minimal environmental impact.	Maximum 20 ERT lines of 315 m length line with diameter of 20 mm. This activity is anticipated to occur within daylight hours over a period of up to 8 days. Applies across both areas of the MUL.

Survey	Method	Method details	Sampling effort
Marine environmental/ecological (up to 5 days)	Benthic ecology samples (including subtidal and intertidal habitats surveys)	Identify benthic communities and habitats at the site, intertidal sample locations may be subject to walkover/drone survey in advance of sampling. A day grab is an instrument used for sampling soft seabed sediments. When deployed overboard it is lowered on a winch to the seabed where the jaws open to take a small (approx. 5L) sample of the surface sediment (top 20 cm). A Hammon grab is a very similar type of sampler, but the jaw mechanism is slightly different which allows it to sample coarser sediments (e.g. gravel and shelly sediments). The samples retained can then be analysed to obtain an overview of the sediment fauna, and particle size. Both samplers are routinely used for surveillance monitoring to support a number of EU Directives such as the Habitats Directive and Water Framework Directive. Day or Hammon grabs do not introduce noise into the underwater environment other than that produced from a slight impact with the grab making contact with the seabed.	There will be up to 20 no. dedicated subtidal benthic ecology grab sampling locations within the proposed MUL area and multiple samples (max 4) may be taken at each location. Samples would be of surface area 0.1 m^2. Applies across both areas of the MUL.
	Seabed imagery (Remotely Operated Vehicles [ROV] surveys)	Underwater camera systems or ROVs may be used for visual inspection of the existing benthic conditions. High quality video recordings and stills may be collected for further analysis and confirmation of suitable conditions for further intrusive activities (e.g. benthic sampling or geotechnical works).	Subtidal sample locations may be subject to drop down video in advance of sampling. Applies across both areas of the MUL.
	Intertidal coring and walkover survey	For intertidal sediment assessment a 0.01 m^2 hand core taken to a depth of 20 cm for benthic faunal analysis will be used. Additional surveys of intertidal hard strata may also be carried out by conducting walk over surveys of the relevant hard strata to record biotopes and species present.	There will be up to 12 no. dedicated intertidal coring/grab locations if shoreline conditions allow for sediment sampling. Applies across both areas of the MUL.

Survey	Method	Method details	Sampling effort
Archaeology (up to 5 days)	Walkover	Intertidal walkover to be undertaken at low tide to assess for the presence of sensitive archaeological features. Survey methodology may also involve the use of a metal detector along the foreshore. Pending the results of geophysical surveys there may be a requirement for further archaeological surveys (i.e. underwater video, dive surveys), including the groyne locations.	To be confirmed, pending the results of the geophysical surveys. Applies across both areas of the MUL.
Geotechnical (up to 16 weeks)	Drop-down video	Drop-down video survey to inspect the seabed and identify any sensitive habitats in the vicinity without disturbance to the seabed.	There will be up to **30 transects** of up to 30 m each using a drop down camera and video surveillance. Applies across both areas of the MUL.
	Boreholes	Boreholes may be up to 10 m below bed level but some may be terminated if sufficient bedrock is encountered. The boreholes will be carried out using sonic methods through the seabed sediment, with rotary coring used to advance through the bedrock. The typical frequencies emitted from rotary drilling are between 0.001-0.120 kHz and a recorded sound pressure of approximately 145 dB re1µPa @1m. Marine rotary drilling involves rotating a drill bit attached to a drill string and applying downward pressure to cut through the rock formations. Geotechnical sampling tools, including push and piston samples, can then be deployed into the ground to recover intact material. All drilling equipment used will follow the ISO and API technical specifications for drilling equipment. Boreholes will be drilled from a jack-up barge to maintain stability when drilling. Each location would require the 4 legs to penetrate the seabed and cause a temporary disturbance on each occasion. Each leg is typically less than 1 m^2 in footprint.	A maximum of 107 no. boreholes of a diameter of 300 mm will be required within both areas of the MUL, including approximately 41 no. for the revetment and 46 no. for the groynes on the east side; and a maximum of 20 no. for the embankment and pumping stations on the west side.

Survey	Method	Method details	Sampling effort
	CPT	The CPT is a geotechnical investigation method used to determine the properties of soils and delineate soil stratigraphy, offering a continuous profile of soil parameters. The CPT rig, often mounted on a truck or a tracked vehicle, uses hydraulic rams to push the cone into the ground. The cone typically has a cross-sectional area of 10 or 15 cm^2. CPTs are to progress to a maximum depth of 10m but will be terminated when bedrock is encountered. In the CPT, an instrumented electronic probe (cone penetrometer) is situated at the front end of a string of steel rods that are hydraulically pushed into the ground at a constant rate of 20 mm/s to measure soil response, geo-stratigraphy, and engineering parameters. A CPT vehicle or hydraulic ram set are often used to provide the reaction and pushing force. The equipment used will conform to relevant international standards, such as ISO, ensuring consistent and reliable geotechnical data.	180 no. CPTs will be conducted of a diameter of 44mm. Applies across both areas of the MUL.
	Grab samples	Grab samples using 0.1 m^2 grabs will be collected for grading, loss on ignition and assessment of benthic community.	A maximum of 32 no. grab samples of surface area 0.1 m^2 will be collected within both areas of the MUL.
	Metocean monitoring buoys	Metocean monitoring buoys are floating sensors with an anchorage system secured on the seabed. The buoys record various metocean conditions through the following monitoring equipment: • conductivity, temperature, depth sensors • optical salinity sensor • Acoustic Doppler Current Profiler (ADCPs operating in the range of 600 kHz or 1 MHz will be used. The instrument emits low amplitude “pings” of sound at a sampling rate of 1-minute average every 10	Up to **two buoys** will be placed within the MUL area. These will be secured by either 2 x 20 kg weights or could be housed within a trawl resistant frame that will lie on the seabed with dimensions of approximately 2 m x 2 m x 1 m.

Survey	Method	Method details	Sampling effort
		minutes. These pings will be emitted in a narrow sound beam (typically a few degrees in width) with a typical echo intensity profile of 80 dB (+/- 1.5 dB)) • optical or electrochemical dissolved oxygen sensor • pH sensor/probe • turbidity sensor • turbidity meter/sediment trap. Metocean monitoring buoys will be anchored with two anchors per buoy. Anchors will have a maximum footprint of 4 m^2 each. These will be secured by either 2 x 20kg weights or could be housed within a trawl resistant frame that will lie on the seabed with dimensions of approximately 2m x 2m x 1m.	

