Iarnród Éireann
Irish Rail

Rosslare ORE Hub

EIAR Environmental Topic Chapters

Chapter 15:

Commercial Fisheries and Aquaculture

venterra | GDG GAVIN & DOHERTY GEOSOLUTIONS | NICHOLAS O'DWYER an RSK company

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

ACP	An Coimisiún Pleanála
BIM	Bord Iascaigh Mhara
CFP	Common Fisheries Policy
COLREGS	Convention on the International Regulations for Preventing Collisions at Sea (1972)
EEZ	Exclusive Economic Zone
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EPA	Environmental Protection Agency
EU	European Union
FLO	Fisheries Liaison Officer
FMMS	Fisheries Management and Mitigation Strategy
GDG	Gavin & Doherty Geosolutions
ICES	International Council for the Exploration of the Sea
IFI	Inland Fisheries Ireland
IS&EFPO	Irish South & East Fish Producers Organisation
ISWFPO	Irish South & West Fish Producers Organisation
KFO	Killybegs Fishermen's Organisation
MSC	Marine Stewardship Council
NIFA	National Inshore Fishermen's Association
NMPF	National Marine Planning Framework
NPWS	National Parks and Wildlife Service
ORE	Offshore Renewable Energy
SFPA	Sea-Fisheries Protection Authority
SI	Statutory Instrument
SSCF	Small-Scale Coastal Fleet
STECF	Scientific, Technical and Economic Committee for Fisheries
ZoI	Zone of Influence

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15 COMMERCIAL FISHERIES, AND AQUACULTURE

15.1 INTRODUCTION

Iarnród Éireann – Irish Rail is applying for development permission for the Rosslare Offshore Renewable Energy Hub (hereafter the 'Proposed Development'), located immediately adjacent and to the northwest of the existing Rosslare Europort at Rosslare Harbour in County Wexford, which is operated by Iarnród Éireann. The Proposed Development includes capital dredging to achieve navigable depths for vessels delivering ORE components; land reclamation to create a storage area for these components; and construction of two new berths to facilitate loading and unloading of ORE components. The land reclamation works include infilling the existing small boat harbour, after the construction of a new small boat harbour. The Proposed Development also includes the installation of a new slipway and facility for local clubs, such as the Sea Scouts.

The purpose of the Proposed Development is to provide a facility for the efficient handling and storage, marshalling, staging and integration of ORE components to facilitate installation of offshore wind energy projects by ORE developers and operators. The Proposed Development is designed to provide facilities that accommodate a wide range of infrastructure uses, both for current requirements and anticipated future needs. For instance, the Proposed Development could be used for traditional port activities if required, including during periods of reduced ORE-related activity. Refer to EIAR Chapter 6: Project Description for further detail.

This chapter of the Environmental Impact Assessment Report (EIAR) presents the assessment of the likely significant effects of the Proposed Development on commercial fishing receptors arising from the construction and operation of the Proposed Development, both alone and cumulatively with other projects. The scope of this chapter was determined following issue of a scoping report to the following topic-relevant stakeholders (see Chapter 4: Scoping and Consultation for full details of consultation):

- Bord Iascaigh Mara
- Inland Fisheries Ireland
- Marine Institute
- Sea Fisheries Protection Authority

The assessment presented in this chapter is informed by the following EIAR chapters/technical appendices:

- Technical Appendix 12: Fish Ecology
- Technical Appendix 15: Commercial Fisheries and Aquaculture
- Chapter 12: Fish, Shellfish and Turtle Ecology

This chapter provides a summary of topic-relevant guidance and outlines the data sources used to characterise the topic-specific Commercial Fisheries Study Area. Building on the general EIAR

methodology outlined in Chapter 1: Introduction and Methodology, the topic-specific methodology followed in assessing the impacts of the Proposed Development on topic-specific receptors is set out, as is the assessment of likely effects on the topic-specific receptors arising from the construction and operation of the Proposed Development.

This chapter provides stakeholders with sufficient information to determine the potential significant impacts of the Proposed Development on commercial fisheries and aquaculture receptors. Specifically, it:

1. Presents the existing commercial fisheries and aquaculture baseline established from available fisheries data, desk studies, and consultations
2. Identifies any assumptions and limitations encountered in compiling this information
3. Identifies those receptors that could be affected by the construction and operation of the Proposed Development
4. Presents the potential effects on commercial fisheries and aquaculture receptors arising from the Proposed Development, based on the information gathered, and the analysis and assessments undertaken
5. Describes any necessary monitoring and/or mitigation measures which will be implemented to prevent, minimise, reduce or offset the possible effects of the Proposed Development on commercial fisheries and aquaculture receptors

This chapter specifically considers potential impacts of the Proposed Development on commercial fishing and aquaculture activity and the supply chain, with a focus on how the Proposed Development may affect fishing operations, access, effort, and economic viability. The assessment has been informed by input from fisheries stakeholders, including vessel operators and local fishing communities.

Ecological considerations relating to commercial fish and shellfish species – including their distribution, habitat use, and sensitivity to stressors such as underwater noise, sedimentation, or habitat loss – are addressed separately in Chapter 12: Fish, Shellfish and Turtle Ecology, where these species are assessed as Key Ecological Receptors, as are non-commercial fish species, including those of conservation concern (e.g., Annex II species under the Habitats Directive) and elasmobranchs.

Non-commercially exploited shellfish species are addressed in Chapter 11: Benthic Ecology.

15.2 RELEVANT LEGISLATION AND GUIDELINES

15.2.1 LEGISLATION AND POLICY

In preparation of this Chapter reference has been made to the following national and international legislation, with due regard to relevant case law:

- Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (Habitats Directive)
- Common Fisheries Policy (Regulation EU No 1380/2013
- Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive)
- Council Directive 2014/89/EU of 23 July 2014 establishing a framework for marine spatial planning (Marine Spatial Planning (MSP) Directive)
- Shellfish Waters Directive 2006/113/EC
- European Communities (Quality of Shellfish Waters) Regulations 2006, as amended.
- The Convention on the International Regulations for Preventing Collisions at Sea, 1972

15.2.2 MARINE SPATIAL PLANNING (MSP) DIRECTIVE AND NATIONAL MARINE PLANNING FRAMEWORK

The Marine Spatial Planning (MSP) Directive (EU/89/2014) requires EU Member States to establish and implement a system for maritime spatial planning within each State's maritime jurisdiction.

The National Marine Planning Framework (NMPF) is Ireland's Marine Spatial Plan and provides the overarching framework for marine spatial planning and is a comprehensive approach to marine planning across the three main areas of forward planning, development management and marine planning enforcement. For further general information on the NMPF please refer to Chapter 2: Legislation and Policy Context of this EIAR.

Chapter 16 of the NMPF provides objectives and policies for fisheries and the proposers of developments or other maritime area uses that may have significant adverse impacts on fishing activities. The fisheries objectives involve (i) delivering a sustainable seafood sector; (ii) promoting a sustainable, profitable and self-reliant industry that protects and enhances the social and economic fabric of rural coastal communities, and (iii) sustaining primary food producers contributing to food security at a national and European level. The policy objectives aim to:

1. Deliver a sustainable seafood sector focused on competitiveness and innovation, with growth driven by a skilled workforce delivering value added products in line with market demands.
2. Promote a sustainable, profitable and self-reliant fishing industry that protects and enhances the social and economic fabric of rural coastal communities dependent on the seafood sector.
3. Sustain primary food producers contributing to food security at a national and European level.

4. Manage utilisation of sea-fisheries resources in consultation with stakeholders to promote environmental sustainability and the development of the sector's economic and social contribution to rural and coastal communities.

Objective 4 is of special relevance in the case of the Proposed Development in so far as this project could impact a) the utilisation of sea-fisheries resources, b) environmental sustainability, and c) the sector's economic and social contribution to rural and coastal communities. Once an impact is identified, how best to proceed is further advised by specific sectoral policies (see below).

The National Marine Planning Framework provides the following Fisheries and Aquaculture Policies of relevance to the Proposed Development:

- **Fisheries Policy 1** concerns proposals that may have significant adverse impacts on access for existing fishing activities. Such proposals must demonstrate that they will, in order of preference, avoid, minimise, or mitigate such impacts. Further, if it is not possible to mitigate significant adverse impacts on fishing activity, the public benefits for proceeding with the proposal that outweigh the significant adverse impacts on existing fishing activity must be demonstrated. Impacts from the Proposed Development on access for existing fishing activities and mitigation for the same is considered in Sections 15.6 and 15.8 below.
- **Fisheries Policy 2** concerns proposals where a significant impact upon fishing activity has been identified. In these cases, a Fisheries Management and Mitigation Strategy (FMMS) is (should be) prepared by the proposer in consultation with local fishing interests. All efforts should be made to agree the FMMS with these local fishing interests while they in turn should engage with the proposer and provide best available, transparent and accurate information and data in a timely manner to help complete the FMMS. The content of the Fisheries Management and Mitigation Strategy (FMMS) should be relevant to the particular circumstances and could include:
    - An assessment of the potential impact of all stages of the development on any affected fishery, both in **socio-economic terms** and in relation to environmental sustainability. This assessment should include consideration of any impact upon cultural identity within fishing communities, as well as identifying indirect / in-combination matters
    - A recognition that the disruption to existing fishing opportunities / activity should be minimised as far as possible
    - Reasonable measures to mitigate any constraints which the Proposed Development or use may place on existing or proposed fishing activity
    - Reasonable measures to mitigate any potential impact on sustainability of fish stocks (e.g., impacts on spawning grounds or areas of fish or shellfish abundance) including **any socio-economic impacts**

    Impacts from the Proposed Development on fishing activities and mitigation for the same is considered in Sections 15.6 and 15.8 below.

    Fisheries Policy 3 concerns proposals that enhance the sustainability of fisheries or support a sustainable fishing industry and or enhanced resilience to the effects of climate change. As the

Proposed Development will facilitate the development of offshore wind, which will, in turn, provide enhanced resilience to the effects of climate change, Fisheries Policy 3 specifies that such projects should be supported provided they fully meet the environmental safeguards contained within the authorisation processes.

- **Fisheries Policy 4** recognises infrastructural proposals that enable access to fishing activities. In the case of the ORE Hub, access to fishing activities is enabled through the provision of a new Small Boat Harbour location with enhanced facilities in deeper water (-4 mCD to -5 mCD) with full tidal access to replace the existing small boat harbour which will be infilled as part of the Proposed Development. Again, Fisheries Policy 4 specifies that such projects should be supported provided they fully meet the environmental safeguards contained within authorisation processes.
- **Fisheries Policy 5** relates to proposals that enhance essential fish habitat (including spawning, nursery, feeding grounds, and migratory routes) and specifies that such projects should be supported. If, however, proposals do not enhance essential fish habitat (as may be the case with the Proposed Development) then they must demonstrate that they will, in order of preference: a) avoid, b) minimise, or c) mitigate any significant adverse impact. If it is not possible to mitigate significant adverse impact on essential fish habitat, proposals must set out the reasons for proceeding. Impacts from the Proposed Development on fish habitat and mitigation for the same is considered in Sections 15.6 and 15.8 below.
- **Fisheries Policy 6** concerns ports and harbours. In this policy, proposers are advised that they should (i) seek to engage with fishing and other relevant stakeholders at an early stage to discuss any changes in infrastructure that may affect them; (ii) take account of the needs of the dependent fishing fleets with a view to avoiding commercial harm where possible; and (iii) where a port or harbour has reached a minimum level of infrastructure required to support a viable fishing fleet, there should be a presumption in favour of maintaining this infrastructure, provided there is an ongoing requirement for it to remain in place and that it continues to be fit for purpose. This policy specifically refers to the idea that where a port or harbour has reached a minimum level of infrastructure required to support a viable fishing fleet there should be a presumption in favour of maintaining this infrastructure. EIAR Technical Appendix 15 provides a comprehensive assessment of the importance of Rosslare as a port to the seafood sector and engagement with fishing stakeholders is summarised in Section 15.4.4.2 and Chapter 4: Scoping and Consultation.
- **Aquaculture Policy 2** specifies that non-aquaculture proposals in aquaculture production areas must demonstrate consideration of, and compatibility with, aquaculture production. Where compatibility is not possible, proposals must demonstrate that they will, in order of preference: a) avoid; b) minimise; c) mitigate significant adverse impacts on aquaculture; and d) if it is not possible to mitigate significant adverse impacts upon aquaculture, proposals should set out the reasons for proceeding. Impacts from the Proposed Development on aquaculture activities and mitigation for the same is considered in Sections 15.6 and 15.8 below.

15.2.2.1 COMMON FISHERIES POLICY (REGULATION EU NO 1380/2013)

A further requirement that must be considered when assessing the impact of the Proposed Development on commercial fisheries relates to any changes brought about in the long-term 'balance' between the capacity of fishing fleets and the resource they exploit. This requirement stems from article 22 of the Common Fisheries Policy (Regulation EU No 1380/2013).

The existence of fishing fleets which are not in balance with the resource they exploit has been an important driving force behind the historic overexploitation of fish and shellfish resources in European waters. Management of fishing capacity helps ensure a stable and enduring balance between the fleets' fishing capacity and fishing opportunities over time.

The Common Fisheries Policy confirms the need for measures to manage fishing capacity. Member States are required to put in place measures to adjust the fishing capacity of their fleet to their fishing opportunities over time, considering trends and based on best scientific advice, with the objective of achieving a stable and enduring balance between them. Measures undertaken by Member States to adjust the fishing capacity of their fleet(s) include temporary tie up schemes or (permanent) fleet decommissioning.

Examples of where a development might change the balance between the capacity of fishing fleets and the resources they exploit include both direct and indirect impacts on biological receptors that are actively fished. This could, for example, involve changes to the population structure; permanent alteration of hydrographical conditions; introduction of underwater noise at levels that adversely affect the marine environment; or introduction of contaminants into seafood for human consumption at levels that exceed those established by legislation or relevant standards. Similarly, indirect impacts arise where a fleet is displaced from its normal fishing pattern because of a development and moves its activities to an adjacent fishery. If this leads to overexploitation of the adjacent stock, then a permanent change in the required balance can occur.

Impacts from the Proposed Development on fishing activities and mitigation for the same is considered in Sections 15.6 and 15.8 below.

15.2.2.2 GUIDANCE

This Chapter has been informed by the following guidance documents:

- EPA (2022) Guidelines on the Information to be Contained in Environmental Impact Assessment Reports
- CIEEM (2024) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.3. Chartered Institute of Ecology and Environmental Management
- DHLGH (2023) Seafood-ORE Working Group – Engagement Guidance

The Summary Guide on Seafood-ORE Engagement was developed to provide Irish ORE projects and seafood stakeholders with guidance on how best to engage and co-exist in a meaningful and constructive manner throughout the lifecycle of ORE related projects. Given the Proposed Development involves an Offshore Renewable Energy Hub, the Summary Guide has been adopted by the parties as the appropriate guide governing their interactions. This approach recognises that

while each development is subject to multiple statutory consent processes, there is also a need for significant and ongoing engagement between projects and the appropriate seafood representative organisations. The Summary Guide is based on the following five principles:

- **Meaningful engagement**: It is important for both the Seafood and ORE sectors to find the right balance between protecting seafood interests, the need to respond to the global climate emergency and the requirement to deliver the State's legal obligations for reductions in carbon emissions. This balance can only be achieved through meaningful engagement between the sectors on the basis that both industries can co-exist in the long term. The Summary Guide advises that, in advance of an application to An Bord Pleanála (ABP, now An Coimisiún Pleanála), projects should arrange physical meetings with National and Regional seafood representative organisations.
- **Mutual respect**: Mutual respect, best endeavours to reach agreement, and recognition of the importance of both sectors is critical to effective engagement
- **Communication**: Commit to open sharing of information and communicate with each other honestly, openly and transparently
- **Cooperation**: Work together, recognising each other's expertise and the importance of each other's industry to Ireland, our economy, society, and coastal communities, to achieve sustainable outcomes that benefit all
- **Coexistence**: Encourage the principle that the seafood and offshore renewable energy industries can work side-by-side and co-exist in a manner that respectfully shares the marine space

15.3 DESCRIPTION OF THE PROPOSED DEVELOPMENT

As described in Chapter 6: Project Description, Iarnród Éireann proposes to develop new port infrastructure almost exclusively (approximately 95%) within the maritime area adjacent to, and immediately north of, the existing Rosslare Europort. The Proposed Development supports Ireland's strategy to develop offshore renewable energy and will serve as a key hub for the construction, operation and maintenance of offshore wind farms in the Irish and Celtic Seas.

The development will involve the reclamation of approximately 24.5 hectares (ha) of seabed, supported by capital dredging of approximately 48.4 ha to -10 mCD. The reclaimed area will accommodate new quay infrastructure, including heavy lift berths, marshalling and storage areas, and support facilities for offshore energy vessels and equipment. In addition, a section of the storage area (1.4ha) will be appropriately surfaced to provide overflow parking for RoRo from the existing RoRo berths within Rosslare Europort.

Construction activities are expected to include piling, rock blasting (if required), and placement of fill material using dredged sediment and imported rock. The works will be phased over a multi-year period and are anticipated to overlap with key seasonal fishing activity in the wider area.

Figure 15.1 shows the location of the Proposed Development. Full details on design, construction methodologies, and phasing are provided in Chapter 6: Project Description.

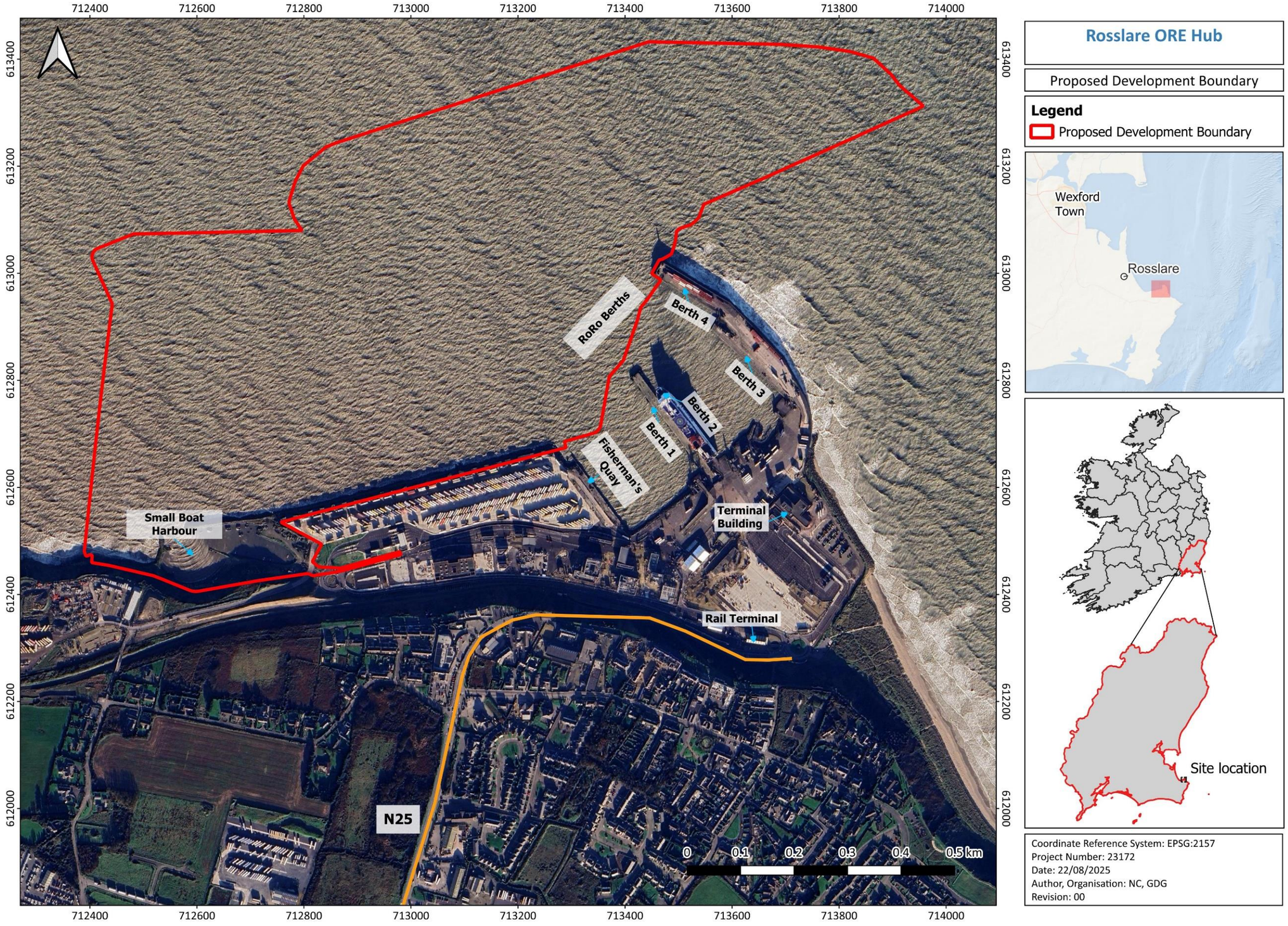

Figure 15.1: Location of Rosslare Europort and Proposed Development

15.4 ASSESSMENT METHODOLOGY

15.4.1 STATEMENT OF COMPETENCE

This chapter of the EIAR has been written by Michael Keatinge.

