



Morven Hawthorn Pit Grid Connection Project

Preliminary Environmental Information Report

Volume 2, Chapter 7: Commercial Fisheries

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Glossary

Term	Meaning
Advisory safe passing distance	Advisory safe passing distance to discourage vessels from passing close to sensitive activities such as the laying of cable.
Automatic Identification System (AIS)	A system by which vessels automatically broadcast their identity and key statistics including location, destination, length, speed and current status. Most commercial vessels and European Union fishing vessels over 15 metres (m) in length are required to carry AIS.
Commercial fishing	Any form of fishing activity legally undertaken where the catch is sold for taxable profit.
Commitments	Measures (embedded mitigation and secondary) to be adopted during the construction, operation and maintenance and decommissioning phases of the MHPGC Project.
Cooperation Agreement	A formal agreement – which may also be referred to as a disruption agreement - between the Applicant and a fisher, intended to reduce disturbance or displacement to a fishery caused by development activities. Such agreements may be supported by monetary payment only where loss or access results from development activities and that loss of access results in an evidenced financial loss, or a demonstrable risk of financial loss, to active fishing vessels.
COVID-19 Pandemic	The COVID-19 pandemic was a global outbreak of coronavirus, an infectious disease caused by the severe acute respiratory syndrome coronavirus, first identified in 2019.
Cumulative effect	The combined effect of the MHPGC Project in combination with the effects from other proposed developments, on the same receptor or resource.
Cumulative effects assessment	Assessment of the likely effects arising from the MHPGC Project alongside the likely effects arising from other proposed developments on the same receptor or resource.
Decommissioning	The period during which a development and its associated processes are removed from active operation.
Demersal Fish Species	Fish which live and feed near or on the seabed. Includes species such as haddock, cod, whiting and flatfish.
Demersal seine	A seine net is a long net, with or without a bag in the centre, which is set either from the shore or from a boat for surrounding a certain area and is operated with 2 (long) ropes fixed to its ends (for hauling and herding the fish).
Demersal trawl	A demersal trawl is a cone shaped net that is towed on the seabed to target demersal fish species.
Development Consent Order (DCO)	An order made under the Planning Act 2008, as amended, granting development consent.
Draft Development Consent Order and deemed Marine Licences	The draft order submitted by the Applicant to the Planning Inspectorate (PINS) as part of its application for development consent under the Planning Act 2008, including any deemed Marine Licence(s) in English Waters.
Embedded mitigation	Measures included as part of the project design. Includes both primary and tertiary mitigation.

Term	Meaning
Environmental Impact Assessment (EIA)	The process of identifying and assessing the significant effects likely to arise from a project. This requires consideration of the likely changes to the environment, where these arise as a consequence of a project, through comparison with the existing and projected future baseline conditions.
EU-Exit	The withdrawal of the UK EU.
Exclusive Economic Zone (EEZ)	An area from the outer limit of the territorial sea up to 200nm from the coastal baseline, over which a sovereign state has rights regarding marine resources.
Fishery	A group of vessel voyages which target the same species or use the same gear.
Fishing ground	An area of water or seabed targeted by fishing activity.
Fleet	A group of vessels classified together based on shared characteristics (such as nationality, vessel type, ownership or function).
Gear type	The method / equipment used for fishing.
iFISH Database	The Marine Management Organisation (MMO) fisheries database of commercial fisheries landings statistics for vessels registered in the UK.
Inshore waters	Marine waters from mean high water springs extending seaward to 12 nautical miles (nm).
International Council for the Exploration of the Sea (ICES) rectangle	ICES standardise the division of sea areas to enable statistical analysis of data. Each ICES statistical rectangle is '30 min latitude by 1 degree longitude' in size (approximately 30nm x 30nm). A number of rectangles are amalgamated to create ICES statistical areas.
Inter-related effects	Effects that may arise from the interactions between different EIA topic effects considered within the project-alone assessment, potentially leading to more significant effects than if they were to be considered in isolation.
Landfall	The area in which the offshore export cables make landfall (come onshore) and the transitional area between the offshore cabling and the onshore cabling. This term applies to the entire landfall area between the trenchless technique exit pits and the transition joint bay inclusive of all construction works.
Landings	Quantitative description of the amount of fish returned to port for sale, in terms of value or weight.
Magnitude	A combination of the spatial extent, duration, frequency and reversibility of an impact
Marine Directorate Licensing Operations Team (MD-LOT)	The part of the Scottish Government's Marine Directorate responsible for assessing and administering applications for marine licences and Section 36 consent (offshore) in Scotland.
Marine Guidance Note	A system of guidance notes issued by the Maritime and Coastguard Agency (MCA) which provide significant advice relating to the improvement of the safety of shipping at sea, and to prevent or minimise pollution from shipping.

Term	Meaning
Marine Management Organisation (MMO)	The MMO, as a UK government body, is responsible for licensing, regulating and overseeing activities in the marine environment for English waters. For a DCO and deemed marine licence, the MMO acts as a statutory consultee, advising on marine planning, environmental impacts, habitats and compliance with marine licensing regulations.
Maximum Design Scenario (MDS)	The realistic worst case scenario, selected on a topic-specific and impact specific basis, from a range of potential parameters for the MHPGC Project.
Mean High Water Springs (MHWS)	The most inshore level location reached by the sea at high tide during mean high water spring tide. This is defined as the average tidal height throughout the year, of two successive high waters, during a 24-hour period in each month when the range of the tide is at its greatest.
Mean Low Water Springs (MLWS)	The average height of the low water levels of each pair of successive low waters during the periods of about 24 hours when the tidal range is at its greatest.
MHPGC Project Environmental Statement (ES)	The document presenting the results of the Environmental Impact Assessment process.
MHPGC Project PEIR Red Line Boundary	The area within which all components of the MHPGC Project will be located, including areas required on a temporary basis during construction and/or decommissioning (such as construction compounds).
MHPGC Project Preliminary Environmental Information Report (PEIR)	A report that provides preliminary environmental information in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. This is information that enables consultees to understand the likely significant environmental effects of a project and which helps to inform consultation responses.
MHPGC Project Scoping Opinions	Separate scoping opinions received from PINS (on behalf of the Secretary of State) and MD-LOT (on behalf of the Scottish Ministers) in response to the MHPGC Project Scoping Report. The MHPGC Project Scoping Opinions contain the range of issues that PINS, and MD-LOT in consultation with statutory stakeholders, have identified should be considered within the EIA process.
MHPGC Project Scoping Report	A Scoping Report for the MHPGC Project, scoping the likely significant effects of the project on the environment, was submitted and accepted by Planning Inspectorate (PINS) and submitted to the Scottish Ministers, via the Marine Directorate – Licencing Operations Team (MD-LOT) in February 2025.
Morven Branxton Area Grid Connection Project (hereafter 'MBAGC Project')	The Morven Branxton Area Grid Connection Project will be comprised of the offshore export cable in Scottish waters from the Morven North or the Morven South Offshore Substation Platforms, the onshore export cable and the onshore land substation in the vicinity of Branxton in East Lothian, Scotland.
Morven Hawthorn Pit Grid Connection Project	The MHPGC Project is comprised of the offshore export cables in Scottish and English waters from the Morven North or the Morven South offshore substation platform(s) (OSP), landfall, onshore export cables, the onshore land substation (LSS) and AC connection cables. Also referred to in this report as the MHPGC Project, for ease of reading.

Term	Meaning
Morven North Offshore Wind Array Project (hereafter 'Morven North')	The Morven North Offshore Wind Array Project which includes the wind turbines and foundations, Offshore Substation Platforms and foundations, inter-array and interconnector cables and associated infrastructure located within the Morven North Boundary.
Morven Programme	The Morven Programme comprises the MHPGC Project, Morven North, Morven South and MBAGC Project collectively.
Morven South Offshore Wind Array Project	The Morven South Offshore Wind Array Project, which includes the wind turbines and foundations, Offshore Substation Platforms and foundations, inter-array and interconnector cables and associated infrastructure located within the Morven South Boundary.
National Grid Hawthorn Pit Substation	The National Grid substation at Hawthorn Pit, County Durham, which the AC connection cables will connect into from the onshore land substation.
Navigational Risk Assessment (NRA)	A document which assesses the hazards to shipping and navigation of a proposed subsea cable based upon a Formal Safety Assessment.
Nephrops Functional Unit (FU)	A Nephrops FU is a geographic area used for managing and reporting on Nephrops populations.
Offshore export cable corridor	The proposed corridor in which the offshore export cables will be located, from either the Morven North or Morven South offshore substation platform to the transition joint bay (TJB) at landfall.
Offshore export cables	HVDC cables which bring electricity from either the Morven North or Morven South offshore substation platform to the TJB at landfall.
offshore substation platforms (OSP(s))	OSP(s) comprise the support structure, topside and electrical components used for collecting the electricity generated by the wind turbine generators, in Scottish waters, for the passage or transmission to landfall. These OSP(s) can be divided into two types: • HVAC collector substations; • HVDC converter substations.
Offshore waters	The area seaward of 12nm extending out to the UK's continental shelf.
Operations and maintenance phase (O&M)	The operational and maintenance phase of the MHPGC Project.
Otter trawl	A net with large rectangular boards (otter boards) which are used to keep the mouth of the trawl net open. Otter boards are made of timber or steel and are positioned in such a way that the hydrodynamic forces, acting on them when the net is towed along the seabed, pushes them outwards and prevents the mouth of the net from closing.
Pelagic fish	Fish which live within the water column, not on or near the seabed or at the coasts.
Pelagic trawl	A net used to target fish species in the midwater column.
Planning Inspectorate (PINS)	The PINS is an executive agency of the UK Government responsible for administering and examining DCO applications for NSIPs in England. PINS manages the application process, oversees consultation and examination, and makes a recommendation to the relevant Secretary of State on whether consent should be granted.

Term	Meaning
Potting	Pots (which may be referred to as creels) are generally rigid structures into which fish or shellfish are guided or enticed through funnels that make entry easy but from which escape is difficult. There are many different styles and designs, each one has been designed to suit the behaviour of its target species.
MHPGC Project Preliminary Environmental Information Report (PEIR)	A report that provides preliminary environmental information in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. This is information that enables consultees to understand the likely significant environmental effects of a project and which helps to inform consultation responses.
Primary mitigation	Measures included as part of the location or design of the MHPGC Project made during the pre-application phase that are an inherent part of the MHPGC Project and do not require additional action to be taken. This includes modifications arising through the iterative design process. These measures will be secured through the consent itself through the description of the MHPGC Project, the parameters and associated commitments secured by the DCO and marine licence, or both.
Receptor	A specific environmental feature, resource, population or asset that may be affected by the MHPGC Project, either directly or indirectly, and which falls within the environmental topics considered under the EIA Regulations.
Residual effects	Effects that continue to exist after mitigation has been applied.
Scallop dredge	A method to catch scallop using steel dredges with a leading bar fitted with a set of spring-loaded, downward pointing teeth. Behind this toothed bar (sword), a mat of steel rings is fitted. A heavy net cover (back) is laced to the frame, sides and to the after end of the mat to form a bag.
Secondary mitigation	Actions that will require further activity to achieve the anticipated outcome and may be imposed as part of the planning consent, or through inclusion in the ES. These include measures required to reduce the significance of environmental effects and may be secured through an environmental management plan. For secondary mitigation measures, both pre-mitigation and residual effects are presented.
Significance	Effect factor that is determined by the magnitude of impact along with the sensitivity of the receptor.
Swept Area Ratio	Swept Area Ratio (derived from Vessel Monitoring System data) indicates the number of times per annum that a fishing gear makes contact with (or sweeps) the seabed surface. Surface Swept Area Ratio provides a proxy for fishing intensity.
Tertiary mitigation	Actions that would occur with or without input from the EIA feeding into the design. These include actions that will be undertaken to meet other existing legislative requirements, or actions that are considered to be standard practices used to manage commonly occurring environmental effects.

Term	Meaning
the Applicant	The legal entity making the applications for consent; Morven Offshore Wind Limited (MvOWL).
the Study Area	For each environmental topic, the baseline environment will be characterised, and the likely significant effect will be described within a topic-specific Study Area. Specific Study Areas are defined for each topic and are based on the maximum spatial extent across which likely significant effects of the MHPGC Project may be experienced by the relevant receptors (i.e. Zone of Influence (Zol)).
transboundary effects	Assessment of likely significant effects resulting from MHPGC Project on the interests of another European Economic Area (EEA) state(s).
transboundary impact	Potential impacts resulting from MHPGC Project and affecting another European Economic Area (EEA) state.
Vessel Monitoring System (VMS)	A system used in commercial fishing to allow environmental and fisheries regulatory organisations to monitor, minimally, the position, time at a position and course and speed of fishing vessels.

Acronyms

Acronym	Meaning
AIS	Automatic Identification System
ASFA	Anglo Scottish Fishermen's Association
CBRA	Cable Burial Risk Assessment
CEA	Cumulative Effect Assessment
Cefas	Centre for Environment, Fisheries, and Aquaculture Science
CFLO	Company Fisheries Liaison Officer
CMS	Construction Method Statement
CNSE	Central North Sea Electrification
COLREGS	The Convention on the International Regulations for Preventing Collisions at Sea
COWRIE	Collaborative Offshore Wind Research into the Environment
CSIP	Cable Specification and Installation Plan
CSV	Construction support vessel
DCF	Data Collection Framework
DCO	Development Consent Order
Defra	Department for Environment, Food and Rural Affairs
DESNZ	Department for Energy Security and Net Zero
ECC	Export Cable Corridor
EEA	European Economic Area
EEZ	Exclusive Economic Zone

Acronym	Meaning
EGL	Eastern Green Link
EIA	Environmental Impact Assessment
EMSA	European Maritime Safety Agency
ES	Environmental Statement
ESCA	European Subsea Cables Association
EU	European Union
FiSMaDiM	Fisheries Sensitivity Mapping & Displacement
FLCP	Fisheries Liaison and Coexistence Plan
FLOWW	Fishing Liaison with Offshore Wind and Wet Renewables Group
FMMCP	Fisheries Mitigation, Monitoring and Communication Plan
FMP	Fisheries Management Plan
FMMS	Fisheries Management and Mitigation Strategy
ICES	International Council for the Exploration of the Seas
IEMA	Institute of Environmental Management and Assessment
IFCA	Inshore Fisheries and Conservation Authority
iFISH	Integrated Fisheries System Holding
IMO	International Maritime Organisation
ISEP	Institute of Sustainability and Environmental Professionals
JFS	Joint Fisheries Statement
KIS-ORCA	Kingfisher Information Service – Offshore Renewable and Cable Awareness
LSE	Likely Significant Effects (as defined by the EIA Regulations)
MBAGC	Morven Branxton Area Grid Connection
MCA	Maritime and Coastguard Agency
MCZ	Marine Conservation Zone
MD-LOT	Marine Directorate – Licensing Operations Team
MDS	Maximum Design Scenario
MD-SEDD	Marine Directorate – Science, Evidence, Data and Digital
MHPGC	Morven Hawthorn Pit Grid Connection
MHWS	Mean High Water Springs
MMO	Marine Management Organisation
MPS	Marine Policy Statement
NFFO	National Federation of Fishermen’s Organisations
NMP	National Marine Plan
NMPi	National Marine Plan interactive
NPF	National Planning Framework

Acronym	Meaning
NPPF	National Planning Policy Framework
NPS	National Policy Statements
NRW	Natural Resources Wales
NtM	Notice to Mariners
O&M	Operation and Maintenance
OEMP	Offshore Environmental Management Plan
OFLO	Offshore Fisheries Liaison Officer
OSP	Offshore Substation Platform
PEIR	Preliminary Environmental Information Report
PINS	Planning Inspectorate
PLN	Port Letters and Numbers
RAM	Restricted in their Ability to Manoeuvre
RBS	Register of Buyers and Sellers
SAC	Special Area of Conservation
SAR	Swept Area Ratio
SFF	Scottish Fishermen's Federation
SNCB	Statutory Nature Conservation Body
SOLAS	International Convention for the Safety of Life at Sea
SoS	Secretary of State
SOV	Service Operation Vessels
SPA	Special Protected Area
SPFA	Scottish Pelagic Fishermen's Association
SSC	Suspended Sediment Concentration
STECF	Scientific, Technical and Economic Committee for Fisheries
SWFPA	Scottish White Fish Producers Association
TAC	Total Allowable Catch
TCA	Trade and Cooperation Agreement
UK	United Kingdom
UKCS	United Kingdom Continental Shelf
UKHO	United Kingdom Hydrographic Office
UXO	Unexploded Ordnance
VMS	Vessel Monitoring System
VTMP	Vessel Traffic Management Plan

Units

Unit	Meaning
%	Percent
£	GB Pound
kg	Kilogramme
km	Kilometre
km ²	Square kilometre
m	Metre
nm	Nautical mile
nm ²	Square nautical mile
t	Tonne

7 Commercial Fisheries

7.1 Introduction

- 7.1.1.1 This chapter of the Preliminary Environmental Information Report (PEIR) presents the preliminary findings of the Environmental Impact Assessment (EIA) work undertaken to date for the Morven Hawthorn Pit Grid Connection Project (hereafter 'MHPGC Project'), as described in **Volume 1, Chapter 2: Project Description, of the PEIR**.
- 7.1.1.2 The chapter considers the potential impacts and effects on commercial fisheries that could result from the construction, operation and maintenance (O&M) and decommissioning phases of the MHPGC Project. Specifically, it relates to the offshore elements of the MHPGC Project from the offshore substation platform(s) (OSPs) within Morven North Offshore Wind Array Project or Morven South Offshore Wind Array Project (hereafter 'Morven North and Morven South') located within Scottish offshore waters, transiting through English offshore and inshore waters, to Mean High Water Springs (MHWS) at landfall.
- 7.1.1.3 This chapter describes the methodology, datasets that have informed the preliminary assessment, baseline conditions, including future baseline, mitigation measures and the preliminary residual significant effects on commercial fisheries that could result from the MHPGC Project.
- 7.1.1.4 In this chapter, 'commercial fishing' is defined as any form of fishing activity legally undertaken where the catch is sold for taxable profit.
- 7.1.1.5 The assessment is informed by the following chapters:
- **Volume 1, Chapter 2: Project Description, of the PEIR;**
 - **Volume 1, Chapter 3: Site Selection & Consideration of Alternatives, of the PEIR;**
 - **Volume 1, Chapter 4: Approach to Environmental Impact Assessment, of the PEIR;**
 - **Volume 1, Chapter 5: Policy and Legislation, of the PEIR;**
 - **Volume 2, Chapter 4: Fish and Shellfish Ecology, of the PEIR;**
 - **Volume 2, Chapter 8: Shipping and Navigation, of the PEIR;**
 - **Volume 2, Chapter 10: Infrastructure and Other Sea Users, of the PEIR;**
 - **Volume 4, Chapter 5: Inter-related Effects, of the PEIR.**
- 7.1.1.6 The chapter also draws on information contained within the following annexes:
- **Volume 1, Annex 4.1: Draft Commitments Register, of the PEIR;**
 - **Volume 1, Annex 4.2: Transboundary Screening, of the PEIR;**
 - **Volume 1, Annex 4.3: Cumulative Screening and Location Plan, of the PEIR;**
 - **Volume 2, Annex 7.1: Commercial Fisheries Technical Report, of the PEIR;**
 - **Volume 2, Annex 7.2: Seabed Condition and Cable Installation / Protection Considerations, of the PEIR;**
 - **Volume 2, Annex 8.1: Navigational Risk Assessment, of the PEIR**
 - **Volume 2, Annex 8.2: Cable Burial Risk Assessment, of the PEIR.**
- 7.1.1.7 This PEIR offers a comprehensive overview of the MHPGC Project's potential environmental impacts and mitigation measures, presenting essential data to stakeholders for review and feedback. The PEIR is informed by engagement with commercial fisheries stakeholders, which is detailed in **Section 7.3**.
- 7.1.1.8 Following statutory consultation, comments will be reviewed and considered, where appropriate, in preparation of the Environmental Statement (ES) that will accompany the applications to the Planning Inspectorate (PINS) for development consent and a marine licence application to Marine Directorate Licensing Operations Team (MD-LOT).

7.2 Legislative and policy context

7.2.1 Overview

- 7.2.1.1 The full relevant legislation and policy context for the MHPGC Project has been detailed in **Volume 1, Chapter 5: Policy and Legislation, of the PEIR**. This section sets out the legislation and planning policy that is relevant to the commercial fisheries assessment.

7.2.2 Legislation

National legislation

United Kingdom

Marine and Coastal Access Act 2009

- 7.2.2.1 The Marine and Coastal Access Act 2009 provides the overarching legislative framework for marine management in United Kingdom (UK) waters. Of particular relevance to the MHPGC Project are the provisions relating to marine planning (Part 3), marine licensing (Part 4), nature conservation (Part 5) and fisheries (Part 7). These Parts establish the framework for marine planning, marine licensing, marine nature conservation, and the regulation, management and enforcement of commercial fishing activities relevant to the commercial fisheries assessment.

Fisheries Act 2020

- 7.2.2.2 The Fisheries Act 2020 provides a UK-wide framework for the sustainable management of fisheries following the UK's withdrawal from the European Union (EU). The Act sets out a series of fisheries objectives that UK fisheries policy authorities, including the Scottish Ministers and the Secretary of State, must seek to achieve when exercising their functions. These objectives are as follows:

- The sustainability objective;
- The precautionary objective;
- The ecosystem objective;
- The scientific evidence objective;
- The bycatch objective;
- The equal access objective;
- The national benefit objective;
- The climate change objective.

- 7.2.2.3 The Fisheries Act 2020 is implemented through UK-wide and devolved fisheries policies and management measures.

- 7.2.2.4 The Joint Fisheries Statement (JFS), published in November 2022, sets out how the UK fisheries administrations intend to achieve the fisheries objectives established under the Fisheries Act 2020 across UK waters. The JFS provides a UK-wide policy framework for fisheries management and includes a commitment to the development and delivery of Fisheries Management Plans (FMPs) for a range of commercially important fish and shellfish stocks.

- 7.2.2.5 Of relevance to commercial fisheries operating in and around the MHPGC Project are FMPs that have been published or are in development for fisheries including brown crab (*Cancer pagurus*) and lobster (*Homarus gammarus*), Nephrops (*Nephrops norvegicus*) and king scallop (*Pecten maximus*). The JFS identifies the fisheries authority responsible for the preparation and implementation of each FMP and promotes co-management approaches involving the fishing industry and other stakeholders. While FMPs are developed by individual fisheries administrations and do not necessarily apply uniformly across all UK waters, the JFS provides the mechanism through which alignment is achieved for the management of shared stocks. The delivery of the FMP programme and associated fisheries management initiatives will continue to evolve over the lifetime of the MHPGC Project.

Scotland

- 7.2.2.6 In Scottish waters, marine and fisheries management is a devolved matter. In offshore waters seaward of 12 nautical miles (nm) adjacent to Scotland, fisheries management, compliance and enforcement are exercised by the Scottish Ministers through Marine Scotland.

7.2.2.7 In these waters, marine and fisheries management is governed by the Marine and Coastal Access Act 2009 (as it applies offshore), the Fisheries Act 2020, and retained and assimilated fisheries legislation. Fisheries Management Plans relevant to Scottish waters are prepared and implemented by the Scottish fisheries administration in accordance with the UK-wide framework established by the Fisheries Act 2020 and the Joint Fisheries Statement.

England

7.2.2.8 In English waters, the Marine Management Organisation (MMO), established under the Marine and Coastal Access Act 2009, is the statutory body responsible for marine planning, marine licensing and the regulation and enforcement of fisheries and marine environmental legislation.

7.2.2.9 The MMO exercises fisheries management and enforcement functions in English waters in accordance with the Marine and Coastal Access Act 2009, the Fisheries Act 2020, and relevant Fisheries Management Plans developed under the Joint Fisheries Statement.

7.2.3 National policy context

National Policy Statements

7.2.3.1 National Policy Statements (NPS) set out the primary policy framework for considering and determining applications for a Development Consent Order (DCO), which is sought for that part of the MHPGC Project in England. This framework includes guidelines, requirements and criteria that the MHPGC Project must meet to obtain consent and proceed with development.

7.2.3.2 **Table 7.1** provides details of the NPS relevant to commercial fisheries and how and where they are covered in the PEIR:

- NPS for energy (EN-1) (Department for Energy Security and Net Zero (DESNZ), 2025);
- NPS for renewable energy infrastructure (EN-3) (DESNZ, 2025a);
- NPS for electricity networks infrastructure (EN-5) (DESNZ, 2025b).