Table 2.2: Predicted time and footprint of each survey activity

Survey activity	Total time for activity		Maximum number of samples	Footprint per sample (m^2)	Maximum total footprint per activity (m^2)
Geophysical survey	Up to 4 months	Up to 10 days	Side Scan Sonar 20 m spacing of main lines and 100 m spacing of cross lines with 25% overlap onto neighbouring lines	-	Suitable percentage cover of the MUL area
		Up to 10 days	Magnetometer 20 m spacing of main lines and 100 m spacing of cross lines with 25% overlap onto neighbouring lines		
		Up to 10 days	Sub-bottom Profiling 20 m spacing of main lines and 100 m spacing of cross lines with 25% overlap onto neighbouring lines		

Survey activity	Total time for activity		Maximum number of samples	Footprint per sample (m^2)	Maximum total footprint per activity (m^2)
		Up to 10 days	Multibeam Echosounder 5-20 m line spacing		
Marine refraction seismic	Up to 8 days		20 m line spacing	-	Suitable percentage cover of the MUL area
Marine ERT	Up to 8 days		Maximum 20 ERT lines of 315 m length	6.3	126
Marine environmental/ecological	Up to 5 days		Subtidal Maximum 80	0.1	8
			Intertidal coring Maximum 12	0.01	0.12
Geotechnical	Up to 4 months		Drop down video 30 transects	-	Suitable percentage cover of the MUL area
			Boreholes Maximum 107	0.071	7.597
			CPT 180	0.1	18
			Grab samples Maximum 32	0.1	3.2
Metocean monitoring buoy anchors	Maximum of 6 months		Two buoys with two anchors per buoy	4	8

2.3 General survey requirements

All appointed survey contractors shall obtain and comply with all necessary marine operational permits including routine and customary vessel/crew/equipment clearances from Customs Agencies, Port Authorities, Marine Survey Office, etc.

2.3.1 Quality assurance

Each of the appointed survey contractors shall comply with the following as a minimum:

- quality and environmental management systems based on ISO9001:2015 and ISO14001
- provision of site and activity specific method statements for all the marine operations within their scope
- provision of quality management plans for all the marine operations.

2.3.2 Health & safety

Health, safety, environment, and welfare considerations will be a priority in the evaluation of possible contractors for the various survey scopes and will be actively managed during the survey work.

Appointed contractors will be required to comply with all legislation relevant to the activities within their scope of work.

Project/survey specific Health, Safety and Environment (HSE) plans will be put in place which will form part of the survey project execution plans.

2.3.3 Working hours

The working hours for the SI works are proposed to be from 8am to 8pm. It is anticipated that the main SI works will be carried out over a period of up to four months including mobilisation and demobilisation. While metocean monitoring buoy deployment will be for period of up to two years, the devices will be autonomous apart from maintenance visits every two to four months. Such maintenance visits will occur during daylight hours only.

Weather conditions and/or sea-state will impact on the working hours, and it may be necessary to temporarily suspend operations when adverse weather conditions and/or sea-state are encountered or forecast. As such, survey plans will remain flexible to take advantage of optimal weather windows. Similarly, equipment or vessel maintenance and repair may impact on the SI works resulting in changes to the survey schedule.

2.3.4 Environmental procedures

Environmental procedures and relevant mitigations to be followed by the appointed survey contractors are detailed within Section 5.2.12 of this report. In addition, this report further details, where relevant, best practice guidance and adherence to relevant legislative frameworks.

2.3.5 Vessels

All vessels will be fit for purpose, certified and capable of safely undertaking all required survey work. Marine vessels will be governed by the provisions of the Sea Pollution Act

1991, as amended. In addition, all vessels will adhere to published guidelines and best working practices such as: the National Maritime Oil/HNS Spill Contingency Plan, Marine Pollution Contingency Plan, Chemicals Act 2008 (No. 13 of 2008), Chemicals (Amendment) Act 2010 (No. 32 of 2010) and associated regulations.

Vessels shall have a Health, Safety and Environmental Management system which should conform to the requirements of the latest International Maritime Organisation, Safety of Life at Sea and environmental requirements for their classification and with any national requirement of the territorial or continental/Economic Exclusion Zone waters to be operated in.

The SI works will be undertaken from vessels in accordance with the relevant guidelines[1] required to manage the risk to marine mammals from man-made sound sources in Irish waters (DAHG, 2014).

[1] Relevant guidance may include the incorporation of the methods outlined in the following text, additional activity-specific mitigation is outlined in Section 6 and within the guidance document (DAHG, 2014). A3: Avoid critical habitats for marine mammals, A4: Avoid operations during key periods of species life cycles, A5: Avoid time periods when effective impact mitigation is not possible, A6: Risk minimisation measures, including minimisation of duration over which sound producing activity takes place, and minimise sound pressure and exposure levels delivered into the environment (i.e., lower impact methods), clear ramp-up procedure, bubble curtain implementation (where relevant), use of dedicated Marine Mammal Observer (MMO) (where relevant).

3 METHODOLOGY

3.1 Environmental Impact Assessment Guidance

A Supporting Information for Screening for Appropriate Assessment (SISAA), a Natura Impact Statement (NIS) and an Annex IV Risk Assessment have also been carried out to support this MUL licence application. All reports were consulted during the preparation of this document.

This report has been prepared with reference to the following European Directives, national legislation and guidance on the provisions of the Environmental Impact Assessment Directive, including:

- Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment as amended by Directive 2014/52/EU (EIA Directive) (Codified Directive)
- Guidelines on the information to be contained in Environmental Impact Assessment Reports (EPA, 2022)
- Technical Guidance note: Obtaining a licence to carry out specified maritime usages in the Maritime Area under the Maritime Area Planning Act 2021. MARA, 2024 Ver 5 (MARA, 2024)
- European Communities (Birds and Natural Habitats) Regulations 2011. SI No. 477 of 2011
- Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. European Commission 2018. 7621 final. Office for Official Publications of the European Communities, Luxembourg
- Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters (DAHG, 2014).

A review of the baseline data was carried out by referring to the following reports and datasets:

- Department of Housing, Local Government and Heritage. National monuments service and wreck viewer
- Irish Ramsar Wetlands Committee. Ramsar sites Ireland
- NPWS Designations viewer (SACs, SPAs, Natural Heritage Area [NHA] and potential NHA [pNHAs])
- Biodiversity Data Centre Maps: Habitats and Species.

4 EIA DIRECTIVE AND PLANNING AND DEVELOPMENT REGULATIONS

4.1 Background

The objective of Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment (the EIA Directive) is to ensure that projects that are likely to have a significant effect on the environment are adequately assessed before they are approved. An EIA is required for all projects detailed in Annex I of the EIA Directive and for all projects detailed in Annex II where the SI works are likely to have significant effects on the environment.

Schedule 5 of the Planning and Development Regulations 2001 (S.I. No. 600 of 2001), as amended sets out the classes, defined under Annex I or Annex II of the EIA Directive, that are subject to mandatory EIA. Schedule 7 of the Planning and Development Regulations 2001 (S.I. No. 600 of 2001), as amended sets out the criteria that must be considered when determining whether a proposed development, that is not automatically subject to mandatory EIA under Schedule 5, is likely to have significant effects on the environment.

The SI works do not fall within the classes defined under Schedule 5 of the Planning and Development Regulations. Therefore, it is not subject to mandatory EIA. This report has assessed the SI works relative to its potential to impact the receiving environment by virtue, inter alia, of its nature, size and location with regard to schedule 7 of the regulations.

As such the following elements have been assessed and an analysis of the assessment is given in Section 5.2 of this report:

- water
- biodiversity
- fisheries and aquaculture
- air quality
- noise and vibration
- landscape/seascape
- traffic and transport (including navigation)
- cultural heritage (including underwater archaeology
- population and human health
- major accidents and disasters
- climate
- waste
- material assets
- interactions.

4.2 Assessment of Impact

The Zone of Influence (ZOI) of the SI works was established in the preparation of the SISAA. Section 5.1 provides a summary of the environmental baseline and Section 5.2 provides an assessment of the potential for impact on the environment.