Michael Keatinge holds a Diploma in Nautical Science awarded by the School of Nautical Studies, Plymouth; a B.A. (Mod), Natural Science, Trinity College, Dublin; a Graduate Diploma in Statistics, Trinity College, Dublin; an M.A. (Zoology), Trinity College, Dublin and an MSc Economics (Policy Studies), Trinity College, Dublin. Michael Keatinge has worked in the seafood/fisheries sector for more than 20 years. During that time, he has held a variety of positions, including statistician and population modeller in the Fisheries Research Centre in the then Department of the Marine and Natural Resources and later the Marine Institute. He has also been Director of Fisheries Development, Training Services, and Economics and Strategic Services at Bord Iascaigh Mhara, Ireland's Seafood Development Agency.

The chapter has been reviewed by Joey O'Connor (BSc (Hons) Marine Science, MSc Engineering in the Coastal Environment). Joey is Principal Marine Environmental Scientist in GDG and has 16 years' experience across environmental monitoring, assessment and consenting in the public and private sectors. Through his project experience and leadership roles he has led and managed large multidisciplinary teams to deliver scientifically robust coastal and marine environmental assessments.

Joey is the Environmental Lead and EIA Coordinator for the Rosslare ORE Hub Project.

15.4.2 INTRODUCTION

The data sources for this chapter of the EIAR include a comprehensive desk study and stakeholder engagement as summarised in Section 15.4.4 below and detailed in EIAR Technical Appendix 12: Fish Ecology and EIAR Technical Appendix 15: Commercial Fisheries and Aquaculture Technical Report.

The baseline information set out in the following sections and further detailed in EIAR Technical Appendix 12 and EIAR Technical Appendix 15, has been used to identify and inform an understanding of relevant receptors. The value of each receptor relevant to this topic is set out and its sensitivity to the potential effects associated with the construction and operation of the Proposed Development is assessed.

The assessment includes consideration of the likely Zone of Influence (ZoI) of the Proposed Development. The baseline scenario has been determined with due consideration of the 'do nothing' scenario.

The 'source-pathway-receptor' model has been used to identify potentially relevant impacts. Once identified, impacts are assessed using a systematic approach to identify and evaluate their significance both alone and in combination with other projects.

15.4.3 THE COMMERCIAL FISHERIES STUDY AREA

Commercial Fisheries Study Area: The Commercial Fisheries Study Area is defined as the geographical area wherein a source-pathway-receptor link can be clearly identified in respect of human receptors, and where detailed information on receptors is provided. It includes all areas that may be directly or indirectly affected by the Proposed Development.

Fish stocks, commercial fishing activity and aquaculture installations in areas relevant to the Proposed Development are defined within the Commercial Fisheries Study Area.

Noting that a range of commercial fisheries information and a range of data are recorded at the scale of International Council for the Exploration of the Sea (ICES) statistical divisions and rectangles, it is considered appropriate to define the extent of the Commercial Fisheries Study Area using the ICES statistical division the Proposed Development is located within.

The Proposed Development is located in the south-west part of the Irish Sea in ICES Division VIIa (Figure 15.2). ICES division VIIa[1] is an area covering the Irish Sea south of 55^0 North (a line running from near Hunter's Point, county Antrim to the coast of Scotland) and north of 55^0 North (a line running from Mine Head in County Waterford to the west coast of Wales).

The **Commercial Fisheries Study Area** is therefore defined as the southern half of ICES Division VIIa.

Noting that the source-pathway-receptor model has identified one potentially relevant receptor group (*South East Scallop Fleet*) which operates in ICES Divisions VIIa (Irish Sea), VIIb,f,g,h,j (Celtic Sea), VIId (Eastern Channel), and VIIe (Western Channel) the **extended Commercial Fisheries Study Area** is defined as ICES Division VIIa,b,d,e,f,g,h, and j in respect of this receptor (Figure 15.3).

All other receptors are inshore fishing boats, and all operate exclusively within the Commercial Fisheries Study Area (see below).

[1] By convention ICES divisions are specified in Roman numerals, e.g. VIIa. However both VIIa and 7a are valid.

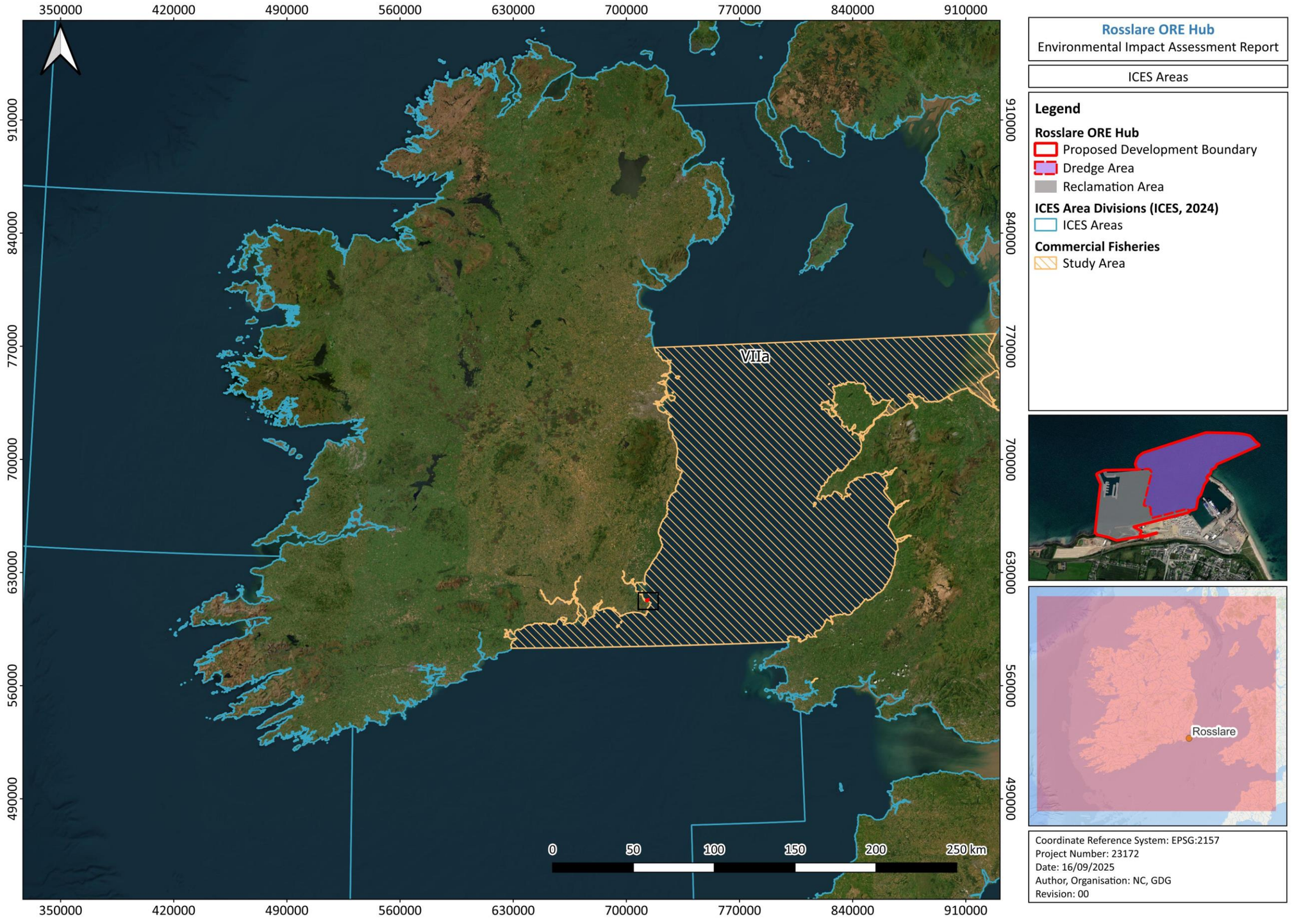

Figure 15.2: Commercial Fisheries Study Area: Southern half of ICES divisions VIIa (Irish Sea)

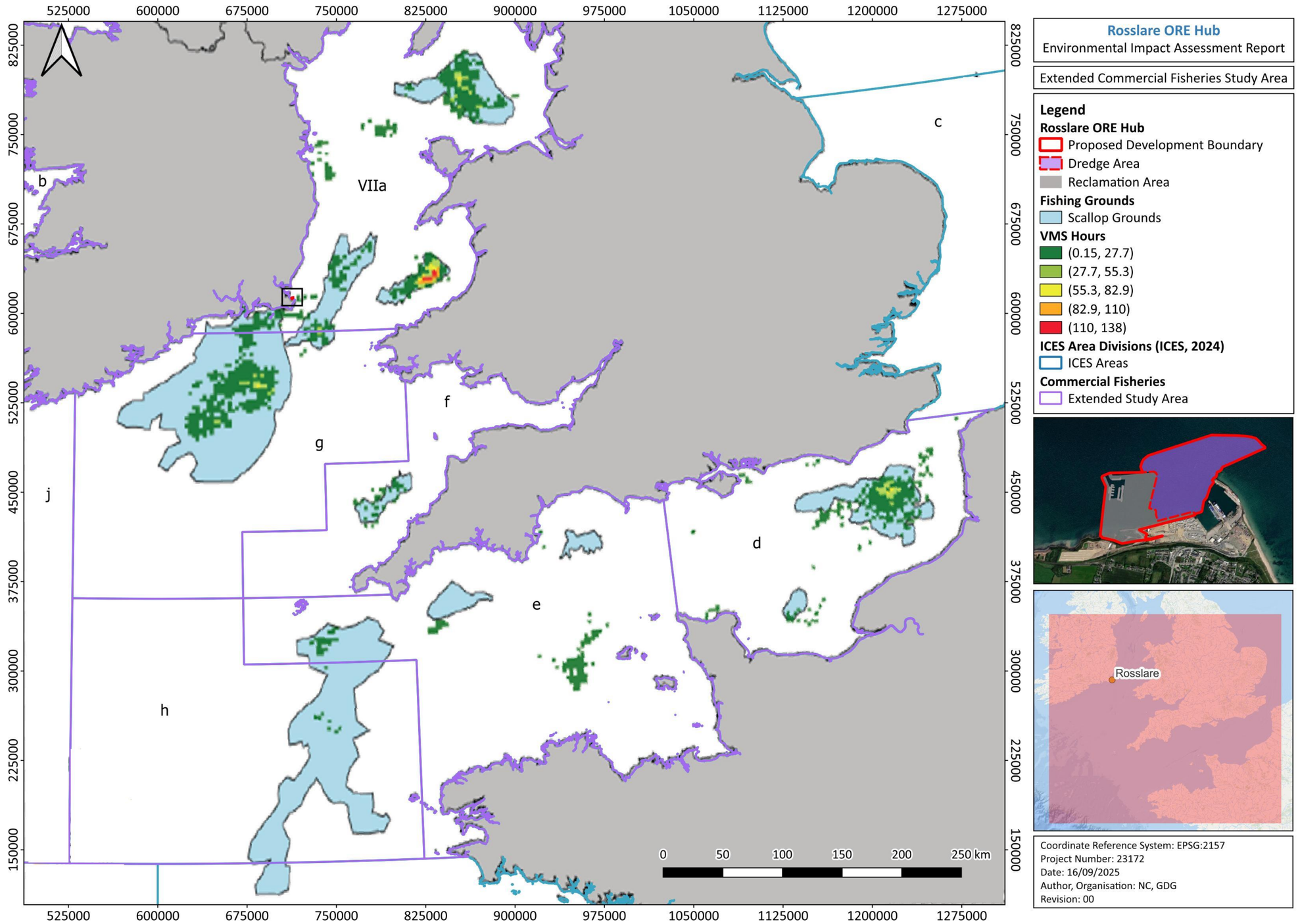

Figure 15.3: Extended Commercial Fisheries Study Area Scallop grounds in the Irish Sea, Celtic Seas & English Channel (Source, Marine Institute, 2023)

15.4.4 DATA SOURCES

15.4.4.1 DESKTOP REVIEW

Information on commercial fisheries and aquaculture activities within the Commercial Fisheries Study Area was collected through a detailed desktop review of existing studies and datasets. These are summarised in Table 15.1 and Table 15.2 and described in detail in EIAR Technical Appendix 12: Fish Ecology and EIAR Technical Appendix 15: Commercial Fisheries and Aquaculture.

Table 15.1: Summary of key desktop reports and data resources (Datasets)

Dataset	From	To	Source
Estimates of annual landings (tonnes) and value (€) of crustacean and bivalve shellfish (excl. prawns and mussels) by Irish vessels into Ireland 2004-2023 (source: Logbook declarations and sales notes for vessels under 10 m, shellfish registration dockets, co-op data). Unit value (per kilo) from sales note data or other sources.	2004	2023	Marine Institute, BIM and SFPA
Landing statistics for Irish Registered Vessels	2015	2022	SFPA
Irish component of EU Fleet Register, Published: 27TH June 2024	2024	2024	European Commission
Volume (tonnes), Value (€) of annual landings to Rosslare Harbour	2008	2022	SFPA
Volume (tonnes) and Value (€) of annual shellfish landings to Rosslare Harbour	2017	2020	SFPA
Volume (tonnes) and Value (€) of annual Razor clam landings (All ports)	2015	2016	SFPA

Table 15.2: Summary of key desktop reports and data resources (Publications)

Dataset	From	To	Source
Annual Review of Fish Stocks with Management Advice published each autumn by the Marine Institute's and generally known as the Stock Book. This is particularly relevant to stock managed by the European Commission under the Common Fisheries Policy (CFP).	2000	2023	Marine Institute
Marine Institute, Atlas of Commercial Fisheries Around Ireland, 3rd edition	2019		Marine Institute
Marine Institute, Atlas of Commercial Fisheries for Shellfish Around Ireland	2017		Marine Institute
Marine Institute, Atlas of Commercial Discarding	2011		Marine Institute, BIM
Marine Institute, North-Western Waters Atlas, 3rd edition	2015		Marine Institute
Marine Institute/BIM, Shellfish Stocks and Fisheries Review	2009	2023	Marine Institute, BIM
Marine Strategy Framework Directive 2008/56/EC, Article 17 update	2008		European Union
Business of Seafood (Based on BIM's National Seafood Survey, provides analysis of the economic performance of the national fleet, employment details etc.)	2016	2023	BIM
Annual Fisheries Report.	2023		BIM
Annual Economic Report on the EU Fishing Fleet (AER). Provides detailed economic evaluations of all EU fleets.	2011	2023	European Union

15.4.4.2 STAKEHOLDER CONSULTATION

One of the aims of the National Marine Planning Framework (NMPF) is the managed utilisation of Ireland's sea-fisheries resources in consultation with stakeholders. This is echoed in NMPF Fisheries Policy 2, which requires developers of any proposal that could result in a significant impact upon fishing activity to prepare a Fisheries Management and Mitigation Strategy in consultation with local fishing and other interests.

The importance of stakeholder consultation is also highlighted in Fisheries Policy 6 (ports and harbours). This advises project developers to engage with fishing and other relevant stakeholders at an early stage and to discuss any changes in infrastructure that may affect them and to take account of the needs of the dependent fishing fleets. This is especially important where a port has reached the minimum level of infrastructure required to support a viable fishing fleet. The need for appropriate and meaningful stakeholder consultation is also advised in the Summary Guide on Seafood/ORE Engagement in Ireland (DHLGH, 2023). This advises that in advance of an application being made to An Coimisiún Pleanála (ACP) , projects should arrange physical meetings with National and Regional seafood representative organisations.

The Rosslare Harbour (EIAR) Fisheries Consultative Group was established in February 2024. Comprising local fisheries and aquaculture interests, the Group acts as the principal communication and discussion forum for the local commercial fisheries and aquaculture sectors. Membership of the Group is shown in Table 15.3 and a summary record of meetings held is shown in Table 15.4. Membership of the Seafood Industry Representative Forum (SIRF), a national group that coordinates the seafood industry's response to ORE development, is shown in Table 15.5. The latter group provides the Chair of the Rosslare Harbour Fisheries Consultative Group, Mr John Lynch of the Irish South & East Fish Producers Organisation.

Table 15.3: Stakeholder Consultative Group

Rosslare Harbour (EIAR) Fisheries Consultative Group Members
Mr John Lynch, Irish South and East Fish Producers Organisation (Chairman)
Ms Liz Goff National Inshore Fishermen's Forum
Mr Leslie Bates, Sofrimar, Kilmore Quay (Fish Processing & Exporting)
Mr Micheál Ferguson (Catching Sector)
Mr Eoin Bates (Catching Sector)
Mr Sam Nunn (Catching Sector)
Mr Seamus Breathnach National Inshore Fishermen's Association
Mr Joey O'Connor (Gavin and Doherty Geosolutions)
Mr Billy Hoey (Iarnród Éireann)

Table 15.4: Summary of Consultations relating to Commercial Fisheries

Date	Type	Meeting with
2nd November 2023	Video Conference (VC)	John Lynch, CEO Irish South & East Fish Producers Organisation (IS&EFPO)
7th November 2023	VC	Meeting with CEO IS&EFPO, CEO Killybegs Fisherman's Organisation , Scientific Advisor KFO Dr Edward Farell.
30th November 2023	VC	Joey O'Connor & Stiofain MacDaibhead (GDG)
5th December 2023	VC	Seafood Industry Representatives Forum
1st February 2024	Rosslare	Rosslare Harbour (EIAR) Fisheries Consultative Group
15th February 2024	VC	Meeting with Seafood Industry Representatives Forum
11th April 2024	VC	Rosslare Harbour Fisheries Consultative Group (RHFCG) and CEO Irish Fish Processors and Exporters Association.
19th July 2024	Rosslare	Rosslare Harbour (EIAR) Fisheries Consultative Group
03rd October 2024	Rosslare	Rosslare Harbour (EIAR) Fisheries Consultative Group
24 October 2024	VC	Rosslare Harbour (EIAR) Fisheries Consultative Group

Table 15.5: Seafood Industry Representation

Members
IFA Aquaculture
Irish Fish Processors and Exporters Association (IFPEA)
Irish Fish Producers Organisation (IFPO)
Irish Seafood Producers Group (ISPG) (Aquaculture)
Irish South & West Fish Producers Organisation (ISWFPO)
Irish South and East Fish Producers Organisation (ISEFPO)

Members
Killybegs Fishermen's Organisation (KFO)
National Inshore Fishermen's Association (NIFA)

The Rosslare Harbour Fisheries Consultative Group voiced support for the consultation process followed and more generally for the Proposed Development during consultations.