Table 7.1: Summary of the NPS provisions relevant to commercial fisheries

Summary of relevant NPS provisions	How and where considered in the PEIR
NPS EN-1	
Paragraph 4.5.8: “Applicants for a DCO must take account of any relevant Marine Plans and are expected to complete a Marine Plan assessment as part of their project development, using this information to support an application for development consent.”	The commercial fisheries impact assessment takes account of the relevant Marine Plans, as outlined in Table 7.2 .
NPS EN-3	
Paragraph 2.8.136 Early consultation with a cross-section of the fishing/aquaculture industries and key regulators (MMO, Statutory Nature Conservation Bodies (SNCBs), Inshore Fisheries and Conservation Authorities (IFCAs), Department for Environment, Food and Rural Affairs (Defra), Welsh Government) to identify impacts and gather evidence of use of the area.	Consultation with statutory advisors and representatives of the fishing industry is ongoing and is intended to continue beyond the submission of the application for consent. Engagement is summarised in Section 7.3.2 .
Paragraph 2.8.137 Where a proposal involves a grid connection/transmission to shore or works in the inshore area, appropriate inshore fisheries and aquaculture groups should be consulted.	Consultation scope includes relevant inshore fisheries interests, principally the IFCAs (as applicable to nearshore/inshore works and landfall), reported in Section 7.3.2 .
Paragraph 2.8.139 Assessments should include robust baseline data and detailed surveys of effects on fish stocks of commercial	Relevant surveys and data are detailed in Volume 2, Chapter 4: Fish and Shellfish Ecology, of the PEIR , where impacts on fish stocks are also assessed. In addition, consultation with the fishing industry has

Summary of relevant NPS provisions	How and where considered in the PEIR
interest, and evidence on constraints/benefits to fishing/aquaculture within the project boundary.	identified key concerns about constraints on fishing activity and available baseline data, which have been taken into account within the commercial fisheries assessment [see Section 7.3.2].
Paragraph 2.8.140 Dialogue during planning/design to maximise co-existence/co-location and reduce displacement; consider best-practice fisheries liaison guidance agreed by renewables and fishing community.	The commercial fisheries assessment reflects ongoing dialogue to support coexistence and reduce displacement risk. Relevant fisheries liaison guidance is referenced in Section 7.4.3 and applied through the MHPGC Project's fisheries engagement approach [see Section 7.3.2].
Paragraph 2.8.141 Transboundary issues: where other coastal state vessels use the area, applicants should identify/consult stakeholders (statutory and non-statutory) to understand impacts and minimise disruption.	Potential transboundary effects are considered in Section 7.11 , where the findings of the transboundary effects assessment are presented.
Paragraph 2.8.142 Advisory safety distances: if advisory safety distances may be sought, the assessment should include effects on commercial fishing/aquaculture; assess a realistic worst case where extents are unknown; consult Maritime & Coastguard Agency (MCA).	Where relevant to the MHPGC Project, the potential for restrictions/exclusion (including any safety-related constraints such as Safety Zones and advisory safe passing distances) is addressed as part of the commercial fisheries assessment [see Section 7.8] and relevant marine navigation/shipping context is cross-referred (Volume 2, Chapter 8: Shipping and Navigation, of the PEIR and Volume 2, Chapter 10: Infrastructure and Other Sea Users, of the PEIR). Worst-case assumptions are described in the assessment method [see Section 7.6.2] and embedded in the impact scenarios.
Paragraph 2.8.220 Mitigation proposals should result from detailed consultation with fishing/aquaculture representatives, IFCAs, MMO, and relevant Defra/Welsh Government policy teams (and Natural Resources Wales (NRW) in Wales).	A range of commitments are presented within Section 7.7 . These have been discussed with fishing representatives in engagement to date (see Section 7.3) and may be further developed following further consultation with the relevant bodies.
Paragraph 2.8.221 Mitigation should be designed to enhance, where reasonably possible, medium/long-term positive benefits to fishing/aquaculture industries, commercial fish stocks and the marine environment.	Commitments in Section 7.7 are framed to reduce adverse effects and, where practicable, support beneficial outcomes for fisheries and the wider marine environment (e.g. through good practice construction management and continued liaison).
Paragraph 2.8.285 Decision-making on commercial fisheries: Secretary of State (SoS) should be satisfied site selection reasonably minimises adverse effects on fish stocks (including during peak spawning) and fishing/aquaculture activity.	A range of commitments to minimise adverse effects are presented within Section 7.7 . Further information on site selection (including the development of the MHPGC Project PEIR Red Line Boundary, with consideration of commercial fisheries interests) is provided in Volume 1, Annex 3.2: Selection and Refinement of the Offshore Infrastructure, of the PEIR .
Paragraphs 2.8.286 to 2.8.287 SoS should consider whether the development occupies any recognised important fishing/aquaculture grounds and whether it would prevent or significantly impede sustainable fishing/aquaculture; significant impediment of protection of sustainable fisheries, fishing activity or aquaculture at recognised important fishing or aquaculture grounds should carry significant weight.	The extent to which the MHPGC Project affects recognised important fishing grounds is assessed in Section 7.8 , informed by stakeholder consultation [see Section 7.3.2].
Paragraph 2.8.288 SoS should consider adverse/beneficial impacts on different types of commercial fishing/aquaculture case-by-case.	The assessment outputs presented in this chapter are intended to support this consideration [see Section 7.8].

Summary of relevant NPS provisions	How and where considered in the PEIR
Paragraph 2.8.289 SoS should be satisfied the applicant has sought, through consultation, to design the proposal with the intention of minimising loss of fishing/aquaculture opportunities; liaison guidance supports coexistence.	Consultation with representatives of the fishing industry is ongoing and is intended to continue beyond the application for development consent. Engagement is summarised in Section 7.3.2 . Existing liaison guidance is noted in Section 7.4.3 and is being applied by the Applicant.
Paragraph 2.8.290 SoS will consider extent of disruption (pre-construction, construction, operation incl. future safety zones) and whether it has been mitigated where reasonably possible.	The potential disruption to commercial fisheries and the significance of the resulting effects are assessed in Section 7.8 , with a range of commitments to minimise/mitigate effects set out in Section 7.7 .
Paragraph 2.8.291 If a project could affect fish species of commercial interest that are also of ecological value, SoS should refer to EN-3's fish/fisheries assessment paragraphs for ecological considerations.	See Volume 2, Chapter 4: Fish and Shellfish Ecology, of the PEIR , where impacts on fish stocks (including ecological receptors) are assessed, with cross-reference to the commercial fisheries assessment where relevant.
NPS EN-5	
Paragraph 2.11.18 For offshore transmission infrastructure, SoS should consult EN-3 Section 2.8 for detailed consideration of important and relevant matters.	The commercial fisheries chapter has been prepared with regard to EN-3 Section 2.8 commercial fisheries policy expectations (baseline, consultation, displacement/coexistence, advisory safe passing distances and mitigation), alongside EN-1 marine planning requirements.

National Planning Policy Framework

7.2.3.3 Due to the nature of commercial fisheries, no policies within the National Planning Policy Framework (NPPF) or National Planning Framework 4 (NPF4) are considered relevant to the commercial fisheries assessment. These planning frameworks are therefore not considered further in this chapter.

7.2.4 Marine planning policy context

7.2.4.1 The following Marine Plans are relevant to commercial fisheries and have informed the assessment of preliminary effects in this chapter, their relevance to the MHPGC Project is outlined in **Table 7.2**.

- The UK Marine Policy Statement (MPS) (DEFRA, 2020);
- Scotland's National Marine Plan (NMP) (Marine Directorate, 2015);
- Northeast Inshore and Northeast Offshore Marine Plan (MMO, 2021).

Table 7.2: Marine planning policy relevant to commercial fisheries

Marine plan description	How and where considered in the PEIR
UK Marine Policy Statement	
Stipulates that the process of marine planning should "enable the co-existence of compatible activities wherever possible" and supports (paragraph 2.3.1.5) the reduction of real and potential conflict as well as maximising compatibility and encouraging co-existence of multiple activities.	Reflecting the Applicant's desire for co-existence, this chapter presents an assessment of potential impacts on commercial fisheries in Section 7.8 and identifies measures to encourage co-existence in Section 7.7 . Additional, secondary mitigation measures are also identified in Section 7.8 to address potentially significant temporary impacts on commercial fisheries.
Paragraph 3.8.10 Requires consideration of the social, economic and environmental impacts of marine developments on commercial fishing activity, including displacement and changes in access to fishing grounds.	

Marine plan description	How and where considered in the PEIR
Supports assessment of secondary and cumulative effects, including the redistribution of fishing effort and potential implications for fish stocks, fishing grounds and fishing communities. Emphasises the importance of engagement with fisheries stakeholders and management bodies and encourages coexistence between fishing and other marine activities.	
Scottish National Marine Plan	
Contains sector-specific policies relevant to offshore wind, submarine cables and commercial fisheries. Policies under Chapter 4 General Policies are of relevance to commercial fisheries, specifically GEN 4 which encourages proposals to enable co-existence and, where possible, developments that do not result in areas being unsuitable for future use by others.	Reflecting the desire for co-existence, this chapter presents an assessment of potential impacts on commercial fisheries in Section 7.8 and identifies measures to encourage co-existence in Section 7.7. Additional, secondary measures are also identified in Section 7.8 to address potentially significant temporary impacts on commercial fisheries.
Policies under Chapter 6 Sea Fisheries ('FISHERIES 1 to 5') are considered relevant to commercial fisheries. Policies seek to safeguard existing fishing opportunities and activities wherever possible and advise that mechanisms for managing conflicts between the fishing sector and other users of the marine environment should be in place (FISHERIES 1). Preparation of a Fisheries Management and Mitigation Strategy (FMMS) is recommended where existing fishing opportunities and activity cannot be safeguarded (FISHERIES 3). Chapter 6 Sea Fisheries provides principles for interactions with other users (Paragraph 6.22), including short-term displacement of fishing during installation, potential damage to fishing equipment and following best practice guidance (Paragraph 6.26).	Reflecting the key concerns and potential impacts that should be addressed in an impact assessment and any FMMS (now referred to as Fisheries Mitigation, Monitoring and Communication Plan (FMMCP) under current Marine Directorate guidance (Scottish Government, 2025a)), this chapter: - Assesses the potential impacts of the MHPGC Project on commercial fisheries in Section 7.8; - Sets out measures to mitigate any constraints that the MHPGC Project may place on commercial fishing activity in Section 7.7; The Applicant has made a commitment (CoT50) of Volume 1, Annex 4.1: Commitments Register of the PEIR)) that a draft FMMCP will be produced in relation to Scottish Waters and submitted as part of the marine licence application(s) to the Scottish Ministers A Fisheries Liaison and Co-existence Plan (FLCP) will be prepared and submitted with the application for development consent (CoT20 / MM-033).
Chapter 11 Offshore Wind and Marine Renewable Energy provide principles for interactions with other users (Paragraphs 11.26 to 11.29), including physical competition for space due to the impact of the physical presence of structures and encourages an inclusive approach to minimise and avoid impacts; and participation in working groups to develop co-existence and mitigation.	
Policies under Chapter 14 Submarine Cables (CABLES 2) are considered relevant to commercial fisheries. Policies seek to minimise impacts on the environment and other users, reduce conflict with other users, ensure suitable cable protection measures where burial is not feasible and use of post-lay surveys, monitoring and remedial action where required. In addition, Chapter 14 Submarine Cables provides principles for interactions with other users (Paragraphs 14.8 to 14.11), including burial and protection to reduce conflict with other users and prevent damage to cables, engagement with stakeholders and provision of information under the Kingfisher Information Service – Offshore Renewable & Cable Awareness (KIS-ORCA) project.	In relation to potential interactions between submarine cables and other users, in this case commercial fisheries, the Applicant's commitments regarding cable burial, protection and monitoring, and to fisheries liaison are set out in Section 7.7 (see Table 7.13). The potential impacts of the MHPGC Project on other sea users are assessed in Volume 2, Chapter 10: Infrastructure and Other Sea Users, of the PEIR.
Northeast Inshore and Northeast Offshore Marine Plan	
NE-FISH-1: Proposals that support a sustainable fishing industry, including the industry's diversification, should be supported.	This chapter presents an assessment of potential impacts on commercial fisheries in Section 7.8 and identifies commitments to reduce and mitigate impacts in

Marine plan description	How and where considered in the PEIR
NE-FISH-2: Proposals that enhance access for fishing activities should be supported. Proposals that may have significant adverse impacts on access for fishing activities must demonstrate that they will, in order of preference: a) Avoid; b) Minimise; c) mitigate - adverse impacts so they are no longer significant. If it is not possible to mitigate significant adverse impacts, proposals should state the case for proceeding.	Section 7.7. Additional, secondary measures are also identified in Section 7.8 to address potentially significant temporary impacts on commercial fisheries.

7.2.5 Local policy context

7.2.5.1 The MHPGC Project lies within the jurisdiction of Durham County Council. There is no local planning policy considered relevant to commercial fisheries.

7.3 Consultation and engagement

7.3.1 Scoping

7.3.1.1 A Scoping Report for the MHPGC Project was issued to PINS and MD-LOT in February 2025 (RPS, 2025). Following consultation with the appropriate statutory bodies, PINS (on behalf of the SoS) and MD-LOT both provided Scoping Opinions in March 2025 (PINS, 2025; MD-LOT, 2025, respectively).

7.3.1.2 **Table 7.3** sets out the key comments raised during the scoping process specific to commercial fisheries, with details of how these comments have been addressed within the PEIR.

Table 7.3: Summary of scoping responses relevant to commercial fisheries

Comment	How and where considered in the PEIR
PINS	
Temporary loss or restricted access to fishing grounds (O&M): The MHPGC Project Scoping Report supporting text is contrary to the proposed justification to support the scoping out of this matter, stating that O&M work could cause temporary loss or restricted access to fishing grounds. On this basis the Inspectorate is not able to scope this matter out of further assessment. The ES should include an assessment of potential impacts on this matter, where Likely Significant Effects (LSE) could occur or the ES should otherwise explain, with evidence of agreement from relevant consultation bodies, why significant effects are not likely to occur.	PINS advice is acknowledged. Temporary loss or restricted access to fishing grounds during the operation and maintenance phase has been scoped into the EIA and is assessed within Section 7.8 .
Long term loss or restricted access to fishing grounds (construction and decommissioning): The proposed timescales for construction and decommissioning could still be lengthy enough for potential LSE to occur. On this basis the Inspectorate is not able to agree to scope this matter out. This matter should be included in the assessment, unless agreement with the relevant consultation bodies is agreed to scope this matter out.	PINS advice is acknowledged. Potential long-term loss or restricted access to fishing grounds during construction and decommissioning has been scoped into the EIA and assessed within Section 7.8 .
MD-LOT	
Section 7.8.4 of the MHPGC Project Scoping Report presents the proposed data sources to be used to inform the commercial fisheries assessment. The Scottish Ministers advise that the MMO's surveillance sightings must not be relied upon for informing the baseline, and that Vessel Monitoring System (VMS) datasets and the use of fisheries sensitivity maps and associated webtool from the Fisheries Sensitivity Mapping and Displacement Modelling	MD-LOT's advice regarding baseline datasets has been incorporated into the EIA. The commercial fisheries baseline [see Section 7.4] is informed by multiple data sources including VMS, Automatic Identification System

Comment	How and where considered in the PEIR
project be utilised to inform the EIA Report. This is a view supported by the Marine Directorate - Science, Evidence, Data and Digital (MD-SEDD) advice.	(AIS), Swept Area Ratio (SAR) and fisheries plotter data, supported by industry consultation. MMO surveillance sightings data are not relied upon as a primary dataset and are presented only alongside other datasets with limitations clearly stated. Outputs from the Fisheries Sensitivity Mapping and Displacement Modelling (FiSMaDiM) project are used to inform baseline characterisation.
In addition, the Scottish Ministers advise that the Applicant must consider the Scottish Fishermen’s Federation (SFF) representation with regard to pre-Brexit landing data to be utilised and fishing plotter data to be considered to inform the assessment.	SFF’s representation regarding the use of pre-Brexit landings data and fishing plotter data has been taken into account. Pre-Brexit datasets are used where appropriate to inform baseline characterisation, supported by industry-provided plotter data and consultation feedback [see Section 7.4].
With regard to the potential impacts to be scoped into assessment in Table 7.50, the Scottish Ministers highlight the SFF’s representation in relation to the potential impact of “snagging risk: loss or damage to fishing gear” to be scoped in which must be fully considered within the EIA Report.	SFF’s representation is acknowledged. Increased snagging risk, including the potential for loss or damage to fishing gear, has been scoped into the EIA and is assessed in Section 7.8 . The safety aspects including potential loss of life as a result of snagging risk are assessed within Volume 2, Chapter 8: Shipping and Navigation, of the PEIR .
Section 7.8.7 of the Scoping Report outlines the designed in measures and mitigation proposed. The Scottish Ministers highlight MD-SEDD advice with regard to cable protection methods and boulder clearance which must be considered fully by the Applicant within the EIA Report. In addition, the Scottish Ministers highlight the SFF representation relating to mitigation and advise that this must also be fully considered within the EIA Report.	MD-SEDD advice and SFF feedback is noted and will be taken into consideration by the Applicant in developing the final design of the MHPGC Project. The Applicant is committed to preparing a Cable Specification and Installation Plan (CSIP) for approval ahead of construction commencing, which will detail the final design of the MHPGC Project. An outline CSIP will be submitted with the DCO and Marine Licence applications (CoT08 / MM-010). The commercial fisheries impact assessment is based on a maximum design scenario [see Section 7.6.2].
In addition, the Scottish Ministers highlight the SFF representation relating to mitigation and advise that this must also be fully considered within the EIA Report.	
MMO	
The MMO notes that potential impacts to be scoped in for shellfisheries are described in Table 7.50. This includes temporary loss or restricted access to fishing grounds, displacement of fishing activity into other areas, interference with fishing activity, increased steaming distances and times, snagging risk, loss or damage to fishing gear and long-term loss or restricted access to fishing grounds. The MMO agrees with the potential impacts scoped in for shellfisheries.	The MMO’s agreement with the scope of impacts assessed for shellfisheries is noted. Impacts are assessed in Section 7.8 .

Comment	How and where considered in the PEIR
The MMO highlights that modest data exists relating to the existence of specific spawning grounds or spawning migrations for the majority of commercially exploited shellfish species in UK waters. However, locations of fished stocks may serve as a useful proxy for spawning grounds for the majority of species, particularly the more sedentary ones. Therefore, indicative spawning and nursing maps can be highlighted within fished International Council for the Exploration of the Sea (ICES) rectangles. In addition to the data sources identified by the Applicant, the MMO requests the use of additional data sources for characterising the nursery and spawning areas of edible crab (<i>Cancer pagurus</i>), lobster (<i>Homarus gammarus</i>) and Norway Lobster (<i>Nephrops norvegicus</i>) (CEFAS, 2023; ICES 2023, Eaton <i>et al.</i>, 2003).	The MMO's advice regarding the use of fished stock distributions as proxies for spawning and nursery grounds has been incorporated. Additional data sources for brown crab (also known as edible crab), lobster and Nephrops are referenced and utilised where appropriate within the Fish and Shellfish Ecology assessment (Volume 2, Chapter 4: Fish and Shellfish Ecology, or the PEIR), with conclusions drawn through to the commercial fisheries assessment [see Section 7.8].
For non-impulsive sounds effects on other receptors, page 97 refers to Chapter 7.8: Commercial Fisheries to illustrate the proposed assessment, however, exposure to underwater noise is not highlighted within this chapter. Rather, Chapter 7.5: Fish and Shellfish Ecology lists "Underwater sound impacting fish and shellfish receptors" as an impact pathway being scoped in. This chapter indicates that modelling will be undertaken to investigate this pathway. The description of the assessment does not differentiate between impulsive and non-impulsive sounds in the way that the report does for marine mammals, however the description indicates that both injury and disturbance/disruption will be considered, implying consideration of both types of noise. Particle motion will also be considered. The MMO has no concerns with this proposal and notes that noise should be assessed from a fisheries perspective too.	The commercial fisheries impact assessment considers how impacts on commercially targeted species may displace or disrupt fishing activity [see Section 7.8]. The commercial fisheries impact assessment draws upon the conclusions of the Fish and Shellfish Ecology assessment (Volume 2, Chapter 4: Fish and Shellfish Ecology, or the PEIR) which considers the effects of underwater sound on fish and shellfish species (including commercially targeted species).
MD-SEDD	
MD-SEDD advise against the reliance of MMO surveillance sightings for informing the baseline. This data has a sampling bias due to risk based taskings in Scotland leading to uneven survey effort, so may not give an accurate representation of fishing activity across the study area. It can however be used to give an indication of the nationality of vessels present in the area and can be used to corroborate information from other sources. MD-SEDD advise that VMS datasets are used in the EIA to produce spatial maps of fishing activity for individual gear types (e.g. demersal trawl), as well as looking at the combined value across all fishing methods. This will help to visualise different fleets' activity. When using MMO VMS datasets, MD-SEDD advise that the data is used to present figures showing both average VMS value and also fishing effort (kW per hour). Areas of high effort may not necessarily equate to areas of high value, so it is advised to visualise the fishing activity using both indices. This will provide further information about the commercial fisheries baseline and help in the assessment of possible displacement of fishing effort.	MD-SEDD's advice is acknowledged and incorporated. MMO surveillance data is not relied upon as a primary dataset and are used only to corroborate other information. Baseline data limitations are fully described in Volume 2, Annex 7.1: Commercial Fisheries Technical Report, of the PEIR. Reflecting good practice, multiple datasets (including AIS, VMS, SAR, vessel plotter data) have been used to develop an understanding of the commercial fisheries baseline, and these have been further validated through engagement with the fishing industry. For detail of baseline data sources and limitations, see Chapter 7, Annex 7.1: Commercial Fisheries Technical Report.
MD-SEDD advise the use of fisheries sensitivity maps and the associated webtool from the recently concluded Fisheries Sensitivity Mapping and Displacement Modelling (FiSMaDiM) project, which may be helpful for assessing fisheries displacement. The project outputs can be accessed here (Case Study Centre for Environment, Fisheries and Aquaculture Science (Cefas)). Please note that the webtool for the sensitivity maps will be released soon.	FiSMaDiM data is available and has been used to inform the commercial fisheries baseline characterisation; see Chapter 7, Annex 7.1: Commercial Fisheries Technical Report.
MD-SEDD note that where cable protection is used, it will follow industry standard guidelines in terms of slope angle and rock grading. The fishing	MD-SEDD advice and SFF feedback is noted and will be taken into

Comment	How and where considered in the PEIR
industry have raised concerns over the use of concrete mattresses in open areas of seabed and therefore MD-SEDD advise that other methods such as rock placement are utilised first where possible, before the use of concrete mattresses.	consideration by the Applicant in developing the final design of the MHPGC Project. The Applicant is taking, and will continue to take, steps to reduce the impacts upon the fishing industry in the area through appropriate mitigation where required. Measures adopted as part of the Project, and which are relevant to commercial fisheries, are provided in Section 7.7 and include a commitment to develop a CSIP (CoT08 / MM-010). An Outline CSIP will be submitted as part of the application for development consent and marine licencing. A final version of the CSIP will be prepared and approved post-consent and ahead of construction. The commercial fisheries impact assessment is based on a maximum design scenario [see Section 7.6.2].
MD-SEDD note that boulder removal may be required during the seabed preparation. MD-SEDD advise that the location of large boulders that are relocated during construction and may pose a snagging risk for fishing gear must be disclosed to the fishing industry within a timely manner. MD-SEDD note that the final location of cables will be provided to KIS-ORCA and advise this is also done within a timely manner.	MD-SEDD advice is noted. The locations of any large boulders relocated during construction will be recorded and shared with the fishing industry in a timely manner. This will be captured as an additional commitment within the FMMCP (CoT50) [and/or included in the Commitments Register].
MD-SEDD advise new guidance on monitoring commercial fisheries in relation to offshore wind farms will be published by the Scottish Government in the coming months and may be useful to the applicant during the EIA stage.	MD-SEDD advice is noted. Whilst not directly relevant to subsea cabling in isolation, the Scottish Government (2025b) guidance is acknowledged by the Applicant (see Section 7.4.3) and has been considered in developing monitoring proposals.
SFF	
The SFF notes from para '3.4.3.18 'Seabed Preparation; that boulders and Unexploded Ordnance (UXO) will be relocated and/or cleared during the seabed preparation work. Since the relocation of boulders and UXOs from their natural positions and re-positioning them creates snagging and safety hazards for demersal and static gears therefore SFF would suggest that to avoid the relocation of boulders and UXOs as much as possible. Where boulder and UXO relocation is unavoidable, we recommend the new locations/coordinates of the relocated boulders and UXO should be recorded and shared with fishermen. Fishermen require geographical readings to decimal of a minute format (3 decimal places sufficient) rather than going down to actual seconds and the datum should be WGS84 rather than ED50. In terms of UXO clearance, the fishing industry supports the use of deflagration as opposed to UXO detonation to mitigate as much as possible against any marine life being caught in the immediate blast radius including the resulting shock waves which can result in barotrauma to marine life out with the initial blast radius.	The Applicant confirms, as described in Volume 1, Chapter 2: Project Description, of the PEIR , that where not possible to microsite around UXO consideration will be given to relocation or clearance using Low Order techniques. Where UXO are cleared, any remaining debris of sufficient size to present a potential navigational hazard or snagging risk will be removed.
Being concerned for fishermen's safety, first of all, SFF would suggest to the Applicant to make all efforts to reach the required depth of cable burial and avoid using cable protection measures as much as possible since the volume	MD-SEDD advice and SFF feedback is noted and will be taken into consideration by the Applicant in