5 ENVIRONMENTAL REPORT

5.1 Environmental baseline

The environmental baseline has been characterised at a high level, proportionate to the scale and nature of the proposed works, which are limited to temporary marine SI works. Detailed baseline characterisation would be undertaken, if required, as part of any future EIAR.

5.1.1 Relevant European sites

The MUL Area overlaps with, or are located in close proximity to, European sites identified through the SISAA. Based on the Source-Pathway-Receptor (S-P-R) model used in the SISAA report, connectivity has been established between the SI works and the following European sites:

- Slaney River Valley SAC
- Seas off Wexford SPA
- Wexford Harbour and Slobs SPA
- The Raven SPA
- Carnsore Point SAC
- Blackwater Bank SAC.

These European sites are the only sites considered to be within the ZOI of the SI works.

Table 5.1 lists the QI of these European sites, while Figure 5.1 and Figure 5.2 shows the location of the SI works relative to these European sites.

Table 5.1: European sites selected for assessment

European site	Qualifying interests for which site has been selected	Proximity to MUL area (km)
Slaney River Valley SAC (000781)	Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) [1330] Mediterranean salt meadows (*Juncetalia maritimi*) [1410] Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation [3260] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae*) [91E0] Freshwater pearl mussel (*Margaritifera margaritifera*) [1029] Sea lamprey (*Petromyzon marinus*) [1095] Brook lamprey (*Lampetra planeri*) [1096]	0 (proposed works take place within and immediately adjacent to the SAC)

European site	Qualifying interests for which site has been selected	Proximity to MUL area (km)
	River lamprey (*Lampetra fluviatilis*) [1099] Twaite shad (*Alosa fallax*) [1103] Salmon (*Salmo salar*) [1106] Otter (*Lutra lutra*) [1355] Harbour seal (*Phoca vitulina*) [1365]	
Seas off Wexford SPA (004237)	Red-throated diver (*Gavia stellata*) [A001] Fulmar (*Fulmarus glacialis*) [A009] Manx shearwater (*Puffinus puffinus*) [A013] Gannet (*Morus bassanus*) [A016] Cormorant (*Phalacrocorax carbo*) [A017] Shag (*Phalacrocorax aristotelis*) [A018] Common scoter (*Melanitta nigra*) [A065] Mediterranean gull (*Larus melanocephalus*) [A176] Black-headed gull (*Chroicocephalus ridibundus*) [A179] Lesser black-backed gull (*Larus fuscus*) [A183] Herring gull (*Larus argentatus*) [A184] Kittiwake (*Rissa tridactyla*) [A188] Roseate tern (*Sterna dougallii*) [A192] Common tern (*Sterna hirundo*) [A193] Arctic tern (*Sterna paradisaea*) [A194] Guillemot (*Uria aalge*) [A199] Razorbill (*Alca torda*) [A200] Puffin (*Fratercula arctica*) [A204] Sandwich tern (*Thalasseus sandvicensis*) [A863] Little tern (*Sternula albifrons*) [A885]	0 (proposed works take place within and immediately adjacent to the SPA)
Wexford Harbour and Slobs SPA (004076)	Little grebe (*Tachybaptus ruficollis*) [A004] Great crested grebe (*Podiceps cristatus*) [A005] Cormorant (*Phalacrocorax carbo*) [A017] Grey heron (*Ardea cinerea*) [A028] Bewick's swan (*Cygnus columbianus bewickii*) [A037] Whooper swan (*Cygnus cygnus*) [A038] Light-bellied Brent goose (*Branta bernicla hrota*) [A046] Shelduck (*Tadorna tadorna*) [A048] Teal (*Anas crecca*) [A052] Mallard (*Anas platyrhynchos*) [A053] Pintail (*Anas acuta*) [A054] Scaup (*Aythya marila*) [A062] Goldeneye (*Bucephala clangula*) [A067] Red-breasted merganser (*Mergus serrator*) [A069] Hen harrier (*Circus cyaneus*) [A082] Coot (*Fulica atra*) [A125] Oystercatcher (*Haematopus ostralegus*) [A130] Golden plover (*Pluvialis apricaria*) [A140]	0 (proposed works take place within and immediately adjacent to the SPA)

European site	Qualifying interests for which site has been selected	Proximity to MUL area (km)
	Grey plover (*Pluvialis squatarola*) [A141] Lapwing (*Vanellus vanellus*) [A142] Knot (*Calidris canutus*) [A143] Sanderling (*Calidris alba*) [A144] Dunlin (*Calidris alpina*) [A149] Black-tailed godwit (*Limosa limosa*) [A156] Bar-tailed godwit (*Limosa lapponica*) [A157] Curlew (*Numenius arquata*) [A160] Redshank (*Tringa totanus*) [A162] Black-headed gull (*Chroicocephalus ridibundus*) [A179] Lesser Black-backed gull (*Larus fuscus*) [A183] Greenland white-fronted goose (*Anser albifrons flavirostris*) [A395] Wigeon (*Mareca penelope*) [A855] Little Tern (*Sternula albifrons*) [A885] Wetland and Waterbirds [A999]	
The Raven SPA (004019)	Red-throated diver (*Gavia stellata*) [A001] Cormorant (*Phalacrocorax carbo*) [A017] Common scoter (*Melanitta nigra*) [A065] Grey plover (*Pluvialis squatarola*) [A141] Sanderling (*Calidris alba*) [A144] Greenland white-fronted goose (*Anser albifrons flavirostris*) [A395] Wetland and Waterbirds [A999]	0 (proposed works take place within and immediately adjacent to the SPA)
Carnsore Point SAC (002269)	Mudflats and sandflats not covered by seawater at low tide [1140] Reefs [1170] Harbour porpoise (*Phocoena phocoena*) [1351]	2.5
Blackwater Bank SAC (002953)	Sandbanks which are slightly covered by sea water all the time [1110] Harbour porpoise (*Phocoena phocoena*) [1351]	5.5 km

The SISAA stated that the SI works has the potential for Likely Significant Effect (LSE), without mitigation, on the following Annex I habitat and Annex II species within the Slaney River Valley SAC, Wexford Harbour and Slobs SPA, Carnsore Point SAC, and Blackwater Bank SAC. This was attributed to habitat loss to the Slaney River SAC and Wexford Harbour Slobs SPA and underwater noise disturbance to noise sensitive species to the Slaney River SAC, Carnsore Point SAC and Blackwater Bank SAC.

The NIS subsequently proposed measures to mitigate the potential for impact on the aforementioned habitats and species. These mitigation measures are given in Section 5.2.12 of this report.

5.1.2 Additional designations

There are no NHAs with the ZOI of the MUL area. Keeragh Islands NHA, which is an important site for seabirds, is the nearest NHA to the MUL area. This NHA is 25 km to the south-west of the MUL area.

Wexford Harbour and Slobs pNHA (000712) lies within the MUL area (area A and partially with area B). This site contains areas of the Annex I habitat wetlands [A999]. The SISAA recorded the potential for LSE on the SPA site which overlaps with the pNHA, without mitigation.

The nearest Ramsar site to the MUL area is The Raven Ramsar site. This Ramsar site is largely coincident, but completely, with the boundaries of The Raven SPA. The proposed MUL area does not overlap with the designated Ramsar habitat area and no potential for LSEs were recorded for The Raven SPA and associated Ramsar.