More specifically, the group advised that:

- Berths for larger fishing vessels to unload fish were required in replacement small boat harbour
- Existing access to Fisherman's Quay for regular users should not be restricted by construction or operational phases of Proposed Development

The final layout of small boat harbour, which includes berths for larger fishing vessels, construction sequencing and continued access to Fisherman's Quay during construction has been agreed in consultation with the Rosslare Harbour Fisheries Consultative Group, through feedback provided to the Project Team in direct engagement and at consultation events, where drawings of proposed layout options under consideration were shared.

The group reviewed the EIAR assessment approach proposed by the lead chapter author and provided information regarding location and extent of and species targeted by fisheries in the Study Area (see EIAR Technical Appendix 15).

15.4.5 ASSESSMENT OF IMPACTS: SENSITIVITY

To determine an overall measure of the sensitivity of each receptor to the Proposed Development, its likely impact is assessed using expert judgement from the perspective of (i) adaptability, (ii) tolerance, (iii) recoverability, and noting the importance attached to the socio-economic impact of a development in the National Marine Planning Framework, (iv) value. The following definitions are used throughout (also presented in tabular format in Table 15.6 to facilitate ease of comparison across categories and levels of significance):

Adaptability: How easily fishing operations or behaviours can adjust to the changes caused by the Proposed Development (e.g,. relocating fishing effort, switching gear types, or adapting schedules).

- Negligible: Fishing activity is highly flexible and can easily adapt to the proposed changes without disruption
- Low: Some adjustment is required, but fishing operations are able to adapt with minimal disruption
- Medium: Fishing operations can adapt, but only with significant changes or cost
- High: Fishing operations cannot reasonably adapt to the proposed changes

Tolerance: The extent to which fishing activity can continue without major disruption or loss, even if the development introduces change (e.g., temporary exclusion zones or noise).

- Negligible: Fishing activity is unlikely to be affected by the proposed changes and is resilient to disruption
- Low: Minor disruptions may occur, but fishing can mostly continue as usual
- Medium: Operations are generally affected and may need to reduce or suspend activity during key phases
- High: Fishing activity is highly vulnerable and may not be able to continue during key project phases

Recoverability: How quickly and effectively fishing operations could return to normal once the impact has ceased (e.g., post-construction).

- Negligible: Fishing activity would recover quickly (e.g., within a year) with no lasting effects
- Low: Recovery is likely within the short term (1–7 years) without major external support
- Medium: Recovery may be slow, costly, or dependent on external factors (7–15 years)
- High: Recovery is expected to take longer than 15 years, or long-term/permanent impacts are expected

Value: The socio-economic importance of the fishery, considering factors such as economic output, cultural heritage, community reliance, and its strategic role in the local or national economy. This reflects the emphasis placed on socio-economic receptors in the National Marine Planning Framework.

- Negligible: Limited economic or cultural value; not central to local livelihoods
- Low: Moderate local value, but not a primary economic driver
- Medium: High socio-economic value locally or regionally, a key part of the coastal economy
- High: Very high value, culturally significant or critical to the viability of fishing communities

Table 15.6: Sensitivity Assessment- Criteria and Scoring Options

Sensitivity	Adaptability	Tolerance	Recoverability	Value
Negligible	High levels of avoidance or adaptation to the impact.	Not generally vulnerable to impacts and resilient to change.	High or very high levels of recoverability.	Low socio-economic value
Low	Moderate levels.	Somewhat vulnerable.	Moderate to high levels of recoverability.	Medium socio-economic value.
Medium	Low levels.	Generally vulnerable.	Recoverability is slow and/or costly.	High socio-economic value.

Sensitivity	Adaptability	Tolerance	Recoverability	Value
High	No capacity to avoid or adapt to the impact.	Highly vulnerable.	Recoverability is long term or not possible.	Very high socio-economic value.

15.4.5.1 ASSESSMENT OF IMPACTS: MAGNITUDE

To determine an overall measure of the magnitude of the identified impact, its extent, duration, frequency, probability, and consequences are considered. The following definitions are applied throughout using expert judgement (also presented in tabular format in Table 15.7 to facilitate ease of comparison across categories and levels of significance):

Extent: Spatial scale of impact on fishing activity or grounds:

- Negligible: Effects are highly localised (within 0–10 m of infrastructure); unlikely to affect access or fishing grounds.
- Low: Impacts are restricted to the Proposed Development Boundary and do not extend beyond it.
- Medium: Impacts extend slightly beyond the development area into nearby fishing grounds within the Zone of Influence (ZoI, see Section 15.6.5)
- High: Impacts affect a large area, including both near-field and far-field fishing grounds across the entire Commercial Fisheries Study Area

Duration: How long fishing activity is affected:

- Negligible: Very short-term disruption (<2 years); fishing activity likely to resume quickly
- Low: Short-term disruption (2–5 years); may temporarily reduce access or effort
- Medium: Medium-term disruption (5–12 years); likely to require adaptive changes to fishing operations
- High: Long-term or permanent impact (≥12 years); may result in sustained loss of access or viability

Frequency: How often the impact occurs during the relevant phase:

- Negligible: Infrequent; only isolated or short-lived disruptions to fishing
- Low: Intermittent; occasional disruptions during the construction or operational phase
- Medium: Regular disruptions expected throughout the phase (e.g., seasonal closures, repeated exclusion zones)
- High: Constant or continuous disruptions during the relevant project phase

Probability: Likelihood that fishing activity will be affected:

- Negligible: Minimal risk of disruption; fishing operations can continue largely unchanged

- Low: Some risk of disruption; minor changes to operations may be needed
- Medium: Moderate risk; partial restrictions or operational changes likely
- High: High risk of substantial disruption; fishing activity may need to be significantly altered or suspended

Consequences: Degree of impact on fishing livelihoods and access:

- Negligible: Slight reduction in fishing opportunity; no material effect on livelihoods
- Low: Minor loss of catch or access; manageable within existing operations
- Medium: Partial loss of access to key grounds or species; potential economic hardship or operational adjustment
- High: Substantial and sustained loss of access or resource; serious impacts to income, viability, or employment in fishing communities

Table 15.7: Magnitude Assessment: Criteria and Scoring Options

Magnitude	Extent	Duration	Frequency	Probability	Consequence
Negligible	Of negligible physical extent	Of very short-term duration (< 2 years)	Occurs infrequently throughout relevant phase	Unlikely to occur	Slight loss of target resource/ ability to carry on fishing
Low	Of limited physical extent	Of short-term duration (from 2 to under 5 years)	Occurs intermittently	May occur	Minor loss
Medium	Of moderate physical extent	Of medium-term duration (from 5 to under 12 years)	Occurs regularly	Likely to occur	Partial loss
High	Of extended physical extent	Of long-term duration (≥12 years)	Occurs continuously	Highly likely to occur	Substantial loss

15.4.5.2 IMPACT CLASSIFICATION

Following scoring in respect of sensitivity and magnitude, each the significant of each impact was then classified using expert judgement according to the classification matrix presented in Table 15.8.

Noting that the impact of the Proposed Development on identified receptors in the Commercial Fisheries Study Area is determined by considering the magnitude of the potential effect and the sensitivity of the receptor, the impact assessment also includes consideration of any mitigation measures that are incorporated into the design (i.e., primary mitigation), and which are intended to prevent, reduce or minimise any significant adverse effects on the environment.

Table 15.8: Impact Significance Classification Matrix

			Sensitivity			
			High	Medium	Low	Negligible
Magnitude	Adverse Impact	High	Very Significant	Significant	Moderate	Imperceptible
		Medium	Significant	Moderate	Slight	Imperceptible
		Low	Moderate	Slight	Slight	Imperceptible
	Neutral Impact	Negligible	Not Significant	Not Significant	Not Significant	Imperceptible
	Positive Impact	Low	Moderate	Slight	Slight	Imperceptible
		Medium	Significant	Moderate	Slight	Imperceptible
		High	Very Significant	Significant	Moderate	Imperceptible

15.4.6 MITIGATION

As discussed in Chapter 1: Introduction and Methodology, three types of mitigation measures are considered in this chapter.

- Primary mitigation
- Secondary mitigation
- Tertiary mitigation

15.4.7 RESIDUAL EFFECTS

Where relevant, residual effects have been determined for each significant effect, considering all proposed mitigation. In cases where residual uncertainty of impact is identified within the EIAR, or the success of implemented mitigation measures requires validation, commitments have been made for the provision of monitoring.

15.5 BASELINE: COMMERCIAL FISH AND AQUACULTURE RECEPTORS IN RECEIVING ENVIRONMENT

This section identifies the commercial fishing and aquaculture operations that occur within the ZoI of the Proposed Development.

Key objectives of this baseline characterisation are to:

- Assess the spatial and temporal overlap between fishing grounds/stock and the Proposed Development
- Provide context for assessing potential impacts to commercial fisheries, including loss of access, displacement of effort, and operational disruption. (Schedule of possible impacts / risk assessment)
- Explore the capacity for effort displacement to adjacent areas or alternative stocks, where feasible.
- Inform an assessment of the potential implications for effort-capacity balance at the local or regional scale.
- Describe areas used by fishers that may be considered of high operational importance (e.g., spawning or nursery areas routinely targeted by fishing activity.

In recognition of the importance of local and sector-specific knowledge, particularly for inshore fisheries, this baseline draws on published reports and data from state agencies including the Sea Fisheries Protection Authority (SFPA), the Marine Institute (MI), Bord Iascaigh Mhara (BIM), Inland Fisheries Ireland (IFI), the National Parks and Wildlife Service (NPWS) and the Environmental Protection Agency (EPA).

Where applicable, assessments of commercially exploited fish and shellfish stocks also incorporate information from relevant international bodies, including ICES, ICCAT (International Commission for the Conservation of Atlantic Tuna) and the North Atlantic Salmon Conservation Organisation (NASCO).

15.5.1 FISHING IN THE STUDY AREA

Under the Common Fisheries Policy commercially important fish stocks are managed by the European Commission in conjunction with the European Parliament, Council of Ministers, and Member States. For Ireland this includes a total of 32 species and 64 stocks (many species have two or more actively managed stocks).

These fisheries are generally subject to active management including catch limits (EU quotas), capacity limits (limits on the total gross tonnes, GT, and/or engine power, kW of the national fleet or

segments of it), effort limitations (kW.days fished), catch reporting and an array of technical measures including mesh size and other gear constraints, area and time closures etc.

Commercially important fish stocks are broadly categorised into two groups: demersal stocks and pelagic stocks.

Demersal stocks (also known as groundfish) live and feed on or near the bottom of seas. They include cod, haddock, whiting, hake, monkfish, megrim, plaice, sole, pollack, saithe and other non-quota species including lemon sole. Demersal stocks are typically fished by trawling using towed nets to catch fish and other marine species living on or close to the seabed. Bottom trawling includes several different types of fishing gear that use a cone-like net with a closed end (cod-end) that holds the catch. The net is towed by one or two boats and held open by boards (trawl doors) or a metal beam. These devices often make contact with the seabed.

The Marine Atlas of Ireland provides aggregated results of fishing effort and landed value of the catch for the years 2014 -2018. Fishing effort and landed values are shown in EIAR Technical Appendix 12: Fish Ecology and EIAR Technical Appendix 15: Commercial Fisheries and Aquaculture for otter trawls, seine nets, gill nets, beam trawls, and long lines.

What is apparent in the Marine Atlas figures is the low levels or even absence of demersal fishing effort in the waters off Rosslare Harbour and the southern Irish Sea generally. This is confirmed by the value figures that show a similar pattern; little or no value is being generated by demersal fisheries in the southern Irish Sea and, specifically, in the waters adjacent to Rosslare Harbour.

While there is much activity in the Celtic Sea and further North in the Irish Sea, these fisheries are generally undertaken by larger (> 18 metre length overall) vessels operating from the national fisheries harbour centres (NFHC) at Howth, Dunmore East and Castletownbere as well as from other fishing ports including Kilmore Quay in south Wexford and Union Hall in the western Celtic Sea.

Pelagic species live and feed in the pelagic zone neither close to the bottom nor too near the shore. Often appearing in large shoals, this group includes mackerel, horse mackerel, herring, blue whiting, boarfish, albacore tuna, and greater silver smelt. Ireland also receives a small quota for blue shark, however, commercial fishing for this species (by Irish vessels) is prohibited under national legislation. There are also non-quota pelagic species like sprat and pilchard which are locally important.

Pelagic fish are typically taken by mid water trawls and the Marine Atlas of Ireland provides aggregated results of fishing effort and landed value.

While pelagic fishing is usually associated with deeper water and continental slopes west of Ireland, and the ports of Killybegs, Ros an Mhíl, Dingle, and Castletownbere, there are also local concentrations of mid-water pelagic trawl effort evident along the coasts of Waterford and east Cork as well as further south in the Celtic Sea. These coastal fisheries, which are primarily directed at herring and sprat, are also evident to the east of Rosslare Harbour and along the coastline to the north of the port, extending intermittently to Wicklow Head and beyond.

In 2020, Ireland's quota of pelagic fish was 158,755 tonnes. In the same year, the SFPA recorded 26 tonnes of pelagic fish landed into Rosslare, representing a very small fraction (0.0164%) of the national total.

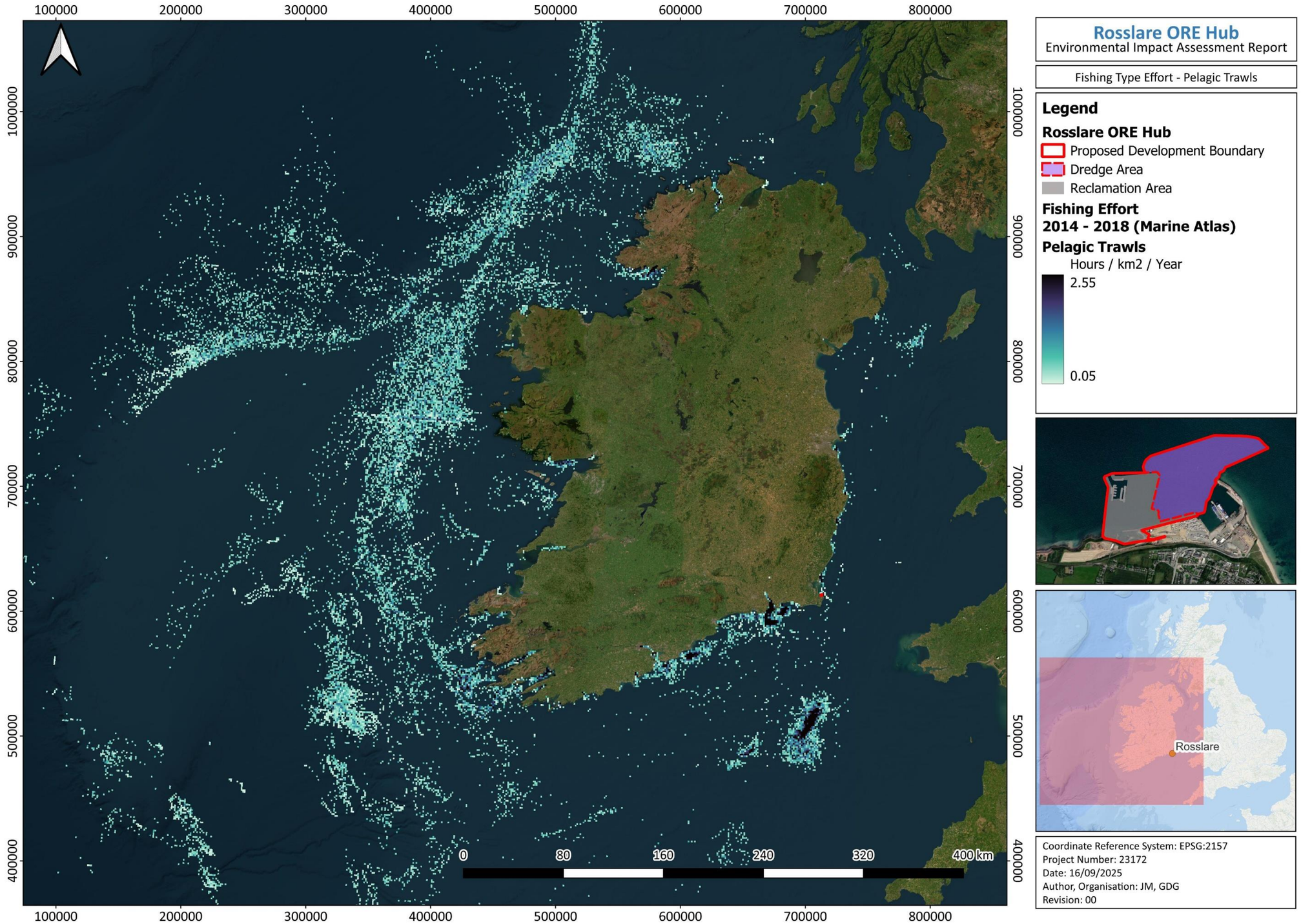

Figure 15.4: Irish Pelagic Trawl Effort (Marine Institute)

Recreational fishing, in particular, sea angling, has been a popular pastime in the southeast of Ireland for many years. Shore and beach angling for marine species can be accessed from sites located all along the coast (Figure 15.5) and a number of charter vessels operating out of Kilmore Quay and Wexford Town give further access to deeper water and offshore stocks.

Coarse fishing is a type of freshwater fishing in which the fish typically caught are catfish, carp, roach, pike, perch, rud, bream, tench, barbel etc. Essentially, all freshwater fish excluding salmon, trout, and sea trout, are coarse fish.

The town of Wexford offers good shore fishing for bass, flounder and eel with the largest bass ever taken in the area weighing 5.9kg. In the late nineties the town quays underwent improvement work that created several new vantage points for shore anglers. Bass, flounder, plaice, eel, codling, whiting and coalfish are all taken.