Comment	How and where considered in the PEIR
of cable protection mass will disrupt the marine habitat and has the potential to create a snagging hazard for fishing vessels within the EC. In terms of using cable protections measures, SFF is opposed to using concrete mattresses, fond mats, rock bags, grout bags, cement bag and other similar nature protection materials in open water since they create severe snagging hazards for bottom trawl fishing vessels and static gears. SFF's preferred cable protection measure is rock protection considering industry standard rock size (1"to 5") with a 1:3 profile followed by an over trawl sweep alongside a long-term monitoring programme. In terms of crossing points, as they introduce obstacles and snagging hazards for the fishing industry, SFF would suggest that the cable crossing should be avoided as much as possible otherwise the design of cables and pipelines crossing points should be consulted on with the fishing industry to ensure their impacts are mitigated.	developing the final design of the MHPGC Project. The number and location of cable crossing points has been considered through route development and option selection, with crossings sought to be minimised where practicable. Crossing requirements will continue to be considered as the design is refined. The Applicant is committed to preparing an Outline CSIP (CoT08 / MM-010) for submission with the application for development and Marine Licence application(s) to the Scottish Ministers. Prior to construction commencing, a detailed CSIP, which will detail the final design of the MHPGC Project [see Section 7.7] will be submitted and agreed. The commercial fisheries impact assessment is based on a maximum design scenario [see Section 7.6.2].
Where OEC is pre-laid on the seabed, the SFF propose the Applicant to use guard vessels on the cable route during the installation period until the cable is buried and protected as required. We propose utilising local fishing vessels to be used as guard vessels. Which in turn establishes a good working relationship and awareness of ongoing developments as they are ultimately the ones that will have their day-to-day operations disrupted.	The Applicant commits to the use of guard vessels during construction where required by risk assessment, as described in Section 7.8.5, to minimise interference with fishing activity and manage safety risks (CoT32/MM-086).
SFF would like to see a clear seabed post-decommissioning where no legacy snagging hazard for fishing vessels is left on seabed. Any part of the unburied cables including crossing points with any type of cable protections (except rock) should be removed to shore followed by an over-trawl sweep additionally a long-term monitoring programme to ensure safety of the fishing vessels in those areas.	An Offshore Decommissioning Programme (CoT44) will be developed prior to decommissioning [see Section 7.7]. The Programme will be prepared in line with prevailing guidance at the time of decommissioning and will be subject to consultation, including with fishing industry representatives.
SFF propose to use pre-Brexit landing data in the EIA. We reiterate the importance of pre-Brexit data to be utilised for the EIA Report to present a realistic baseline of fishing activities within the study area, as some fisheries targeting species such as small haddock have declined post Brexit. Fishing plotter data from fishermen, SFF and associations should be used as AIS and VMS data cannot represent all the actual fishing activities within the study area. In general collection of fishing plotter data from the fisheries organisations, and any specific data from smaller vessels that are not required to use AIS or VMS is recommended.	MD-LOT and SFF advice regarding the use of pre-Brexit landings data and fishing plotter data has been taken into account. Pre-Brexit datasets are used where appropriate to inform baseline characterisation, supported by industry-provided plotter data and consultation feedback [see Section 7.4].
Proposed embedded mitigation: - SFF would propose 'the FMMS' to be developed and adopted pre-consent in consultation with fishing industry to ensure all fishing industry's concerns are considered and addressed accordingly. - We request that all Notice to Mariners (NtMs) are issued in sufficient time to avoid any disruption to fishing activities in the intended area. Fishermen require geographical readings to a decimal of a minute format (3 decimal places sufficient) rather than going down to actual seconds and the datum should be WGS84 rather than ED50.	The Applicant has made a commitment (CoT50 of Volume 1, Annex 4.1: Commitments Register of the PEIR)) that a draft FMMCP will be produced in relation to Scottish Waters and submitted as part of the marine licence application(s) to the Scottish Ministers (CoT50). The Applicant commits to adhering to standard good practice in terms of NtM issue and reporting of dropped

Comment	How and where considered in the PEIR
We propose also adding the 'dropped object' to the Kingfisher Bulletin App if a potential hazard exists for fishers.	objects as confirmed in Section 7.7 (CoT04 / MM-004).
We would propose the following Embedded Mitigations to be considered: - As part of the proposed commitments, there is no measure for disruption payments for fishing vessels. No reference has been made about mitigation once operational and loss of fishing opportunities to the fishing industry. SFF proposes that a cooperation agreement should be considered for both static and mobile gears where they are required to be temporarily relocated. A long-term compensation mechanism should be put in place for those fishermen who are excluded from offshore export cables. - Utilise the services of an Offshore Fisheries Liaison Officer (OFLO) with sufficient knowledge of fisheries and the fishers that utilise the development area.	The Applicant confirms that they will utilise suitably experienced OFLOs [see Section 7.7, CoT19 / MM-032]. The Applicant notes the SFF feedback regarding disruption payments. The application of any disruption payment procedure is considered 'additional mitigation' [see Section 7.8.2 for Applicant consideration of disruption payments] and would be in response to an identified significant temporary impact to a static gear fishing fleet. Any disruption payment procedures will be in line with established guidance and existing Applicant procedure.
SFF notes from the Table 7.50 (p317) that 'Snagging risk – loss or damage to fishing gear' has been scoped in. We agree with this being scoped in; however, since snagging in some limited cases has resulted in fatalities, we propose that the possibility of a loss of life should also be highlighted as to a risk of snagging hazards not just to fishing gear.	SFF's concerns regarding snagging risk and safety are acknowledged. Snagging risk is assessed in Section 7.8 while risks to vessel safety and potential loss of life are assessed within Volume 2, Chapter 8: Shipping and Navigation, of the PEIR.

7.3.2 Further consultation and engagement

7.3.2.1 Further engagement with the fishing industry has been undertaken to develop an understanding of fishing activity in and around the MHPGC Project, and to understand fisheries stakeholder concerns. Meetings have been held with the following representative organisations:

- Anglo Scottish Fishermen's Association (ASFO);
- National Federation of Fishermen (NFFO);
- North Eastern IFCA;
- Northumberland IFCA.
- SFF;
- Scottish Pelagic Fishermen's Association (SPFA); and
- Scottish White Fish Producers Association (SWFPA).

7.3.2.2 In addition to this, five in-person public engagement events and one online event were held during October and November 2025. The events sought to capture the geographical extent of the MHPGC Project and were held in Stonehaven, Murton, Seaham and South Hetton. A number of fishers attended these events.

7.3.2.3 Additional consultation has been summarised in **Table 7.4**.

Table 7.4: Summary of further consultation and engagement

Date	Consultee and response type	Comment	How and where considered in the PEIR
16 March 2026	NFFO, North Eastern IFCA and Northumberland IFCA Virtual meeting	- Meeting presented the draft Commercial Fisheries PEIR findings, including updated baseline, impact assessment and proposed mitigation; - NFFO reiterated that achieving appropriate cable burial depth is critical	PEIR updated to incorporate additional fisheries datasets, including CatchApp, IFCA returns, fisheries

Date	Consultee and response type	Comment	How and where considered in the PEIR
		to enable continued fishing and reduce snagging risk, particularly across the Farn Deeps Nephrops grounds; - Stakeholders welcomed the use of additional baseline datasets (including IFCA returns, CatchApp, surveillance data and 2024 MMO landings), noting that the use of multiple data sources increased confidence in the assessment; - Draft assessment findings identifying significant temporary construction effects on the potting and Nephrops trawl fleets were discussed. Stakeholders highlighted cumulative pressures on these fleets; - Potential mitigation measures to address significant construction phase impacts, including progressive construction, minimising the period between cable installation and burial, fisheries liaison and monitoring of cable burial, were discussed; - NFFO supported a pragmatic approach to development of the FLCP, noting the title of the document (e.g. FLCP vs FMMCP) is not of importance relative to the intent and content; - Post-PEIR engagement arrangements were discussed.	surveillance data and 2024 MMO landings [see Section 7.4.4]; - The commercial fisheries assessment adopts a precautionary assessment of temporary construction effects on Nephrops trawl and potting fisheries [see Section 7.8]; - Embedded mitigation includes maximising cable burial where feasible, fisheries liaison and cable burial verification/monitoring [see Section 7.7]; - The Outline FLCP and FMMCP will be developed having regard to stakeholder feedback, with further consultation proposed post-PEIR.
20 March 2026	SFF, ASFA, SPFA and SWFPA Virtual meeting	- Meeting presented the draft Commercial Fisheries PEIR findings and sought stakeholder feedback on the assessment and proposed mitigation. - Stakeholders reiterated concerns regarding selection of the western export cable corridor and the potential duration of disruption to the Farn Deeps Nephrops fishery, emphasising the importance of construction methodology and cable burial. - Additional discussion covered pelagic fishing activity, route selection, UXO constraints and the need for transparency regarding alternatives considered. - Stakeholders requested continued engagement on engineering and geotechnical constraints and cable installation methodology. - Stakeholders requested examples of FLCPs and clarification of the relationship and differences between an FLCP and FMMCP.	- PEIR includes latest baseline information [see Section 7.4.4]; Volume 1, Chapter 3: Site Selection & Consideration of Alternatives, of the PEIR explains the rationale for the routing of the preferred offshore export cable corridor; - The commercial fisheries assessment and embedded mitigation have been refined to consider stakeholder feedback on construction sequencing, cable

Date	Consultee and response type	Comment	How and where considered in the PEIR
			burial, fisheries liaison and monitoring [see Section 7.7]; Example Outline FLCP's (England) were shared with stakeholders post-meeting, to allow understanding of content and comparison with FMMCP's (Scotland).
13 October 2025	NFFO, Virtual meeting	- The meeting focused on the Commercial Fisheries EIA for the MHPGC Project, including scope, baseline data, impacts and engagement. - The western offshore export cable corridor is the projects preferred offshore route due to engineering and environmental constraints; it overlaps important Nephrops fishing grounds, so minimising displacement and cumulative effects is a key concern for the NFFO. - Cable burial in soft sediments and minimising cable protection where possible were highlighted as important measures by the NFFO to reduce impacts on trawling. - Data gaps were noted by the NFFO for under-12 metre (m) length fishing vessels and inshore potting, to be addressed through fisher engagement, CatchApp data, IFCA input and updated datasets. - The cumulative assessment will consider other projects, Marine Protected Areas (MPAs) and fisheries management measures, which was welcomed by NFFO. - Next steps included non-statutory consultation events, continued fisheries engagement, and follow-up with NFFO ahead of PEIR and consent applications.	- The assessment considers the interaction of the preferred offshore export cable corridor with the Nephrops fishery [see Section 7.8] and includes a cumulative assessment incorporating relevant offshore developments, MPAs and fisheries management measures [see Section 7.9]; - Additional baseline data, including CatchApp, IFCA data and updated landings datasets, have been incorporated where available to improve understanding of smaller vessel activity [see Section 7.4.4]; - Embedded mitigation includes a commitment to maximise cable burial where practicable, minimise cable protection and continue fisheries liaison through development of the Outline FLCP and FMMCP [see Section 7.7, CoT20 / MM-033 and CoT50].

Date	Consultee and response type	Comment	How and where considered in the PEIR
23 October 2025	North Eastern IFCA and Northumberland IFCA, Virtual meeting	- The meeting focused on the Commercial Fisheries EIA for the MHPGC Project, with IFCAs providing input on scope, data and mitigation. - The western offshore export cable corridor is the projects preferred offshore route due to engineering and environmental constraints: it overlaps with high-value Nephrops grounds. - Small-vessel activity (under 15m length) is poorly represented in VMS/AIS data; IFCAs offered catch returns and permit data to help address this gap. - Constraints on fishing activity were clarified by the IFCAs, including the prohibition of scallop dredging within 6nm in the North Eastern IFCA district. - Embedded mitigation including cable burial, trenchless landfall techniques, and development of fisheries liaison and coexistence plans across English and Scottish waters were discussed. - Next steps included non-statutory consultation events, data sharing from IFCAs and follow-up meetings in early 2026 to discuss preliminary assessment outcomes and mitigation.	- Information provided by the IFCAs has informed the commercial fisheries baseline [see Section 7.4.4]. - The PEIR baseline identifies the limitations of VMS/AIS datasets for smaller vessels and incorporates additional data sources where available [see Section 7.4.4]. - The assessment recognises relevant fisheries management measures, including local byelaws, within the baseline and assessment [see Sections 7.4, 7.8 and 7.9]. - Embedded mitigation is confirmed in Section 7.7.
30 October 2025	SFF and ASFA, Virtual meeting	- The meeting focused on the Commercial Fisheries EIA for the MHPGC Project, with Scottish fishing organisations providing input on routing, data and mitigation. - The western offshore export cable corridor is the projects preferred offshore route due to engineering and environmental constraints, but strong concerns were raised by the SFF about overlap with key Nephrops and potting grounds. - Cable burial depth was discussed, with fishing industry preference for deeper burial where feasible and opposition to concrete mattresses/rock bags, favouring rock placement instead. - Baseline data discussions highlighted the importance of Scottish fishing vessel activity within both Scottish and English waters, inclusion of 2024 landings data when available, and use of confidential member vessel plotter data provided by SFF. - Opportunities for improved engagement were identified by SFF, including potential use of the Horizon Watch platform.	- The commercial fisheries baseline incorporates Scottish fisheries information, including confidential vessel activity data provided by the SFF, together with updated landings datasets [see Section 7.4.4]. - The assessment considers cable burial as an embedded mitigation measure and seeks to minimise cable protection where practicable, recognising the importance of maintaining safe fishing access [see Section 7.7]. - Continued engagement with

Date	Consultee and response type	Comment	How and where considered in the PEIR
		Next steps included non-statutory consultation events, further engagement with Scottish stakeholders in early 2026, and early consultation on the FMMCP ahead of consent submission.	Scottish fisheries stakeholders will inform development of the FMMCP and will continue throughout the pre-application process. The Applicant is supportive of the SFF-led Horizon Watch initiative, an information bulletin intended to assist Scottish fishermen by providing advance awareness of proposed subsea cable routes and other installations. The Applicant will continue to monitor the development of Horizon Watch and engage with the initiative where it is considered appropriate.

7.4 Baseline Characterisation

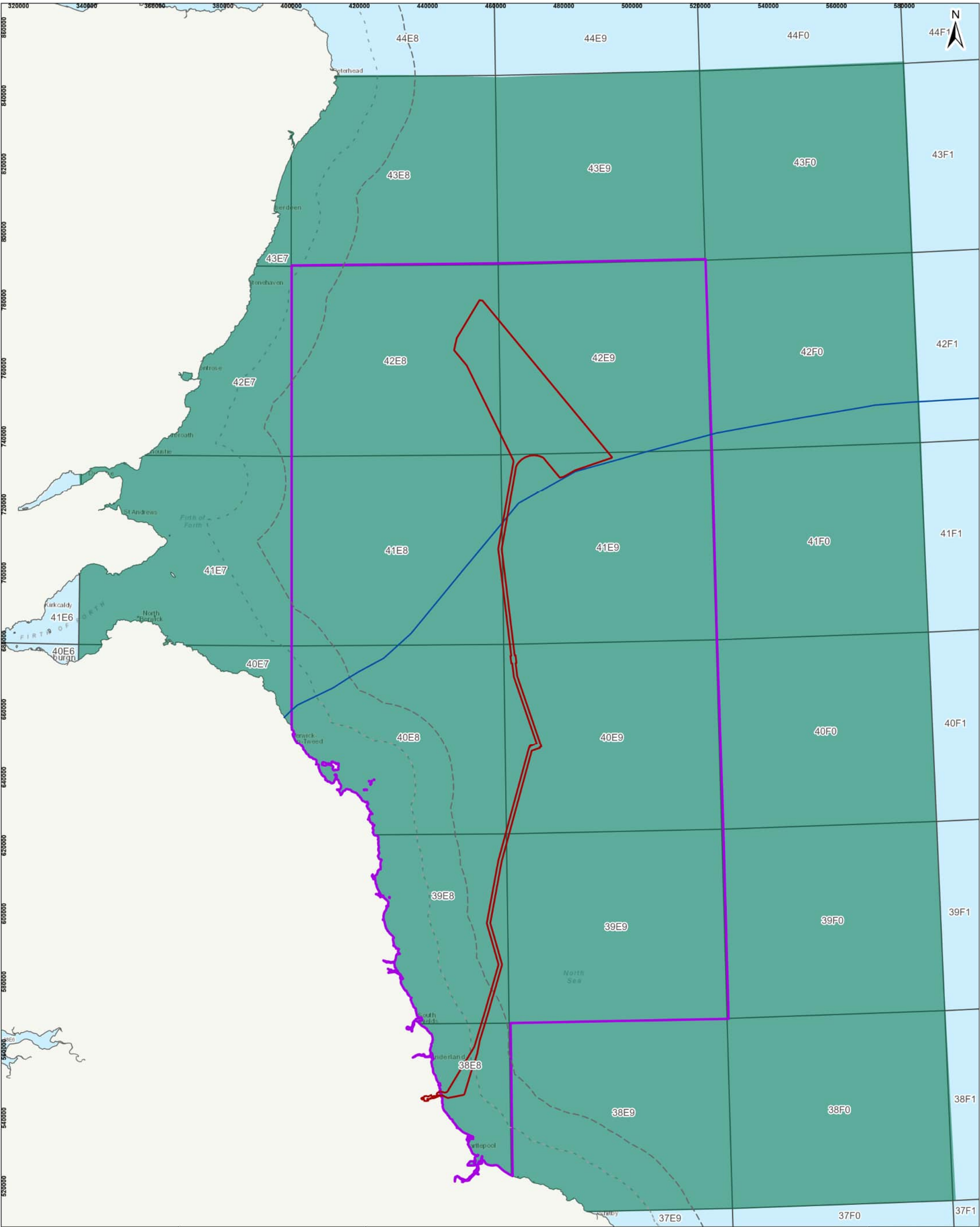
7.4.1 Overview

- 7.4.1.1 **Volume 1, Chapter 2: Project Description, of the PEIR** sets out the description of the MHPGC Project and **Volume 1, Chapter 4: Approach to Environmental Impact Assessment, of the PEIR** sets out the overarching approach that has been used in developing the preliminary environmental information.
- 7.4.1.2 This section describes the methods and data sources used to characterise the baseline for commercial fisheries within the study area and describes the existing baseline characteristics.

7.4.2 Commercial Fisheries Study Areas

- 7.4.2.1 The MHPGC Project is located within the ICES Division 4b (Central North Sea) statistical area, within UK Exclusive Economic Zone (EEZ) waters. For recording commercial fisheries landings, ICES Division 4b is divided into statistical rectangles, of which the MHPGC Project overlaps with nine.
- 7.4.2.2 Two study areas are defined for commercial fisheries, which are shown in **Figure 7.1**:
- The Local Commercial Fisheries Study Area covering ICES rectangles 38E8, 39E8, 39E9, 40E8, 40E9, 41E8, 41E9, 42E8 and 42E9;
 - The Regional Commercial Fisheries Study Area covering ICES rectangles 38E8 to 38F0, 39E8 to 39F0, 40E7 to 40F0, 41E7 to 41F0, 42E7 to 42F0 and 43E7 to 43F0.
- 7.4.2.3 The Local Commercial Fisheries Study Area is defined where the MHPGC Project overlaps with an ICES rectangle, as specified above.
- 7.4.2.4 A Regional Commercial Fisheries Study Area is considered to provide context to the description of commercial fishing activity in the Local Commercial Fisheries Study Area, and to inform assessment

of displacement impacts within the PEIR. The Regional Commercial Fisheries Study Area includes ICES rectangles immediately adjacent to those that make up the Local Commercial Fisheries Study Area.





Project Name:
MORVEN HAWTHORN PIT GRID CONNECTION PROJECT

Drawing Title:
FIGURE 2.1: LOCAL COMMERCIAL FISHERIES STUDY AREA AND REGIONAL COMMERCIAL FISHERIES STUDY AREA

0 1 2 4 6 8 10 12 14 16 18 20 22 24 nm


Scale@A3:1:1,000,000

Service Layer Credits:
Datum: OSGB 1936
Projection: British National Grid

Drawing Number:
MHPGC-NIM-CF-0001

Data Sources:
Ordnance Survey, ICES

Geodetic Information:
World Topographic Map: CH, PEIR, GERM, FAD, ROMA, USGS
World Topographic Map: GERM, US, GERM, GERM, USGS, NGA

VER	DATE	DETAILS	BY	CHECK
00	20/11/25	Initial Issue	FN	SM
01	14/07/26	Final Issue	FN	SM
-	-	-	-	-
-	-	-	-	-

LEGEND

- MHPGC Project PEIR
- Red Line Boundary
- Commercial Fisheries Local Study Area
- Commercial Fisheries Regional Study Area
- ICES Rectangles
- 6 nm Limit
- 12 nm Limit
- Territorial Limits



7.4.3 Relevant guidance

7.4.3.1 The preliminary assessment has been informed by the following guidance documents:

- Guidance on preparing Mitigation and Monitoring Plans: FMMCP (Scottish Government, 2025a);
- Offshore windfarms - monitoring impacts on the commercial fishing industry: good practice guidance (Scottish Government, 2025b);
- Good Practice Guidance for assessing fisheries displacement by other licensed marine activities (Scottish Government, 2022);
- Best Practice Guidance for Fishing Industry Financial and Economic Impact Assessments (United Kingdom Fisheries Economic Network and Seafish, 2012);
- Fisheries Liaison with Offshore Wind and Wet Renewables group (FLOWW) Recommendations for Fisheries Liaison: Best Practice guidance for offshore renewable developers (FLOWW, 2014 and noted to be currently in the process of being updated);
- FLOWW Best Practice Guidance for Offshore Renewables Developments: Recommendations for Fisheries Disruption Settlements and Community Funds (FLOWW, 2015);
- FLOWW Best Practice Guidance for Fisheries Liaison with Offshore Renewables Developments (FLOWW, 2025);
- Guidance on Commercial Fisheries Mitigation and Opportunities from Offshore Wind commissioned by Collaborative Offshore Wind Research into the Environment (COWRIE) (Blyth-Skyrme, 2010a);
- Developing guidance on fisheries Cumulative Impact Assessment for wind farm developers (Blyth-Skyrme, 2010b);
- Guidelines for data acquisition to support marine environmental assessments of offshore renewable energy projects. Contract report: ME5403 (Cefas, 2012);
- Guidelines for liaison with the fishing industry on the United Kingdom Continental Shelf (UKCS) – Issue 8 (Offshore Energies UK, 2023);
- Fishing and Submarine Cables - Working Together (International Cable Protection Committee, 2009);
- European Subsea Cables Association (ESCA) Guideline 01 and Appendices (ESCA, 2018);
- Fishing and Submarine Cables: Working Together (International Cable Protection Committee, Drew 2009);
- Recommendations for positive interactions between offshore wind farms and fisheries. European Innovation Council and Small and Medium-sized Enterprises Executive Agency (European Commission) (Dupont *et al.*, 2020).

7.4.3.2 While the MHPGC Project is not strictly categorised as part of the FLOWW group, the FLOWW guidance is considered relevant in this instance due to the type of infrastructure (cables and associated advisory safe passing distances), together with well established procedures in UK waters that have been developed through offshore wind farm development.

7.4.3.3 It is noted that updated FLOWW Best Practice Guidance has been recently published (27 November 2025). It updates the previous FLOWW guidance that was published in 2014 and supersedes the FLOWW Best Practice Guidance for Offshore Renewables Developments: Recommendations for Fisheries Disruption Settlements and Community Funds published in 2015.

7.4.3.4 It is also noted that as of September 2025, the SFF and its constituent fisheries associations have withdrawn from FLOWW and no longer endorse its guidance. It is understood that the intention is to develop Scottish-specific fisheries liaison guidance that better accounts for potential interactions between the fishing industry and floating Offshore Wind Farms. In the absence of any current alternative to FLOWW and recognising that UK OWF projects have, to date, adhered to FLOWW-derived guidance, the Applicant has sought to align its fisheries liaison procedures with the well-established procedures applied to date across existing projects.

7.4.4 Baseline Data Sources

Desk study

- 7.4.4.1 Information on commercial fisheries within the MHPGC Project Study Areas was collected through a detailed desktop review of existing studies and datasets. These are summarised in **Table 7.5** below.
- 7.4.4.2 Data has been sourced from ICES, the EU Data Collection Framework (DCF), the Marine Directorate National Marine Plan interactive (NMPI), the UK MMO, the European Maritime Safety Agency (EMSA), the SPFA and SFF.
- 7.4.4.3 Where data sources allow, a five to 10 year (or longer) trend analysis has been undertaken, using the most recent annual datasets available at the time of writing. The temporal extent of this period is dependent on each data source analysed (e.g. 2012 to 2016; 2016 to 2020 or 2012 to 2024).
- 7.4.4.4 Relevant literature from several sources has also been reviewed in the preparation of this report. A full list of references is provided at the end of this report. References are cited within the text where appropriate.
- 7.4.4.5 **Volume 2, Annex 7.1: Commercial Fisheries Technical Report, of the PEIR** includes further details of the analysis undertaken to develop the commercial fisheries baseline.