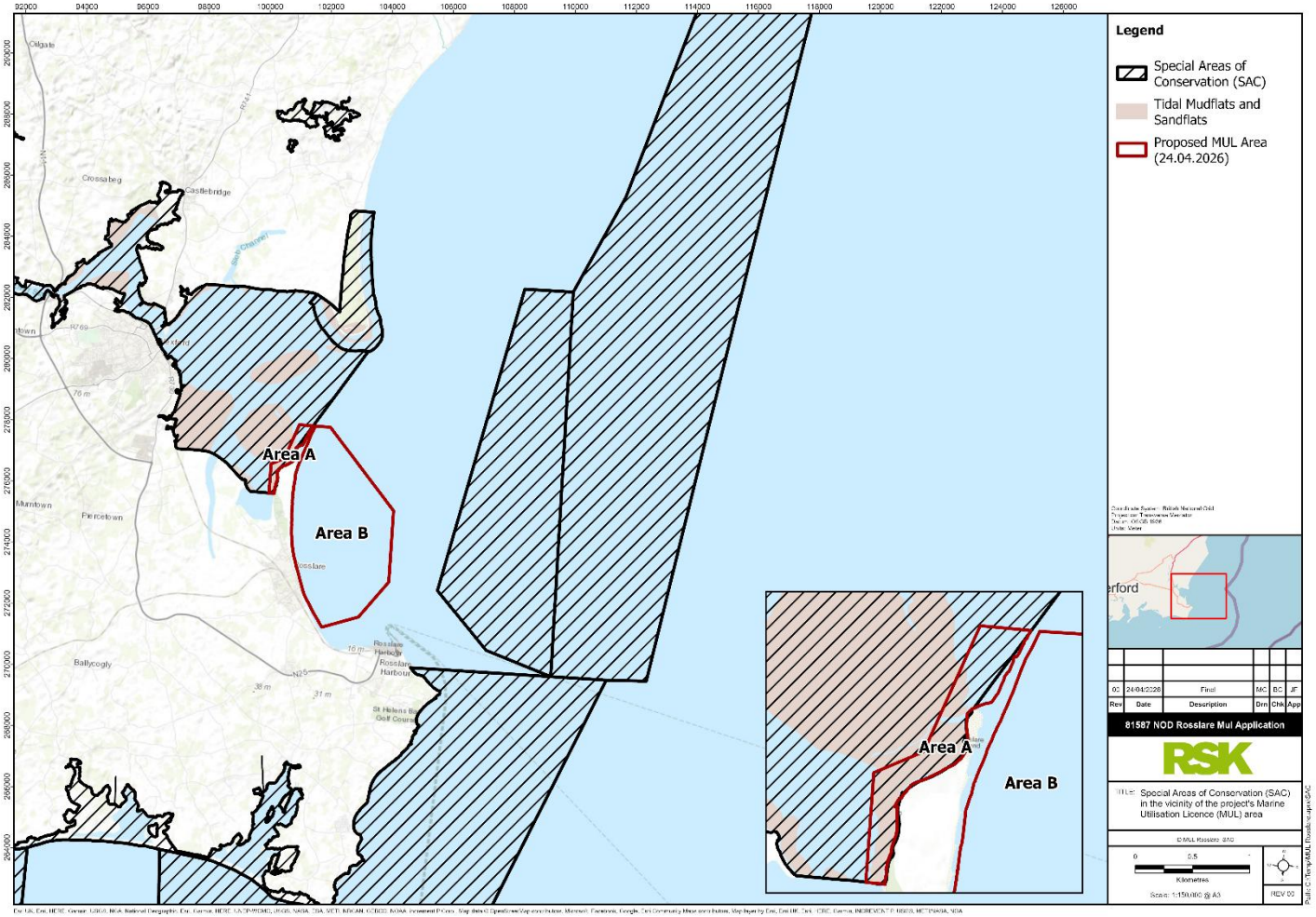

Figure 5.1: SAC sites in the vicinity of the MUL area

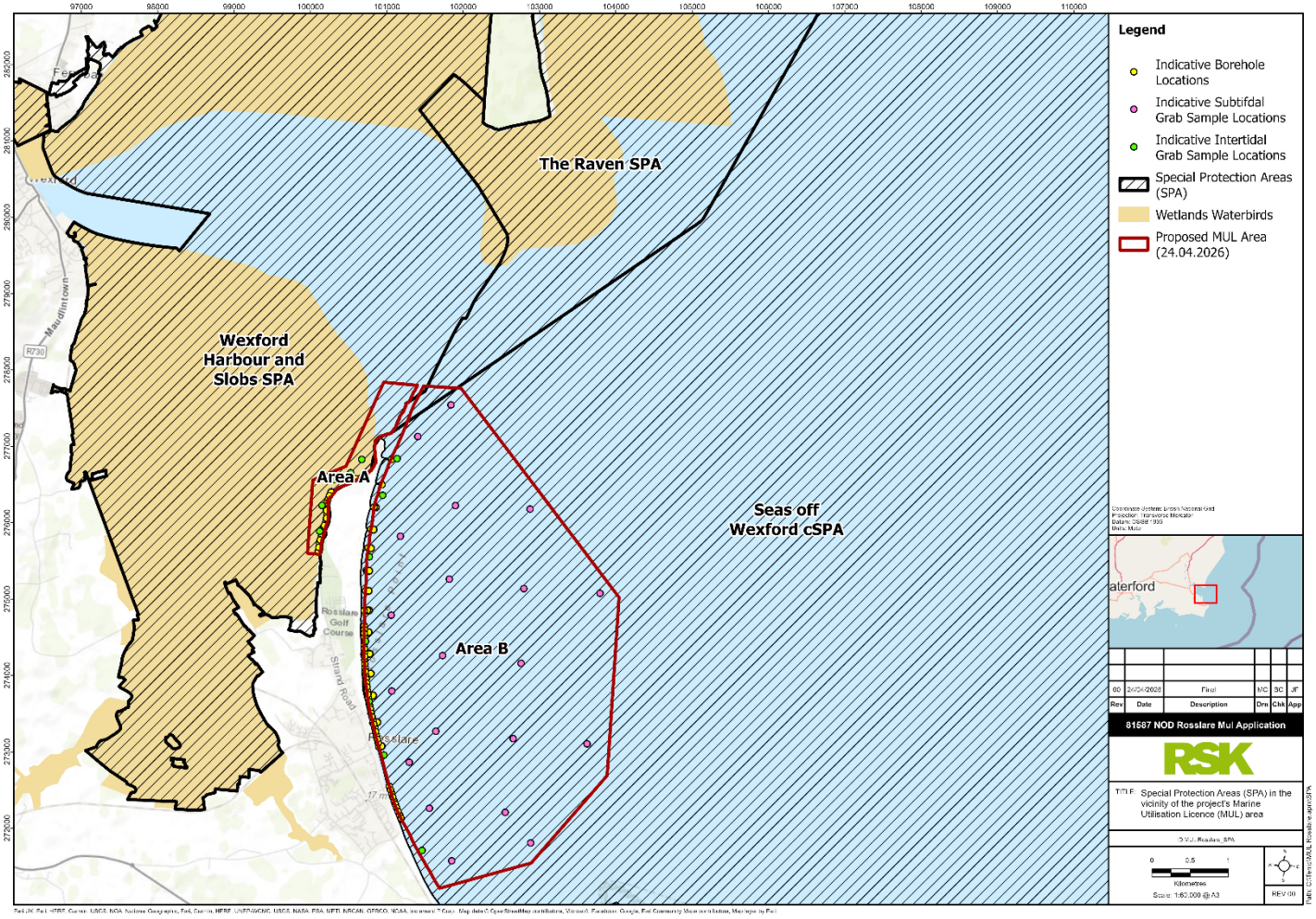

Figure 5.2: Special Protection Areas in the vicinity of the MUL area

5.2 Assessment for potential for impact

The following assessment presents a high-level screening of potential environmental effects associated with the SI works. The purpose of this assessment is to identify whether any impact pathways exist that could give rise to likely significant effects.