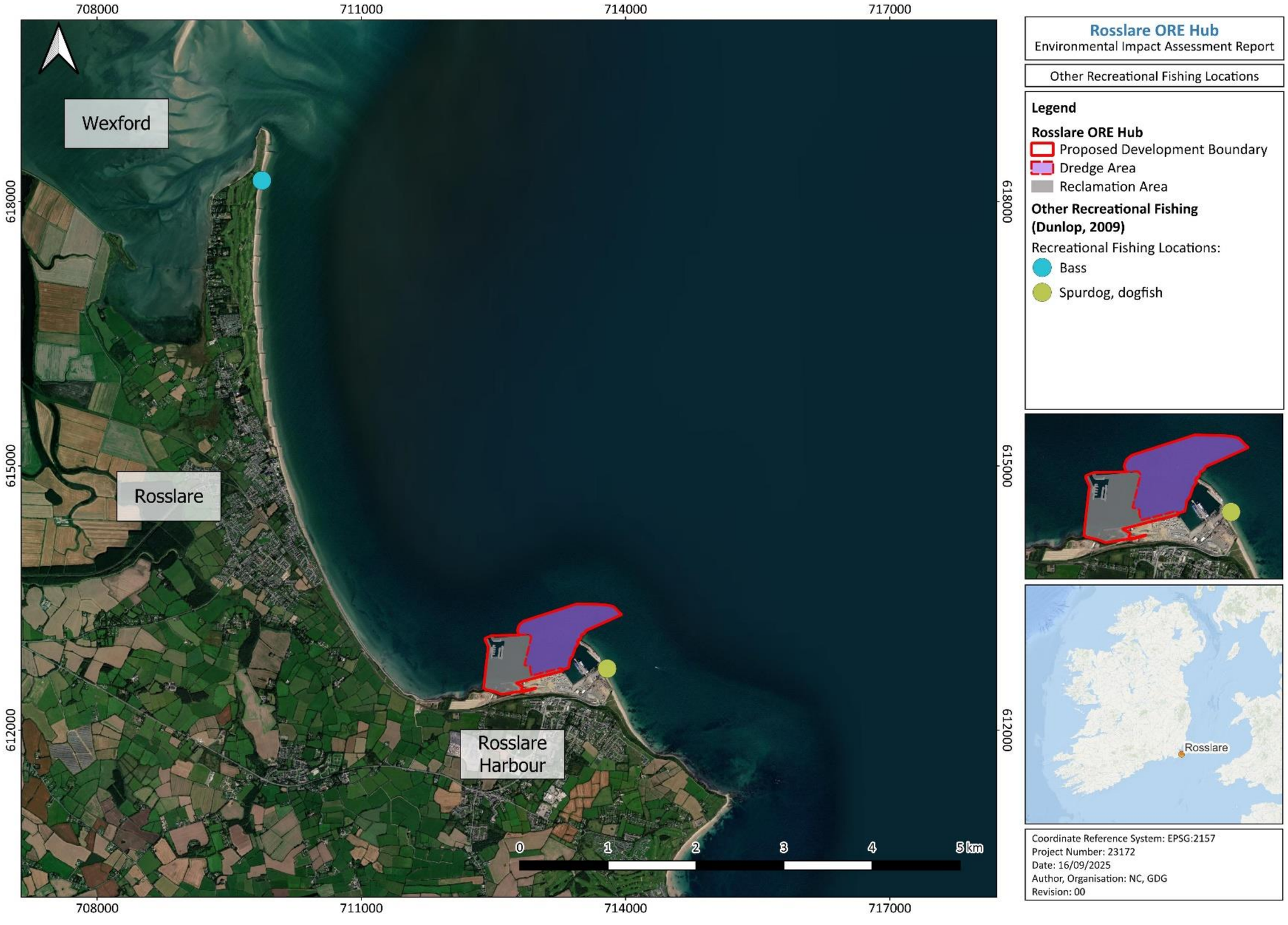

Figure 15.5: Recreational Fishing Locations (Dunlop, 2009)

The southeastern side of Wexford harbour is protected from the open sea by a narrow spit of land which runs north for 4.8 km terminating at Rosslare Point. Bass can be taken here. On the seaward side of Rosslare Point, tope weighing up to 18kg, spurdog, and dogfish are all taken. Boat fishing on Rosslare Bay is for ray, plaice, dabs, codling and gurnard. An Irish Record for grey gurnard (3 lbs) has been held there since 1967. During the summer boat fishing is undertaken in the buoyed channel leading into the ferry terminal.

To the southeast of Rosslare Harbour, (Figure 15.5) lies a long, shallow underwater reef known as the Splaugh Rock. In the late sixties, this area was famous for the large numbers of bass that shoaled there in spring and autumn. In the past local fishing boats known as *Wexford cots* hunted the free feeding bass and with catches of up to 40 fish per boat on a tide. This fishery subsequently declined and by the mid-eighties, it had all but gone.

To the south of the harbour wall, there is shore fishing using rod and line over mixed ground for bass, dogfish and flounder. A number of specimen bass (> 4.53 kg) have been recorded on this stretch, particularly where the flooding tide flows across the rock outcrops at Greenore Point.

Once an important fishery in the south Wexford and River Slaney catchment area, commercial fishing for salmon using draft nets was phased out from 2007. This followed a decision to prohibit, for conservation reasons, commercial fishing for salmon in mixed stock fisheries at sea. This came about as a direct result of the dramatic decline in the overall numbers of Atlantic salmon and sea trout returning to Ireland's rivers to spawn. This was cause for concern not least because these are species that connect water quality in the smallest headwater streams with distant marine ecosystems that are changing at an oceanic scale. The prohibition was also accompanied by a scheme, the Salmon Hardship Scheme, that allowed fishers active in the local net fishery to voluntarily cease fishing and undertake not to seek a licence in the future in return for financial compensation. The scheme closed for applications in 2007. Today the fishery is entirely by rod and line (Table 15.9).

Table 15.9: Commercial and Angling Salmon Catch 2022 (IFI, 2023)

Fishery	Commercial Catch	Rod & Line Catch & Release	Total Catch
Spring Salmon	0	142	142
Sea Winter Salmon	0	45	45

The importance of the Slaney draft net fishery is illustrated in the historic catch data. In the period 1995 – 2000 the commercial draft net fishery produced an average annual catch of 2,394 wild salmon (Table 15.10). This was some 1.1% of the total national catch (all fisheries) and 7.9% of the total national draft net catch. With an average weight of 4.1kg per fish, average landings during the period amounted to 9,714 kg per annum. In the same period the rod and line fishery produced an average annual catch of 463 fish. This was 0.2% of the total national catch or 1.3% of the total national rod catch. In their most recent report, published in 2023, Inland Fisheries Ireland recorded zero commercial salmon catch on the river Slaney in 2022.

Table 15.10: Annual catch statistics for the River Slaney salmon fisheries 1995 – 2000 (Maoiléidigh et al., 2001)

Year	National Draft Net	National Drift Net	National Rod Catch	National Total	River Slaney Draft Net Fishery	Slaney % National Total	Slaney % National Draft	River Slaney Rod Catch	Slaney % National Total	Slaney % National Rod
1995	40,182	209,602	29,932	279,716	2,882	1.0 %	7.2 %	450	0.2 %	1.5 %
1996	36,959	161,180	42,229	240,368	2,548	1.1 %	6.9 %	550	0.2 %	1.3 %
1997	27,320	139,990	43,330	201,640	1,616	0.8 %	5.9 %	175	0.1 %	0.5 %
1998	29,293	163,565	39,360	232,218	3,181	1.4 %	10.9 %	400	0.2 %	1.0 %
1999	23,018	120,425	34,416	177,859	3,177	1.8 %	13.8 %	900	0.5 %	2.6 %
2000	26,037	162,650	37,690	226,377	962	0.4 %	3.7 %	300	0.1 %	0.8 %
Average	30,468	159,569	37,826	226,363	2,394	1.1 %	8.1 %	463	0.2 %	1.3 %

Like Salmon, commercial fishing for Sea trout in Ireland was largely phased out from 2007. By way of illustration, in 2001 the total national draft net catch of Sea trout amounted to 2,192 fish; by 2007 this had fallen to 311 and by 2022 it was just 61 animals. For angling the comparative figures were 1,066 fish in 2001, 331 fish in 2007 and 208 in 2022. In 2022, anglers caught 97% of total sea trout catch (including catch and release), while commercial fishermen accounted for just 3%.

Despite this huge decline in catches, the Slaney has remained an important Sea trout river. In 2022, some 12.6% of the total national Sea trout catch was taken on the Slaney (Table 15.11). All of these fish were taken by rod and line under the *catch and release* scheme. The 262 fish caught and released on the Slaney represented 14.5% of all Sea trout caught and released nationally.

The top three sea trout producing water systems made up 26.7% (539) of the national sea trout catch by rod and line in 2022 (Slaney, Moy (Ballina), Erne (Ballyshannon)).

Table 15.11: Sea Trout Catch 2022

Location	Commercial Catch	Rod & Line (Catch & Release)	Rod & Line (Harvest)	Total
National	63	1,810	208	2,081
Slaney	0	262	0	262
% National	0%	14.5%	0%	12.6%

Management Measures for Wild Salmon and Sea Trout

The Department of the Environment, Climate, and Communications, provides management measures for Salmon and Sea trout on the river Slaney by way of the Inland Fisheries Acts 1959 to 2017. The Conservation of Salmon and Sea trout (River Slaney) bye law no. 985, 2020 prohibits any person:

- To take by rod and line, any salmon or sea trout (over 40 cm) from the specified waters during the period from 1st January 2021 to 31st March 2021 and from 1st September 2021 to the end of the year
- To take by rod and line any salmon or sea trout (over 40cm) from the specified waters other than by catch and release during the period from 1st April 2021 to 31st August 2021
- From using or attempting to use when angling for salmon or sea trout of any size (a) any lure other than artificial fly using single or double barbless hooks in that part of the River Slaney upstream from the Railway Bridge Enniscorthy, or (b) worms as bait or any fish hooks, other than single barbless hooks, in that part of the River Slaney downstream from the Railway Bridge Enniscorthy to the mouth of the River Slaney

Commercially important shellfish stocks in the Irish Sea may be broadly categorised into two groups, molluscs and crustaceans. A third group, the echinoderms are less frequently harvested in Ireland

but include species of sea-urchin, some quite popular in the Asian market. As there are no commercial echinoderm fisheries in the ZoI this group will not be considered further.

Of the two other invertebrate shellfish phyla commercially exploited in the Irish sea and waters adjacent to Rosslare, the first of these, the molluscs, are a diverse assemblage that is further sub-divided into univalve molluscs, bivalve molluscs, and cephalopods.

The univalve molluscs include the locally important whelk. All remaining molluscs fisheries in the vicinity of the Rosslare are part of the second group, the bivalve molluscs. This includes scallops, razor shells, clams, and cockles. It also includes the primary farmed species in the area, the mussel. The third group, the cephalopods, include the squid and cuttlefish, species not considered important in the Irish Sea and, again, this group will not be considered further.

Crustaceans are a large and diverse group. The commercially exploited crustaceans comprise mobile creatures with hard segmented shells and flexible joints including lobster, brown crab, spider crab and shrimp.

Many commercial fisheries use pots and other similar forms of traps to target species living on or near the seabed. This includes crustaceans such as crabs and lobsters, molluscs, and fish such as sea bass and eels. These gears are characterised by a rigid, three-dimensional frame, wooden or mesh panels, and a tapered entrance to prevent the catch from escaping, and they can be used in a range of environments – from shallow, coastal waters, to offshore, deep-sea fisheries. Fishing vessels can deploy multiple traps attached to a single rope with a floating buoy at each end. Individual traps, which each have a single vertical rope connecting the trap to the surface, can also be used (MSC, 2025).

Dredges are rigid structures that are towed along the seabed and used to harvest species living in or on the seabed, such as scallops, oysters and clams. The design of a dredge varies depending on the species being targeted, but it typically consists of a metal frame with a bar at the front, and a collecting bag at the back. The bar - which can have a row of metal teeth - is pulled along the surface of the seabed or raked through the sediment. Dredges are used worldwide in offshore and inshore fisheries, and may be operated by hand in shallow waters, or towed by a fishing boat. Multiple dredge frames can be attached to a single vessel.

In Ireland, commercially important shellfish stocks are targeted by vessels of all sizes, however, for most stocks the primary commercial fleets comprise inshore vessels, less than 12 metres in length (overall), and operating within 12 nautical miles of the coast. There are exceptions:

- Nephrops: These are targeted by mid-sized vessels 18 - 24 metres in length. There are no prawn vessels operating from or in the vicinity of Rosslare Europort.
- Scallops: While scallop may be targeted by both inshore and larger offshore boats, the primary fleet, and that landing periodically into Rosslare, comprises larger (> 18 metres length, overall) offshore vessels.
- Brown crab: Nationally these are targeted by both inshore and, in some areas, larger, offshore vivier vessels 18 -24 metres in length. The fleet operating from or in the vicinity of Rosslare Europort consists entirely of inshore vessels less than 12 metres in length.

Many shellfish stocks, although subject to the Common Fisheries Policy, are in practice managed nationally. These stocks are exploited within the 12-mile limit.

While shellfish stocks are generally not subject to EU catch limits (quotas), some are. Norway lobster (prawns) is an example. These are traditionally harvested both inside and, more often, outside the 12 nautical mile limit by both Irish vessels and vessels registered in the UK and other EU Member States (France and Spain). They are subject to EU quotas and sharing arrangements with the UK.

Some shellfish stocks are subject to EU effort limits (brown crab) and/or other technical measures.

Other shellfish stocks (within the 12 nautical mile limit) are managed by a variety of technical measures, including minimum and maximum landing size, catch and effort limits (fishing days per week and/or hours per day), closed areas, technical constraints on fishing gear etc., agreed nationally and set out in Statutory Instruments under the seal of the Minister for Agriculture, Food and the Marine.

The Marine Institute's annual Shellfish Stocks and Fisheries Review, along with Ireland's Marine Atlas, the Institute's online data portal (https://atlas.marine.ie) provide the most up to date scientific assessments of the location and status of Ireland's shellfish fisheries as well as information on the average fishing effort and value derived from these fisheries. This information is presented in EIAR Technical Appendix 12 Fish Ecology and EIAR Technical Appendix 15: Commercial Fisheries and Aquaculture.

Species specific information is summarised in the following sub-sections.

15.5.1.1 RAZOR CLAMS[2]

Razor clams (*Ensis siliqua*) occur along the east coast of Ireland in mud and muddy sand sediments from Dundalk to Dublin and from Cahore to Rosslare and in numerous areas along the west coast. A second species, *Ensis arcuatus*, is abundant in clean sand substrates on the west coast. Both species may occur in the same area.

The Razor Clam fishery in the south Irish Sea opened in 2010. Landings increased from 50 tonnes to 100 tonnes in 2011 and 2012 and peaked at over 200 tonnes in 2016. Landings declined from 2016 to 2019, but increased in 2020 to 150 tonnes, mostly from Curracloe. Landings in 2021 were about 80 tonnes and approximately 140-150 tonnes in 2022 and 2023. The Waterford estuary fishery was closed by court order in 2019.

The fishery occurs mainly in Rosslare Bay and further north at Curracloe. The Rosslare Bay fishery was closed by voluntary agreement in 2017 due to a decline in the availability of large clams. Approximately 12 vessels fish in the area but this number changes seasonally with some vessels moving to the north Irish Sea. The fishery occurs close to or overlaps with a number of SACs and SPAs.

In 2022, 97 tonnes of razor clams were landed through Rosslare port. This represented 13% of all razor clams landed nationally, 8% of the total landings through the port by volume and 20% by value (total value €603,340, unit price €6.322). All were taken by vessels under 12 metres.

[2] Text based on Chapter 8, Razor Clam, in, Shellfish Stocks and Fisheries Review 2023. BIM & Marine Institute.

15.5.1.2 SURF CLAM

Surf clams (*Spisula solida*) are sub-tidal, infaunal bivalves which inhabit clean, coarse sands and gravels. When present, animals generally occur in high densities but given the patchy distribution of suitable substrates, stocks are probably locally discrete. These are medium lived animals with a life span ranging from 5 to 10 years. Spawning takes place in early summer and is followed by a pelagic larval dispersal phase. Juveniles recruit to the current fishery from age 2.

Surf clam fisheries are fished by inshore vessels (< 12 metre length overall) using single, non-hydraulic, clam dredges. Fishing can take place in late spring, or, in some cases throughout the year. The main fisheries occur in Waterford Harbour, Clifden, and inner Galway Bay. Other beds (many unfished) occur in Blacksod Bay, Broadhaven Bay, Bertraghbuoy Bay, Bantry Bay, the Saltee Islands and other areas where suitable coarse sand is available.

The Marine Institute's Atlas of Commercial Fisheries for Shellfish around Ireland does not include any specific reference to a Rosslare fishery, but it does note that unfished beds may occur around the Saltee Islands and other areas where suitable coarse sand is available.

15.5.1.3 COCKLES

Cockle (*Cerastoderma edule*) stocks occur in intertidal sand and mud habitats that occur as isolated and discrete areas around the coast and are probably local, self-recruiting populations. Only Dundalk Bay has supported commercial dredge fisheries in recent years. While recruitment to the stock occurs regularly, overwinter survival can be highly variable. As a consequence, biomass in some years is insufficient to support a fishery.

The Marine Institute's Atlas of Commercial Fisheries for Shellfish around Ireland does not include any specific reference to a Rosslare fishery.

15.5.1.4 WHELK

Whelk (*Buccinum undatum*) are long-lived (life span to 15 years) epibenthic gastropods inhabiting sand and mixed sediments, at depths to 50 metres, where they feed as scavengers and predators. Animals typically grow to 150mm shell height and are, generally, mature at 70-85mm shell height. Whelk egg masses are deposited directly onto the substrate and there is no pelagic larval phase. As a consequence, stocks may be locally discrete and whelk in the south Irish Sea may be comprised of a number of populations with limited connectivity.

Whelk are taken in baited traps, with crab (including spider crab) often used as the main bait. Fishing occurs throughout the year and there has been a commercial fishery in the south Irish Sea (Howth to Rosslare) since the 1960s. The fishery expanded in the early 1990s due to new markets in South Korea and Japan. Historically landings were as high as 10,000 tonnes per annum, however, this figure has averaged just below 4,000 tonnes in the last 20 years (2004 – 2023). In 2023 landings were 5,021 tonnes and varied between 2,180 and 6,329 tonnes in the period 2014 - 2023.

The Marine Institute has assessed whelk stock in the Irish Sea as generally depleted or locally depleted due to high fishing mortality. There is currently no limit on landings, and the whelk fishery is managed through a minimum landing size of 25mm shell width.

The Marine Institute's Atlas of Commercial Fisheries for Shellfish around Ireland includes a specific reference to a Rosslare fishery, noting that the *South Irish Sea fishery (Rosslare to Howth)* employs some 50 vessels and up to 25,000 pots. It also provides an assessment of whelk landing to Rosslare from 2014 – 2022 (Figure 15.6).