Table 7.5: Summary of key desktop reports used to characterise the commercial fisheries baseline

Title	Source	Extent	Year	Author
Landings statistics				
Landings statistics data for UK registered vessels, with data query attributes for: landing year; landing month; vessel length category; ICES rectangle; vessel/gear type; port of landing; species; live weight tonnes (t) and value (£).	MMO	UK waters	2012 to 2024	MMO, annual landings statistics publications
Landings statistics for EU registered vessels with data query attributes for: landing year; landing quarter; ICES rectangle; vessel length; gear type; species and landed weight (t).	EU DCF database	EU waters	2012 to 2016	EU DCF, 2023
Fisheries Dependent Information including landings and effort data for EU registered vessels, available by ICES division, provided by EU Member States in the context of the 2024 DCF Fisheries Dependent Information data call.	Scientific, Technical and Economic Committee for Fisheries (STECF)	North Atlantic	2013 to 2023	Gibin <i>et al.</i> , 2024
Catch App anonymised data, showing catch records for English and Welsh registered vessels of under 10m length, with data query attributes for year; return port; ICES rectangle; species and live weight (t).	MMO	UK waters	2022 to 2024	MMO, 2025a (unpublished; response to 2025 data request)
North Eastern IFCA shellfish catch return system data summary, identifying vessel numbers, numbers of pots hauled and landings of lobster and crab in ICES sub rectangles 38E8-7 and 38E8-8.	North Eastern IFCA	ICES rectangle 38E8	2023 and 2024	North Eastern IFCA (unpublished; response to 2025 data request)
Spatial data				
VMS data for UK registered vessels ≥ 15 m length. Note that UK vessels ≥ 12 m in length have VMS on board, however, to date, the MMO	MMO	UK waters	2016 to 2020	MMO, 2022a

Title	Source	Extent	Year	Author
provide amalgamated VMS datasets for $\geq 15\text{m}$ vessels only. VMS data sourced from MMO displays the first sales value (£) of catches.				
VMS data for EU registered vessels $\geq 12\text{m}$ length. VMS data sourced from ICES displays the surface Swept Area Ratio ¹ of catches by different gear types and covers EU (including UK) registered vessels 12m and over in length.	ICES	EU waters	2016 to 2020	ICES, 2022
Fishing vessel route density, based on vessel AIS positional data. AIS is required to be fitted on fishing vessels $\geq 15\text{m}$ length.	EMSA	EU waters	2023	EMSA, 2025
SPFA vessel plotter data.	SPFA	Provided direct to Applicant cropped to MHPGC Project PEIR Red Line Boundary	Long term data series	SPFA, 2024
SFF member vessel plotter data indicating location of fishing activity.	SFF	Provided direct to Applicant cropped to MHPGC Project PEIR Red Line Boundary	Long term data series	SFF, 2025 [Confidential]
Surveillance data indicating vessel nationality and gear type for actively fishing vessels.	MMO	UK waters	2018 to 2023	MMO, 2025b (unpublished; response to Applicant data request)
FiSMaDiM	Cefas	UK waters	2012 to 2021	Cefas, 2025
Morven North and Morven South marine traffic (AIS and radar) survey data	Anatec	Morven North and Morven South plus a 10nm buffer	2024	Anatec, 2024 and 2025

Site specific surveys

- 7.4.4.6 No site-specific surveys have been undertaken to inform the EIA for commercial fisheries. Baseline data sources have been validated via engagement with fisheries stakeholders and consideration has also been given to the results of site-specific marine traffic surveys that are described in **Volume 2, Chapter 8: Shipping and Navigation, of the PEIR**.

Data limitations and assumptions

- 7.4.4.7 Limitations of landings data include the spatial size of ICES rectangles, which can misrepresent actual activity across the MHPGC Project, and care is therefore required when interpreting the data.

¹ Surface Swept Area Ratio indicates the number of times in an annual period that a demersal fishing gear makes contact with (or sweeps) the seabed surface. Surface Swept Area Ratio provides a proxy for fishing intensity.

- 7.4.4.8 It is noted that all commercial landings by UK registered vessels are subject to the Registration of Buyers and Sellers (RBS) legislation and therefore landings by UK vessels of all lengths are recorded within the MMO Integrated Fisheries System Holding (iFish) database. Whilst it is recognised that there is no statutory requirement for owners of vessels 10m and under to declare their catches, registered buyers are legally required to provide sales notes of all commercially sold fish and shellfish due to the 2005 RBS of First Sale Fish Scheme (RBS legislation) (MMO, 2021). The RBS legislation is applicable to licenced fishing vessels of all lengths and requires name and Port Letters and Numbers (PLN) of the vessel which landed the fish to be recorded in relation to each purchase. For the 10m and under sector, landing statistics are recorded on sales notes provided by the registered buyers (MMO, 2021). Information that may not be formally recorded on the sales note, such as gear and fishing area, is added by coastal staff based on local knowledge of the vessels they administer. For example, from observations of the vessel during inspections at ports or from air and sea surveillance activities as well as discussions with the owner or operator of the vessel (MMO, 2021). There are occasions when fish are not subject to the RBS legislation and therefore are not represented within the MMO iFish landings database, for instance when purchases of first sale fish direct from a fishing vessel are wholly for private consumption, and less than 25 kilogrammes (kg) is bought per day.
- 7.4.4.9 Lack of recent landings statistics for EU (non-UK) fleets is also recognised as a data limitation; based on the most recent European Commission data call, more recent (from 2017 onwards) landings data is no longer available by ICES rectangle. Data at a scale of ICES division (the whole of the North Sea) is less useful to understand fishing activity specific to the area overlapping the MHPGC Project but has been used.
- 7.4.4.10 Limitations of VMS data are primarily focused on the coverage being limited to vessels $\geq 15\text{m}$ for MMO data. It is important to be aware that where mapped VMS data may appear to show inshore areas as having lower (or no) fishing activity compared with offshore areas, this is not necessarily the case, because VMS data does not include vessels typically operating in inshore areas (which typically comprises vessels $< 15\text{m}$ in length). To assist in mitigating the risk of under-representing smaller inshore vessels, site-specific marine traffic survey data, comprising information on vessel movements gathered by AIS and radar, has been analysed alongside VMS data.
- 7.4.4.11 Fishing vessel route density data from the EMSA is based on AIS data, representing activity for vessels with AIS ($\geq 15\text{m}$ in length). A limitation of AIS data is that it does not distinguish between steaming and actively fishing; nevertheless, it provides corroboration for key fishing grounds and insight into transit routes to alternative fishing grounds.
- 7.4.4.12 Data limitations have been managed by ensuring accurate interpretation of the data and clear understanding of its scope, together with cross-referencing between data sources and consultation with the fishing industry. As data forms only part of the evidence base, the limitations identified are not considered to significantly affect the certainty, or reliability, of the impact assessments in **Section 7.8**.

7.4.5 Overview of baseline environment

- 7.4.5.1 A summary of the commercial fisheries baseline environment is provided in the following sections. Further details of the analysis, including mapping of spatial data, undertaken to develop the commercial fisheries baseline is provided in **Volume 2, Annex 7.1: Commercial Fisheries Technical Report, of the PEIR**.

Overview of landings statistics

- 7.4.5.2 An overview of fisheries landings by UK registered fishing vessels recorded from the Local Commercial Fisheries Study Area is presented in this section. Equivalent detail for the Regional Commercial Fisheries Study Area is provided in **Volume 2, Annex 7.1: Commercial Fisheries Technical Report, of the PEIR** and not duplicated here.
- 7.4.5.3 Overall first-sale values across the 2012 to 2024 period from the Local Commercial Fisheries Study Area show a relatively stable but moderately fluctuating pattern, punctuated by a sharp peak in 2019 [see **Figure 7.2**]. Total first-sale value generally oscillated between approximately £15 to £20 million (annual average of £17.8 million) for most of the 13-year period. The marked spike in 2019 indicates

an anomalous year of elevated value associated with landings of Nephrops likely driven by favourable stock availability, strong market prices for higher-value species or a combination of both.

- 7.4.5.4 Landed weight, in contrast, exhibits a clear long-term downward trend, falling from around 9,000 to 10,000 tonnes (t) in 2012 to 2014 to approximately 4,000t by 2023 and 2024. The decline is progressive rather than abrupt. The divergence between relatively stable value and falling weight suggests a market shift towards higher-value species, stronger per-kilogram sales prices and/or a reduction in lower-value bulk landings.
- 7.4.5.5 The ICES rectangle-based distribution of first-sale values shows pronounced spatial variability [see **Figure 7.3**]. ICES rectangles 38E8 (English waters), 39E8 (English waters) and 40E8 (primarily English waters with some overlap into Scottish waters) emerge as the most economically significant areas, though landings values from them vary considerably year to year. Notably, 39E8 recorded very high values in 2014 and 2019, exceeding an annual landed value of £6 million in the peak years, demonstrating the importance of fishing activity in this ICES rectangle. Other rectangles show relatively more modest landings values.
- 7.4.5.6 Landed weights per ICES rectangle broadly mirror the value distribution but with additional distinctions, particularly where high-volume but lower-value catches dominate. For instance, substantial landings in 40E9 in 2019 highlight peak bulk catches of herring (*Clupea harengus*) that do not correspond proportionally to value trends. This disconnect between landed value and weight indicates the influence of species catch composition, for example, with large pelagic fish species landings not yielding high first sales values despite large tonnage.
- 7.4.5.7 The species-based first-sale value chart in **Figure 7.4** indicates Nephrops, lobsters (*H. gammarus*) and brown crab (*C. pagurus*) and king scallop (*P. maximus*) as key commercially targeted species in the Local Commercial Fisheries Study Area. Nephrops show consistently high annual first sales values, with an exceptional peak in 2019 exceeding £13 million. Average annual first sales values of Nephrops landings across a most recent five-year time series from 2020 to 2024 were £7.1 million. Equivalent values for lobsters were £5.3 million, for brown crab were £2.3 million and for king scallop were £756,000. Landed values of lobsters and brown crab have increased across the 2012 to 2024 period, largely reflecting growing market prices for these shellfish species. Landings of king scallop have declined across 2012 to 2023, though in looking at longer term landings statistics this may be expected and reflects long-established periodic cycles in king scallop fishing activity whereby particular grounds are heavily targeted and then less heavily targeted as stocks replenish. King scallop landings increase in 2024 further validating this anticipated cyclical pattern. Landings of demersal fish species including haddock (*Melanogrammus aeglefinus*) and whiting (*Merlangius merlangus*) historically made greater contributions to overall landings values from the Local Commercial Fisheries Study Area; since 2012 landings of these species have shown broad decline in landed value, though some increase is observed across 2022 and 2023. Landed values of pelagic fish species, namely herring, show notable variability across the 2012 to 2024 time series, reflecting the highly nomadic nature of pelagic fisheries that target fast-moving pelagic fish.
- 7.4.5.8 The species-level landed weight distribution provides additional insight into fishing behaviour. Nephrops dominate in terms of landed tonnage, reflecting the scale of this fishery. Substantial landings of brown crab, scallops and herring also appear in several years, though with notable fluctuations. The extremely high herring landings in 2014 likely indicate a single large landing event, demonstrating the episodic nature of some pelagic fisheries.
- 7.4.5.9 Landed value by gear type for the Local Commercial Fisheries Study Area is shown in **Figure 7.5**. The distribution of first-sale value by gear type highlights the dominance of demersal trawls and pots by fleets active in the Local Commercial Fisheries Study Area, with both gears generating consistently high landings values across the 2019 to 2024 period. Demersal trawls show the highest average value overall, reflecting the importance of Nephrops trawling in particular. In contrast, dredge fisheries and pelagic gears contribute relatively marginally to total landings values, with limited landings associated with other gear types.
- 7.4.5.10 Comparison of landings values attributed across UK home nations indicates that English and Scottish registered fishing vessels account for the vast majority of demersal trawl and potting values. Northern Irish vessels contribute more modestly overall. Landings data demonstrates the

relevance fisheries within the Local Commercial Fisheries Study Area to both English and Scottish fleets.

- 7.4.5.11 Vessel length data illustrate a clear distinction between typically smaller inshore potting vessels and larger demersal trawlers within the Local Commercial Fisheries Study Area, though also indicates the presence of smaller, under 15m length demersal trawlers.
- 7.4.5.12 Seasonal landings trends indicate distinct seasonal patterns associated with different fisheries. Demersal trawl landings peak in winter (January to March) and again in late autumn (October to November), reflecting a winter Nephrops fishery. Potting activity, in contrast, peaks in midsummer (July to August). Dredge landings remain fairly consistent year-round, though with a slight increase in spring.
- 7.4.5.13 English demersal trawlers active in the Local Commercial Fisheries Study Area land into ports including North Shields, Blyth, Amble and Hartlepool and Scottish demersal trawlers land into Peterhead, Eyemouth and Fraserburgh. Potting vessels make landings into Blyth, Amble, Burnmouth, Eyemouth, Seahouses and Holy Island. Dredge vessels make their landings into Peterhead.
- 7.4.5.14 In terms of non-UK fishing vessel activity, vessels registered in the Netherlands, Denmark, Belgium, France and Germany are active across the UK EEZ within ICES Division 4b. Large midwater and bottom trawl vessels from these nations target a variety of species, primarily pelagic and demersal fish.

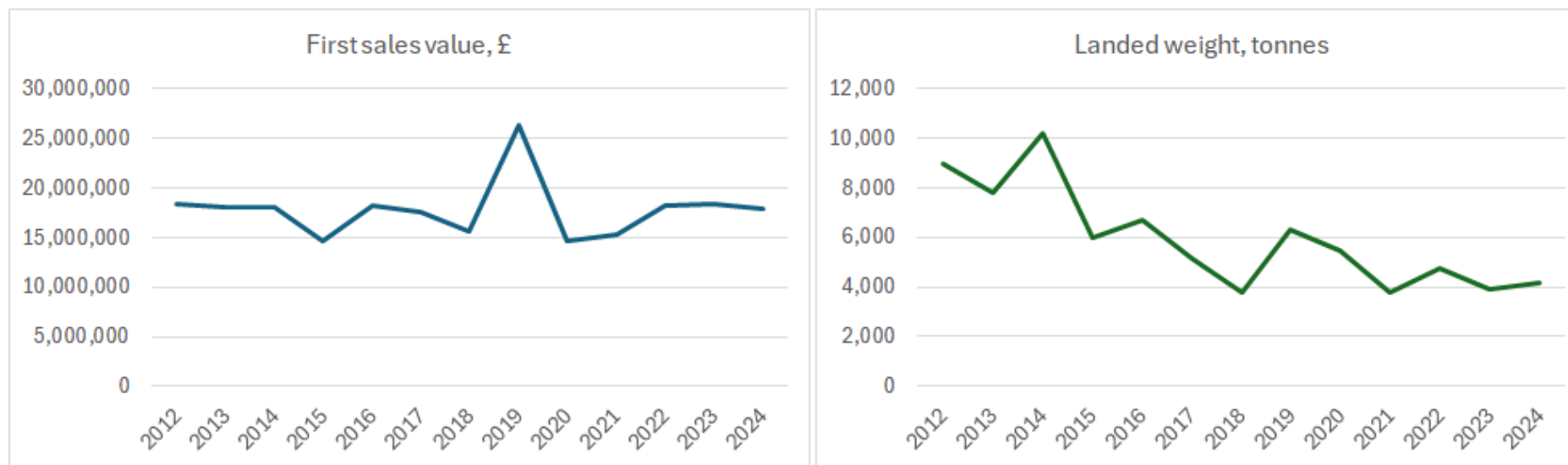


Figure 7.2: Annual first sales value and weight of landings by UK registered fishing vessels from the Local Commercial Fisheries Study Area between 2012 and 2024²

² (Source: MMO, 2013 to 2025)

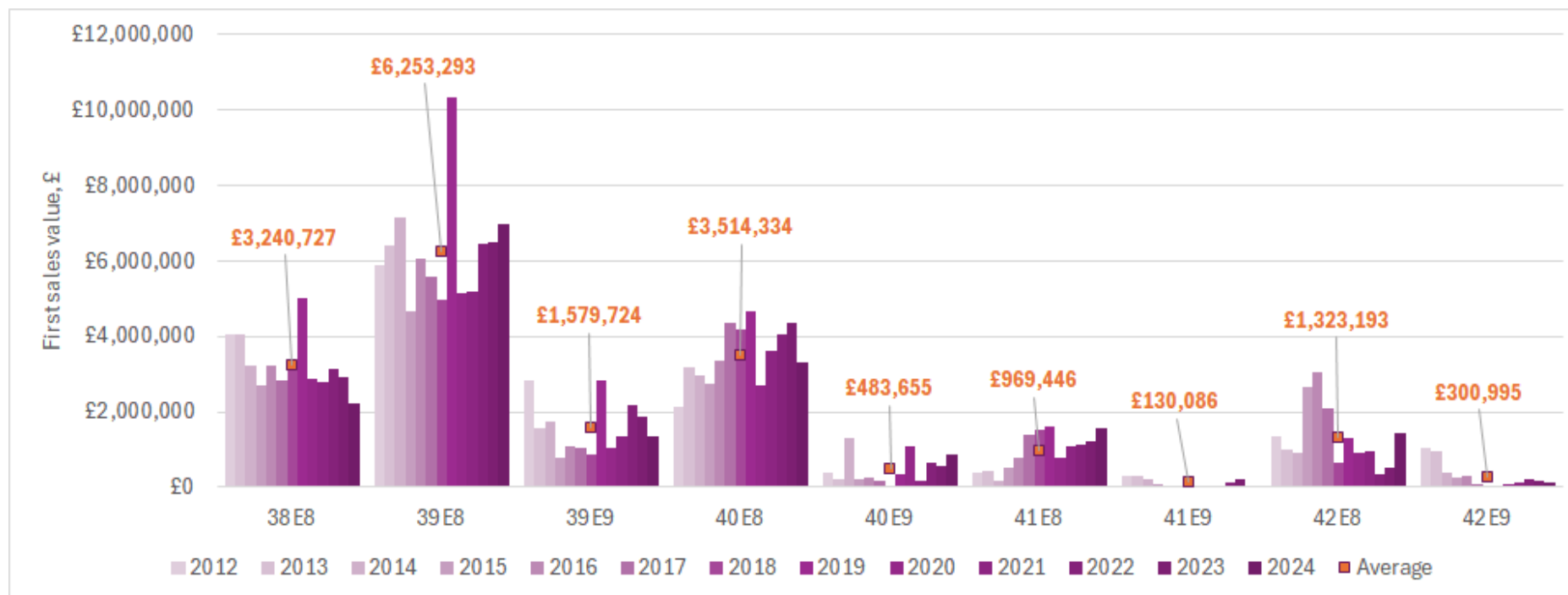


Figure 7.3: Annual first sales value (and average annual value in orange) of landings by UK registered fishing vessels from the Local Commercial Fisheries Study Area, by ICES rectangle, between 2012 and 2024²

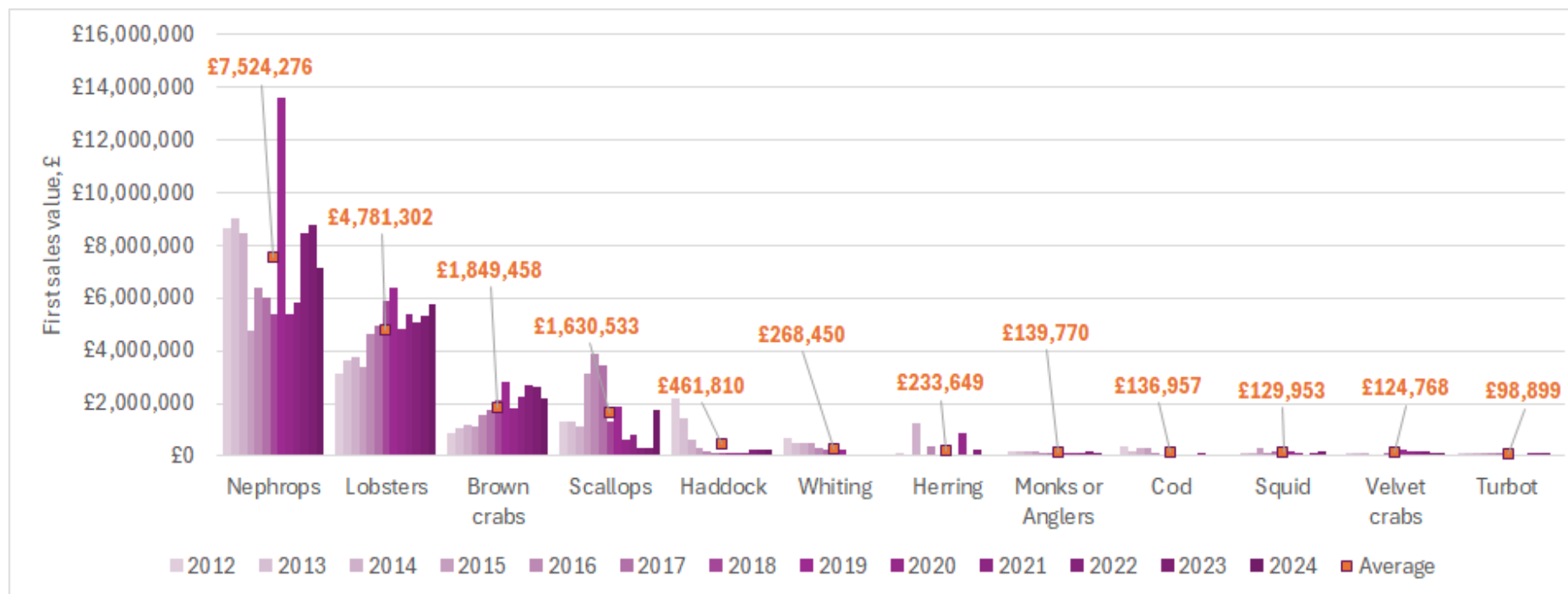


Figure 7.4: Key species by annual first sales value (2012 to 2024) (and average annual value in orange) from the Commercial Fisheries Local Study Area²

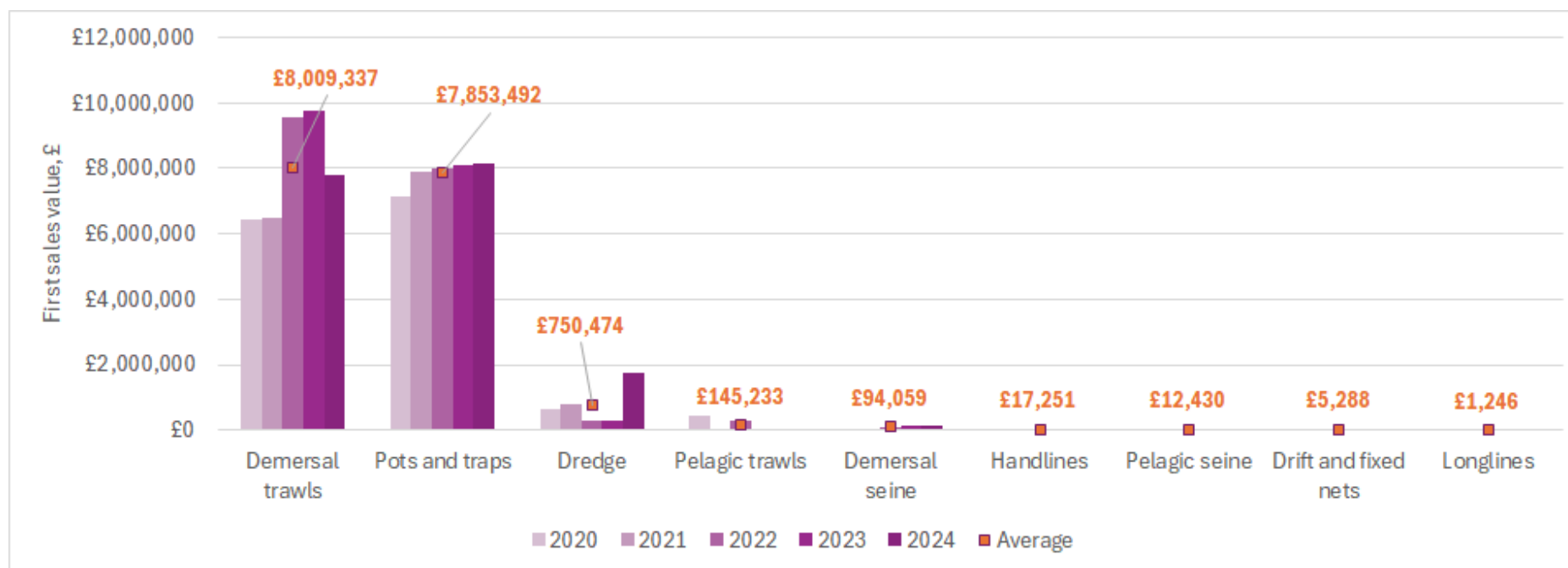


Figure 7.5: Annual and average first sales value of landings (2020 to 2024) by gear type from the Local Commercial Fisheries Study Area³

³ Source: MMO, 2013 to 2025 with data extracted covering 2020 to 2024

Fishing activity by gear type

Dredge fishery

- 7.4.5.15 Within the Local Commercial Fisheries Study Area, the scallop dredge fishery primarily operates in ICES rectangle 42E8, off the east coast of Scotland (67% of landings by value from the Local Commercial Fisheries Study Area). The scallop dredge fishery accounted for £750,000 first sales value landed annually on average from the Local Commercial Fisheries Study Area between 2020 and 2024. This value decreased over the period from 2020 (£625,000 landed value) to 2023 (£307,000 landed value) but increased notably in 2024 (£1.7 million).
- 7.4.5.16 Spatial data indicates that the scallop dredge fishery operates inshore of the MHPGC Project with limited scope for overlap with the offshore extent of the MHPGC Project PEIR Red Line Boundary up to MHWS.
- 7.4.5.17 Landings by scallop dredge vessels are made primarily into the Scottish ports of Peterhead, Fraserburgh and Aberdeen. Landings of lesser value are made in the English ports of Hartlepool and North Shields. Landings data indicates peak scallop landings across April to June, with lower levels of landings in winter months.