5.2.1 Population and human health

No potential for impacts on population or human health is considered possible; there is no potential for pollution from hydrocarbons, vessel discharge/waste or the introduction of invasive non-native species as the proposed vessels will operate in accordance with best practice guidance, including relevant legislative frameworks for pollution prevention and biosecurity. No significant effects on population or human health are anticipated as a result of the SI works.

5.2.2 Biodiversity

5.2.2.1 Coastal and benthic habitats

The Slaney River Valley SAC boundary extends into area A of the proposed MUL area. The SAC is designated for habitats including mudflats and sandflats not covered by seawater at low tide, Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) and Mediterranean salt meadows (*Juncetalia maritimi*). The mudflats and sandflats not covered by seawater at low tide may be present within MUL area A of the SI works; here sediments primarily constitute infralittoral fine sand or muddy substrate.

There is the potential for loss and/or disturbance to these marine habitats as a result of the sediment sampling methods. In addition to direct habitat loss when taking samples, there will also be temporary habitat loss due to the four feet of the jack-up barge used to conduct sampling, as well as temporary placement of equipment associated with seismic surveys and the anchoring of metocean monitoring buoys. Due to the limited footprint of the jack-up barge and sampling, the impact on the benthic habitat would be negligible.

The deposition arising from the drilling of the geotechnical marine boreholes, from the other sediment sampling methods (grab samples and intertidal coring) and positioning of equipment on the seabed (e.g. jack-up barge legs, equipment associated with seismic survey methods and metocean monitoring buoy anchors) has the potential to result in indirect effects of Annex I habitats associated with increased Suspended Sediment Concentrations (SSC). Furthermore, the sediment type noted within the MUL area is noted as sand (fine to medium) with mixed sediment (INFOMAR, 2026). This sediment type typically falls out of suspension quite rapidly and as the works will take place along the Rosslare coast this would aid in the rapid dispersal of any suspended sediments due to the water depth, tidal influence, the nature of the habitats and currents near the MUL area.

There is potential for limited SSC within the immediate footprint of the sediment sampling, but due to the small number of sites, relative footprint and limited duration of the works, SSC impacts on benthic habitats is expected to be negligible.

5.2.2.2 *Invasive non-native species*

The introduction and spread of invasive non-native species is recognised as a potential risk associated with marine operations, particularly through the movement of vessels, equipment and associated materials between locations.

Potential pathways for the introduction or transfer of invasive non-native species during the SI works include:

- vessel hull fouling
- ballast water discharge
- mobilisation and deployment of survey equipment (e.g. frames, sensors, anchors and buoys).

Given the nature of the SI works, which are temporary and involve a limited number of vessels operating within a defined area, the risk of introducing or spreading invasive non-native species is considered to be low.

Standard industry best practice biosecurity measures will be implemented as part of the project delivery. These will include:

- ensuring vessels comply with applicable international conventions, including the International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention) and MARPOL requirements (where appropriate)
- inspection and, where necessary, cleaning of equipment prior to mobilisation to site
- avoiding the transfer of sediments, fouling organisms or standing water between locations
- minimising the time that equipment remains deployed where practicable.

Through implementation of such best practice, the potential for the introduction or spread of invasive non-native species associated with the SI works is considered to be low, and no significant effects are predicted.

5.2.2.3 *Avifauna*

The SI works will take place within and immediately adjacent to three SPAs; Seas off Wexford SPA, Wexford Harbour and Slobs SPA and The Raven SPA. The SPAs have numerous avifauna as qualifying species, including cormorant (*Phalacrocorax carbo*), which inhabit sheltered and shallow subtidal over sand and mud flats.

Avifauna species may be at risk from airborne noise, vibration, lighting, and human presence-related disturbance. However, Rosslare Harbour is a busy shipping area where marine species in the area are likely to be habituated to marine traffic to a degree, and the temporary addition of a single vessel operating at either low speeds or stationary for the SI works is unlikely to constitute a significant increase in vessel activity given the levels of vessel activity typical for the area. Furthermore, the works are of temporary nature and limited duration. The limited benthic and coastal habitat disturbance which may have foraging implications is also limited in extent and therefore the impacts on avifauna would be negligible.

5.2.2.4 *Marine mammals*

The SISAA, NIS and Annex IV Risk Assessment identifies marine mammals, including harbour porpoise, grey seal, harbour seal and otter, as receptors with potential connectivity to the SI works.

Potential impact pathways to marine mammals include underwater noise generated by geophysical survey equipment and geotechnical activities, as well as increased vessel presence during SI works.

While these pathways are present, the scale, duration and nature of the SI works are such that any effects would be temporary, localised and limited in extent. The acoustic sources associated with the SI works are short-term and intermittent, and will attenuate rapidly within the shallow coastal waters of the study area.

Marine mammals in the wider area are also likely to be periodically exposed to existing vessel traffic associated with Rosslare Harbour and surrounding coastal activities. The temporary and limited increase in activity associated with the SI works would not represent a substantial change to baseline conditions.

Any behavioural responses (e.g. short-term avoidance) would be temporary and reversible, with no measurable effect on the distribution, abundance or conservation status of marine mammal populations.

Accordingly, it was concluded there was potential for disturbance to marine mammals in the absence of mitigation. Mitigation was subsequently proposed in the NIS and Annex IV risk assessment and is given in Section 5.2.12 of this report.

5.2.2.5 *Fish*

Commercial fisheries

There is potential overlap between the MUL area and commercial fisheries activities including dredges, pots, bottom otter trawls, pelagic trawls and beam trawls (Figure 5.3). However, as the overlap is limited to the outer boundary of the MUL area and due to the limited duration of the works, the impact on commercial fisheries is anticipated to be negligible. Furthermore, any SSC is likely to be limited in extent and of limited duration, with dispersion resulting in reduced SSC concentrations in the surrounding area. This is also therefore unlikely to impact the commercial fisheries activities.