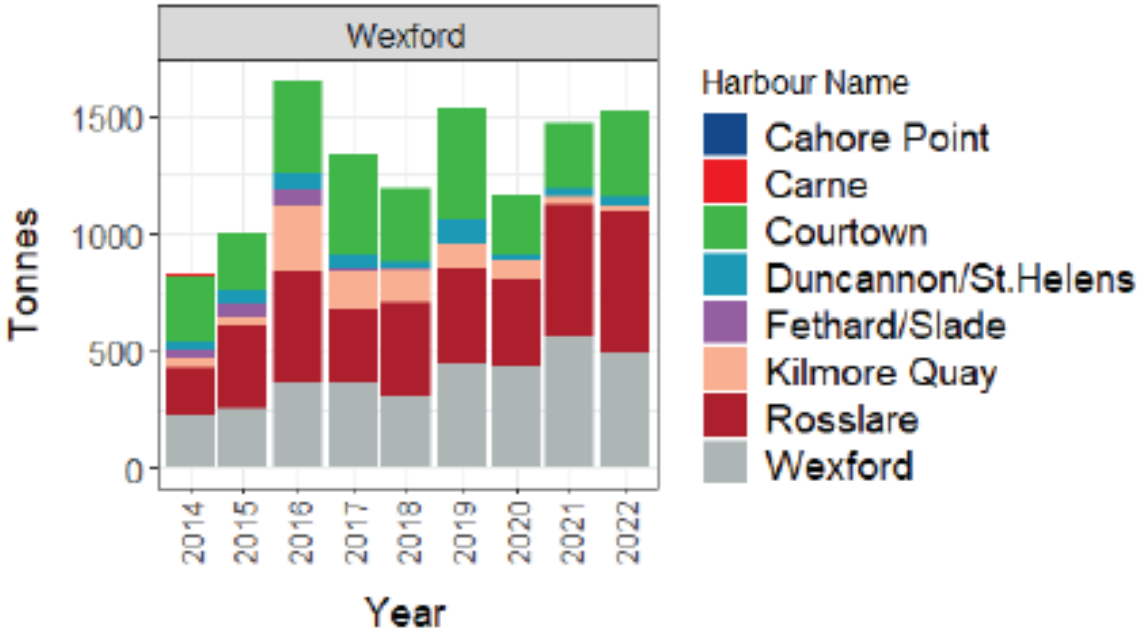

Figure 15.6: Whelk landings 2014-2022 (Marine Institute, 2022)

In 2022, 869 tonnes of whelk were landed through Rosslare port. These represented 14% of all whelk landed nationally, 69% of the landings through the port by volume and 46% by value (total value €1.364 million, unit price €1.57). Of the total taken, 17% were by vessels under 10 metres in the polyvalent segment of the fleet and the balance, 83% by polyvalent vessels under 10-18 metres.

15.5.1.5 LOBSTER (HOMARUS GAMMARUS)

Lobster are long lived, non-migratory crustaceans that, typically, inhabit underwater reefs where they feed as scavengers and predators. Animals moult in summer, growing about 6mm at each moult. Moulting in some cases is annual but often moulting and spawning occurs in alternate years. Post spawning, larvae generally undergo a dispersal phase lasting about 30 days with larvae hatching from June to August. Larval behaviour may limit dispersal.

Lobster fisheries are undertaken by inshore vessels (< 12 metre length overall) using baited traps. Fishing often occurs throughout the year with the main fishery between March and October. While there is currently no limit on landings or fishing effort the lobster fishery is managed using technical measures. These include a minimum (87mm carapace length) and maximum landing size (127mm carapace length) and a prohibition on the landing of v-notched lobsters (Tully, 2017). As the number of v-notched lobsters in any stock at any given time depends on the scale of any local v-noting programme the efficacy of this measure varies on different coasts. Annual landings can vary from 250 to 850 tonnes.

Total activity also varies from year to year; in 2013 it was estimated to be some 765 vessels fishing 214,000 pots. Lobster becomes less abundant and brown crab are more abundant with increasing depth.

Although the fishery for lobster is targeted there is often a significant by-catch of brown and velvet crab in the fishery. Velvet crab is a common by-catch in the fishery close to shore.

The Marine Institute's Atlas of Commercial Fisheries for Shellfish around Ireland does not include any specific reference to a Rosslare fishery, but it does note that fishing takes place west and south of Dunmore East to the Saltee Islands, and off South Wexford (south coast).

In 2022, two tonnes of lobster were landed through Rosslare port.

15.5.1.6 VELVET CRAB (*NECORA PUBER*)

Velvet crab are relatively short-lived animals (life span 4-6 years) found on shallow water reefs or patchy reefs with crevices and on mixed sediments. Juveniles are also found in sand and generally, velvet crab are more common in bays than on open coasts. These are fast growing animals that mature at 1-2 years (45-50mm carapace width) and generally exhibit high fecundity (> 1 brood per year).

Velvet crab fisheries are taken in baited traps set from inshore (< 18 metres) vessels operating in shallow coastal waters. Fishing occurs throughout the year with the main season from March to October. Apart from targeted pot fisheries (southwest, and coasts of Dublin, Galway and Donegal) there is also a significant by-catch taken in lobster fisheries. Landings in 2023 were 242 tonnes and varied between 200[3] and 328 tonnes in the period 2014 – 2023. The landings in 2020 during the first year of Covid-19 were 12 tonnes.

The distribution of velvet crab fisheries is similar to lobster but usually in shallow waters less than 20m depth. Landings are mainly into ports on the west (Rossaveal), southwest (Bantry, Castletownbere, Crosshaven, Schull, Skibbereen), east (Clogherhead, Howth, Dun Laoghaire) and southeast coasts (Rosslare, Kilmore Quay).

The Marine Institute's Atlas of Commercial Fisheries for Shellfish around Ireland includes a specific reference to a Rosslare fishery. In 2022, 8 tonnes of velvet crab were landed through Rosslare port.

15.5.1.7 BROWN CRAB (*CANCER PAGURUS*)

Brown crab are long lived animals found on all coasts living in sedimentary and reef habitats where they feed as scavengers and predators. They mostly moult in summer, but the moulting season can be protracted. The moult frequency of commercial size classes is annual, however, this declines with size. Post spawning, the larval dispersal phase lasts around 30-50 days with larvae hatching from March to November. The size at 50% maturity for female crab is 120mm (carapace width). The growth increment at moult is 15-25% of pre-moult size for main commercial size classes and is higher in male crab.

Brown crab fisheries are taken in baited traps set from smaller (< 18 metres) inshore boats operating in shallow coastal waters all the way up to larger (18 – 23 metre) offshore '*vivier*' vessels operating

[3] Landings in 2020, the first year of Covid-19, were 12 tonnes.

off the northwest coast and fishing out to depths of 200m. Fishing occurs throughout the year with the main season from March to November. Apart from targeted pot fisheries, there is also a by-catch taken in set nets and bottom trawls.

Landings in 2023 were 7,893 tonnes and varied between 6,500 and 9,300 tonnes in the period 2014 - 2023. Catch rates are highly variable between vessels, areas, seasons and years making it difficult to identify patterns.

While there is currently no limit on landings, crab fishing is managed using a combination of technical measures and effort limitation, specifically:

- A minimum landing size (MLS) of 130mm carapace width (140mm north of 56°N). As the female, long-lived size at 50% maturity is 120 mm, the minimum landing size largely prevents growth overfishing.
- Annual effort by vessels over 15 m in length fishing the northwest stock is restricted to 465,000 kw.days (ICES Area VI - 1415/2004 EC)
- Annual effort by vessels over 15 m in length fishing in ICES Area VII outside of the Biologically Sensitive Area (BSA) is restricted to 40,960 kw.days (1415/2004 EC)
- Annual effort by vessels over 10 m in length fishing in the Biologically Sensitive Area (BSA) is restricted to 63,198 kw.days (1415/2004 EC)
- Effort by vessels under 10 m in length is unrestricted in all areas

The Marine Institute's Atlas of Commercial Fisheries for Shellfish around Ireland does not include any specific reference to a Rosslare fishery, however, it does note that targeted fishing takes place on the southeast coast and specifically that crab stocks off the southeast coasts are exploited mainly by Irish vessels <13 m in length inside 12 nm. In 2022, 39 tonnes of brown crab were landed through Rosslare port.

15.5.1.8 SPIDER CRAB (MAJA BRACHYDACTYLA)

Spider crab are a relatively short lived (<10 years) species that inhabit mixed reef-sedimentary habitats and clean sand. Animals migrate inshore in spring to release larvae and moult. Larval life is short, comprising only 2 stages. Spider crab have a terminal moult meaning that they reach a certain size and stop growing. The life span following terminal moult is limited to 2-3 years as the shell ages.

Spider crab are common on all coasts. Apart from Tralee, spider crab are lightly exploited in many areas and may even have expanded its distribution in the past 20 years. There may also be local depletion in some areas when a targeted fishery is present (Tully, 2017).

While the Marine Institute's Atlas of Commercial Fisheries for Shellfish around Ireland does not include any specific reference to a Rosslare fishery, it does note that targeted fishing takes place on the southeast coast. Evidence of the presence of spider crab aggregations was collected from the project specific benthic surveys described in Volume 3: Technical Appendix 13 of this EIAR and confirmed by the Fisheries Consultative Group. This fishery takes place in late spring and early summer (May – July) and coincides with the moulting season.

In 2022, 40 tonnes of spider crab were landed through Rosslare port. While just 7% of all landings through the port by volume and value (total value €199,850) the spider crab landings were 7% of the national landings.

15.5.1.9 SHRIMP (PALAEMON SERRATUS)

The shrimp, *Palaemon serratus*, is a short lived (2 years) demersal species inhabiting mixed sedimentary and reef habitat. Local stocks occur within bays. The status of these stocks is highly variable and appears to be recruitment driven which is, itself, also highly variable. Larvae hatch from May to July and juveniles (0+ age group) recruit to fisheries in October.

The shrimp fishery is prosecuted by many small (< 8 metre length overall) inshore vessels using baited traps in targeted, single species, fisheries in shallow inshore waters and coastal bays on the south, west and northwest coasts. Smaller fisheries also occur in the Irish Sea.

Shrimp fishing occurs between the months of August and March with a closed season from mid-March to August 1st. Voluntary agreements in some areas delay the opening of the fishery until September.

Annual (national) landings vary from 100 - 400 tonnes. As female shrimp are larger than males, the fishery takes place mainly on 1 year old females and fishing of mature females in spring may limit recruitment. As recruitment of the 0+ age group occurs in October, growth overfishing (not allowing time for growth of shrimp before they are caught) can be a feature of the autumn fishery if the catch is not graded. However, voluntary grading and live discarding is a common practice in all areas.

15.5.1.10 SCALLOP (PECTEN MAXIMUS)

Scallop are long-lived (life span 10-15 years) epifaunal bivalves found on sand, gravel and mixed sediments, usually recessed in the surface material. When disturbed, the largely sedentary adults can use their shells to 'swim' vigorously and quite effectively for distances from 1 to 5 metres. Scallop spawn in summer and their larvae undergo a pelagic dispersal phase before settling.

There are a number of scallop beds, interconnected by larval dispersal, in the Irish Sea and Celtic Sea. These are mostly outside the 12 nm fishery area. Scallops are taken using spring loaded dredges towed by a variety of vessel sizes with larger (> 20 m length) vessels for the offshore fisheries in the Celtic Sea, Irish Sea and English Channel. Inshore fisheries are fished by smaller boats.

The scallop fishery is the one major fishery which uses Rosslare as a landing port. Scallop fishing is a deep-rooted tradition, which in Ireland extends back to at least the 16th century. Scallops are commercially fished in numerous locations and landed into more than 40 ports around the coast. Stocks along the west and south coasts are small and discrete. Off the southeast coast and in the Irish Sea scallops are widely distributed and abundant in both inshore and offshore waters.

The south and east coast scallop fishery is fundamentally different to the small inshore scallop fisheries off the west coast. These offshore stocks are fished by large vessels that may tow as many as 34 spring loaded dredges with each dredge approximately 0.8 m wide. The dredges are held in series on two beams, which are fished on each side of the vessel.

The fishery off the southeast coast began in inshore waters, south of the Wexford coast, in the 1970s and gradually expanded offshore and into the south Irish Sea. Further expansion occurred in

the 1990s and by 2002 the Irish fleet had increased its range, from the southeast coast and south Irish Sea to the English Channel and west of France. In 1997 the total number of dredges in the fishery was 103. This expanded to 498 dredges between 1997 and 2000 and peaked at 528 dredges in 2002. By 2003 the majority of Irish fishing effort had transferred from the Irish coast to the Irish Sea and English Channel due to an apparent decline in stocks off the southeast coast. From 2002, however, there was a gradual decline in total fishing effort due to various economic constraints. The physical condition of the vessels, increasing fuel prices and declining market prices for scallops in 2002-2004 all contributed to a reduction in fishing activity. In addition, a days at sea regime was imposed on the Irish fleet by the European Commission (Council regulation 1415/2004) in 2005 which, when transposed to Irish legislation, limited the activity of the vessels. The resultant economic difficulties culminated in the decommissioning of a number of vessels from the fleet in 2005.Landings in 2023 were 2,470 tonnes and varied between 1,940 and 2,739 tonnes in the period 2014 - 2023. While there is currently no limit on landings, scallop fishing is managed using effort limitation, specifically:

- The capacity of the scallop fleet (over 10 m in length) has been limited since 2006 and a specific authorisation is required to fish for scallop
- The total annual effort (kw.days) of the fleet is also capped by the Western Waters agreement (EC 1415/2004)
- Considering the relationship between vessel length and dredge number the number of dredges in the fleet can be predicted: this has varied from 198-230 in recent years compared to estimated 500+ dredges prior to 2006 when the fleet was partially decommissioned.
- In 2022, a total of 2,217 tonnes of scallop were landed to Irish ports. Of these, 212 tonnes of scallop were landed through Rosslare port. This was 9.6% of the total landings.

15.5.2 AQUACULTURE IN THE COMMERCIAL FISHERIES STUDY AREA

Areas approved for on growing of shellfish must be designated as shellfish waters, in compliance with the requirements of the Shellfish Waters Directive (2006/113/EC). The aim of this Directive is to protect or improve shellfish waters in order to support shellfish life and growth. It is designed to protect the aquatic habitat of bivalve and gastropod molluscs, which include oysters, mussels, cockles, scallops and clams. The Directive requires Member States to designate waters that need protection. It sets physical, chemical and microbiological requirements that designated shellfish waters must either comply with or endeavour to improve. It also provides for the establishment of pollution reduction programmes for the designated waters. The Directive is implemented in Ireland by the European Communities (Quality of Shellfish Waters) Regulations 2006 (SI No 268 of 2006, as amended) and responsibility for it rests with the Department of Agriculture, Food and the Marine.

The aquaculture (farming) of marine shellfish is carried out through licensing of specific sites. This gives the licence holders exclusive access to the licensed site for the purpose of producing shellfish. The licence also entitles the licensee to have excluded any activity that might interfere with the licensed aquaculture production. Licences may also be issued to groups, usually co-operatives, to undertake extensive bottom culture of certain shellfish.

In the Commercial Fisheries Study Area, mussels fished for relay and on growing in the south Irish Sea are mainly managed under Fishery Natura Plans implemented through Fishery Natura Declarations (see Section 15.5.3 below). Fishing for mussels in other areas, which are mainly intertidal, but also subtidal in an area of Wicklow Reef and Dalkey Sound SACs, is prohibited.

The mussel seed fishery on the island of Ireland is managed on an all-island basis by the Department of Agriculture Food and Marine (DAFM) in Ireland (IE), the Department of Agriculture, Environment and Rural Affairs (DAERA) in Northern Ireland (NI) and the cross-border Loughs Agency.

Ireland is now Marine Stewardship Council (MSC) certified for both Bottom & Rope mussels. This certification is held centrally, by BIM, for the whole mussel industry and represents an innovative approach to the certification process as well as value for money for the sector. According to BIM's *Annual Aquaculture Report, Findings of the National Seafood Survey 2024,* bottom cultured mussels generated 3,626 tonnes of product in 2023 (down from 6,864 tonnes in 2022) valued at €3.957 million (down from €8,966 million in 2022).

Designated Shellfish Waters, Seed Mussel Harvesting and Licenced Blue Mussel Aquaculture Sites in the Commercial Fisheries Study Area are described in EIAR Technical Appendix 15. None overlap with the Proposed Development Boundary.

The closest aquaculture facility to the Proposed Development is in Wexford Harbour, where blue mussel spat are relayed for on-growing in licensed sites.

15.5.3 NATURA 2000 REGULATIONS AND FISHERIES MANAGEMENT

The designation of Natura sites on Ireland's coast has the potential to impact on fisheries and aquaculture in those areas. Such fishing and aquaculture activities need to be controlled and protected through Natura fisheries permits, declarations and notices (SFPA, 2025).

In order to allow for the continuing activity of fisheries and aquaculture in Natura sites, the Minister for Agriculture, Food and the Marine enacted the following Statutory Instruments that regulate and control by means of Declarations and permits for fishing and aquaculture activities in these areas:

- European Union (Birds and Natural Habitats) (Sea-fisheries) Regulations 2013

The European Union (Birds and Natural Habitats) (Sea Fisheries) Regulations 2013 provide for a process for the Minister for Agriculture, Food and the Marine to prepare and publish a fisheries Natura plan, which includes provision for receiving representations.

Where the Minister publishes a Natura plan, they may issue a Fisheries Natura Declaration in respect of a designated area. Contravention of a Fisheries Natura Declaration constitutes an offence. The purpose of a Fisheries Natura Declaration is to provide for the regulation of activities in the area subject to the plan. Regulation of activities may include:

- Fishing by class or description
- Prohibition on use of fishing gear by class
- Fishing by sea fishing boats by class or description
- Limiting fishing by means other than sea fishing boats

- Regulation of fishing periods, species
- Requirements on the notification of fishing and landing, and the use of location devices.

Where the Fisheries Natura Declaration requires the that fishing activities in the designated area shall only be permissible by means of a permit, then the Minister for Agriculture, Food and the Marine may, on application, issue Fisheries Natura Permits, to authorise fishing activities in the designated area

15.5.4 COMMERCIALLY IMPORTANT FISHING FLEETS IN THE STUDY AREA

Situated in the south-eastern part of the Irish Sea, Rosslare Europort is a recognised transport hub for cars, passengers and freight and Ireland's best geographically positioned port to the UK and mainland Europe. While Rosslare Europort's role as a fishery harbour may be less well documented, this chapter considers the extent to which the Proposed Development may impact on the viability of the fishing fleet. The information presented provides a detailed understanding of the commercial fisheries baseline against which the potential impacts of the Proposed Development can be assessed in EIA terms.

The assessment summarised below and presented in EIAR Technical Appendix 15 has been developed following a detailed and rigorous desk-based assessment of data and literature, supplemented with qualitative information gained through direct consultation with both the fish catching and processing sectors in Rosslare and communication and discussion with representatives of the Irish South & East Fish Producers Association, the National Inshore Fishermen's Association, the south east Regional Inshore Fisheries Forum, and the Irish Fish Processors and Exporters Association.

15.5.4.1 IMPORTANCE OF ROSSLARE AS A FISHERY HARBOUR

Fisheries Policy 6 (National Marine Planning Framework): Any port or harbour development should take account of the needs of the dependent fishing fleets with a view to avoiding commercial harm where possible. Where a port or harbour has reached a minimum level of infrastructure required to support a viable fishing fleet, there should be a presumption in favour of maintaining this infrastructure, provided there is an ongoing requirement for it to remain in place and that it continues to be fit for purpose.

In 2023, the Sea Fisheries Protection Authority (SFPA), using landing declarations (EU logbook) and sales notes, recorded a total of 1,263 landing events through the port of Rosslare. Events refer to individual landings of declared quantities of fish or shellfish (commercial fisheries or seafood), by species, from registered fishing vessels. These events amounted to a total of 1,484 tonnes of seafood valued at €3,458,621. In 2020, the corresponding figures were 906 tonnes of seafood landed valued at €5.773 million.