Demersal otter trawl fishery

- 7.4.5.18 Within the Local Commercial Fisheries Study Area demersal trawlers predominantly target Nephrops. The demersal trawl fishery also targets squid, and demersal whitefish such as haddock and monkfish.
- 7.4.5.19 The majority of landings are attributed to ICES rectangle 39E8 (the MHPGC Project PEIR Red Line Boundary overlaps the eastern edge of this rectangle) off the northeast coast of England (48% of landings by value from the Local Commercial Fisheries Study Area), and adjacent ICES rectangles 38E8 and 39E9. The demersal trawl fishery accounted for £8 million first sales value landed annually on average from the Local Commercial Fisheries Study Area between 2020 and 2024. Landings values attributed to demersal trawl have remained broadly consistent over the time period peaking in 2023 at £9.8 million.
- 7.4.5.20 Spatial data indicates low levels of demersal trawl activity within the MHPGC Project PEIR Red line Boundary in Scottish waters. Within English waters the MHPGC Project PEIR Red line Boundary overlaps the intensively fished and high value Farn Deep's Nephrops ground. Vessels targeting this spatially well-defined ground comprise a mix of small local boats and larger visiting vessels. The local fleet is dominated by under 10m length trawlers working single-rig gear, while fishing effort spikes have historically involved more powerful visiting twin-rig vessels from ports further afield, over 15m in length.
- 7.4.5.21 Landings data indicates a demersal fishery that is most active across winter months, peaking November through to March. Landings of Nephrops are primarily made into North Shields and Blyth. Landings are also made into Scottish ports including Eyemouth and Peterhead.

Potting fishery

- 7.4.5.22 Within the Local Commercial Fisheries Study Area, the potting fishery targeting lobster and brown crab primarily operates in ICES rectangle 40E8, off the Northumbrian coast (38% of landings by value from the Local Commercial Fisheries Study Area). The potting fishery accounted for £7.9 million first sales value landed annually on average from the Local Commercial Fisheries Study Area between 2020 and 2024. This value has remained relatively constant over the time period, displaying a gradual and slight increasing trend.
- 7.4.5.23 Spatial data indicates limited scope of overlap of potting activity with the MHPGC Project in Scottish waters, with activity focused across the nearshore portion of the MHPGC Project PEIR Red Line Boundary inside of the 12nm limit.
- 7.4.5.24 The potting fleet is comprised of vessels with a range of sizes and capabilities, some operating nearshore in historical coastal grounds and larger vessels targeting both inshore and offshore grounds. Landings by potting vessels are made primarily into the English ports of Seahouses, Holy Island, Blyth and Amble, and the border ports of Burnmouth and Eyemouth. Landings data indicates year-round potting activity with a relative peak in landings across late summer and autumn.

Demersal seine fishery

- 7.4.5.25 Within the Local Commercial Fisheries Study Area, the demersal seine fishery primarily operates in ICES rectangles 42E8 and 42E9 at the northernmost extent of the Local Commercial Fisheries Study Area in Scottish waters. It accounted for £94,000 first sales value landed annually on average from the Local Commercial Fisheries Study Area between 2020 and 2024. Landings values attributed to demersal seine have increased over the time period peaking in 2024 at £162,000.
- 7.4.5.26 The demersal seine fishery targets haddock and landings data indicates peaks in landed value in June and December. Almost all landings are made into Peterhead.
- 7.4.5.27 Spatial data indicates low levels of demersal seine in the Local Commercial Fisheries Study Area with limited potential for activity overlap with the MHPGC Project.

Pelagic trawl fishery

- 7.4.5.28 Within the Local Commercial Fisheries Study Area, the pelagic trawl fishery accounted for £145,000 first sales value landed annually on average between 2020 and 2024, with a peak in recorded landings in 2020 and no landings recorded in 2021 or 2024. The majority of landings are associated with ICES rectangle 40E9 with the fishery primarily targeting herring.
- 7.4.5.29 Spatial data indicates the presence of some pelagic trawl activity in the Local Commercial Fisheries Study Area. Data indicates limited potential for overlap with the MHPGC Project PEIR Red line Boundary, with activity located to the east and west. Landings are made into Dutch ports and Peterhead.

Commercial fisheries receptors

- 7.4.5.30 The key fishing fleets operating across the MHPGC Project Local and Regional Commercial Fisheries Study Areas are listed in **Table 7.6**.
- 7.4.5.31 In addition to **Table 7.6**, the commercial fisheries baseline is summarised by jurisdiction immediately below to support a clear understanding of how fishing activity may interact with the MHPGC Project across different regulatory contexts. It is recognised that commercial fishing fleets operate across both English and Scottish jurisdictions, and that fishing grounds in the North Sea are shared by vessels registered in the UK and other nations.

Summary of commercial fisheries activity in Scottish waters

- 7.4.5.32 Commercial fishing activity within Scottish waters relevant to the MHPGC Project, located substantially beyond the 12nm limit, is undertaken mainly by large Scottish-registered vessels, with additional activity by visiting English and other UK vessels. Fishing activity across the Regional and Local Commercial Fisheries Study Areas is dominated by mobile gear fisheries, including pelagic trawl, scallop dredge and demersal otter trawl and seine fleets. Spatial mapping indicates that very limited commercial fishing activity within Scottish waters overlaps the MHPGC Project PEIR Red Line Boundary, with the majority of fishing effort occurring outside the Project area and at a broader regional scale.

Summary of commercial fisheries activity in English waters

- 7.4.5.33 Commercial fishing activity within English waters relevant to the MHPGC Project comprises a combination of potting and demersal otter trawl activity. Inshore waters, particularly within 12nm, support potting fisheries targeting lobster and brown crab along the Northumberland and Durham coast. These fisheries are undertaken primarily by smaller English-registered vessels, many under 10 m in length, operating from ports including North Shields, Blyth, Amble, Seahouses and Hartlepool, and exhibit strong seasonal patterns with peak activity typically during summer and autumn months.
- 7.4.5.34 Further offshore, demersal otter trawl activity is a key component of commercial fishing within English waters, particularly over the southern portion of the MHPGC Project PEIR Red Line Boundary where it overlaps the Farn Deep Nephrops Functional Unit⁴. This activity is undertaken by a mix of

⁴ A Functional Unit in this context is a defined geographical management area used by ICES for the assessment and management of Nephrops populations, typically representing a distinct stock associated with a specific muddy sediment habitat.

English-registered vessels and larger visiting vessels, including Scottish-registered trawlers, targeting Nephrops, and is most intensive during autumn and winter months. Spatial mapping confirms a clear overlap between the MHPGC Project PEIR Red Line Boundary within English waters and established, commercially important Nephrops trawling grounds and inshore potting grounds.

Table 7.6: Summary of fishing fleets active in the study areas, and identified as commercial fisheries receptors

Fishing Fleet	MHPGC Project PEIR Red Line Boundary	Local and Regional Commercial Fisheries Study Areas
Dredge fishery	Limited dredge activity.	- Dredge activity evident and focused inshore and to the northwest of the MHPGC Project PEIR Red Line Boundary in Scottish waters and to the south of the MHPGC Project in English waters. - Primarily Scottish, and some English-registered vessels, mostly over 15m length, targeting king scallop.
Demersal otter trawl fishery	- Very high levels of activity overlapping southern portion of MHPGC Project PEIR Red Line Boundary in English waters, associated with Farn Deep's Nephrops fishing ground. - Negligible activity across remainder of MHPGC Project PEIR Red Line Boundary.	- High levels of demersal trawl activity in distinct Nephrops grounds in both Scottish and English waters. - Primarily English and Scottish, and some Northern Irish-registered vessels targeting Nephrops and to a lesser extent haddock and other whitefish species: - English fleet comprising under and over 15m length vessels; - Scottish fleet comprising over 15m length vessels; - Northern Irish fleet comprising over 15m length vessels.
Potting fishery	- High levels of activity overlapping the southern portion of the MHPGC Project PEIR Red Line Boundary in English waters, primarily inside of the 12nm limit. - Negligible activity across remainder of the MHPGC Project PEIR Red Line Boundary.	- Potting activity evident throughout inshore waters, with notable grounds to the southeast of the MHPGC Project PEIR Red Line Boundary in English waters. - English and some Scottish registered vessels, mostly under 15m length, targeting lobster, brown crab and velvet crab.
Demersal seine fishery	No demersal seine activity occurring with any regularity.	- Low levels of demersal seine activity, focused to the north of the MHPGC Project PEIR Red Line Boundary in Scottish waters. - Primarily Scottish registered vessels, over 15m length, targeting haddock.
Pelagic trawl fishery	Limited, sporadic pelagic trawl activity across the southern portion of the MHPGC Project PEIR Red Line Boundary.	- Low levels of pelagic trawl activity, focused in discrete areas to the north and east of the MHPGC Project PEIR Red Line Boundary in both Scottish and English waters. - Primarily Scottish vessels, over 40m length, targeting herring. - Occasional presence of non-UK pelagic trawlers from France, Denmark, the Netherlands, Germany.

7.4.6 Future baseline conditions

- 7.4.6.1 During the 35 year operational lifetime of the MHPGC Project, the commercial fisheries baseline can be expected to evolve both on a natural basis and in response to global trends such as climate change and other anthropogenic activities. The Infrastructure Planning (EIA) Regulations 2017, the Marine Works (Environmental Impact Assessment) Regulations 2007 and the Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017 require that "an outline of the likely evolution thereof without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge" is included. Therefore, an assessment of future baseline conditions, in the absence of the MHPGC Project, has been undertaken and is described within this section.
- 7.4.6.2 Commercial fisheries patterns change and fluctuate based on a range of natural and management-controlled factors. These factors include the following:
- Offshore development: Response to existing offshore developments, including offshore wind farm projects;
 - Market demand: commercial fishing fleets respond to market demand, which is impacted by a range of factors, such as changes in consumer preferences and international trade policies, and including the 2020 to 2021 COVID-19 pandemic, which disrupted the seafood supply chain with, for example, lockdowns and restaurant closures;
 - Market prices: commercial fishing fleets respond to market prices by focusing effort on higher value target species when prices are high;
 - Stock abundance: fluctuation in the biomass of individual species stocks in response to the status of the stock, recruitment, natural disturbances (e.g. due to storms), climate change, and changes in fishing pressure etc;
 - Fisheries management: including new management for specific species where overexploitation has been identified, or changes in Total Allowable Catches (TACs) leading to the relocation of effort, or an overall increase/decrease of effort and catches from specific areas;
 - Environmental management: including the potential restriction of certain fisheries within protected areas. Consultation with fisheries stakeholders indicated potential for increased use of 'lighter' fishing gear in the future, such as seine nets, in response to perceived impacts of trawling;
 - Improved efficiency and gear technology: with fishing fleets constantly evolving to reduce operational costs (e.g. by moving from beam trawl to demersal seine to respond to increasing fuel costs); and
 - Sustainability: with seafood buyers more frequently requesting certification of the sustainability of fish and shellfish products, such as the Marine Stewardship Council certification, industry is adapting to improve fisheries management and wider environmental impacts.
- 7.4.6.3 A recent example of how fisheries management can change the baseline relates to sandeel (*Ammodytidae*); the sandeel fishery has significantly reduced in the UK EEZ over the past five years, with very low quotas relevant for this area (i.e. sandeel area 4). It is noted that the UK Government has prohibited UK vessels from catching sandeel from the North Sea from the period 2021 to 2023. As of 2024, catching sandeel from the North Sea has been prohibited for all UK and non-UK vessels in the UK EEZ⁵.
- 7.4.6.4 Another example of changing fishery's patterns relates to the recent prohibition of scallop dredging in the Dogger Bank Special Area of Conservation (SAC). Many of the UK scallop vessels that operate outside 12nm will target areas throughout the UK, including central North Sea, English Channel, Irish

⁵ In Scottish waters this is imposed via The Sandeel (Prohibition of Fishing) (Scotland) Order 2024; in English waters this is applied via Government-imposed closure / quota withdrawal rather than via a statutory instrument.

Sea and West of Scotland. Restrictions on fisheries due to environmental management can displace the activity and also lead to higher reliance on existing grounds.

- 7.4.6.5 The variations and trends in commercial fisheries activity are an important aspect of the baseline assessment and forms the principal reason for considering up to five years of key baseline data. Given the time periods assessed, the future baseline scenario would typically be reflected within the current baseline assessment undertaken. However, in this case, existing baseline data do not capture any potential changes in commercial fisheries activity resulting from the withdrawal of the UK from the EU.
- 7.4.6.6 Following withdrawal, the UK and the EU have agreed to a Trade and Cooperation Agreement (TCA), applicable on a provisional basis from 01 January 2021. The TCA sets out fisheries rights and confirms that from 01 January 2021, and during a transition period until 30 June 2026, UK and EU vessels will continue to access respective EEZs (12nm to 200nm) to fish. In this period, EU vessels will also be able to fish in specified parts of UK waters between 6nm to 12nm.
- 7.4.6.7 Twenty five percent of the EU's fisheries quota in UK waters will be transferred to the UK over the five-year transition period; most of this quota has already been transferred and distributed across the four nations of the UK. After the five-year transition there will be annual discussions on fisheries opportunities. Across the Regional Commercial Fisheries Study Area, where UK fisheries primarily target non-quota shellfish species, it is expected that fleets are unlikely to be impacted by quota transfers. It is possible that UK vessels will seek to exploit additional quota species opportunities, but vessels would need to access quota holdings.
- 7.4.6.8 In May 2025, the UK and EU reached a new agreement extending reciprocal fishing access until 30 June 2038. This 12-year extension maintains the status quo, allowing EU vessels continued access to UK waters, including the 6nm to 12nm zone, based on historical catch data from 2012 to 2016. The initial 25% quota transfer from the EU to the UK, as stipulated in the TCA, is still set to complete by 30 June 2026. While the new agreement extends access rights, it is expected that annual negotiations on specific quotas and fishing opportunities will continue, similar to the current framework.
- 7.4.6.9 Market changes have the potential to impact fishing activity in the Regional Commercial Fisheries Study Area; some of the catch landed by UK vessels is exported to EU markets (e.g. brown crab) and potential tariff/non-tariff barriers could affect which species are targeted and to what extent.
- 7.4.6.10 In relation to the effects of the COVID-19 pandemic, MMO annual reporting notes that the effects of the pandemic on the UK fishing industry were felt from March 2020. The MMO UK Sea Fisheries Statistics 2021 report observes that an increase in overall UK landings quantity and value in 2021 (relative to 2020) largely reflected recovery from the COVID-19 pandemic period and additional quota available to the UK fleet after leaving the EU (MMO, 2022b).
- 7.4.6.11 Commercial fisheries receptors (i.e. relevant fishing fleets) could theoretically be impacted by climate change over the lifetime of the MHPGC Project. Increased sea temperature/change in pH levels have the potential to affect the distribution of commercially targeted fish and shellfish stocks in the Regional Local Commercial Fisheries Study Areas. Scientific research to date indicates the following for key commercially targeted species (Núñez-Riboni *et.al.*, 2019; OSPAR, 2023; European Environment Agency, 2024; Sailley *et.al.*, 2025; and Garrett and Pinnegar, 2022):
- Of relevance to the Nephrops fishery, most shellfish are sedentary but have a high tolerance to changes in temperature. Some warming in this part of the North Sea is unlikely to significantly impact this target species;
 - Any evidence around scallops and how changes in temperature will impact upon them is varied and not conclusive;
 - For white fish fisheries, such as those targeting haddock, climate change could have a large impact via warming sea, in turn reducing the area within the North Sea that is suitable for these fish species. This could cause fish to migrate further north, making areas of the northern North Sea more important as a fishery.
- 7.4.6.12 Changes in the distribution of target species may in turn affect commercial fishing activity in the Regional and Local Commercial Fisheries Study Areas over the long term; for example, altering fishing methods, targeted grounds and seasonal patterns in activity.

- 7.4.6.13 An increase in storm events may also directly impact fishing activity in the Regional and Local Commercial Fisheries Study Areas, with changes with seasonal fishing patterns in response to changes in weather and periods of safe fishing conditions.

7.5 Impact assessment methodology

7.5.1 Overview

- 7.5.1.1 **Volume 1, Chapter 4: Approach to Environmental Impact Assessment, of the PEIR** sets out the overarching approach that has been used in developing the preliminary environmental information. This section describes the technical methods used to determine the sensitivity of the receptors and magnitude of effects and sets out the significance criteria that have been used for the preliminary commercial fisheries assessment.
- 7.5.1.2 The approach for determining the significance of effects is a two-stage process that involves defining the magnitude of the potential impacts and the sensitivity of the receptors. The methodologies for assessing sensitivity, magnitude and significance for commercial fisheries are described below.

7.5.2 Receptor sensitivity

- 7.5.2.1 When defining sensitivity, reference has been made to the criteria levels set out in **Volume 1, Chapter 4: Approach to Environmental Impact Assessment, of the PEIR**. To determine sensitivity of the receptor, the vulnerability of the receptor to the specific impact and its ability to recover and adapt were also considered [see **Table 7.7**].

Table 7.7: Definition of terms relating to the sensitivity of the receptor

Sensitivity	Description	Example indicators
Very High	Receptor is very highly vulnerable to impacts that may arise from the MHPGC Project and recoverability is long term or not possible. And/or: No alternative fishing grounds are available.	- Area represents only fishing ground. - Gear types/location highly specific with no feasible alternatives. - Full economic dependency on affected activity. - Permanent loss anticipated.
High	Receptor is highly vulnerable to impacts that may arise from the MHPGC Project and recoverability is long term or not possible. And/or: Low levels of alternative fishing grounds are available, or fishing fleet has limited operational range.	- Area represents core or primary fishing ground. - Gear types/location highly specific with no feasible alternatives. - Economic dependency on affected activity. - Long-term or permanent loss anticipated.
Medium	Receptor is somewhat vulnerable to impacts that may arise from the MHPGC Project and has moderate levels of recoverability. And/or: Moderate levels of alternative fishing grounds are available, or fishing fleet has moderate operational range.	- Affected grounds represent an important component of seasonal fishing activity and income. - Some difficulty relocating effort without displacement or loss. - Limited spatial mobility or operational constraints (e.g. gear type, vessel size).

Sensitivity	Description	Example indicators
Low	Receptor is not generally vulnerable to impacts that may arise from the MHPGC Project or has high recoverability. And/or: High levels of alternative fishing grounds are available, or fishing fleet has large to extensive operational range; fishing fleet is adaptive and resilient to change.	- Area represents a small portion of fleet activity. - Similar grounds are accessible within normal operational range. - Flexible gear use or target species.
Negligible	Receptor is not vulnerable to impacts that may arise from the MHPGC Project or has high recoverability. And/or: Extensive alternative fishing grounds available or fishing fleet is highly adaptive and resilient to change.	- No reliance on affected grounds. - Vessel(s) operate across multiple regions or grounds. - Impacts are spatially or temporally insignificant to operations.

7.5.2.2 Vulnerability is the susceptibility of a receptor to experience the impact of a change in baseline conditions:

- For example, very high vulnerability relates to a very high sensitivity: receptor cannot adapt, avoid or tolerate the impact;
- For example, very low vulnerability relates to a negligible sensitivity: receptor is highly likely to recover fully to levels not detectable against baseline.

7.5.2.3 Recoverability is a measure of how well a receptor recovers following exposure to an effect:

- For example, very low recoverability relates to a very high sensitivity: receptor does not have the ability to recover, or recovery is long term (e.g. greater than 12 years);
- For example, very high recoverability relates to a negligible sensitivity: receptor is highly likely to recover fully to levels not detectable against baseline.

7.5.3 Magnitude of impact

7.5.3.1 The magnitude of an impact that could affect commercial fisheries is influenced by several key factors, including the scale of the change, the spatial extent the impact is likely to occur and the duration and frequency of the impact. When defining the magnitude of the impact, criteria detailed in **Volume 1, Chapter 4: Approach to Environmental Impact Assessment, of the PEIR** has been followed [see **Table 7.8**].

Table 7.8: Definition of terms relating to the magnitude of an impact

Magnitude of impact	Definition	Example indicators
High (Adverse)	Impact is expected to result in one or more of the following: - Substantial loss of target fish or shellfish biological resource (e.g. loss of substantial proportion of resource within the MHPGC Project PEIR Red Line Boundary); - Substantial loss of ability to carry on fishing activities (e.g. substantial proportion of effort within the MHPGC Project PEIR Red Line Boundary).	- Affected area represents core or critical fishing ground. - High dependence confirmed through data and consultation. - Long-term or permanent reduction in fishing activity anticipated. - No viable alternative grounds within normal fleet operating range.

Magnitude of impact	Definition	Example indicators
	And/or: Impact is of long-term duration (e.g. greater than 12 years duration) or is of extended physical extent.	
Medium (Adverse)	Impact is expected to result in one or more of the following: - Partial loss of target fish or shellfish biological resource (e.g. moderate loss of resource within the MHPGC Project PEIR Red Line Boundary); - Partial loss of ability to carry on fishing activities (e.g. moderate reduction of fishing effort within the MHPGC Project PEIR Red Line Boundary). And/or: Impact is of medium-term duration (e.g. less than 12 years) or is of moderate physical extent.	- Affected grounds represent an important component of seasonal or annual income. - Evidence of displacement pressures (e.g., competition, increased pressure on grounds, gear conflict). - Consultation indicates moderate reliance or operational challenge in adapting to impact presence.
Low (Adverse)	Impact is expected to result in one or more of the following: - Minor loss of target fish or shellfish biological resource (e.g. minor loss of resource within the MHPGC Project PEIR Red Line Boundary); - Minor loss of ability to carry on fishing activities (e.g. minor reduction of fishing effort within the MHPGC Project PEIR Red Line Boundary). And/or: Impact is of short-term duration (e.g. less than two years) or is of limited physical extent. The short-term time period is based on professional judgement and is not definitive dependent on the nature of the impact.	- Affected grounds contribute to a small portion of annual fishing activity. - Consultation indicates low economic or operational dependence. - Displacement or resource loss can be offset within normal fleet operating range.
Negligible	Impact is expected to result in one or more of the following: - Slight loss of target fish or shellfish biological resource (e.g. slight loss of resource within the MHPGC Project); - Slight loss of ability to carry on fishing activities (e.g. slight loss of fishing effort within the MHPGC Project). And/or: Impact is of very short-term duration (e.g. less than one year) or physical extent of impact is negligible and broadly undetectable from pre-development baseline conditions.	- Very low or no fishing activity recorded. - Industry consultation confirms negligible operational reliance. - Any effect is short-lived and easily absorbed.

7.5.3.2 EIA regulations and guidelines recognise the importance of defining the duration of impacts, through terms like 'long term', 'medium term', and 'short term' and these durations can vary based on context and sector, such as in commercial fisheries. While there is no universally standardised definition of these terms, general guidelines can inform their appropriate use. For context, the EU EIA Directive (2011/92/EU) and related regulations focus more on assessing the significance of impacts rather than rigidly defining timeframes, but they emphasise the need for a comprehensive analysis of impacts over different temporal scales. Similarly, the International Energy Agency and UK EIA guidelines recommend considering the temporal relevance of impacts in relation to a project's lifecycle.