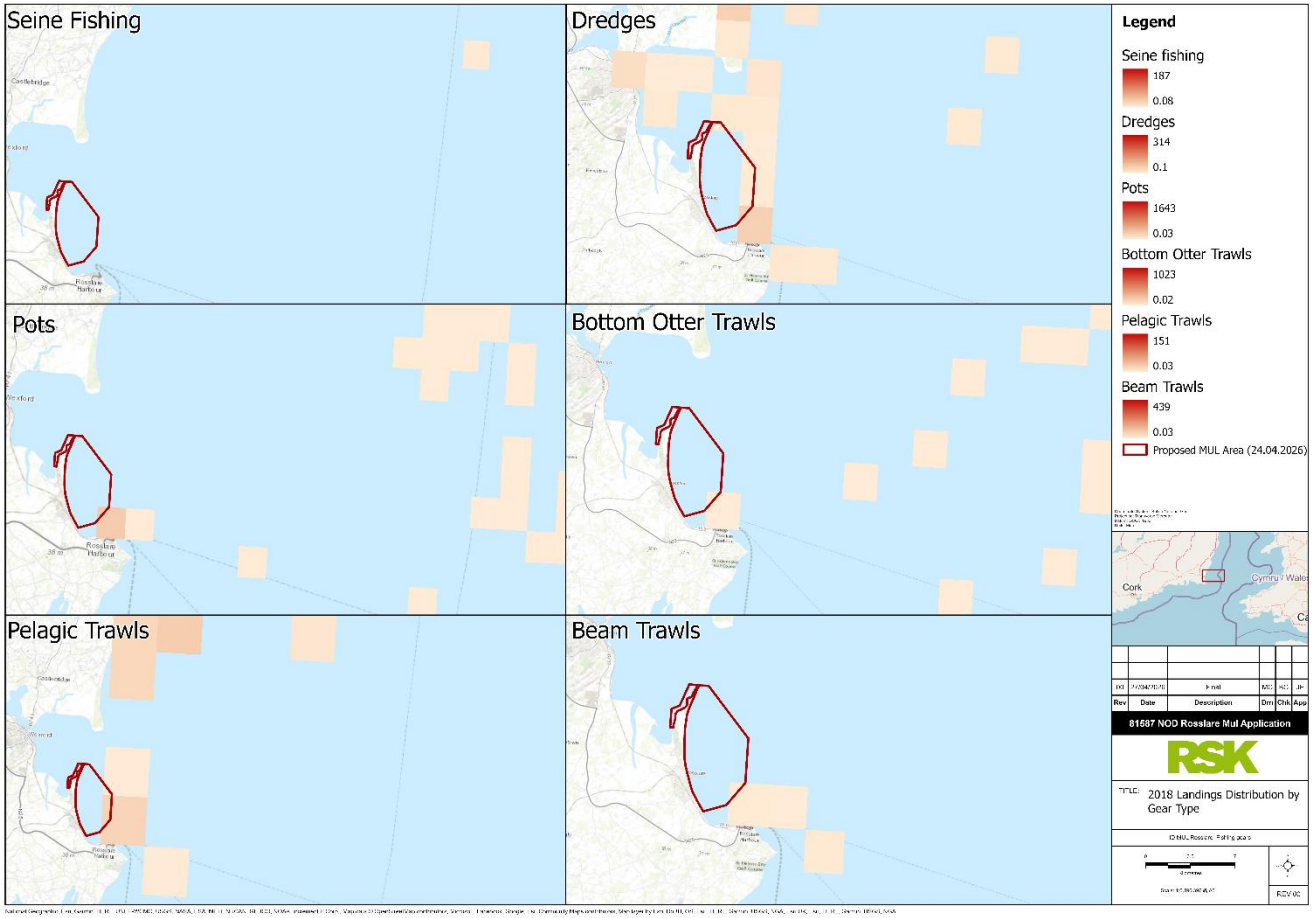

Figure 5.3: 2018 landings distribution by gear type

Source: Marine Institute (n.d.)

Aquaculture

Aquaculture (notably blue mussel [*Mytilus edulis*]) licenced sites occur within the boundary of the MUL area. A Pacific oyster (*Magallana gigas*) site is located to the west of the MUL area (Figure 5.4). Due to the temporary nature of the SI works and limited/temporary increases in SSC and the minimal overlap between the MUL area and the aquaculture sites, impacts on aquaculture is considered to be negligible. Furthermore, no intrusive works are proposed within the aquaculture boundaries. Owing to the scale and scope of the SI works and the distance of any intrusive works from these aquaculture areas no project-related effects are foreseen.

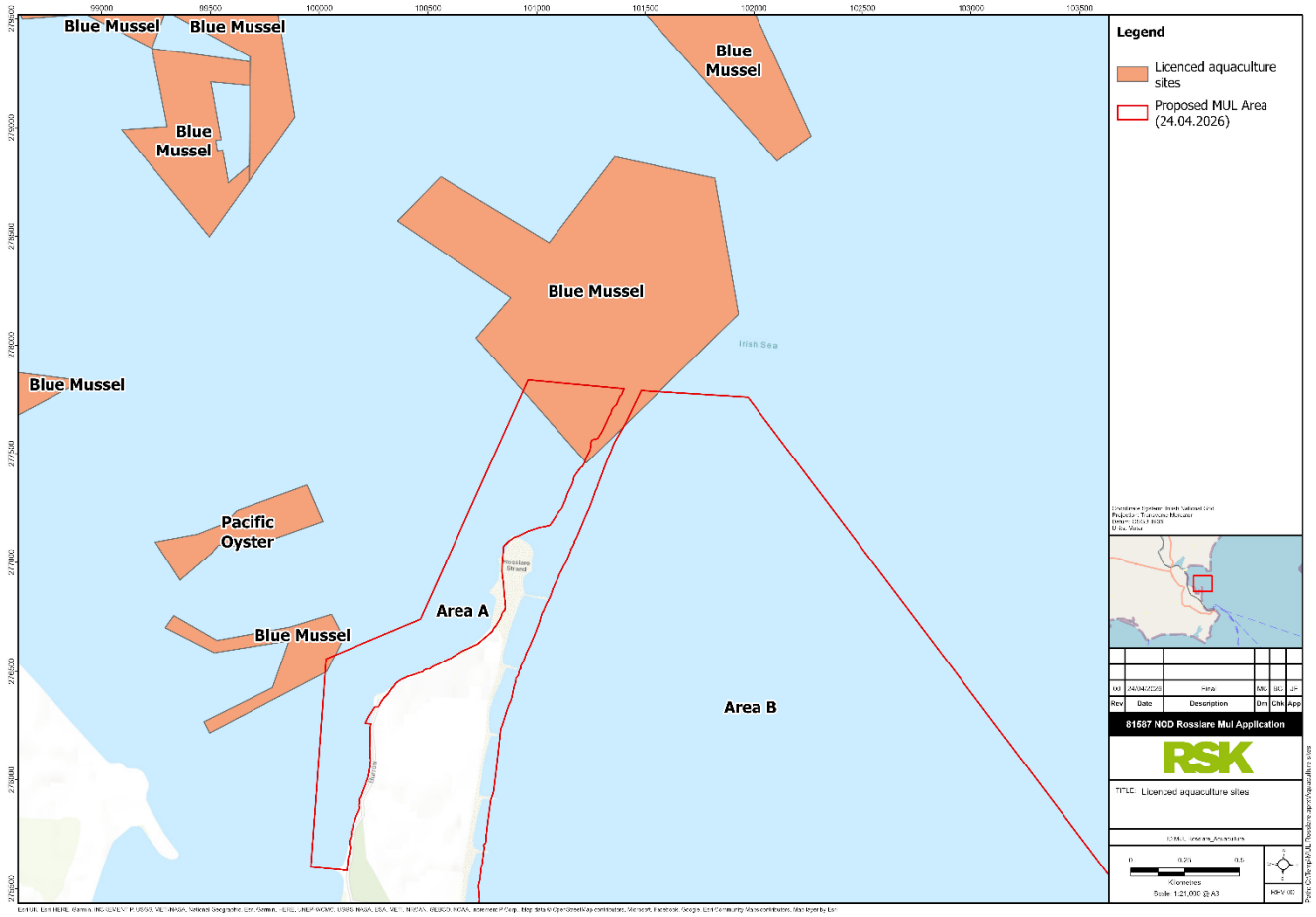

Figure 5.4: Licenced aquaculture sites

Source: Department of Agriculture, Food and the Marine (n.d.)