The significance of seafood landing through the port is apparent when compared with landings into the national fishery harbour centres and other harbours around the coast. In terms of volume, in 2023, Rosslare ranked in 12th place nationally, falling between Rossaveel and Clogherhead. In terms of value, it ranked in 14th place, falling between Kinsale and Wicklow.

Of the 906 tonnes landed in 2020, 856 tonnes (94.4%) were accounted for by various species of shellfish. These had a total value of €5.680 million or 98.4% of the total value of seafood (€5.773 million) landed that year. These figures place Rosslare port as the 6th most important, nationally, for shellfish by value and the 7th most important for shellfish by volume (Source: SFPA, 2020) (Figure 15.7).

Further, while Rosslare accounted for just 3.4% by volume and 5.6% by value of all shellfish landed in 2020, the national figures include Dublin Bay Prawns (*Nephrops norvegicus*); a stock managed by quota, agreed at a European level under the Common Fisheries Policy, and fished in Irish waters by vessels from France, Spain and the United Kingdom, as well as Ireland. With a total quota in 2020 of 6,416 tonnes, valued at €53 million (The Business of Seafood, 2021, BIM) Dublin Bay prawns account for more than half (52%) of the value of all shellfish landed nationally. As Rosslare landings do not include any Dublin Bay Prawns, the non-prawn shellfish landed through the port represents *pro rata* 11.7% of all non-prawn shellfish landed into Irish ports.

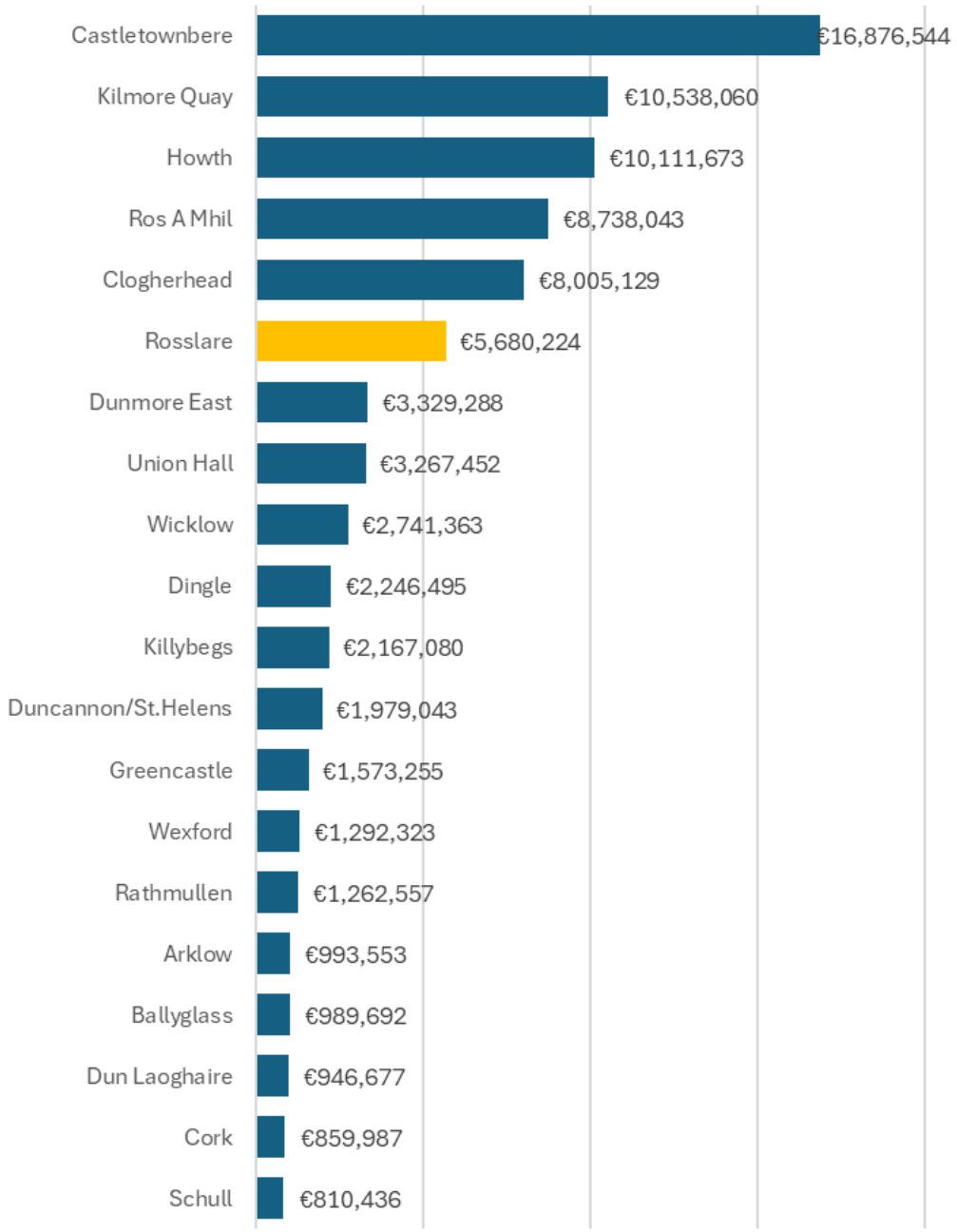

Figure 15.7: Top 20 Shellfish Species Landing Ports in 2020, by value (SFPA, 2020)

15.5.4.2 ROSSLARE FISHING FLEET

Ireland's fishing fleet is highly diversified with a broad range of vessel types and sizes. Traditionally divided into operational units or segments with similar characteristics (target species, fishing gear and fishing patterns), in September 2024 the national fleet comprised 1,949 vessels grouped into five segments.

Analysis reveals that 130 of these were registered to owners in County Wexford (refer: EIAR Technical Appendix 15: Commercial Fisheries and Aquaculture of Volume 3 of the EIAR). This was 7% of the national fleet.

Of the 130 fishing vessels registered to owners in County Wexford, 34 were over 18 metres in length. Vessels 18 metres and over are considered offshore vessels with the ability to stay at sea over long periods and operate at distance from their home port.

- Five were registered in the *Aquaculture* segment and operate from Wexford Town
- Eight were registered in the *Beam Trawl* segment and operate from Kilmore Quay
- Thirteen were registered in the *Polyvalent* segment and operated by owners based in Kilmore Quay (10), Arthurstown (2) or New Ross (1). At least one of these demersal trawlers is reported to use Rosslare as a landing port.
- One registered in the *Specific General* segment operates from Wexford Town in the mussel sector
- Seven were registered in the *Specific Scallop* sub- segment and operated by owners based in Kilmore Quay (4), New Ross (2) and Wexford Town (1). All of these large scallop boats are reported to use Rosslare as a landing port when fishing on the west coast of England and Wales, Cardigan Bay and the southern Irish Sea.

The remaining 96 fishing vessels registered to owners in County Wexford were under 18 metres in length. All of these are considered to have a moderate to high dependency on their home port due to their size and limited range of operation and 36 are considered to *have or potentially have* a high dependency on the port of Rosslare. This is based on i) their size dependent operating constraints ii) the home address of their owner/operator or iii) their traditional/established use of Rosslare as a home port (Table 15.12).

- One was registered in the *Polyvalent Potting* segment and operated by an owner in Rosslare.
- Thirty were registered in the Polyvalent (under 18 metres) sub-segment of which 14 are operated by owners with a home address in Rosslare. Eleven are operated by owners with a home address within easy commuting distance of Rosslare, including Bridgetown (2), Broadway (5), Mulgannon (2) and Wexford Town (2) and five were identified by Rosslare Harbour (EIAR) Fisheries Consultative Group as frequent users of Rosslare.
- Four were registered in the *Specific General* sub-segment and are operated by owners identified by the Rosslare Harbour (EIAR) Fisheries Consultative Group as frequent users of Rosslare and included vessels whose owners reside in Kilmore Quay (24 minutes away by road), Fethard-on-Sea (24 minutes away by road), and Duncannon (47 minutes away by road).
- One was registered in the *Specific Scallop* segment and operated by an owner in Wexford Town.

Table 15.12: Inshore and Small-Scale Coastal Fleet (SSCF) with likely dependency on Rosslare

Segment	Length Class				Length (Overall)		
	0-10	10-12	12-18	Number of Boats	Min	Mean	Max
Polyvalent Potting	1			1	7.9	7.9	7.9
Polyvalent < 18	25	1	4	30	4.6	7.9	14.5
Specific General	1	2	1	4	9.3	10.9	13.3
Specific Scallops			1	1	13.7	13.7	13.7
Total	27	3	6	**36**	4.6	8.4	14.5

Table 15.13: Seafood landed at Rosslare (2022) by species and fleet segment (SFPA, 2022)

Species	Fishing gear	Vessel Size 0-10	Vessel Size 10-18	ALL	Total	%	Value € million
		Polyvalent		Specific			
		Landings 2022 (tonnes)					
Whelk	Pots	149	720		869	69%	€1.364
Scallop	Dredge			212	212	17%	€0.801
Razor Clams	Dredge			97	97	8%	€0.603
Lobster	Pots	1	1		2	0%	€0.039
Velvet crab	Pots	8			8	1%	€0.021
Brown crab	Pots	6	33		39	3%	€0.117
Spider crab	Pots	40			40	3%	€0.023
Total		204	754	309	1,267	100%	€2.969

15.5.4.3 FISHERIES UNDERTAKEN BY THE ROSSLARE FISHING FLEET

In 2022, the SFPA recorded 1,267 tonnes of seafood, valued at €2.969 million, landed through Rosslare Europort (refer to Table 15.13).

1) Whelk were the main species landed, accounting for 869 tonnes or 69% of the total by weight. These were valued at €1.364 million at first point of sale.
2) Scallop were in second place with 212 tonnes (17%, €0.801 million)
3) Razor clams were in third place with 97 tonnes (8%, €0.603 million)
4) The balance comprised 89 tonnes of various crustaceans (lobster 2 tonnes, velvet crab 8 tonnes, brown crab 39 tonnes, and spider crab 40 tonnes) making up 7% of the total and valued collectively at €0.199 million

Table 15.13 highlights another important feature of Rosslare based fisheries. Pot fisheries, specifically those targeting whelk and various crustacean species (all prosecuted by polyvalent vessels) represent 75% of all landings by volume and 53% by value.

These landings correspond to the fleet profile presented earlier (Table 15.12) and considered to have or potentially have a high dependency on the port of Rosslare:

- 204 tonnes of mostly whelk and spider crab landed by up to 25 vessels in the polyvalent under 18 and 1 in the polyvalent potting segments and all under 10 metres (0-10) small scale coastal fleet
- 754 tonnes of mostly whelk and brown crab landed by 1 vessel in the polyvalent 10-12 metre and 4 vessels in the polyvalent 14-18 metre length class
- 309 tonnes landed by vessels in the specific segment including 212 tonnes of scallop landed by up to 7 vessels registered in the *Specific Scallop* sub-segment and 97 tonnes of Razor clam landed by up to 5 vessels in the *specific* segment

Based on the foregoing it is possible to identify four discreet Rosslare based fleets.

Fishery 1: Razor shells (Clams)

BIM, in its economic analysis of the Irish small-scale fleet (Curtin, 2023) note that the specific segment generates 71% if its value is from razor clams. BIM further notes that 'of those vessels mainly selling shellfish, those with razor clams can be classified as specific dredgers and that these fisheries are almost exclusively across the vessel length classes; 6-10 metres, 10-12 metres and 12-15 metres.

In 2022, 97 tonnes of razor clams were landed through Rosslare port. These represented 13% of all razor clams landed nationally, 8% of the landings through the port by volume and 20% by value (total value €603,340, unit price €6.322 kg^{-1}).

Fishery 2: Whelk

In 2022, 81% of all whelk landed from fisheries in the Irish Sea were taken by pots (EU gear code FPO). Of these, 88% were taken by vessels in the under 12 metre small-scale coastal fleet (SSCF) and

of these, 40% were taken by vessels under 10 metres in length with the 48% by vessels between 10 and 12 metres.

Whelk fisheries are fished exclusively by vessels in the polyvalent sector, and primarily by vessels using pots. This is consistent with licensing policy which prevents vessels licensed in the specific segment from fishing univalve molluscs including whelk. It is also consistent with the general observations found in the BIM analysis.

In 2022, 869 tonnes of whelk were landed through Rosslare port. These represented 14% of all razor clams landed nationally, 69% of the landings through the port by volume and 46% by value (total value €1.364 million, unit price €1.57 kg). Of the total, 17% were taken by vessels under 10 metres in the polyvalent segment of the fleet and the balance, 83% by polyvalent vessels under 10-18. This is consistent with licensing policy and with the general observations found in BIM's analysis.

Fishery 3: Crustaceans (including Lobster, Brown, Velvet, and Spider Crab)

In 2022, 62% of all crustaceans landed from fisheries in the Irish Sea were taken by pots (EU gear code FPO). The breakdown by species includes 58% of the lobster, 69% of the brown crab, 74% of the velvet crab, and 39% of all spider crab all taken in pots. Of these 96% were taken by vessels in the under 12 metre small-scale coastal fleet (SSCF); 77% by vessels under 10 metres in length and a further 19% by vessels between 10 and 12 metres.

BIM, in its economic analysis of the Irish small-scale fleet (Curtin, 2023), point out that, nationally, boats registered in the polyvalent general segment and fishing with pots, generate most of their non whelk revenue from crab (62%), and lobster (14%). BIM further notes that, of the three segments - specific, polyvalent pots and polyvalent general - the specific segment is clearly distinct while the other two are broadly similar targeting the same species albeit in different proportions. They also note that most vessels use just one gear with only a small minority using 2 gears (~12%).

In 2022, 2 tonnes of lobster, 8 tonnes of velvet crab, 39 tonnes of brown crab, and 40 tonnes of spider crab (89 tonnes in total) were landed through Rosslare port. While just 7% of all landings through the port by volume and value (total value €199,850) spider crab landings were 7% of the national landings.

Fishery 4: Scallop

The fourth major fishery using Rosslare as a landing port is the scallop fleet. Today there are just eight vessels registered in the Specific scallop sub-segment. Apart from a single 11-metre boat the other seven are all large, 24-27 metres vessels. The owners of all seven of these vessels are residents of county Wexford; four in Kilmore Quay, two in New Ross, and one in Wellington Bridge.

In 2022, a total of 2,217 tonnes of scallop were landed to Irish ports from fisheries in the Irish Sea, Celtic Seas, and the English Channel. Of these, 949 tonnes (43%) were taken in the various fisheries in the Irish Sea, 710 tonnes (32%) in the Eastern English Channel, 201 tonnes (9%) in the Western English Channel and 336 tonnes (15%) in the Celtic Sea (along with smaller amounts on other coasts). In the same year, 212 tonnes of scallop were landed through Rosslare port. This was 9.6% of the total national landings of this species.

Some 80% of the catch was taken by larger vessels, 24 – 40 metres in length. This is consistent with the current fleet profile: 7 of the 8 vessels registered in the Specific scallop subsegment are large, 24-27 metres vessels, registered to owners living in Wexford.

Please note a socioeconomic assessment of the Rosslare fishing fleet is provided in EIAR Technical Appendix 15.

15.5.5 ADJACENT FISHERIES

Adjacent fisheries to those which overlap with the Proposed Development include the whelk fisheries out of Wicklow (85 km), Arklow (61 km) and Courtown (42 km) and the Waterford Estuary Brown crab and Cockle fisheries (32 km) and the Waterford Estuary Razor clam fishery (58km, currently closed) (Figure 15.8).

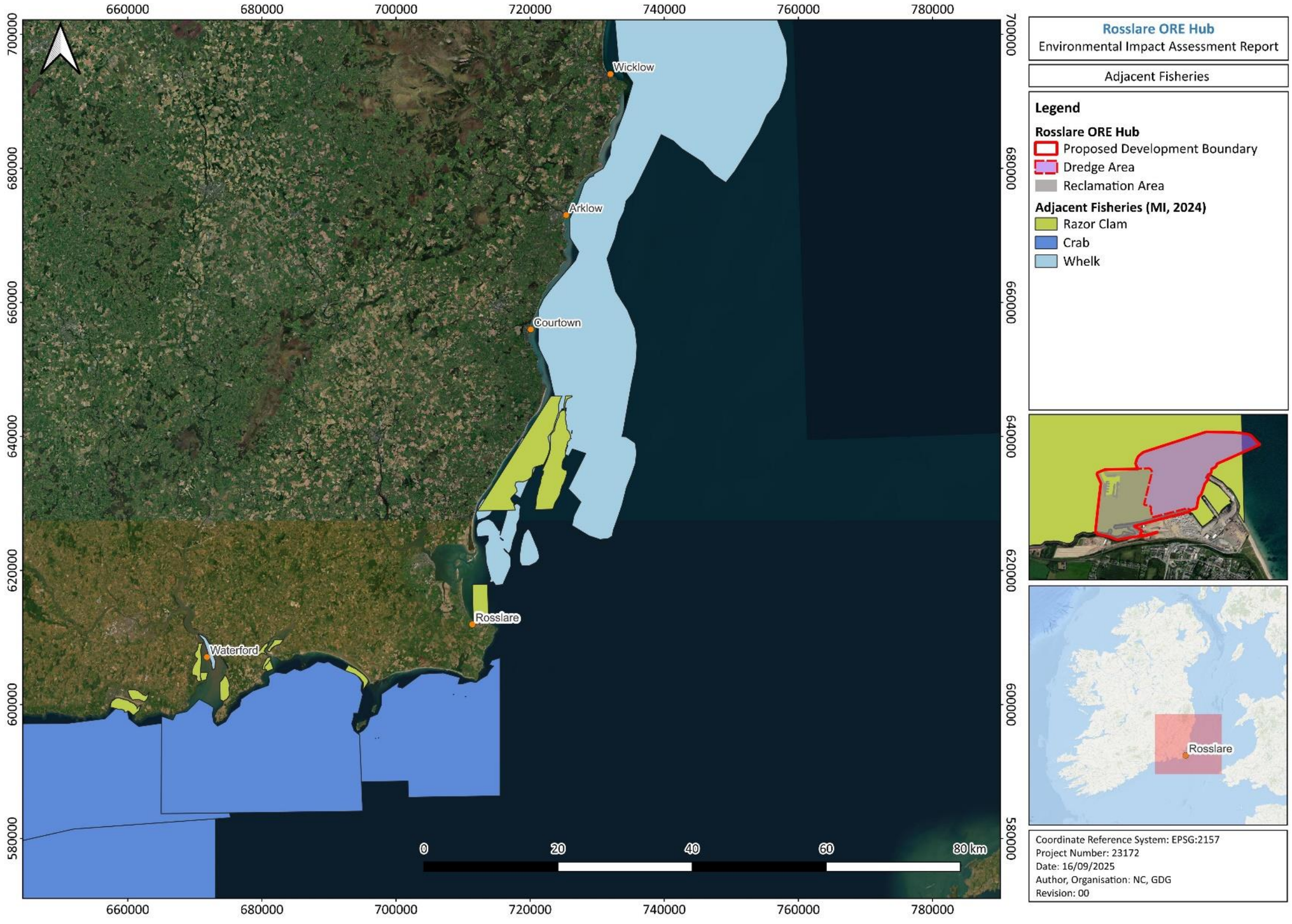

Figure 15.8: Adjacent fisheries to the Proposed Development

15.5.6 SUMMARY OF KEY RECEPTOR GROUPS

Key receptors identified from the baseline information described above are considered for impact assessment in the following three groups:

- Group A receptors (fishing fleets with direct source-pathway-receptor links to the Proposed Development, Table 15.14)
- Group B receptors (adjacent fisheries upon which the Proposed Development could have an indirect impact, Table 15.15)
- Group C receptors (adjacent fleets upon which the Proposed Development could have an indirect impact, Table 15.16)

Please note with the closest aquaculture site is in Wexford Harbour, no aquaculture receptors have been identified within the Study Area that could be impacted by the Proposed Development.