7.5.3.3 In relation to commercial fisheries, the following timeframes are considered appropriate to the MHPGC Project:

- Short term:
 - These are typically impacts that last for a relatively brief period, often in the range of one to two years;
 - Short-term impacts generally refer to temporary changes that are expected to reverse quickly once the disturbance has ceased. This timeframe is consistent with the natural recovery cycles of many environmental systems.
- Medium term:
 - Medium-term impacts are often those expected to last several years but not beyond 10 to 12 years;
 - The recovery or restoration of affected systems might take this amount of time, especially when it comes to ecosystems or species that require longer periods to recover or regenerate.
- Long term:
 - Long-term impacts typically extend beyond 12 years and could be permanent or only partially reversible within the human timescale;
 - Long-term impacts could involve major habitat changes, loss of biodiversity, or irreversible degradation of fisheries resources, which may take decades or longer to recover, if they recover at all.

7.5.4 Significance of effect

7.5.4.1 The significance of the effect upon commercial fisheries is determined by correlating the magnitude of the impact and the sensitivity of the receptor (i.e. fishing fleet). The method employed for this assessment is presented in **Table 7.9**.

7.5.4.2 In cases where a range is suggested for the significance of effect, there remains the possibility that this may span the significance threshold (i.e. the range is given as minor to moderate). In such cases the final significance is based upon the expert's professional judgement as to which outcome delineates the most likely effect, with an explanation as to why this is the case.

7.5.4.3 For the purposes of this assessment [see **Table 7.10** also]:

- A level of effect of moderate or more will be considered a 'significant' effect in terms of the EIA Regulations;
- A level of effect of minor or less will be considered 'not significant' in terms of the EIA Regulations.

7.5.4.4 Following the classification of an effect using this methodology, a clear statement will then be made as to whether that effect is significant or not significant. Major and moderate effects are considered to be significant, whilst minor and negligible effects are considered to be not significant. However, professional judgement will also be applied in reaching conclusions as to the significance of effects. Typical definitions for the classification of effects are shown in **Table 7.10**.

Table 7.9: Matrix used for the assessment of the significance of the effect

Sensitivity of receptor	Magnitude of impact			
	Negligible	Low	Medium	High
Negligible	Negligible	Negligible or minor	Negligible or minor	Minor
Low	Negligible or minor	Negligible or minor	Minor	Minor or moderate
Medium	Negligible or minor	Minor	Moderate	Moderate or major

Sensitivity of receptor	Magnitude of impact			
	Negligible	Low	Medium	High
High	Minor	Minor or moderate	Moderate or major	Major
Very high	Minor	Moderate or major	Major	Major

Table 7.10: Significance definitions

Significance classification	Definition	Significant effect
Major	A large and detrimental change to a valuable/sensitive receptor, likely exceeding an accepted threshold. A large and beneficial change, resulting in enhancements in baseline conditions, transitioning from previously poor conditions to new legal compliance, or making a major contribution to national goals These effects may represent key factors in the decision-making process. Potentially associated with sites and features of national importance or likely to be important considerations at a regional scale. Major effects may relate to features that are unique and irreplaceable.	Significant
Moderate	A medium scale change that, although not beyond an accepted threshold, is still considered to be generally unacceptable, unless offset by significant positive benefits of the project. If adverse, these effects are likely to be important at a regional or local scale and on their own could influence on decision making. A positive moderate effect is a medium scale change that improves baseline conditions sufficiently to contribute to guideline targets.	Significant
Minor	A minor adverse change that remains within legal and planning policy limits. A minor positive change that is unlikely to significantly impact the overall balance of considerations. These effects might be raised as local issues and could be relevant to the detailed design of a project, but they are unlikely to be critical in the decision-making process.	Not significant
Negligible	A very small change that is so inconsequential it can be considered acceptable to disregard. These effects fall below perceptible limits, lie within normal variations, or fall within the margin of forecasting error. They are unlikely to influence decision-making.	Not significant

7.5.5 Assumptions and limitations of the assessment

- 7.5.5.1 Limitations associated with the data used to inform the description of the baseline environment are fully described in **Volume 2, Annex 7.1: Commercial Fisheries Technical Report, of the PEIR** and summarised in **Section 7.4.4** above. These limitations have been managed by ensuring accurate interpretation of the data and clear understanding of its scope, together with cross-referencing between data sources and engagement with the fishing industry. As data form only part of the evidence base, the limitations identified are not considered to significantly affect the certainty or reliability of the impact assessments in **Section 7.8**.
- 7.5.5.2 The MHPGC Project is in development, and the final design of the project is not yet defined (as is standard practice within the industry for projects at this stage of development). To manage this uncertainty and allow a robust impact assessment to be undertaken, the assessment presented in this chapter is based on a maximum design scenario for the MHPGC Project as set out in **Table 7.12**. Through adoption of this maximum (or 'realistic worst-case') scenario, there is confidence that the maximum potential adverse impact has been assessed, and as a result impacts of greater adverse

significance would not arise should any other development scenario to that assessed within this chapter be taken forward in the final scheme design.

7.6 Key parameters for assessment

7.6.1 Scope of the assessment

7.6.1.1 The approach to assessment was presented in the MHPGC Project Scoping Report and has been refined in consultation with relevant statutory and non-statutory consultees as detailed in **Section 7.3** and through the MHPGC Project Scoping Opinions received from the PINS (2025) and MD-LOT (2025).

7.6.1.2 **Table 7.11** summarises the impacts considered as part of the assessment. No impacts have been scoped out of the commercial fisheries assessment.

Table 7.11: Impacts scoped into the assessment

Potential impact	Phase			Potential effects scoped into the assessment
	C	O&M	D	
Loss or restricted access to fishing grounds	✓	✓	✓	The physical presence of infrastructure and any restrictions on fishing activity (e.g. presence of advisory safe passing distances) associated with the construction, O&M, and decommissioning of MHPGC Project have the potential to lead to the loss or restricted access to fishing grounds.
Displacement of fishing activity to other areas	✓	✓	✓	The physical presence of MHPGC Project infrastructure and any restrictions on fishing activity (e.g. presence of advisory safe passing distances) during construction, O&M, and decommissioning have the potential to displace fishing activity from affected areas to alternative fishing grounds.
Interference with fishing activity	✓	✓	✓	The presence of vessels engaged in MHPGC Project construction, O&M and decommissioning activities, together with associated offshore works, has the potential to interfere with normal fishing operations.
Increased steaming distances and times	✓	✓	✓	The physical presence of MHPGC Project infrastructure and any restrictions on fishing activity (e.g. presence of advisory safe passing distances) during construction, O&M and decommissioning may result in increased steaming distances and times for fishing vessels accessing alternative fishing grounds.
Snagging risk – loss or damage to fishing gear	✓	✓	✓	The physical presence of MHPGC Project infrastructure, including any components located on or above the seabed during construction, O&M and decommissioning, has the potential to increase the risk of snagging, resulting in the loss of or damage to fishing gear.
Impacts on commercially exploited species	✓	✓	✓	Construction, O&M and decommissioning of MHPGC Project infrastructure may result in disturbance to commercially exploited fish and shellfish species. Potential effects on fish and shellfish ecology are assessed in Volume 2, Chapter 4: Fish and Shellfish Ecology, of the PEIR , with the implications of such effects for commercial fishing activity assessed within this chapter.

C= Construction, O&M = Operations and maintenance and D= Decommissioning phases

7.6.2 Maximum design scenario

- 7.6.2.1 The maximum design scenario (MDS) for each impact identified in **Section 7.6.1** has been selected as those having the potential to result in the greatest effect on an identified receptor or receptor group. The MDS presented in **Table 7.12**, have been selected from the parameters provided in **Volume 1, Chapter 2: Project Description, of the PEIR** and methodology outlined in **Volume 1, Chapter 4: Approach to Environmental Impact Assessment, of the PEIR**.

Table 7.12: MDS relevant for the assessment of potential impacts on commercial fisheries

Impact	Maximum Design Scenario	Explanation
Note: The cable length measurements are for the maximum distance between the OSP)and trenchless drill exit pit unless otherwise stated. For clarity one trench length is as follows: - OSP to exit pit – up to 324.67km; - OSP to MHWS – up to 326.00km; - Scottish waters (OSP– Scottish-English Offshore Waters Boundary)– up to 98km; - English waters (English offshore waters boundary – exit pit) – up to 226.67km; - English waters (English offshore waters boundary – MHWS) – up to 228.00km.		
Construction		
Loss or restricted access to fishing grounds	Installation of up to four offshore cables (two conductors and two fibre optic) in up to two trenches within a corridor of maximum width 1km Construction duration: up to four years, commencing with seabed preparation Advisory safe passing distances around cable installation vessels: 500m Sandwave clearance: - Sandwave clearance activities undertaken using MFE over an approximate four month duration; - Sediment disturbance rate is 1000kg/s; - Surface width of up to 28m per trench and base width of up to 20m per trench; <u>Per trench = 1,484,000m²</u> - Scottish waters: 31km length × 28m width = 868,000m² - English waters: 22km length × 28m width = 616,000m² <u>Total (up to two trenches) = 2,968,000m²</u> - Scottish waters: 1,736,000m²	The MDS is defined by the maximum spatial extent of seabed disturbance from cable installation, route preparation, sandwave clearance and landfall works. Landfall works and vessel interactions are defined by the maximum footprint of exit pits, floatation pits, anchor spreads and jack-up activities. The MDS is inherently precautionary, assuming all maximum parameters occur concurrently with no reduction for overlapping disturbance footprints. Site preparation: - Sandwave clearance activities may be undertaken using a range of techniques (plough and MFE), over an approximate four-month duration in both Scottish and English waters. Releases via both are modelled; - A conservative MFE near-bed sediment release rate of 1000 kg/s conservatively estimated based on the MDS trench cross section dimensions, the speed of progress of the tool and the bulk density of the local sediment type;

Impact	Maximum Design Scenario	Explanation
	- English waters: 1,232,000m² Cable installation (trenching): Installation via trenching of up to 324.67km of cable, with a trench width of up to 2.1m and a depth of up to 3m; Trenching rate is 400m/hr. <u>Per trench = 2,045,421m³</u> - Scottish waters: 98 km length × 2.1m width × 3m depth = 617,400m² - English waters: 226.67km length × 2.1m width × 3m depth = 1,428,021m² <u>Total (up to two trenches) = 4,090,842m³</u> - Scottish waters: 1,234,800m³ - English waters: 2,856,042m³ Trenchless techniques (landfall) (English waters): Up to four boreholes. Trenchless installation via Horizontal Directional Drilling (HDD), (conduit diameter of 1.6m, conduit length of 2,000m). Drilling fluid discharge up to 180m³ each and up to 1,083m³ total. Trenchless drill punchout will be up to approximately 1660m offshore of MHWS in water depths up to 20m LAT. Up to four exit pits (140m long × 50m wide × 5m deep). Area up to 7,000 m² each; 28,000m² total. Volume up to 18,667m³ each; 74,668m³ total. Up to two floatation pits (240m long × 55m wide × 5m deep). Area up to 13,200m² each; 26,400m² total. Volume up to 39,167m³ each; 78,334m³ total. Cable burial and protection: Minimum cable burial depth = 0.5m Cable protection material types = Concrete Mattresses / Rock Bags; Rock Installation; Cable Protection Systems (CPS).	- Dredge spoil release is simulated as an instantaneous release at the water surface. 10% of 11,000m³ is assumed to form the passive phase of the plume; - Other seabed preparation such as sandwave clearance plough, boulder clearance and PLGR may be used but do not represent the MDS in terms of potential increases in suspended sediment concentrations (SSC) and associated deposition. Cable installation: - Trenching may be carried out by mechanical cutting, jet trenching, ploughing or CFE. Jet trenching is anticipated to generate the highest SSC and has therefore been assumed as the MDS; - Suspension of 100% of material from the trench cross section will give the MDS for sediment disturbance; - Conservatively assumes 100% fluidisation of material expelled from a U-shaped trench. In reality trenching will move a proportion of material rather than bringing it fully into suspension; - Offshore export cable corridor trenching modelling assumes sediment release along the whole offshore export cable corridor; - Cable routes cross a variety of seabed materials, and burial depth may be up to 3m in some areas. The assessment therefore considers this upper bound to define the MDS in terms of sediment disturbance; - Trenching rate will be up to 400m/hr. Trenchless techniques (landfall): - HDD represents the maximum MDS for sediment disturbance due to the potential for drilling fluid release (frac-out); - The MDS for sediment disturbance by trenchless installation is given by applying a conservative Bentonite concentration of 100 kg/m³ in drilling mud, the volume of spoil released is equal to the maximum volume of the bore;

Impact	Maximum Design Scenario	Explanation
	Protection dimensions below are based on deployment of rock berms. Maximum cable protection height = 2m Maximum cable protection width = 14m Maximum cable protection length per trench = 35,070m Total maximum cable protection for up to two trenches = 70,140m Cable crossings: Up to 16 cable crossings, utilising concrete mattresses or rock berms. Crossing dimensions below are based on deployment of rock berms. Maximum crossing height = 2m Maximum crossing width = 18m Maximum crossing length = 200m Maximum seabed area per crossing = 3,600m² Maximum seabed area for 16 crossings = 57,600m²	- Other stages of drilling (pilot hole drilling and stages of reaming) may result in smaller release events separated in time. But the MDS is considered as a release of drilling mud from a single conduit; - Two drills could be operational at one time; however, the timing of drilling will be staggered meaning there will not be an occasion where punch-out occurs simultaneously (or within 6 hours of each other); - Trenchless drill punchout will be up to approximately 1,660 m offshore of MHWS in water depths up to -20m LAT.
Displacement of fishing activity to other areas	As defined for 'Loss or restricted access to fishing grounds'; see above.	The MDS represents the maximum duration and extent of fishing exclusion throughout the construction phase and, hence, the greatest potential to lead to displacement of fishing effort.
Interference with fishing activity	Construction duration: up to four years Offshore vessel activity: Up to 550 return trips by installation vessels, including some vessels with Restricted Ability to Manoeuvre (RAM). A maximum of 33 vessels on site at any one time. Landfall vessel activity: Up to 250 return trips by installation vessels, including RAM vessels. A maximum of 14 vessels on site at any one time.	The MDS represents the maximum level of construction vessel activity and therefore the greatest potential for interference with fishing activity.
Increased steaming distances and times	As defined for 'Loss or restricted access to fishing grounds'; see above.	The MDS represents the maximum duration and extent of fishing exclusion throughout the construction phase and, hence, the

Impact	Maximum Design Scenario	Explanation
		greatest potential for additional steaming to alternative fishing grounds.
Snagging risk – loss or damage to fishing gear	As defined for 'Loss or restricted access to fishing grounds'; see above.	The MDS represents the maximum extent of offshore infrastructure and construction activity and therefore the greatest potential for gear snagging to occur.
Impacts on commercially exploited species	As described in Volume 2, Chapter 4: Fish and Shellfish Ecology of the PEIR .	The MDS presented in Volume 2, Chapter 4: Fish and Shellfish Ecology, of the PEIR represents the maximum potential disturbance to commercially targeted fish and shellfish species and therefore the greatest potential consequential effect on commercial fisheries.
Operation and Maintenance		
Loss or restricted access to fishing grounds	Maintenance of up to two operational HVDC cables (with up to two fibre optic cables) and any associated cable protection Operational life: 35 years Advisory safe passing distances around major maintenance vessels: 500m. Cable surveys: Up to five surveys per year to inspect cable and protection status Cable repairs (English and Scottish waters): Up to 41 export cable repairs, each with a length of up to 2km and a 20m width. Up to 40,000m² of temporary disturbance each; 1,640,000m² total; Up to 4% of the cable route length, up to 13km, may require remediation per year. Remediation may occur in different locations and for varying lengths but it is anticipated that up to 13km of export cable length per year per trench will require remediation with a maximum width of 20m. Up to 522,240m² of temporary disturbance per year; total 18,278,400m².	The MDS represents the maximum duration and extent of fishing exclusion throughout the O&M phase and hence the greatest potential to restrict access to fishing grounds. Given the burial of the cables, it is assumed that fishing will resume throughout the O&M phase, with exception of within any advisory safe passing distance areas around major maintenance activities and in areas of cable protection. Cable repairs (English and Scottish waters): - The greatest foreseeable number of cable reburial and repair events is considered to be the MDS for sediment dispersion; - The majority of cable repairs are anticipated to be c.500-1000m. The MDS utilises the area of disturbance by repair which provides a highly conservative area; - The repair of cables may be undertaken using similar techniques to those employed during installation, therefore the potential increases in SSC and deposition would be in-line with the construction phase.

Impact	Maximum Design Scenario	Explanation
Displacement of fishing activity to other areas	As defined for 'Loss or restricted access to fishing grounds'; see above.	The MDS represents the maximum duration and extent of fishing exclusion throughout the O&M phase and, hence, the greatest potential to lead to displacement of fishing effort.
Interference with fishing activity	O&M: Operational lifespan of 35 years. Up to 5 geophysical surveys proposed per year. Geophysical equipment as detailed in the construction phase MDS. Vessel activity: Routine inspection (no remediation/repair) constitutes survey activity (survey vessel) up to 2 surveys per year per trench; duration 2 weeks per survey; 3 return trips per survey; 2 vessel maximum at 1 time per survey. Per year for 2 trenches: Surveys – 4 Return trip – $4 \times 3 = 12$ Total vessels at time – 2 Routine inspection (no remediation/repair) constitutes survey activity (USV) up to 2 surveys per year per trench; duration 6 weeks per survey; 110 return trips (up to 4 USV + 1 guard vessels with port call every 4 days) (55 per survey = 110); up to 4 USV + 1 guard vessel = 5 max at 1 time per survey. Per year for 2 trenches: Surveys – 4 Return trips – $4 \times 55 = 220$ Total vessels at time – 5 Remediation (up to 13.056km per year per trench, in different locations along route) Vessels on site for remediation activities, for up to two trenches: Up to four operation and maintenance vessels on site at any one time, comprising a combination of construction support vessel (CSV) and/or Service Operation Vessels (SOV) and/or guard	The MDS represents the maximum level of O&M vessel activity and therefore the greatest potential for interference with fishing activity.

Impact	Maximum Design Scenario	Explanation
	vessel and/or rock dump vessels and/or Crew Transfer Vessels (CTVs)/workboats. Vessel movements (remediation), for up to two trenches: Up to 62 operation and maintenance vessel movements (return trips) each year, consisting of CSV or SOV and/or guard vessel and/or rock dump vessels and/or CTVs/workboats. Repair (41 lifetime repairs, for up to two trenches) Vessels on site for REPAIR activities, for up to two trenches: Up to four operation and maintenance vessels on site at any one time, comprising a combination of CLV and/or barge and/or Barge Handlers/Tugs and/or Jack-Up and/or CSV and/or CTV and/or Rock dump. Vessel movements (repair), for up to two trenches: Up to 245 operation and maintenance vessel movements (return trips) over the operational lifetime (35 years) consisting of CLV and/or barge and/or Jack-Up and/or Barge Handlers/Tugs and/or CSV and/or CTV and/or Rock dump.	
Increased steaming distances and times	As defined for 'Loss or restricted access to fishing grounds'; see above.	The MDS represents the maximum duration and extent of fishing exclusion throughout the O&M phase and, hence, the greatest potential for additional steaming to alternative fishing grounds.
Snagging risk – loss or damage to fishing gear	As defined for 'Loss or restricted access to fishing grounds'; see above.	The MDS represents the maximum extent of offshore infrastructure and therefore the greatest potential for gear snagging to occur.
Impacts on commercially exploited species	As described in Volume 2, Chapter 4: Fish and Shellfish Ecology of the PEIR.	The MDS presented in Volume 2, Chapter 4: Fish and Shellfish Ecology of the PEIR represents the maximum potential disturbance to commercially targeted fish and shellfish species and therefore the greatest potential consequential effect on commercial fisheries.
Decommissioning		
Loss or restricted access to fishing grounds	Decommissioning of subsea cables and any associated cable protection	

Impact	Maximum Design Scenario	Explanation
Displacement of fishing activity to other areas	The approach to decommissioning will be defined and be subject to an EIA at the (future) time of decommissioning, in line with and subject to prevailing decommissioning and EIA requirements. Current assumptions are that cables will be removed where possible and appropriate to do so, while cable protection measures would preferentially be left in situ, although removal has been assessed as the MDS. For the purposes of this MDS, total removal of all offshore infrastructure, including buried cables and cable protection, has been assumed. On this basis, the environmental impacts associated with decommissioning are anticipated to be similar to, or lower than, those associated with construction.	
Interference with fishing activity		
Increased steaming distances and times		
Snagging risk – loss or damage to fishing gear		
Impacts on commercially exploited species	As described in Volume 2, Chapter 4: Fish and Shellfish Ecology of the PEIR.	The MDS presented in Volume 2, Chapter 4: Fish and Shellfish Ecology of the PEIR represents the maximum potential disturbance to commercially targeted fish and shellfish species and therefore the greatest potential consequential effect on commercial fisheries.

7.7 Commitments adopted as part of the MHPGC Project

- 7.7.1.1 As set out in **Volume 1, Chapter 4: Approach to Environmental Impact Assessment, of the PEIR** and **Volume 1, Annex 4.1: Draft Commitments Register, of the PEIR**, several measures have been adopted as part of the MHPGC Project to reduce the potential for impacts on commercial fisheries.
- 7.7.1.2 Embedded mitigation includes the following measures as identified in the Institute of Environmental Management and Assessment (IEMA) (now known as the Institute of Sustainability and Environmental Professionals (ISEP)) Guide to Shaping Quality Development (IEMA, 2015):
- Primary mitigation - measures included as part of the project design. IEMA describes these as “modifications to the location or design of the development made during the pre-application phase that are an inherent part of the project and do not require additional action to be taken”. This includes modifications arising through the iterative design process. These measures will be secured through the consent itself through the description of the project and the parameters secured in the DCO and marine licence, or both;
 - Tertiary mitigation - IEMA describes these as “actions that would occur with or without input from the EIA feeding into the design process. These include actions that will be undertaken to meet other existing legislative requirements, or actions that are considered to be standard practices used to manage commonly occurring environmental effects”.
- 7.7.1.3 Embedded mitigation measures that will form part of the final design (and are established legislative requirements/good practice, or both) have been taken into account as part of the initial assessment presented in **Section 7.8** (i.e., the initial determination of impact magnitude and significance of effects assumes implementation of these measures). This ensures that the measures that the Applicant is committed to are considered in the assessment of effects.
- 7.7.1.4 Where an assessment identifies likely significant adverse effects, secondary mitigation measures may be applied. These are measures that could further prevent, reduce and, where possible, offset these effects. They are defined by IEMA as “actions that will require further activity to achieve the anticipated outcome” and may be imposed as part of the planning consent, or through inclusion in the ES. These include measures required to reduce the significance of environmental effects and may be secured through an environmental management plan. For secondary mitigation measures both pre-mitigation and residual effects are presented.
- 7.7.1.5 The measures relevant to commercial fisheries are outlined in **Table 7.13**. As there is a secured commitment to implementing these measures, they are considered inherently part of the design of the MHPGC Project and have therefore been considered in the assessment presented in **Section 7.8**.

Table 7.13: Embedded commitments relevant to commercial fisheries implemented as part of the MHPGC Project

Commitment number	Measure adopted	How the measure will be secured
CoT04 / MM-004	Advance warning will be provided via NtMs to ensure that the appropriate authorities are informed of offshore construction, operation and maintenance, and decommissioning activities. Copies of all notices must be provided to the MMO, MCA and UKHO as well as other interested parties, as appropriate. Early notification will allow appropriate marking of all installed infrastructure on UKHO Admiralty/nautical charts.	Proposed to be secured as a requirement of the DCO and Scottish Marine Licence(s).
CoT06 / MM-006	An Outline Offshore Environmental Management Plan (OEMP) will be prepared and submitted with the application for development consent, and as part of the marine licence application(s) to the Scottish Ministers. A Detailed OEMP will be developed substantially in accordance with the Outline OEMP and submitted and approved by the MMO and MD-LOT. The Outline Offshore EMP will include: • An Outline Marine Biosecurity Plan; • An Outline Marine Pollution Contingency Plan; • An Outline Marine Mammal Mitigation Protocol; • An Outline Vessel Traffic Management Plan; • An Outline Navigational Safety Plan; • A chemical risk assessment that includes information such as how chemicals will be used, stored, and transported, in line with recognised best-practice guidance; • A dropped-object protocol will be established to cover the reporting and recovery of any items lost overboard that could endanger other sea users; • A Marine Emergency Action Card outlining the steps to be followed in the case of a marine emergency; • Provisions for the handling and disposal of waste.	Proposed to be secured as a requirement of the DCO and Scottish Marine Licence(s).
CoT07 / MM-007	An Outline Offshore Operations and Maintenance Plan will be prepared and submitted as part of the application for development consent and as part of the marine licence application(s) to the Scottish Ministers. A Detailed Offshore Operations and Maintenance Plan will be produced prior to entering the operation and maintenance phase.	Proposed to be secured as a requirement of the DCO and Scottish Marine Licence(s).
CoT08 / MM-010	An Outline Offshore Cable Specification and Installation Plan (CSIP) will be prepared and submitted with the application for development consent and as part of the marine licence application(s) to the Scottish Ministers. It will include cable burial to be the preferred option for cable protection, where practicable. A Detailed CSIP will be developed prior to construction that will be substantially in accordance with the Outline CSIP. The Outline CSIP will include (but is not limited to): • a Cable Burial Risk Assessment (CBRA), which will define burial depths and safeguards, based on seabed conditions and external aggression and climate change hazards, to keep	Proposed to be secured as a requirement of the DCO and Scottish Marine Licence(s).