Annex II fish species

The MUL area is within the ZOI of the following Annex II fish species in association with the Slaney River Valley SAC:

- sea lamprey (*Petromyzon marinus*) [1095]
- brook lamprey (*Lampetra planeri*) [1096]
- river lamprey *(Lampetra fluviatilis*) [1099]
- twaite shad (Alosa fallax) [1103]
- salmon (*Salmo salar*) [1106].

The SI works are unlikely to present a barrier to migration for these species, as they predominantly inhabit on-bottom subtidal and freshwater areas. Therefore, populations are unlikely to be significantly affected in the way of migration behaviour. It is however, appreciated individuals are sensitive to other disturbance (e.g. underwater noise, SSC, etc.). Given the short term duration of the works and anticipated limited extent/rapid dispersion of any SSC, the impacts on Annex II fish species is considered to be negligible.

It was accordingly concluded there was potential for effects on these species in the absence of mitigation. Mitigation was subsequently proposed in the NIS and is given in Section 5.2.12 of this report.

5.2.3 Water, air and climate

While emissions to air as a result of vessel exhausts is unavoidable, the level of such emissions would not be significantly above background levels in this area. As a result, Air Quality standards are not expected to be exceeded. Given that there is only one vessel due to be in operation, an increase in emission levels would not be significant. Therefore, no effects to air quality are anticipated. Other than indirect impacts on climate change resulting from the use of vessel fuel the SI works do not have the potential to impact climate change trends.

5.2.4 Waste

Waste streams may include black/grey water, general solid waste and materials associated with the daily vessel operations. The waste produced is anticipated to be of low volume due to the requirement of only one vessel associated with the SI works. Best practice waste disposal methods will be carried out with regards to segregation, handling and storage, and disposal, to prevent waste entering the marine environment. Vessel waste will be handled in line with best practice guidance, including MARPOL legislative requirements. Due to the SI works only requiring one vessel, the impact from waste is considered to be negligible.

5.2.5 Cultural heritage

A review of the National Monuments Service Historic Environment viewer and wreck viewer has been carried out. The review indicated a small number of wrecks within the MUL area or adjacent waters, but no historic monuments.

Any intrusive works such as sampling and borehole drilling will avoid any known wreck sites, which would ensure any impacts on cultural heritage is negligible.

5.2.6 Material assets

A discharge point and the Rosslare Harbour dredge disposal location are located within the MUL area. No intrusive works are proposed at these locations, and SI works should be planned to avoid interaction with these assets.

No other infrastructure, such as pipelines or power cables, have been identified within the MUL area. Given the limited number of identified assets, the temporary nature of the SI works, and the ability to avoid known asset locations, any effects on material assets would be temporary, localised and not significant.

5.2.7 Noise and vibration

Noise and vibration will be generated during the SI works, primarily associated with vessel activity, geophysical survey equipment and geotechnical operations such as borehole drilling.

Airborne noise will be limited to short-term vessel and equipment activity and is addressed in Section 5.2.2.3 in relation to avifauna. Given the offshore location, temporary nature of the works and absence of nearby sensitive human receptors, airborne noise effects are not considered significant.

Accordingly, while airborne noise and vibration pathways are recognised, these do not give rise to significant environmental effects.

Underwater noise may be generated by acoustic survey equipment and geotechnical activities. As identified within the SISAA, NIS and Annex IV Risk Assessment while underwater noise represents a potential impact pathway, the sources are short-term, intermittent and spatially limited. In addition, sound levels will attenuate rapidly within the shallow coastal waters of the MUL area. However, it was concluded there was potential for disturbance to marine mammals and fish species in the absence of mitigation. Mitigation was subsequently proposed in the NIS and is given in Section 5.2.12 of this report.

5.2.8 Landscape and seascape

The SI works do not require the installation of any permanent infrastructure. All equipment and activities associated with the SI works will be temporary and limited in duration.

Any visual presence associated with vessels or equipment will be short-term and reversible, with no lasting alteration to landscape or seascape character.

Accordingly, no significant effects on landscape or seascape are predicted.

5.2.9 Traffic and transport

Minor inconvenience to navigation during the SI works may occur. The appropriate notices will be provided to ensure other sea users are aware of the operations and deployments. Rosslare Harbour is located to the south of the MUL area and is therefore subject to significant existing vessel traffic. However, given the SI works will require the use of only one vessel, disruption to other vessels is considered to be negligible.

Given the minimal disruption to other sea users from the single vessel carrying out the works, the impact on traffic and transport is considered to be negligible.

5.2.10 Major accidents and disasters

The SI works are limited to temporary activities and do not involve the storage or handling of significant quantities of hazardous materials.

The potential for major accidents is therefore limited to standard marine operational risks, such as vessel collision or accidental pollution events. Given the small number of vessels involved, the short duration of the works, and the offshore nature of the activities, the likelihood of such events occurring is very low.

The MUL area is not located within an area subject to significant natural disaster risk. While adverse weather conditions may occur, these represent typical operational constraints for marine activities and do not give rise to increased risk of major accidents.

In the unlikely event of an incident, any effects would be localised and short-term in nature.

Accordingly, the risk of major accidents and disasters is low and does not give rise to significant environmental effects.

5.2.11 Cumulative effects

Cumulative effects have been considered with reference to the SISAA, supporting NIS and Annex IV Risk Assessment, which reviewed other plans and projects within the wider study area.

While other marine and coastal activities may occur within the region, the SI works are temporary, localised and of short duration. As such, there is limited potential for temporal or spatial overlap with other activities that could give rise to cumulative effects.

In addition, the nature of the SI works, comprising short-term activities, does not give rise to sustained or large-scale environmental pressures that could combine with other projects to result in significant effects.

Accordingly, no significant cumulative effects are predicted.

5.2.12 Summary of mitigations

The following mitigation measures will be employed as a result of potential effects attributed to underwater noise impacts. These mitigation measures are in line with best practice guidance (NPWS, 2014), with further detail provided in proceeding sections. The following mitigation is provided to mitigate the effects of the usage of geophysical survey equipment, however some of these measures will be used for other potentially noisy, geotechnical and other sampling methodology as applicable.

- A qualified Marine Mammal Observer (MMO) will be on board the survey vessel to monitor marine mammal activity and log all events.
- Pre-start monitoring: relevant operations shall not commence if marine mammals are detected within a 500 m radial distance of the vessel (a conservative range which accounts for the maximum likely ZOI for potential injury from geophysical surveys of 130 m).
- Survey operations shall only commence in daylight hours where effective visual monitoring by the MMOs has been achieved. Where effective visual monitoring is not possible, the sound-producing activities shall be postponed until effective visual monitoring has been completed.