Table 15.14: Key Receptor Group A: Fishing fleets upon which the Proposed Development could have a direct impact

GROUP A: COMMERCIALLY IMPORTANT FISHING FLEETS WITH DIRECT LINKS TO PROPOSED DEVELOPMENT			
Fishery 1 Razor shell	Fishery 2 Whelk	Fishery 3 Crustaceans	Fishery 4 Scallops

Table 15.15: Group B Adjacent fisheries upon which the Proposed Development could have an indirect impact

GROUP B: ADJACENT FISHERIES WITH INDIRECT LINKS TO PROPOSED DEVELOPMENT	
Waterford Estuary Brown crab fishery	Waterford Estuary Cockle fishery
Waterford Estuary Razor clam (Currently closed)	Wicklow, Arklow and Courtown Whelk

Table 15.16: Adjacent fleets upon which the Proposed Development could have an indirect impact

GROUP C: ADJACENT FLEETS WITH INDIRECT LINKS TO PROPOSED DEVELOPMENT			
Wicklow	Courtown	Dunmore East	Duncannon
Arklow	Kilmore	Slade	Arthurstown

15.6 IMPACT ASSESSMENT

15.6.1 DO NOTHING SCENARIO

In this EIAR, the term 'Do Nothing' scenario is used to describe the anticipated evolution of the baseline without the Proposed Development.

In the Do-Nothing Scenario, the Proposed Development would not proceed, leaving the existing environmental conditions unchanged. In the short term the current (at time of writing) levels of fishing are likely to persist without any significant alterations, as no construction activities associated with the Proposed Development would occur. The existing small boat harbour operation activities would continue, maintaining the current levels of disturbance and fishing activity within the area. While changes to fish ecology and fisheries may occur, they would likely follow the same trajectory that the surrounding habitats have experienced over the past few decades. Natural processes, such as habitat succession and seasonal ecological changes, would continue uninterrupted. Ongoing environmental pressures unrelated to the Proposed Development, such as habitat degradation, pollution, invasive species, stock collapse and market pressures could still impact on fish ecology and fisheries in the area over time.

15.6.2 PRIMARY MITIGATION

Integrated measures refer to those elements of the Proposed Development that have been incorporated into the design specifically to avoid or reduce potential adverse effects on the receiving environment, including commercial fisheries receptors.

The following design features are particularly relevant to the assessment of effects on fishing activity:

- Construction Phasing and Harbour Access: The construction sequence has been designed to ensure that the existing Small Boat Harbour remains operational until the replacement facility is operational and ready for use. This will maintain continuity of access for the inshore fishing fleet and avoid temporary loss of harbour infrastructure critical to fishing operations. Once the new Small Boat Harbour is operational users will access it via a temporary secure access road. Users will access the new Small Boat Harbour via the permanent access road once it is completed which will be later in the construction programme.
- Access to Fisherman's Quay: The construction works will not restrict access to Fisherman's Quay throughout the construction phase. This will prevent disruption to berthing and loading/unloading activities for local fishers who rely on this infrastructure.
- The provision of enhanced facilities for exiting small boat harbour users in deeper water (-4 to -5mCD) when compared to the existing small boat harbour facilities.
- Additional pontoon provision (80m length) and hard quay (59m length) for fishing vessels currently using Fisherman's quay. Access to Fisherman's quay will be maintained, however, the new Small Boat Harbour will be capable of taking some of the vessels simultaneously and provide facilities when Fisherman's Quay is otherwise occupied.

These measures are part of the integrated project design and ensure that fishing activity and access to port infrastructure are maintained during the works. Accordingly, their implementation is considered in the assessment of potential impacts in Section 15.6.6.

Where potentially significant or higher adverse effects remain despite project design, additional measures (i.e., secondary mitigation) have been proposed. These will be fully implemented to minimise potential impacts from the different phases of the Proposed Development.

Further mitigation for effects assessed as not significant is also outlined below, where the scale of construction activities warrants general mitigation measures and best-practice design to reduce any effects on the receiving environment.

15.6.3 TERTIARY MITIGATION

The Convention on the International Regulations for Preventing Collisions at Sea, 1972 (COLREGS). Specifically: Rule 18 states:

Responsibilities between vessels

I. A vessel engaged in fishing when underway shall, so far as possible, keep out of the way of: (i) a vessel not under command; (ii) a vessel restricted in her ability to manoeuvre

15.6.4 SUMMARY OF IMPACTS

Corresponding to the three receptor groups identified, direct and indirect impacts are considered in Table 15.17.

Please note ecological considerations relating to commercial fish and shellfish species – including their distribution, habitat use, and sensitivity to stressors such as underwater noise, sedimentation, or habitat loss – are addressed separately in Chapter 12: Fish, Shellfish and Turtle Ecology, where these species are assessed as Key Ecological Receptors, as are non-commercial fish species, including those of conservation concern (e.g., Annex II species under the Habitats Directive) and elasmobranchs.

In summary, Chapter 12: Fish, Shellfish and Turtle Ecology found no significant cumulative effects are anticipated, due to the limited spatial and temporal extent of predicted pressures, the nature of the port environment, and the absence of sensitive biological features (e.g., spawning or nursery habitats) within the ZoI.

Interactions between construction activities and other pressures (e.g., underwater noise, suspended sediment) are expected to be highly localised and temporary. No transboundary effects are predicted, as the zone of impact does not extend beyond Irish territorial waters.

Following the implementation of primary and tertiary mitigation measures described in Chapter 12 (i.e. perimeter bund and noise attenuation measures, rotary bored piling technique, noise reduction rock blasting approach, pollution controls and MARPOL compliance), no significant residual effects are expected during either the construction or operational phases.

Table 15.17: Impacts on identified receptors

Receptor	Impact No.	Impact	Direct/Indirect Impact and Phase (if relevant)
Receptor Group A: Local Commercial Fishing Fleet	1	Construction activities, physical presence of infrastructure, or increased vessel traffic during construction period leading to adverse impacts on access to Rosslare Harbour for existing fishing activities (i.e., reduced access to, or exclusion from, established landing sites)	Direct Impact/ Construction Phase
	2	Construction activities, physical presence of infrastructure, or increased vessel traffic during construction period leading to impact upon fishing activity in vicinity of Rosslare Harbour (e.g., through gear snagging[4] or other technical interactions)	Direct Impact/ Construction Phase
	3	Displacement of Rosslare fleet results in increased steaming times to fishing grounds	Direct Impact /Construction and Operation
	4	Permanent loss of shellfish grounds arising from the Proposed Development	Direct Impact/ Operational Phase
	5	Changes to shipping routes and vessel traffic as a result of ORE construction activities leading to increased vessel traffic within fishing grounds and a direct impact upon fishing activity	Direct Impact/ Operation Phase
Receptor Group B: Adjacent Fisheries	6	Displacement of Rosslare fleet leading to increased fishing pressure on adjacent fish or shellfish resources	Indirect Impact /Construction and Operation Phases
Receptor Group C: Adjacent Fishing Fleets	7	Displacement of Rosslare fleet leading to gear conflicts or other technical interactions with adjacent operators	Indirect Impact /Construction and Operation Phases
	8	Displacement of Rosslare fleet leading to economic impacts on adjacent operators	Indirect Impact /Construction and Operation Phases

[4] This impact would primarily impact static gear such as pots if not removed from the areas construction vessels were transiting through and operating in

15.6.5 ZONE OF INFLUENCE

The Zone of Influence for commercial fisheries key receptors groups refers to the spatial extent over which impacts from the Proposed Development could impact these receptors, both directly and indirectly. The Zone of Influence is defined as ICES *statistical rectangle* 33E3 (Figure 15.9).

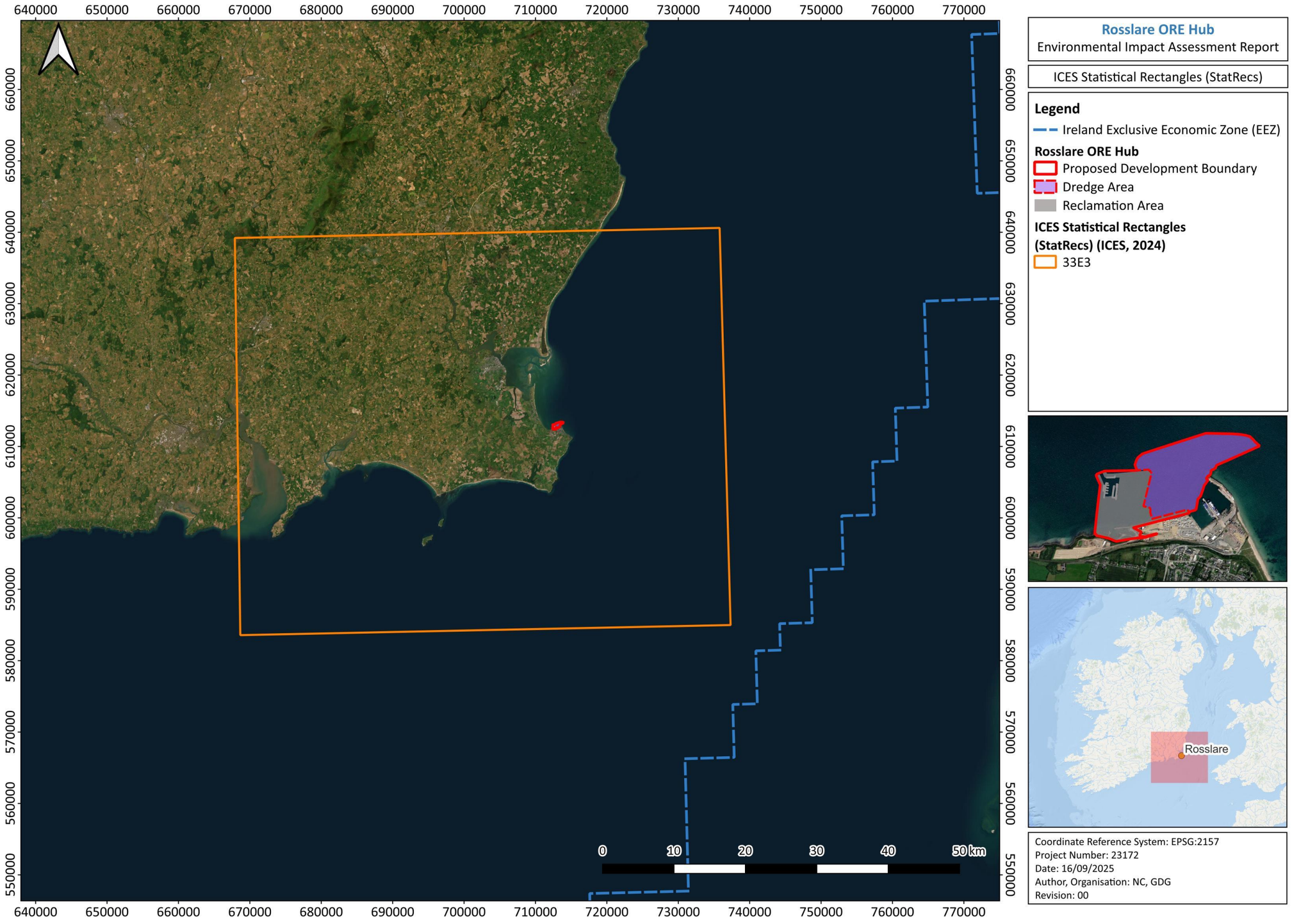

Figure 15.9: Zone of Influence, ICES Statistical Rectangle 33E3 (outlined in orange)

15.6.6 IMPACT ASSESSMENT: KEY RECEPTOR GROUP A (LOCAL COMMERCIAL FISHING FLEETS)

Based on the current fleet register and the analysis presented in the accompanying socio-economic assessment of the seafood industry operating from Rosslare Europort (see EIAR Technical Appendix 15), and further to consultation with the owners of the local fishing fleet and processors in Kilmore Quay and Duncannon, the commercial fishing fleet considered to have, or potentially have, a high dependency on the port of Rosslare comprises up to 36 vessels of which 30 are under 12 metres in length.

- In 2022 the benefit to the southeast region from seafood landed through the port of Rosslare totalled €8.7 million in added value, employed 107 persons (70 directly employed, 25 indirectly and 12 induced) and contributed an annual wage bill of €3.3 million to the region.
- The fleets responsible for this activity, the scallop, razor clam, whelk, and crustacean fleets, are considered to be of high socio-economic value.

In this EIAR the potential direct and indirect impacts of the Planned Development on these fleets are assessed. As required by the National Marine Planning Framework, this includes

- an assessment of developments which have the capacity to impact stocks (biological receptors) (see Chapter 12: Fish, Shellfish and Turtle Ecology)
- an assessment of the potential impact of all stages of the development on the affected fisheries, both in socio-economic terms and in relation to environmental sustainability (this chapter).

This section also considers the requirement under the Common Fisheries Policy to measure and manage fishing capacity and, where necessary, to *put in place measures to adjust the fishing capacity of each fleet to its available fishing opportunities over time, taking into account trends and based on best scientific advice, with the objective of achieving a stable and enduring balance between them*.

15.6.6.1 GROUP A (LOCAL COMMERCIAL FISHING FLEET) IMPACT ASSESSMENT

Construction Phase

Impact 1: Construction activities, physical presence of infrastructure, or increased vessel traffic during the 24-month construction period leading to adverse impacts on access to Rosslare Harbour for existing fishing activities through reduced access to, or exclusion from, established landing sites at Rosslare Harbour.

In 2022 the benefit to the southeast region from seafood landed through the port of Rosslare totalled €8.7 million in added value, 107 employees (70 directly employed, 25 indirectly and 12 induced) and an annual wage bill of €3.3 million. The fleets responsible for this activity, the scallop, razor clam, whelk, and crustacean fleets, are therefore considered to be of high socio-economic value. Should these local inshore fleets be displaced from Rosslare, and given the distances involved to the nearest neighbouring alternative ports at Kilmore Quay and Courtown along with the severe tidal restrictions at Wexford, it is probable that fishing in the three main fisheries prosecuted by the Rosslare inshore fleet (Razor Clams, Whelks, and Crustaceans) will be severely impacted. In that sense the degree to which a receptor can avoid or adapt to this impact is low. In addition, it is likely

that only low levels of alternative fishing grounds are available closer to the alternative landing facilities of Kilmore or Courtown.

The impacted receptor (the fleet) is considered to have only limited capacity to avoid or adapt to the impact of a compulsory closure of the small boat facilities in Rosslare. In addition, should markets be lost because of supply disruption then it is also likely that recoverability might be slow and/or costly. Overall, the sensitivity of the local fishing fleet to this impact is considered **medium**.

In respect of magnitude, considering the following measures built into the project design for the construction phase (i.e., primary mitigation) which are:

- sequencing of the construction programme to ensure "always afloat" provision for existing users of the Small Boat Harbour
- maintenance of access to Fisherman's Quay for those larger fishing vessels currently using it under agreement with Rosslare Europort

an adverse impact on access to, or exclusion from, established landing sites is expected to affect very few vessels if any over short periods of time with port closure not expected. It is not considered likely that construction activities would lead to exclusion from established landing sites to such an extent that the fleet is required to relocate to Kilmore Quay, Wexford, Courtown or other ports further removed from Rosslare. Magnitude is therefore considered to be low.

Based on a predicted medium sensitivity and a low magnitude, the overall significance of the effects of these impacts is considered to be slight in respect of this receptor and not significant in EIA terms.

Impact 2: Construction activities, physical presence of infrastructure, or increased vessel traffic during construction period leading to significant impact upon fishing activity in vicinity of Rosslare Harbour through gear snagging or other technical interactions.

The socio-economic impact assessment presented in EIAR Technical Appendix 15 provides a detailed insight into the scale and nature of the impact that may occur to fishing in the event that the Rosslare fleet is directly impacted, and identifies that:

- Up to 32 fishing vessels, fishing pots or dredges could be potentially affected
- These vessels would expect to land in excess of €2 million annually, all of which could be transferred to adjacent landing ports/harbours
- The landings are expected to generate up €6.2 million in Gross Added Value, employ some 70 FTEs and generate a wage bill of €2 million

While a small part of the crustacean fishery (in particular spider crab) will be directly impacted by construction activities, the physical presence of infrastructure, and increased vessel traffic during the construction period i) the area directly impacted is very small (i.e., limited to the Proposed Development Boundary), ii) there are proportionately, moderate to high levels of alternative fishing grounds available to the local fleet, and iii) the fishing fleet has an operational range consistent with the resources available locally.

Consequently, the likelihood of any increased risk of gear snagging or other significant impact upon fishing activity is low.

The receptor (the fishing fleet) is of high socio-economic value, and may be vulnerable to construction activities, physical presence of infrastructure and increased vessel traffic, however, considering the footprint of the Proposed Development and given that only a small part of the crustacean fishery (in particular, spider crab) will be directly impacted by the reclamation of 24.5 hectares of seabed i) the area directly impacted is very small, ii) there are, proportionately, moderate to high levels of alternative fishing grounds available to the local fleet, and iii) the fishing fleet has an operational range consistent with the resources available locally. In these circumstances the receptor (fleet) is not considered generally vulnerable. In that sense the receptor is likely to show only **low** sensitivity to these impacts.

Given that impacts will be of limited physical extent, will only occur infrequently (if at all) and will lead to only partial loss of target shellfish resources (approximately 24.5 hectares) and/or partial loss of ability to carry on fishing activities then the magnitude of this impact is considered **low**.

Based on a predicted low sensitivity and a low magnitude, the overall significance of the effects of these impacts is considerably to be **slight** in respect of this receptor and **not significant** in EIA terms.

Construction and Operation Phases

Impact 3 – Displacement of Rosslare fleet results in increased steaming times to fishing grounds.

Given the sizeable proportion of normal operating costs attributable to fuel, any increased steaming time resulting in higher fuel costs will adversely impact the balance between fleet capacity and fishing opportunities. Assessing that balance on an annual basis is a legal requirement of each Member State under the requirements of the Common Fisheries Policy.

The impacted receptor is considered to have little capacity to avoid or adapt to the impact of increased steaming times to fishing grounds. Overall, the sensitivity of the Local Commercial Fishing Fleet to this impact is considered **medium** in these circumstances.