Commitment number	Measure adopted	How the measure will be secured
	the offshore export cables protected and compliant through all project phases while upholding navigational and environmental safety; the implementation, management and monitoring of cable protection; details on the development of the cable installation and protection design within the Farn Deep's Nephrops ground, which will seek to maximise cable burial and minimise the requirement for external cable protection, where technically feasible, taking account of cable stability, integrity and other engineering requirements.	
CoT14 / MM-022	An Offshore Construction Method Statement (CMS) will be prepared and approved by the MMO prior to the commencement of construction.	Proposed to be secured as a requirement of the DCO and Scottish Marine Licence(s).
CoT19 / MM-032	Ongoing liaison with the fishing industry through the appointment of a Company Fisheries Liaison Officer(s) (CFLO)(s) and adherence to good practice guidance with regards to fisheries liaison (e.g. FLOWW [2025] guidance for English Waters).	Proposed to be secured as a requirement of the DCO and Scottish Marine Licence(s).
CoT20 / MM-033	An Outline Fisheries Liaison and Coexistence Plan (FLCP) will be produced in relation to English Waters and will be submitted with the application for development consent. It will include details of the measures which are proposed to be implemented to reduce impacts on commercial fishing, the approach to monitoring fisheries activity and the approach to fisheries liaison and procedures to manage interactions between the MHPGC Project and the fishing industry. A Detailed FLCP will be developed post-consent substantially in accordance with the Outline FLCP.	Proposed to be secured as a requirement of the DCO.
CoT28 / MM-076	An Outline Navigational Safety Plan will form part of the Outline OEMP, which will be prepared and submitted with the application for development consent and as part of the marine licence application(s) to the Scottish Ministers. It will detail measures to ensure compliance with international marine regulations in addition to outlining safe passing distances requested by MHPGC Project vessels, and the use of guard vessels. A Detailed Navigational Safety Plan will be developed in accordance with the outline plan.	Proposed to be secured as a requirement of the DCO and Scottish Marine Licence(s).
CoT30 / MM-078	An Outline Vessel Traffic Management Plan (VTMP) will form part of the Outline OEMP, which will be prepared and submitted with the application for development consent and as part of the marine licence application(s) to the Scottish Ministers. A Detailed VTMP will be developed pre-construction substantially in accordance with the Outline VTMP, and in line with the relevant legislation, guidance and industry best practice. The Detailed VTMP will: - Detail vessel routing to and from construction areas and ports to avoid areas of high risk, including liaison with the Port of Seaham; - Include vessel standards and a code of conduct for vessel operators in compliance with international marine regulations as adopted by the Flag State, including the Convention on the International Regulations for Preventing Collisions at Sea (COLREGs) (International Maritime Organization (IMO), 1972/77) and the International Convention for the Safety of Life at Sea (SOLAS) (IMO, 1974);	Proposed to be secured as a requirement of the DCO and Scottish Marine Licence(s).

Commitment number	Measure adopted	How the measure will be secured
	- Detail measures to reduce disturbance to marine mammal receptors from transiting vessels, such as slow transit through the MHPGC Project and other measures as detailed in the Outline Marine Mammal Mitigation Protocol; - Detail measures to reduce disturbance to red throated diver from transiting vessels, such as slow transit through the MHPGC Project and other measures as detailed in the Red Throated Diver Protocol;	
CoT31 / MM-085	MHPGC Project vessels will display appropriate marks and lights at all times, and broadcast their navigational status on AIS, particularly when Restricted in Ability to Manoeuvre (RAM).	Proposed to be secured as a requirement of the DCO and Scottish Marine Licence(s).
CoT32 / MM-086	An Advisory Safety Statement to define advisory safe passing distance and use of guard vessels, will be submitted as part of the application for development consent.	Proposed to be secured as a requirement of the DCO and Scottish Marine Licence(s).
CoT44	An Offshore Decommissioning Programme will be developed and submitted to the MMO and MD-LOT prior to the commencement of any offshore construction. It will be in line with the latest relevant legislation and available guidance at the time of production, as far as reasonably practicable.	Proposed to be secured as a requirement of the DCO and Scottish Marine Licence(s).
CoT55	A draft Fisheries Management and Mitigation Coexistence Plan (FMMCP) will be produced in relation to Scottish Waters and submitted as part of the marine licence application(s) to the Scottish Ministers. The draft FMMCP will detail measures which are proposed to be implemented to reduce impacts on commercial fishing, the approach to monitoring fisheries activity and the approach to fisheries liaison and procedures to manage interactions between the MHPGC Project and the fishing industry in Scottish Waters. Updates to the FMMCP will be developed post-consent in accordance with the draft FMMCP if required.	Proposed to be secured as a requirement of the Scottish Marine Licence(s).

7.8 Assessment of impacts

7.8.1 Overview

- 7.8.1.1 This section includes the assessment of the impacts to commercial fisheries arising from the construction, O&M and decommissioning phases of the MHPGC Project. A summary of the effects is presented in **Table 7.22**.

7.8.2 Construction phase

Loss or restricted access to fishing grounds

- 7.8.2.1 During the construction phase, this impact relates to the *temporary* loss or *temporary* restricted access to fishing grounds due to construction activities related to the installation of the offshore export cable, inclusive of seabed preparation. Fishing activity will be locally and temporarily excluded at the location of construction owing to the presence of construction vessels, construction operations and the need to observe the COLREGS 1972.
- 7.8.2.2 The construction scenario assumes a maximum construction period of four years. However, construction activities are unlikely to occur across the entire offshore export cable corridor simultaneously. Installation activity at any one section of the offshore export cable corridor would therefore be expected to be of substantially shorter duration than the overall construction period. An advisory safe passing distance of 500 m will be applied from the central point of active construction or maintenance works to discourage vessels from passing close to sensitive activities within the offshore export cable corridor such as the laying of cable. This would create a roaming advisory area of approximately 0.79 km² around the active works. Target burial depth will be informed by CBRA (see **Volume 2, Annex 8.2: Cable Burial Risk Assessment, of the PEIR**) with target burial depth of the offshore export cable of between 0.5m and 3m (with cable protection installed only where necessary, along no more than 10.7% of the cable route).
- 7.8.2.3 The loss of, or restricted access to fishing grounds created by exclusion zones will be gradual as construction progresses. Temporary restrictions to fishing activity and/or anchoring, will also be required in areas where full cable burial to target depth has not yet been achieved and/or surface-laid cable exists (prior to burial or cover by external cable protection).
- 7.8.2.4 Embedded mitigation relevant to this impact is set out in **Table 7.13**. This includes the preparation of an Outline FLCP for English waters (CoT20 / MM-033) and a draft FMMCP for Scottish waters (CoT55). The Plans will set out measures to reduce impacts on commercial fishing, the approach to monitoring and fisheries liaison, and procedures for managing interactions between the MHPGC Project and the fishing industry. These embedded commitments have been taken into account in the assessment of loss or restricted access to fishing grounds presented below.

During the construction phase, this impact is considered temporary because it is only applicable throughout the duration of the construction phase. Long-term loss of access is considered for the O&M phase in **Section 7.8.3. Receptor sensitivity**

Dredge fishery

- 7.8.2.5 Spatial analysis shows that scallop dredge activity occurs predominantly inshore of the MHPGC Project, with limited scope for spatial overlap with the MHPGC Project PEIR Red Line Boundary [see **Figure 4.50 in Volume 2, Annex 7.1: Commercial Fisheries Technical Report, of the PEIR**]. The fleet operates over broad spatial areas, landing into a range of Scottish and English ports, and demonstrates a degree of operational flexibility, with alternative grounds available within normal operating ranges. Overall, the scallop dredge fishery is characterised by low vulnerability to potential impacts arising from the MHPGC Project, high recoverability due to fleet mobility and availability of alternative grounds, and low to medium value within the affected area. The scallop dredge fishery is therefore assessed as a receptor of **low** sensitivity.

Demersal otter trawl fishery (Nephrops)

- 7.8.2.6 The demersal otter trawl fishery within the Local Commercial Fisheries Study Area and in both Scottish and English waters is dominated by vessels targeting Nephrops, with additional targeting

of squid and demersal whitefish such as haddock and monkfish. Landings are strongly concentrated within ICES rectangle 39E8 off the northeast coast of England (the MHPGC Project PEIR Red Line Boundary is located within its eastern extent), which represents an intensively fished and high-value Nephrops ground, with adjacent rectangles also contributing materially to landings. The fishery accounts for substantial annual first sales value and has remained consistently important over the assessment period. Spatial data indicate low levels of demersal trawl activity within the MHPGC Project in Scottish waters, but clear spatial overlap in English waters, particularly within the Farn Deep Nephrops ground. This ground is spatially well defined and supports a mix of smaller local vessels and larger visiting vessels, with limited scope for displacement without increased competition or loss of efficiency. The habitat-specific nature of the fishery, high economic dependency on specific grounds and limited availability of equivalent alternative grounds constrain recoverability. The demersal otter trawl (Nephrops) fishery is therefore assessed as a receptor of **high** sensitivity.

Demersal otter trawl fishery (haddock and whitefish)

- 7.8.2.7 The demersal otter trawl fishery targeting haddock and other demersal whitefish operates across a broad spatial area including the Local Commercial Fisheries Study Area in both Scottish and English waters. This component of the demersal trawl fleet is characterised by a higher degree of spatial mobility and operational flexibility compared to Nephrops-targeting vessels, with the ability to adapt fishing locations in response to short-term spatial constraints. Spatial data indicate limited reliance on the area intersected by the MHPGC Project PEIR Red Line Boundary, which does not represent a core fishing ground for haddock or other demersal whitefish. Overall, this fishery exhibits low vulnerability to spatially localised impacts, high recoverability due to the availability of alternative grounds within normal operating ranges, and medium economic value at the scale of the Local Commercial Fisheries Study Area. The demersal otter trawl fishery targeting haddock and other demersal whitefish is therefore assessed as a receptor of **low** sensitivity.

Potting fishery

- 7.8.2.8 The brown crab and lobster potting fleet operating off the northeast coast of England is characterised by reliance on specific inshore grounds. The inshore section of MHPGC Project PEIR Red Line Boundary overlaps with potting areas, which are expected to contribute materially to the economic viability of the fleet. Opportunities to relocate pots are constrained to some degree by territorial behaviour and limited availability of alternative grounds, particularly for smaller vessels with restricted operating ranges. The UK potting fleet is deemed to be of medium vulnerability, medium recoverability and medium to high value. The potting fleet is therefore assessed as a receptor of **medium** sensitivity.

Demersal seine fishery

- 7.8.2.9 The demersal seine fishery within the Local Commercial Fisheries Study Area is a relatively small component of overall fishing activity, primarily operating in ICES rectangles 42E8 and 42E9 at the northern extent of the Local Commercial Fisheries Study Area in Scottish waters. The fishery targets haddock, with landings made almost exclusively into Peterhead. Spatial data indicate low levels of activity within the Local Commercial Fisheries Study Area and limited potential for overlap with the MHPGC Project PEIR Red Line Boundary. The fleet operates over broader grounds and exhibits flexibility in spatial distribution, reducing vulnerability to localised disturbance. The demersal seine fishery is characterised by low vulnerability, high recoverability due to the availability of alternative grounds, and relatively low economic value within the affected area. The demersal seine fishery is therefore assessed as a receptor of **low** sensitivity.

Pelagic trawl fishery

- 7.8.2.10 The pelagic trawl fishery operating within the Local Commercial Fisheries Study Area represents a comparatively minor component of fishing activity, targeting herring and accounting for relatively low annual first sales value. Activity is primarily associated with ICES rectangle 40E9 in English waters, with landings made into Peterhead and ports outside the UK. Spatial data indicate the presence of pelagic trawl activity within the Local Commercial Fisheries Study Area; however, potential for overlap with the MHPGC Project is limited, with activity generally occurring to the east and west of the MHPGC Project PEIR Red Line Boundary. As a mid-water fishery, pelagic trawling does not rely on seabed interaction and exhibits an extensive operational range in targeting highly mobile shoaling fish. The pelagic trawl fishery is characterised by low vulnerability, high

recoverability, and low economic value in relation to the MHPGC Project. The pelagic trawl fishery is therefore assessed as a receptor of **low** sensitivity.

Magnitude of impact

7.8.2.11 Dredge fishery

- 7.8.2.12 During the construction phase, impacts on the scallop dredge fishery would arise primarily from temporary exclusion associated with the 500m advisory safety distance around installation vessels. However, spatial data indicate that scallop dredge activity occurs predominantly inshore of the MHPGC Project, with limited scope for overlap with the MHPGC Project PEIR Red Line Boundary. While construction activities would extend up to a four-year period, individual works at any given location would be short-term and spatially constrained, and the affected seabed represents a small proportion of the scallop grounds used by the fleet. The potential impact is predicted to be of local spatial extent, temporary with a short-term duration, and high reversibility. It is predicted that the potential impact will affect the receptor directly. On this basis, potential construction impacts on the scallop dredge fishery are assessed as **low adverse** magnitude.

Demersal otter trawl fishery (Nephrops)

- 7.8.2.13 Construction of the MHPGC Project has the potential to affect the demersal otter trawl fishery targeting Nephrops through temporary loss of access within advisory safety distances and direct seabed disturbance associated with seabed preparation (including sandwave clearance, boulder clearance and pre-lay grapnel runs), offshore export cable installation and localised cable protection and crossings, where required. Within English waters, the MHPGC Project PEIR Red Line Boundary overlaps the intensively fished and high-value Farn Deep Nephrops ground, where construction activities would occur intermittently over the up to four-year construction period. Sandwave clearance could disturb seabed areas of up to approximately 1.2km² in English waters and 1.7km² in Scottish waters, while cable installation would involve trenching with a maximum trench width of 2.1m. Current preliminary engineering assessment [see **Volume 2, Annex 7.2: Seabed Condition and Cable Installation / Protection Considerations, of the PEIR**] indicates that standard cable installation techniques, including trenching, are considered applicable through the low and extremely low-strength clay sections of the offshore export cable route, including within the Farn Deep Nephrops ground. Seabed rock placement is not currently expected within the low-strength clay sections, while detailed design may identify a requirement for localised rock placement for cable stability within sections of extremely low-strength clay; this is currently considered a low-probability scenario. Four cable crossings are also located within the intensively fished Farn Deep Nephrops ground. These represent discrete locations where localised cable protection may be required, subject to detailed design. The Outline CSIP [CoT08 / MM-010] will also include details on the development of the cable installation and protection design within the Farn Deep Nephrops ground, which will seek to maximise cable burial and minimise the requirement for external cable protection, where technically feasible. The associated disturbance would be temporary and spatially progressive as construction advances along the offshore export cable corridor. The Outline FLCP for English waters (CoT20 / MM-033) and draft FMMCP for Scottish waters (CoT55) will further present measures to reduce impacts on commercial fishing, the approach to monitoring and fisheries liaison, and procedures for managing interactions between the MHPGC Project and the fishing industry.
- 7.8.2.14 Although individual construction activities are temporary and linear in nature, their location within a spatially discrete and highly relied-upon fishing ground is expected to result in a partial loss of fishing opportunity. The potential impact is predicted to be of local spatial extent, temporary with a medium-term duration due to phased works, and medium reversibility. It is therefore predicted that the potential impact will affect the receptor directly. Potential construction impacts on the demersal otter trawl (Nephrops) fishery are therefore assessed as **medium adverse** magnitude.

Demersal otter trawl fishery (haddock and whitefish)

- 7.8.2.15 The demersal otter trawl fishery targeting haddock and other demersal whitefish operates across a wider spatial area within the Local Commercial Fisheries Study Area and beyond. Limited overlap of the MHPGC Project PEIR Red Line Boundary with this fishery is expected. During construction, potential impacts would be limited to temporary avoidance of areas around cable installation vessels due to advisory safety distances and localised seabed disturbance associated with trenching and sandwave clearance. Given the low level of spatial interaction, the temporary nature of construction activities, and the availability of alternative fishing grounds within the normal operating range of this

whitefish fleet, any loss of access or displacement would be minor and readily absorbed without measurable effects on fishing activity or landings. The potential impact is predicted to be of local spatial extent, temporary with a short-term duration, and high reversibility. It is predicted that the potential impact will affect the receptor directly. Potential construction impacts on the demersal otter trawl fishery targeting haddock and demersal whitefish are therefore assessed as **low adverse** magnitude.

Potting fishery

- 7.8.2.16 The UK potting fleet operating in the vicinity of the MHPGC Project PEIR Red Line Boundary is comprised of smaller inshore vessels (mainly under 15m length) targeting inshore grounds and larger vessels targeting offshore grounds. Whilst these vessels do have some opportunity to fish in alternative areas, adjacent/alternative grounds are understood to be already heavily targeted.
- 7.8.2.17 During construction, potting vessels will be required to remove pots from areas under construction inside the MHPGC Project PEIR Red Line Boundary. Potting fishers could therefore experience loss of earnings for the time taken to relocate gear, and (potentially) a loss of earnings associated with not being able to fish the specific grounds under construction (e.g. if alternative grounds are either not available, or not as productive). Potting typically involves a number of fleets of pots being deployed across a range of areas, and while it is highly unlikely that 100% of pots deployed by a single vessel will be impacted at any one time, it is understood that specific potting grounds may be targeted by specific operators. In this case, individual fishing businesses that routinely target the site will be impacted to a higher extent and this is accounted for within the assessment.
- 7.8.2.18 The inshore section of the MHPGC Project PEIR Red Line Boundary in English waters, where the majority of potting activity occurs, would be subject to construction activity during the up to four-year construction window resulting in intermittent but potentially prolonged disruption to fishing activity. This would represent a partial loss of fishing opportunity within core grounds, with limited scope for relocation without increased competition or reduced catch efficiency.
- 7.8.2.19 The Outline FLCP for English waters (CoT20 / MM-033) and draft FMMCP for Scottish waters (CoT55) will present measures to reduce impacts on commercial fishing, the approach to monitoring and fisheries liaison, and procedures for managing interactions between the MHPGC Project and the fishing industry.
- 7.8.2.20 The potential impact is predicted to be of local spatial extent, temporary with a medium-term duration, and medium reversibility. It is predicted that the potential impact will affect the receptor directly. On this basis, potential construction impacts on the potting fishery are assessed as **medium adverse** magnitude.

Demersal seine fishery

- 7.8.2.21 Potential construction phase impacts on the demersal seine fishery would be limited to temporary exclusion within advisory safety distances and localised seabed disturbance associated with sandwave clearance and cable installation. Spatial data indicate low levels of demersal seine activity within the Local Commercial Fisheries Study Area and limited potential for overlap with the MHPGC Project PEIR Red Line Boundary, which is located outside the primary areas used by the fleet. Given the small scale of potential interaction, the availability of alternative grounds and the fleet's ability to operate over broader spatial areas, any loss of access during construction would be minor and readily absorbed. The potential impact is predicted to be of local spatial extent, temporary with a short-term duration, and high reversibility. It is predicted that the potential impact will affect the receptor directly. Potential construction impacts on the demersal seine fishery are therefore assessed as **low adverse** magnitude.

Pelagic trawl fishery

- 7.8.2.22 The pelagic trawl fishery targets mid-water species and does not rely on interaction with the seabed. During construction, potential impacts would be limited to temporary avoidance of areas around cable installation vessels due to the presence of advisory safety distances. Spatial data indicate limited potential for overlap between pelagic trawl activity and the MHPGC Project PEIR Red Line Boundary, with fishing activity generally occurring to the east and west of it. Given the short-term and localised nature of vessel-based exclusion, high mobility of this fleet and absence of seabed interaction, construction activities are not expected to result in any measurable loss of fishing opportunity. The potential impact is predicted to be of local spatial extent, temporary with a very

short-term duration, and high reversibility. It is predicted that the potential impact will affect the receptor indirectly. Potential construction impacts on the pelagic trawl fishery are therefore assessed as **negligible adverse** magnitude.

Significance of effect

Dredge fishery

- 7.8.2.23 Although the dredge fishery is not prominent within the MHPGC Project PEIR Red Line Boundary, the assessment recognises that temporary localised disturbance and advisory safe passing distances may result in limited disruption to fishing activity where dredge vessels are operating. Accordingly, a precautionary low adverse magnitude has been assigned rather than a negligible magnitude. It is considered that the sensitivity of the receptor is low and the magnitude of impact is low adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the construction phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal otter trawl fishery (Nephrops)

- 7.8.2.24 It is considered that the sensitivity of the receptor is high and the magnitude of impact is medium adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the construction phase, is considered to be moderate or major adverse. While the combination of high receptor sensitivity and medium adverse magnitude indicates that the effect could reasonably be characterised as either moderate or major adverse, professional judgement has been applied to conclude a **moderate adverse** effect, which is significant in EIA terms. This reflects the temporary and localised nature of construction activities, the absence of permanent loss of access, the progressive and linear nature of works across the fishing ground, and the expectation that fishing activity will resume following completion of construction.

Demersal otter trawl fishery (haddock and whitefish)

- 7.8.2.25 Although the demersal otter trawl fishery targeting haddock and other whitefish is not a prominent receptor within the MHPGC Project PEIR Red Line Boundary, temporary localised disturbance associated with construction activities and advisory safe passing distances may result in limited disruption to fishing activity. Accordingly, a precautionary low adverse magnitude has been assigned rather than a negligible magnitude. It is considered that the sensitivity of the receptor is low and the magnitude of impact is low adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the construction phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Potting fishery

- 7.8.2.26 It is considered that the sensitivity of the receptor is medium and the magnitude of impact is medium adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the construction phase, is considered to be **moderate adverse**, which is significant in EIA terms.

Demersal seine fishery

- 7.8.2.27 Although demersal seine activity within the MHPGC Project PEIR Red Line Boundary is limited, temporary localised disturbance associated with construction activities and advisory safe passing distances may result in limited disruption to fishing activity. Accordingly, a precautionary low adverse magnitude has been assigned rather than a negligible magnitude. It is considered that the sensitivity of the receptor is low and the magnitude of impact is low adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the construction phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Pelagic trawl fishery

- 7.8.2.28 Although the magnitude of impact is considered to be negligible due to the very limited overlap between the pelagic trawl fishery and the MHPGC Project PEIR Red Line Boundary, a precautionary minor adverse effect has been assigned to recognise that temporary advisory safe passing distances and construction activities could result in limited, short-term disruption should pelagic vessels be present during construction. It is considered that the sensitivity of the receptor is low and the magnitude of impact is negligible adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the construction phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Secondary mitigation and residual effect

- 7.8.2.29 Of the commercial fisheries fleets assessed, significant effects prior to the application of secondary mitigation were identified only for the UK potting fleet and UK Nephrops trawl fleet. Secondary mitigation and the resulting residual effects for these fleets are therefore considered further below. For all other fleets, effects were assessed as not significant and no additional secondary mitigation is considered necessary; the residual effects remain as described above.

Potting fishery

- 7.8.2.30 Specific to the UK potting fleet where there is a significant impact, the Applicant is committed to developing an Outline FLCP (CoT20 / MM-033) and draft FMMCP (CoT50) [see **Table 7.13**]. Where temporary removal or relocation of static fishing gear is required to facilitate construction activities, the Applicant will deliver secondary mitigation through the consideration of evidence-based cooperation agreements and associated justifiable disturbance payments, where appropriately evidenced, in accordance with the FLOWW guidance (2025).
- 7.8.2.31 Through the application of the Outline FLCP (CoT20 / MM-033) or draft FMMCP (CoT50), through which any cooperation agreements and justifiable disturbance payments for static gear will be secured where relevant, the residual effect for the UK potting fleet is predicted to be **minor adverse**, which is not significant in EIA terms.

Demersal otter trawl fishery (Nephrops)

- 7.8.2.32 For the UK Nephrops trawl fleet, the Outline FLCP (CoT20 / MM-033) and draft FMMCP (CoT50), if considered relevant, will instead focus on measures to minimise the duration and spatial extent of construction-related disruption. Potential measures under consideration include continued fisheries liaison, advance communication of works, refinement of construction sequencing where practicable, maximisation of cable burial and minimisation of cable protection where feasible in the Farn Deep Nephrops ground, together with post-installation monitoring to support the safe resumption of fishing activity. In addition, the Applicant will continue to engage with the fishing industry during and following PEIR consultation to explore further proportionate mitigation measures.
- 7.8.2.33 At the PEIR stage, the package of secondary mitigation for the UK Nephrops trawl fleet is still being developed through ongoing engagement with the fishing industry. The ES will present the final package of mitigation measures, informed by consultation responses and continued stakeholder engagement, and will review the residual effect where appropriate. Accordingly, the residual effect is conservatively assessed as **moderate adverse**, which is significant in EIA terms, at the PEIR stage.