- Ramp Up: Following the pre-start monitoring, a ramp-up procedure will take place for a period of 20 minutes for all relevant survey equipment.
- Where the duration of a survey line or station change will be greater than 40 minutes, the activity shall, on completion of the line/station being surveyed, either shut down and undertake a full pre-start monitoring and ramp-up procedure or reduce the sound energy output to a lower state with an output peak SPL of 165-170 dB re 1µPa @1m, and then undertake the full ramp up procedure.
- If there is a break in sound output for a period of 5 – 10 minutes the MMO will be required to check that no marine mammals are observed within the monitored zone prior to recommencement of the sound sources at full power. Where a marine mammal is observed within the 500 m monitored zone during such a break, then all pre-start monitoring and a subsequent ramp-up procedure shall recommence as in a normal start-up operation.
- If there is a break in sound output for a period greater than 10 minutes, then all pre-start monitoring and a subsequent ramp-up procedure will be undertaken.

5.2.12.1 In combination effects

Provided the measures recommended for the noise sensitive species listed above are implemented, no effects on relevant species, in combination with other projects and plans, are considered possible.

6 CONCLUSION

This report has assessed the proposed marine SI works associated with the Rosslare CEFRS project in the context of the EIA Directive and relevant Irish legislation. This SISEIA should be read in conjunction with the SISAA, NIS and Annex IV Risk Assessment.

The SI works comprise temporary marine surveys including geophysical, geotechnical, environmental investigations within a defined MUL area. No permanent infrastructure will be installed, and all activities are short-term and reversible in nature.

The assessment has considered the characteristics of the SI works, their location, and the nature of potential impacts. The works are limited in scale, duration and spatial extent. Any potential effects are temporary, localised and short-term, and do not give rise to significant environmental effects when the proposed mitigation and best practice guidance is considered.

On this basis, it is concluded that the SI works are not likely to give rise to significant effects on the environment.

Accordingly, an EIA is not required.

7 REFERENCES

EC (2018), 'European Commission Notice C (2018) 7621 Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC', Office for Official Publications of the European Communities, Luxembourg;

EMODnet. (2026), 'European Marine Observation and Data Network – Central Portal'. Available online: https://emodnet.ec.europa.eu/geoviewer/#!/ (accessed March 2026)

European Commission (EC) (2000), 'Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC'. Office for Official Publications of the European Communities, Luxembourg.

European Commission (EC) (2007), 'Guidance document on the strict protection of animal species of Community interest under the Habitats Directive 92/43/EEC'. European Commission

European Commission (EC) (2013), 'Guidance on the Application of the Environmental Impact Assessment (EIA) Procedure for Projects Co-financed by the EU Funds 2014–2020'. Publications Office of the European Union, Luxembourg.

European Commission (EC) (2021), 'European Commission Notice C (2021) 6913 Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC', Office for Official Publications of the European Communities, Luxembourg

Ghoul, A. & Reichmuth, C. (2016), Auditory sensitivity and masking profiles for the sea otter (Enhydra lutris). In: Advances in Experimental Medicine and Biology, pp. 349–354. Springer.

Irish Whale and Dolphin Group (IWDG) (2023), Leatherback Turtle Stranding, Curracloe Beach, Co. Wexford, 28 October 2023. Logged in the IWDG stranding database and referenced in IWDG communications.

Marine Institute (2026b), '*[Harbour Seal Habitat]* (Ireland's Marine Atlas)'. https://atlas.marine.ie/#?c=52.3352:-6.3618:12 (accessed March 2026).

Marine Institute (2026c), '*[Otter Habitats]* (Ireland's Marine Atlas)'. https://atlas.marine.ie/#?c=52.3352:-6.3618:12 (accessed March 2026).

Marine Institute. (2026a), 'Species Distribution – Marine Mammals (MapServer). Ireland's Marine Atlas'. Available online: https://www.arcgis.com/apps/mapviewer/index.html?url=http%3A%2F%2Fatlas.marine.ie%2Farcgis%2Frest%2Fservices%2FSpeciesDistributionMarineMammals%2FMapServer&source=sd (accessed March 2026)

Morris, Chris, and Callan Duck (2019), 'Aerial Thermal-Imaging Survey of Seals in Ireland, 2017–2018'. Irish Wildlife Manuals 111. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht. Available online: https://www.npws.ie/sites/default/files/general/AerialThermalSealSurvey2017_2018_0.zip (accessed March 2026)

MyPlan.ie Maps (2026), 'Spatial planning portal in connection with the Department of Housing and Irish Local Authorities. Available online : https://www.myplan.ie/ (accessed March 2026).

National Parks and Wildlife Service (NPWS) (2007), 'Otter (Lutra lutra) Conservation Status Report'. National Parks & Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin. Available online : https://www.npws.ie/sites/default/files/general/otter-conservation-status-report.pdf (accessed March 2026)

National Parks and Wildlife Service (NPWS) (2011), 'Roaringwater Bay and Islands SAC (000101): Conservation Objectives'. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht. Available online: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000101.pdf. (accessed March 2026)

Cronin, M.A., McConnell, B.J. (2008), 'SMS seal: A new technique to measure haul-out behaviour in marine vertebrates', *Journal of Experimental Marine Biology and Ecology*, Volume 362, Issue 1, Pages 43-48, ISSN 0022-0981.

Cummins, S., Lauder, C., Lauder, A. & Tierney, T. D. (2019), 'The Status of Ireland's Breeding Seabirds: Birds Directive Article 12 Reporting 2013 – 2018'. Irish Wildlife Manuals, No. 114. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Ireland

Department of Agriculture, Food and the Marine (n.d.), ' Aquaculture MUL area shapefile'. Irish Spatial Data Exchange (ISDE). Available atonline: https://www.isde.ie/geonetwork/srv/eng/catalog.search#/metadata/ie.marine.data:dataset.4791 (accessed March 2026)

Department of Arts, Heritage and the Gaeltacht (DAHG) (2014), 'Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters'. Available online: https://www.npws.ie/sites/default/files/general/Underwater%20sound%20guidance_Jan%202014.pdf (accessed March 2026)

Department of the Environment, Heritage and Local Government (DoEHLG) (2009, rev. 2010), 'Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities. Government of Ireland'.

Environmental Protection Agency (EPA) (2022), 'Guidelines on the information to be contained in Environmental Impact Assessment Reports; Wexford. Ireland'.

European Commission (EC) (2002), 'Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites: Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC'. Office for Official Publications of the European Communities, Luxembourg.

Integrated Mapping for the sustainable development of Ireland's marine resource (INFOMAR) (2026), 'Seabed and sediment data'. Available online: https://www.infomar.ie/maps/interactive-maps/seabed-and-sediment (accessed March 2026).

Laist, D.W., Knowlton, A.R., Mead, J.G., Collet, A.S. and Podesta, M. (2001), 'Collisions between ships and whales'. *Marine Mammal Science*, 17: 35-75.

Marine Institute (n.d.), 'ISDE dataset record: ie.marine.data:dataset' *.4791*. Available online: https://www.isde.ie/geonetwork/srv/eng/catalog.search#/metadata/ie.marine.data:dataset.4791 (accessed March 2026)

Maritime Area Regulatory Authority (MARA) (2024), 'Technical Guidance note: Obtaining a licence to carry out specified maritime usages in the Maritime Area under the Maritime Area Planning Act 2021. MARA, 2024 Ver 5'.

National Parks and Wildlife Service (NPWS) (2012), 'Conservation Objectives: Slaney River Valley SAC 000781'. Dublin: Department of Arts, Heritage and the Gaeltacht. Available online: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000781.pdf (accessed March 2026)National Parks and Wildlife Service (NPWS) (2014), 'Guidance to Manage the Risks to Marine Mammals from Man-made Sound Sources in Irish Waters'. January 2014.