In respect of magnitude, considering the following measures built into the project design (i.e., primary mitigation) which are:

- sequencing of the construction programme to ensure “always afloat” provision for existing users of the Small Boat Harbour
- the provision of enhanced facilities for existing small boat harbour users in deeper water (-4 to -5mCD) when compared to the existing small boat harbour facilities
- maintenance of access to Fisherman’s Quay for those larger fishing vessels currently using it under agreement with Rosslare Europort
- additional pontoon provision (80m length) and hard quay (59m length) for fishing vessels currently using Fisherman’s quay

displacement of the Rosslare fleet resulting in increased steaming times to fishing grounds is not expected. This is because these measures will ensure that current users of the small boat harbour and Fisherman’s Quay can continue to fish their normal fishing grounds and land fish catch at

Rosslare as normal throughout both the construction and ongoing operation of the Rosslare Europort ORE Hub. Magnitude is therefore considered to be **low**.

Based on a predicted medium sensitivity and a low magnitude, the overall significance of the effects of these impacts is considerably to be **slight** in respect of this receptor and **not significant** in EIA terms.

Operational Phase Impacts

Impact 4 – Permanent loss of shellfish grounds arising from the development of the Proposed Development and reclamation of 24.5 hectares of seabed.

While a small part of the crustacean fishery, in particular spider crab, will be directly impacted by reclamation of 24.5 hectares of seabed i) the area directly impacted is very small, ii) there are, proportionately, moderate to high levels of alternative fishing grounds available to the local fleet, and iii) the fishing fleet has an operational range consistent with the resources available locally.

While the fleet is of high socio-economic value and generally vulnerable to loss of grounds, given that only a very small part of the crustacean fishery will be directly impacted, from a fleet perspective, the receptor is considered to show only **low** sensitivity to this impact.

Given that only a small part of the crustacean fishery will be directly impacted, overall, the magnitude of this impact is **low**.

Based on a predicted low sensitivity and a low magnitude, the overall significance of the effects of these impacts is considered to be **slight** in respect of this receptor and **not significant** in EIA terms.

Impact 5 – Changes to shipping routes and maintenance vessel traffic as a result of operation activities leading to **increased vessel traffic within fishing grounds** and a direct impact upon fishing activity.

While a small part of the crustacean fishery (in particular spider crab) will be directly impacted by the physical presence of infrastructure and increased vessel traffic during the operational period i) the area directly impacted is small, ii) there are, proportionately, moderate to high levels of alternative fishing grounds available to the local fleet, and iii) the fishing fleet has an operational range consistent with the resources available locally.

In addition, increases in vessel numbers is deemed to be low when considered in the context of existing activity within the vicinity of the Proposed Development (please see Chapter 20: Shipping and Navigation of the EIAR).

While the fleet is of high socio-economic value and generally vulnerable to disruption, given that only a small part of the crustacean fishery will be directly impacted and the low increase in vessel numbers, then, from a fleet perspective, the receptor is considered to show only **low** sensitivity to this impact.

Given that only a small part of the crustacean fishery will be directly impacted, overall, the magnitude of this impact is **low**.

Based on a predicted low sensitivity and a low magnitude, the overall significance of the effects of these impacts is considered to be **slight** in respect of this receptor and **not significant** in EIA terms.

15.6.7 IMPACT ASSESSMENT: KEY RECEPTOR GROUP B (ADJACENT FISHERIES/FISHING GROUNDS)

Construction and Operational Phase Activities

Impact 6: Displacement of Rosslare fleet area leading to increased fishing pressure on adjacent fish or shellfish resources.

This impact (increased fishing pressure on adjacent shellfish resources) potentially arises as a consequence of construction (24-month duration) and operational activities, due to physical presence of infrastructure, or increased vessel traffic during construction or operational periods leading to significant impact upon fishing activity, adverse impacts on access for existing fishing activities, or reduced access to, or exclusion from, established landing sites that results in the local fleet relocating to alternative ports and fishing alternative stocks which in turn leads to increased fishing pressure on these adjacent shellfish resources.

If fleet displacement occurs, given the increased steaming times to traditional fishing grounds, then increased fishing on adjacent shellfish resources becomes likely. As many inshore resources are already fully exploited, increased fishing pressure may not be sustainable.

NOTE: Assessing this impact is consistent with the requirement of the National Marine Planning Framework, to assess '*the potential impact of all stages of the development on the affected fisheries in relation to environmental sustainability.'*

The scale of fishing in terms of fleet, gear, target species, volume and value of landings, added value, employment, along with post-harvest added value, employment, wages, etc., are presented in the accompanying socio-economic assessment: Rosslare ORE Hub Environmental Impact Assessment Report, EIAR Technical Appendix 15: Commercial Fisheries and Aquaculture Technical Report.

BIM (2019) estimated that in 2018 some 30% of the Kilmore Quay/South Wexford hinterland economy could be attributed to the seafood sector encompassing direct, indirect and induced effects. Direct employment of the seafood economy in the region was 500 FTEs with a further 225 full-time employees generated downstream. The sector generated €14 million in wages and salaries directly

with a further €8 million generated indirectly and through induced effects of the seafood sector at a regional level. Further downstream effects occur outside the region at the national level.

During the 5-year period 2017 – 2021, official SFPA seafood landings through Rosslare amounted to €13.857 million. This represented 18% of the total landings of Rosslare and Kilmore. Using this factor and information from local processors to account for additional seafood sourced from other ports in the South-east it is estimated that there are 38 fulltime jobs in processing directly dependent on Rosslare landed seafood. These jobs are supported by a wage bill of €1.0 million and generate a gross value added (GVA) of €3.5 million. In addition to the direct employment the processing of Rosslare landed seafood generates an additional 20 indirect and 8 induced jobs with wage bills of

€0.6 million and €0.3 million respectively. The GVA of the indirect and induced activity amounted to €1.3 million and €0.6 million respectivelyThe impacted receptor (the adjacent fleet) is considered to have little capacity to avoid or adapt to the impact of increased fishing pressure on adjacent fish or shellfish resources. In addition, should markets be lost because of supply disruption then it is also likely that recoverability might be slow and/or costly. Overall, the sensitivity of the adjacent fishing fleet to this impact is considered **medium** in these circumstances.

In respect of magnitude, considering the following measures built into the project design (i.e., primary mitigation):

- sequencing of the construction programme to ensure "always afloat" provision for existing users of the Small Boat Harbour
- the provision of enhanced facilities for existing small boat harbour users in deeper water (-4 to -5mCD) when compared to the existing small boat harbour facilities
- maintenance of access to Fisherman's Quay for those larger fishing vessels currently using it under agreement with Rosslare Europort
- additional pontoon provision (80m length) and hard quay (59m length) for fishing vessels currently using Fisherman's quay

the impact of increased fishing pressure on adjacent fish or shellfish resources is not expected. This is because these measures will ensure that current users of the small boat harbour and Fisherman's Quay can continue to fish their normal fishing grounds and land fish catch at Rosslare as normal throughout both the construction and ongoing operation of the Rosslare Europort ORE Hub. Magnitude is therefore considered to be **low**.

Based on a predicted medium sensitivity and a low magnitude, the overall significance of the effects of these impacts is considered to be **slight** in respect of this receptor and **not significant** in EIA terms.

15.6.8 IMPACT ASSESSMENT: KEY RECEPTOR GROUP C (ADJACENT FLEETS)

Construction and Operational Phase Activities

Impact 7 – Displacement of Rosslare fleet leading to gear conflicts or other technical interactions with adjacent operators.

If displacement occurs, and given the steaming times involved, the consequential impact: increased fishing pressure on adjacent shellfish resources, and given that alternative fishing opportunities are more likely to involve the extended use of static gear (pots) then, in the absence of an agreed management plan, gear conflicts or other technical interactions could occur. Overall, the sensitivity of the adjacent fishing fleet to this impact is considered **medium** in these circumstances.

In respect of magnitude, considering the following measures built into the project design (i.e., primary mitigation):

- sequencing of the construction programme to ensure "always afloat" provision for existing users of the Small Boat Harbour

- the provision of enhanced facilities for existing small boat harbour users in deeper water (-4 to -5mCD) when compared to the existing small boat harbour facilities
- maintenance of access to Fisherman's Quay for those larger fishing vessels currently using it under agreement with Rosslare Europort
- additional pontoon provision (80m length) and hard quay (59m length) for fishing vessels currently using Fisherman's quay

displacement of the Rosslare fleet resulting in gear conflicts or other technical interactions with adjacent operators is not expected. Magnitude is therefore considered to be **low**.

Based on a predicted medium sensitivity and a low magnitude, the overall significance of the effects of these impacts is considerably to be **slight** in respect of this receptor and **not significant** in EIA terms.

Impact 8 – Displacement of Rosslare fleet leading to economic impacts on adjacent operators.

If displacement occurs, and given the steaming times involved, the consequential impact, increased fishing pressure on adjacent shellfish resources, becomes very likely. While that does not mean that economic impacts on adjacent operators are inevitable, given that alternative fishing opportunities are more likely to involve the extended use of static gear (pots) then, in the absence of an agreed management plan, economic impacts on adjacent operators are likely. Overall, the sensitivity of the adjacent fishing fleet to this impact is considered **medium** in these circumstances.

In respect of magnitude, considering the following measures built into the project design (i.e., primary mitigation):

- sequencing of the construction programme to ensure "always afloat" provision for existing users of the Small Boat Harbour
- the provision of enhanced facilities for existing small boat harbour users in deeper water (-4 to -5mCD) when compared to the existing small boat harbour facilities
- maintenance of access to Fisherman's Quay for those larger fishing vessels currently using it under agreement with Rosslare Europort
- additional pontoon provision (80m length) and hard quay (59m length) for fishing vessels currently using Fisherman's quay

displacement of the Rosslare fleet resulting in gear conflicts or other technical interactions with adjacent operators is not expected. Magnitude is therefore considered to be **low**.

Based on a predicted medium sensitivity and a low magnitude, the overall significance of the effects of these impacts is considered to be **slight** in respect of this receptor and **not significant** in EIA terms.

15.7 CUMULATIVE EFFECTS AND OTHER INTERACTIONS

15.7.1 METHODOLOGY

While a single development may not in itself cause a significant impact on the local ecosystem, a combination of projects within a localised area may cause a negative impact. Therefore, the cumulative impacts of a project in association with other projects must be taken into consideration when assessing the possible impacts of a development.

Projects identified as having potential to act in-combination with the Proposed Development are considered to be those projects most likely to contribute to these pressures and generate the same or similar impacts to those assessed above. The following approach to the identification of cumulative impacts has been taken:

- The geographic boundaries of the Proposed Development were reviewed.
- As the Proposed Development is solely marine based, a search for projects with a marine component or the ability to impact the marine environment through a source-pathway-receptor model were considered relative to the potential for cumulative effects. In this regard, all additional projects which may result in impacts to commercial fisheries receptors within 5 km of the Proposed Development Boundary were considered in this review. This is considered to be reasonable and appropriate relative to the scale and scope of the Proposed Development.
- The search was focused on projects and applications listed through the following sources:
- Local Authority Planning applications, Wexford County Council Development Plan, An Bord Pleanála, the Maritime Area Regulatory Authority (MARA) for applications submitted after 17th July 2023, the Foreshore Unit of the Department of Housing, Local Government and Heritage for applications prior to 17th July 2023, the Environmental Protection Agency (EPA) Dumping at Sea register.

15.7.2 ASSESSMENT OF CUMULATIVE IMPACTS

A full list of all projects sourced for consideration in this EIAR are given in Chapter 25: Interactions. Those projects considered relevant to the Proposed Development are listed in Table 15.18.

An assessment of these projects, with regard to potential cumulative effects, at the construction and operational phase of the Proposed Development was carried out and the rational for the assessment is provided in Table 15.18.

No projects were identified with the potential to lead to cumulative impacts with the Proposed Development during either the construction or operational phases.

15.7.2.1 ASSESSMENT OF TRANSBOUNDARY IMPACTS

Transboundary effects refer to significant effects that a Proposed Development in one country may have on the environment of another. The United Nations Economic Commission for Europe (UNECE) Convention on Environmental Impact Assessment in a Transboundary Context, (referred to as the 'Espoo Convention') adopted in 1991 documents the requirement to consider transboundary impacts. The Espoo Convention requires that assessments are extended across borders between

Parties of the Convention when a planned activity may cause significant adverse transboundary impacts.

The ZoI of potential impacts on commercial fisheries receptors does not extend beyond the Irish EEZ Figure 15.9. As such, transboundary impacts are not considered possible.

Table 15.18: In-combination projects considered relevant to the Proposed Development

Application Reference	Brief Description	Distance	Status	Within ZoI of Proposed Development	Overlap in Temporal Scope	Assessment
S0016-02	This permit is for the loading and dumping at sea of dredged material, arising from maintenance dredging at Rosslare Europort and Ballygeary Harbour, Co. Wexford. The proposed activities involve the loading and dumping of 478,500 tonnes (wet weight) of dredged material from 2023 to 2027. Dredged material will be loaded by a trailing suction hopper dredger and/or by a backhoe dredger and dumped at an established dumping site located approximately 6 km northeast of the port. The permit holder is required to manage the permitted activities to ensure the protection of the marine environment and to submit reports on the loading and dumping activities and monitoring results to the EPA.	n/a	Granted	Yes	Potential for cumulative effects during construction, S0016-02 the permit (reference: S0016-02) is valid until 2027 & similar to the construction start date.	Construction activities, physical presence of infrastructure, or increased vessel traffic during construction period leading to disturbance of fisheries receptors. Dredging: Temporary disturbance or loss of (a) spawning or nursery grounds or (b) fish or shellfish grounds arising from dredging activity within the harbour. Owing to nature and scale of these site investigation activities and distance from Proposed Development (closest is > 9 km away), significant cumulative effects are not considered likely

Application Reference	Brief Description	Distance	Status	Within ZoI of Proposed Development	Overlap in Temporal Scope	Assessment
FS007135	ESB Wind Development Ltd. Site Investigations at Loch Garman Offshore Wind off coast of county Wexford	14.3km	Consultation	No	Potential overlap with SI activities and construction/operation.	
FS007464	Bore Array Ltd, Site Investigation for Bore Array Offshore Wind Farm, off Co. Wexford	15.6km	Applied	No		
FS007261	Shelmalere Offshore Wind Farm - Site Investigations off Counties Wexford and Wicklow.	9.8km	Consultation	No		
FS007048	Energia Site Investigation off Wexford Coast	10.2km	Determined	No		

15.8 MITIGATION MEASURES

While no significant impact on fishing activity arising from any proposal has been identified, the Rosslare Harbour Fisheries Consultative Group will continue to meet periodically, both in advance of and during construction to ensure good Fisheries Management and Mitigation planning to provide ongoing liaison with fishers throughout all stages of the Proposed Development.

15.8.1 CONSTRUCTION PHASE

- A Fisheries Liaison Officer (FLO) will maintain effective communications between the Proposed Development and fishers during the construction phase of the Proposed Development, as set out in the Seafood/ORE Engagement in Ireland guidance (Seafood/ORE Working Group, 2023) and will be responsible for:
    - Appropriate liaison with relevant fishing interests to ensure that they are fully informed of development planning and any marine activities and works
    - Timely issue of notifications including Notice to Mariners and other navigational warnings to the fishing community to provide advance warning of project activities and associated advisory safe passing distances
- A contingency plan will be developed by Iarnród Éireann to address any unforeseen impact on the local fleet, in particular any displacement of Rosslare fleet resulting in:
    - Increased steaming times to fishing grounds
    - Increased fishing pressure on adjacent shellfish resources
    - Gear conflicts or other technical interactions with adjacent operators
    - Economic impacts on adjacent operators
- A Fisheries Management and Mitigation Strategy will be prepared by Iarnród Éireann setting out the approach to fisheries liaison and means of delivering co-existence and disruption agreements ahead of construction
- A buoyed construction area will be implemented around the site by Iarnród Éireann
- A dropped object protocol will be implemented

15.8.2 OPERATIONAL PHASE

- The Harbourmaster will continue to maintain effective communications between the Proposed Development and fishers
- The Fisheries Management and Mitigation Strategy (FMMS) will continue to be implemented during the operational phase of the Proposed Development

15.9 RESIDUAL EFFECTS

Following the implementation of the mitigation measures outlined above, residual effects of impacts of the Proposed Development will be negligible and **not significant** in EIA terms for all commercial fisheries receptors during the construction and operation phases of the Proposed Development.

15.10 SUMMARY

This chapter of the EIAR has assessed the potential environmental impacts on Commercial Fisheries from the construction and operation phases of the Proposed Development, the assessment is summarised in Table 15.19.

Table 15.19: Assessment Summary

Potential Effect	Construction/ Operation	Beneficial / Adverse/ Neutral	Extent (Site/Local/National / Transboundary)	Short term/ Long term	Direct/ Indirect	Permanent / Temporary	Reversible / Irreversible	Significance of Effect (according to defined criteria)	Proposed mitigation	Residual Effects (according to defined criteria)
Key Receptor Group A (Local Commercial Fishing Fleets) – construction activities, physical presence of infrastructure and increased vessel traffic on existing fishing activities	Construction	Adverse	Site	Short term	Direct	Temporary	Reversible	Not Significant	n/a	Not Significant
Key Receptor Group A (Local Commercial Fishing Fleets) – construction activities, physical presence of infrastructure, or increased vessel traffic impacting fishing activity in vicinity	Construction	Adverse	Local	Short term	Direct	Temporary	Reversible	Not Significant	n/a	Not Significant
Displacement of Rosslare fleet	Construction	Adverse	Local	Short term	Direct	Temporary	Reversible	Not Significant	n/a	Not Significant
Displacement of Rosslare fleet	Operation	Adverse	Local	Long term	Direct	Permanent	Reversible	Not Significant	n/a	Not Significant
Permanent loss of shellfish grounds from the proposed development and reclamation	Operation	Adverse	Site	Long term	Direct	Permanent	Irreversible	Not Significant	n/a	Not Significant
Changes to shipping routes and maintenance of vessel traffic during operation –	Operation	Adverse	National?	Long term	Direct	Permanent	Reversible	Not Significant	n/a	Not Significant

Potential Effect	Construction/ Operation	Beneficial / Adverse/ Neutral	Extent (Site/Local/National / Transboundary)	Short term/ Long term	Direct/ Indirect	Permanent / Temporary	Reversible / Irreversible	Significance of Effect (according to defined criteria)	Proposed mitigation	Residual Effects (according to defined criteria)
impacting fishing activity										
Group B Adjacent fisheries - Displacement of Rosslare fleet area – shellfish resources	Construction	Adverse	Local	Short term	Direct	Temporary	Reversible	Not Significant	n/a	Not Significant
Group B Adjacent fisheries - Displacement of Rosslare fleet area – shellfish resources	Operation	Adverse	Local	Long term	Direct	Permanent	Reversible	Not Significant	n/a	Not Significant
Displacement of Rosslare fleet – gear conflicts or other technical interactions with adjacent operators	Construction	Adverse	Local	Short term	Direct	Temporary	Reversible	Not Significant	n/a	Not Significant
Displacement of Rosslare fleet – gear conflicts or other technical interactions with adjacent operators	Operation	Adverse	Local	Long term	Direct	Permanent	Reversible	Not Significant	n/a	Not Significant
Displacement of Rosslare fleet leading to economic impacts on adjacent operators	Construction	Adverse	Local	Short term	Direct	Temporary	Reversible	Not Significant	n/a	Not Significant
Displacement of Rosslare fleet leading to economic impacts on adjacent operators	Operation	Adverse	Local	Long term	Direct	Permanent	Reversible	Not Significant	n/a	Not Significant

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