Displacement of fishing activity to other areas

- 7.8.2.34 Loss of access or exclusion from fishing grounds due to construction activities associated with the MHPGC Project may lead to increases in fishing effort in other areas that may already be exploited thereby leading to increased pressure and gear conflict.
- 7.8.2.35 Conflict over diminished grounds may occur if displaced vessels explore grounds traditionally fished by other gear types and/or displaced vessels relocate to actively fished grounds already targeted by the same gear. For example, this could include displaced demersal otter trawlers exploring areas fished by potters and thereby causing gear conflict or gear entanglement between potting lines and trawl gear and/or displaced demersal otter trawlers focusing effort in areas already fished by demersal otter trawlers and therefore increasing competition in that area.
- 7.8.2.36 Embedded mitigation relevant to this impact is set out in **Table 7.13**. In particular, the Outline FLCP for English waters (CoT20 / MM-033) and draft FMMCP for Scottish waters (CoT55) will set out measures to reduce impacts on commercial fishing, including the approach to monitoring and fisheries liaison and procedures for managing interactions that may give rise to displacement. These embedded commitments have been taken into account in the assessment of displacement of fishing activity presented below.

Receptor sensitivity

Dredge fishery

- 7.8.2.37 The scallop dredge fishery operates over broad spatial areas and shows limited spatial overlap with the MHPGC Project PEIR Red Line Boundary. The affected area represents a small proportion of the scallop grounds used by the fleet, and alternative grounds are available within normal operating

ranges. The fleet demonstrates a high degree of mobility and adaptability, allowing it to respond to short-term spatial restrictions without significant operational or economic consequences. Overall, the fishery exhibits low vulnerability, high recoverability, and low to medium economic value within the affected area. The scallop dredge fishery is therefore assessed as a receptor of **low** sensitivity.

Demersal otter trawl fishery (Nephrops)

- 7.8.2.38 The demersal otter trawl fishery targeting Nephrops is highly dependent on spatially discrete fishing grounds with limited availability of equivalent alternative grounds within normal operating ranges. Displacement of fishing effort from this ground may result in increased competition, reduced catch efficiency and operational conflict on adjacent grounds. Overall, the fishery exhibits high vulnerability, low recoverability, and high economic value. The demersal otter trawl (Nephrops) fishery is therefore assessed as a receptor of **high** sensitivity.

Demersal otter trawl fishery (haddock and whitefish)

- 7.8.2.39 The demersal otter trawl fishery targeting haddock and other demersal whitefish operates across a broad spatial area and does not rely on the areas within the MHPGC Project PEIR Red Line Boundary as a core fishing ground. The fleet exhibits a high degree of spatial mobility and flexibility, with alternative grounds available within normal operating ranges. The MHPGC Project PEIR Red Line Boundary does not contribute materially to the viability of this fishery. Overall, the fishery exhibits low vulnerability, high recoverability, and medium economic value at the scale of the wider Local and Regional Commercial Fisheries Study Areas. The demersal otter trawl fishery targeting haddock and other demersal whitefish is therefore assessed as a receptor of **low** sensitivity.

Potting fishery

- 7.8.2.40 The potting fishery targeting brown crab and lobster operates across a range of inshore and, for some vessels, offshore grounds. The inshore section of the MHPGC Project PEIR Red Line Boundary in English waters overlaps regularly used potting grounds that are expected to contribute materially to the economic viability of the fleet; however, this area of overlap does not represent the sole fishing area available to potting vessels. While displacement of static gear can result in increased competition, reduced catch efficiency and operational challenges, there remains some capacity for vessels to relocate gear within their normal operating ranges. Overall, the potting fishery exhibits medium vulnerability, medium recoverability, and medium to high economic value. The potting fishery is therefore assessed as a receptor of **medium** sensitivity.

Demersal seine fishery

- 7.8.2.41 The demersal seine fishery represents a relatively small component of fishing activity within the Local Commercial Fisheries Study Area, within Scottish waters, and shows limited spatial overlap with the MHPGC Project PEIR Red Line Boundary. The fleet operates across wider grounds and demonstrates flexibility in fishing location and seasonality, reducing vulnerability to localised disturbance. Overall, the fishery exhibits low vulnerability, high recoverability, and relatively low economic value within the Local Commercial Fisheries Study Area. The demersal seine fishery is therefore assessed as a receptor of **low** sensitivity.

Pelagic trawl fishery

- 7.8.2.42 Activity shows limited spatial overlap with the MHPGC Project PEIR Red Line Boundary, and the fleet exhibits high mobility and adaptability. Overall, the fishery exhibits low vulnerability, high recoverability, and low economic value within the MHPGC Project PEIR Red Line Boundary. The pelagic trawl fishery is therefore assessed as a receptor of **low** sensitivity.

Magnitude of impact

Dredge fishery

- 7.8.2.43 Displacement of scallop dredge activity during construction would be limited to temporary avoidance of areas around installation vessels and associated advisory safety distances. Given the limited overlap between the MHPGC Project PEIR Red Line Boundary construction activities and scallop grounds in both Scottish and English waters, and the availability of alternative areas, any displacement would be readily absorbed within the fleet's normal operating range. Displacement would be short-term, localised and would not result in increased competition or loss of fishing opportunity. The potential impact is predicted to be of local spatial extent, temporary with a short-term duration, and high reversibility. It is predicted that the impact will affect the receptor directly.

Displacement of scallop dredge activity during construction is therefore assessed as **low adverse** magnitude.

Demersal otter trawl fishery (Nephrops)

7.8.2.44 During the construction phase, displacement of Nephrops trawl activity would arise as vessels temporarily avoid areas subject to advisory safety distances, seabed disturbance from sandwave clearance and cable trenching, and perceived operational risk around installation activities. Within English waters, the MHPGC Project PEIR Red Line Boundary overlaps the spatially discrete and intensively fished Farn Deep Nephrops ground, meaning displaced effort is likely to be redistributed to adjacent grounds that are already subject to fishing pressure. While displacement would be temporary and progressive as construction activities move along the route, the four year construction period and phased nature of works mean that displacement pressures may recur over multiple seasons. While there remains potential for gear conflicts and increased fishing pressure to arise, the duration and extent of these effects would be reduced through embedded mitigation measures, including advance communication of works (CoT04 / MM-004) and fisheries liaison (CoT19 / MM-032), with further procedures for managing interactions between the MHPGC Project and the fishing industry presented in the Outline FLCP for English waters (CoT20 / MM-033) and draft FMMCP for Scottish waters (CoT55).

7.8.2.45 The potential impact is predicted to be of local spatial extent, temporary with a medium-term duration, and medium reversibility. It is predicted that the impact will affect the receptor directly. On this basis, displacement of Nephrops trawl activity during construction is assessed as **medium adverse** magnitude.

Demersal otter trawl fishery (haddock and whitefish)

7.8.2.46 During the construction phase, displacement of demersal whitefish trawl activity would be limited to temporary avoidance of advisory safety distances around installation vessels. Given the limited spatial overlap with the MHPGC Project PEIR Red Line Boundary and the fleet's ability to readily relocate effort without increased competition or reduced catch efficiency, displacement effects are expected to be minor. The potential impact is predicted to be of local spatial extent, temporary with a short-term duration, and high reversibility. It is predicted that the impact will affect the receptor directly. Displacement of demersal whitefish trawl activity during construction is therefore assessed as **low adverse** magnitude.

Potting fishery

7.8.2.47 Construction phase displacement of potting activity would occur where static gear is required to be removed from the offshore export cable corridor and surrounding advisory safety distances during installation, trenching and sandwave clearance works. Displaced pots would need to be redeployed into adjacent areas that may already be intensively fished, increasing the potential for congestion and competition. Conflict over diminished grounds may occur if displaced vessels operating mobile gear (e.g. demersal trawl) explore grounds traditionally fished by potters and/or displaced potting gear is relocated into other actively fished potting grounds. Displacement of mobile gear may therefore increase the risk of interaction with potting gear.

7.8.2.48 When considering the impact of potters being displaced into grounds already targeted by potters two scenarios are feasible:

- Alternative fishing grounds are available to relocate gear, in which case gear conflict and displacement effects will be low;
- Alternative fishing grounds are not available as adjacent areas are already being fished by potters, in which case the gear already on the ground limits the level of displacement. While there remains potential for gear conflicts and increased fishing pressure to arise, the duration and extent of these effects would be reduced through embedded mitigation measures, including advance communication of works (CoT04 / MM-004) and fisheries liaison (CoT19 / MM-032), with further procedures for managing interactions between the MHPGC Project and the fishing industry presented in the Outline FLCP for English waters (CoT20 / MM-033) and draft FMMCP for Scottish waters (CoT55).

7.8.2.49 While displacement effects would be temporary and localised, they may recur intermittently over the up to four-year construction period as works progress along the route. Displacement would not result

in permanent loss of fishing opportunity, and pots are expected to be redeployed within affected areas following completion of construction works. The potential impact is predicted to be of local spatial extent, temporary with a medium-term duration, and medium reversibility. It is predicted that the impact will affect the receptor directly. Displacement of potting activity during construction is therefore assessed as **medium adverse** magnitude.

Demersal seine fishery

- 7.8.2.50 Any displacement of demersal seine activity during construction would be confined to short-term avoidance of advisory safety distances around installation vessels. Given the limited overlap of activity with the MHPGC Project PEIR Red Line Boundary and availability of alternative grounds, displacement would be readily absorbed and would not result in operational or economic consequences. The potential impact is predicted to be of local spatial extent, temporary with a short-term duration, and high reversibility. It is predicted that the impact will affect the receptor directly. Displacement of demersal seine activity during construction is therefore assessed as **low adverse** magnitude.

Pelagic trawl fishery

- 7.8.2.51 Displacement of pelagic trawl activity during construction would be limited to temporary avoidance of installation vessels and associated advisory safety distances. Given the absence of seabed interaction, limited overlap with the MHPGC Project PEIR Red Line Boundary and high fleet mobility, any displacement would be negligible and would not result in measurable changes to fishing patterns. The potential impact is predicted to be of local spatial extent, temporary with a very short-term duration, and high reversibility. It is predicted that the impact will affect the receptor indirectly. Displacement of pelagic trawl activity during construction is therefore assessed as **negligible adverse** magnitude.

Significance of effect

Dredge fishery

- 7.8.2.52 It is considered that the sensitivity of the receptor is low and the magnitude of impact is low adverse. While the matrix in **Section 7.5.4** indicates that the resulting effect could reasonably be characterised as either negligible or minor adverse, professional judgement has been applied to conclude a minor adverse effect. This reflects the potential for temporary localised displacement of fishing activity during construction, although the effect would be short-term, readily reversible and not expected to result in material increases in competition or loss of fishing opportunity. Accordingly, the effect of displacement of fishing activity, during the construction phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal otter trawl fishery (Nephrops)

- 7.8.2.53 It is considered that the sensitivity of the receptor is high and the magnitude of impact is medium adverse. Therefore, the effect of displacement of fishing activity, during the construction phase, is considered to be moderate or major adverse. While the combination of high receptor sensitivity and medium adverse magnitude indicates that the effect could reasonably be characterised as either moderate or major adverse, professional judgement has been applied to conclude a **moderate adverse** effect, which is significant in EIA terms. This reflects the temporary and localised nature of construction activities, the absence of permanent loss of access, the progressive and linear nature of works across the fishing ground, and the expectation that fishing activity will resume following completion of construction.

Demersal otter trawl fishery (haddock and whitefish)

- 7.8.2.54 It is considered that the sensitivity of the receptor is low and the magnitude of impact is low adverse. While the matrix in **Section 7.5.4** indicates that the resulting effect could reasonably be characterised as either negligible or minor adverse, professional judgement has been applied to conclude a minor adverse effect. This reflects the potential for temporary localised displacement of fishing activity during construction, although the fleet is expected to readily relocate effort within its normal operating range without material increases in competition or reductions in catch efficiency. Accordingly, the effect of displacement of fishing activity, during the construction phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Potting fishery

- 7.8.2.55 It is considered that the sensitivity of the receptor is medium and the magnitude of impact is medium adverse. Therefore, the effect of displacement of fishing activity, during the construction phase, is considered to be **moderate adverse**, which is significant in EIA terms.

Demersal seine fishery

- 7.8.2.56 It is considered that the sensitivity of the receptor is low and the magnitude of impact is low adverse. While the matrix in **Section 7.5.4** indicates that the resulting effect could reasonably be characterised as either negligible or minor adverse, professional judgement has been applied to conclude a minor adverse effect. This reflects the potential for temporary localised displacement of fishing activity during construction, although the limited interaction with the MHPGC Project PEIR Red Line Boundary and the availability of alternative fishing grounds mean that any displacement is expected to be readily accommodated. Accordingly, the effect of displacement of fishing activity, during the construction phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Pelagic trawl fishery

- 7.8.2.57 It is considered that the sensitivity of the receptor is low and the magnitude of impact is negligible adverse. While the matrix in **Section 7.5.4** indicates that the resulting effect could reasonably be characterised as either negligible or minor adverse, professional judgement has been applied to conclude a minor adverse effect. This reflects the potential for temporary, localised displacement of pelagic trawl activity during construction should vessels be operating within or adjacent to the MHPGC Project PEIR Red Line Boundary. However, given the limited overlap with pelagic fishing activity, high fleet mobility and the availability of alternative fishing grounds, any displacement is expected to be short-term and readily accommodated. Accordingly, the effect of displacement of fishing activity, during the construction phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Secondary mitigation and residual effect

- 7.8.2.58 Of the commercial fisheries fleets assessed, significant effects prior to the application of secondary mitigation were identified only for the UK potting fleet and UK Nephrops trawl fleet. Secondary mitigation and the resulting residual effects for these fleets are therefore considered further below. For all other fleets, effects were assessed as not significant and no additional secondary mitigation is considered necessary; the residual effects remain as described above.

Potting fishery

- 7.8.2.59 Specific to the UK potting fleet where there is a significant impact, the Applicant is committed to developing an Outline FLCP (CoT20 / MM-033) and draft FMMCP (CoT50) [see **Table 7.13**]. Where temporary removal or relocation of static fishing gear is required to facilitate construction activities, the Applicant will deliver secondary mitigation through the consideration of evidence-based cooperation agreements and associated justifiable disturbance payments, where appropriately evidenced, in accordance with the FLOWW guidance (2025). These measures are also expected to reduce displacement pressures by facilitating the coordinated relocation of fishing gear during construction.
- 7.8.2.60 Through the application of the Outline FLCP (CoT20 / MM-033) /draft FMMCP (CoT50), through which any cooperation agreements and justifiable disturbance payments will be secured where relevant, the residual effect for the UK potting fleet is predicted to be **minor adverse**, which is not significant in EIA terms.

Demersal otter trawl fishery (Nephrops)

- 7.8.2.61 For the UK Nephrops trawl fleet, the Applicant is committed to developing an Outline FLCP (CoT20 / MM-033) and draft FMMCP (CoT50) if relevant, [see **Table 7.13**] which is expected to include continued fisheries liaison, advance communication of works, refinement of construction sequencing where practicable, maximisation of cable burial and minimisation of cable protection where feasible in the Farn Deep Nephrops ground, together with post-installation monitoring to support the safe resumption of fishing activity.
- 7.8.2.62 At this stage, the detailed package of secondary mitigation remains under development and will be refined through ongoing stakeholder engagement ahead of submission of the ES. The effectiveness

of any additional measures identified through this process will be considered within the final assessment of residual effects presented in the ES.

- 7.8.2.63 The ES will present the final package of mitigation measures, informed by consultation responses and continued stakeholder engagement, and will review the residual effect where appropriate. Accordingly, the residual effect of displacement of fishing activity is conservatively assessed as **moderate adverse**, which is significant in EIA terms, at the PEIR stage.

Interference with fishing activity

- 7.8.2.64 This section assesses the likely effects arising from MHPGC Project related vessel traffic and changes to shipping patterns associated with construction activities, leading to interference with fishing activity (reduced access).

Receptor sensitivity

Potting fishery

- 7.8.2.65 The potting fishery targeting brown crab and lobster operates using static gear that is deployed over extended periods and marked by surface (or 'dhan') buoys. As a result, potting activity can be vulnerable to interference from increased vessel movements, particularly where construction vessels transit to and from active work areas. Interaction between construction vessel propellers and gear surface markers and attached lines has the potential to result in gear disturbance or loss, leading to operational disruption for fishers.

- 7.8.2.66 The potting fleet operates across a range of inshore and offshore grounds in Scottish and English waters, and while alternative areas are available, relocation of static gear can be operationally challenging and may reduce fishing efficiency. However, areas that may be subject to increased vessel traffic do not represent the sole fishing grounds for the fleet, and interference effects are generally localised and temporary in nature. Overall, the potting fishery exhibits medium vulnerability to vessel-related interference, medium recoverability given the ability to redeploy gear following disruption, and high economic value. The potting fishery is therefore assessed as a receptor of **medium** sensitivity.

All other fisheries

- 7.8.2.67 With the exception of the potting fishery, all other commercial fishing fleets operating within the Local Commercial Fisheries Study Area are characterised by mobile fishing gears and a high degree of spatial flexibility. These fleets, including demersal otter trawl (Nephrops and whitefish), demersal seine, scallop dredge and pelagic trawl fisheries, are generally able to avoid construction vessels through short-term alterations to fishing patterns, towing direction or timing of activity. Interference arising from construction vessel movements is expected to be limited to temporary disruption associated with advisory safety distances, guard vessel activity and vessel transits, with no requirement for gear removal and no permanent interaction pathway. The affected areas do not represent the sole or primary fishing grounds for these fleets, and alternative grounds are available within normal operating ranges. Overall, these fleets exhibit low vulnerability to vessel-related interference and high recoverability following short-term disruption. All other fishing fleets are therefore assessed as receptors of **low** sensitivity for the interference with fishing activity impact.

Magnitude of impact

- 7.8.2.68 Vessel movements associated with the construction phase of the MHPGC Project, including construction vessels transiting to and from active work areas, will add to existing levels of marine traffic within the Local Commercial Fisheries Study Area. Over the up to four-year construction period, this will include up to approximately 550 return trips by offshore construction and support vessels and up to 250 return trips by vessels associated with landfall works. A full assessment of additional vessel movements and navigational risk is provided in **Volume 2, Chapter 8: Shipping and Navigation, of the PEIR**.
- 7.8.2.69 During construction, a maximum of up to 33 vessels may be present offshore at any one time and up to 14 vessels may be present concurrently in the vicinity of landfall works. Some construction vessels will be RAM, and their presence may require fishing vessels to temporarily alter fishing patterns or avoid active work areas and associated advisory safety distances.

- 7.8.2.70 All construction vessels will be fitted with AIS (CoT31 / MM-085) and will operate in accordance with applicable statutory and Flag State requirements, including the COLREGs.
- 7.8.2.71 Advisory safety distances of up to 500m will be applied around vessels undertaking construction activities, including cable installation, seabed preparation and cable protection works (CoT32 / MM-086). Where required by risk assessment, guard vessels will be deployed to monitor advisory safety distances and to actively alert third-party vessels, including fishing vessels, to the presence of construction activities. The location and duration of construction works, advisory safety distances and any advisory safe passing distances will be promulgated through appropriate channels to support advance planning by fishing vessels (CoT04 / MM-004).
- 7.8.2.72 Ongoing liaison with the fishing industry will be maintained throughout the construction phase, including communication of the timing, location and duration of construction activities, vessel movements and advisory safety distances (CoT19 / MM-032).
- 7.8.2.73 Taking account of the temporary and localised nature of construction vessel activity, the use of marine coordination and traffic management procedures, promulgation of construction information, and ongoing fisheries liaison, all fishing fleets are expected to be able to plan their activities to avoid vessel movements associated with construction of the MHPGC Project. As a result, interference with fishing activity arising from construction vessel movements is predicted to be limited. The magnitude of impact is therefore assessed as **low adverse** for all fisheries.

Significance of effect

- 7.8.2.74 In accordance with the significance matrix (**Table 7.9**) where both negligible and minor adverse outcomes are possible, professional judgement has been applied. For the purposes of this assessment, a precautionary minor adverse effect has been assigned where a credible impact pathway remains.

Dredge fishery

- 7.8.2.75 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of interference within fishing activity, during the construction phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal otter trawl fishery (Nephrops)

- 7.8.2.76 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of interference within fishing activity, during the construction phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal otter trawl fishery (haddock and whitefish)

- 7.8.2.77 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of interference within fishing activity, during the construction phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Potting fishery

- 7.8.2.78 Overall, it is considered that the receptor sensitivity is medium and the magnitude of impact is low adverse. Therefore, the effect of interference within fishing activity, during the construction phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal seine fishery

- 7.8.2.79 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of interference within fishing activity, during the construction phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Pelagic trawl fishery

- 7.8.2.80 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of interference within fishing activity, during the construction phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Secondary mitigation and residual effect

- 7.8.2.81 No mitigation measures for commercial fisheries are considered necessary because the likely effect in the absence of further mitigation (beyond the commitments outlined in **Table 7.13**), remains **minor adverse**, which is not significant in EIA terms.

Increased steaming distances and times

- 7.8.2.82 A detailed Navigational Risk Assessment (NRA) (see **Volume 2, Annex 8.1: Navigational Risk Assessment, of the PEIR**) has been undertaken and is discussed in **Volume 2, Chapter 8: Shipping and Navigation, of the PEIR**, which includes full consideration of commercial fishing vessels while transiting (e.g. from a collision and allision perspective). This assessment focuses on the likely significant effects arising from longer steaming distances to alternative fishing grounds that would have otherwise been targeted within the MHPGC Project PEIR Red Line Boundary.

Receptor sensitivity

Potting fishery

- 7.8.2.83 The potting fishery operating within the Local Commercial Fisheries Study Area in both Scottish and English waters undertakes regular steaming between local ports and established inshore and offshore fishing grounds to deploy, haul and reset fleets of pots. While construction activities associated with the MHPGC Project may require temporary avoidance of active work areas, these areas will be localised and temporary in nature, and do not represent the sole fishing grounds available to the fleet. With adequate prior notification of construction activities (CoT04 / MM-004), potting vessels are expected to be able to plan fishing operations to minimise the need for additional steaming beyond normal operating practices. On this basis, and notwithstanding the static nature of the gear, the sensitivity of the potting fishery to additional steaming during construction is considered to be **medium**, reflecting some operational constraint but the availability of alternative grounds within normal operating ranges.

All other fisheries

- 7.8.2.84 With the exception of the potting fishery, all other commercial fishing fleets operating within the Local Commercial Fisheries Study Area use mobile fishing gears and are generally able to avoid construction vessels through short-term alterations to fishing patterns, towing direction or timing of activity. While the Nephrops trawl fishery is highly dependent on the spatially discrete Farn Deep fishing ground, interference arising from construction vessel movements is expected to be temporary and localised, allowing vessels to continue operating within the wider fishing ground outside active construction areas. For all mobile gear fisheries, interference associated with advisory safety distances, guard vessel activity and vessel transits would therefore be limited to short-term operational disruption, with no requirement for gear removal and no permanent interaction pathway. Overall, these fleets exhibit low vulnerability to vessel-related interference and high recoverability following short-term disruption and are therefore assessed as receptors of **low** sensitivity for this impact.

Magnitude of impact

- 7.8.2.85 Details of construction activities, including the location, timing and duration of works, will be promulgated in advance of and during construction through established channels such as NtMs, Kingfisher bulletins and direct fisheries liaison (CoT04 / MM-004 and CoT19 / MM-032). Construction activities will be localised and progressive along the cable route, and fishing vessels may be required to make minor deviations to avoid active work areas and associated advisory safety distances.
- 7.8.2.86 Although construction activities will occur over a four year period, at any given time works will be limited in spatial extent, and alternative fishing grounds will remain accessible within normal operating ranges. As a result, while there may be some inconvenience associated with planning fishing activity around construction works, it is not anticipated that fishing vessels will be required to undertake considerable additional steaming beyond that typically associated with normal fishing operations. Any additional steaming is expected to be temporary, intermittent and localised.
- 7.8.2.87 The potential impact is predicted to be of local spatial extent, temporary with a medium-term duration over the construction phase, and high reversibility. It is predicted that the impact will affect

the receptor directly. Based on the justifications above, the magnitude of additional steaming to alternative fishing grounds during construction is therefore assessed as **low adverse** for all fisheries.

Significance of effect

Dredge fishery

- 7.8.2.88 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of increased steaming, during the construction phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal otter trawl fishery (Nephrops)

- 7.8.2.89 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of increased steaming, during the construction phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal otter trawl fishery (haddock and whitefish)

- 7.8.2.90 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of increased steaming, during the construction phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Potting fishery

- 7.8.2.91 Overall, it is considered that the receptor sensitivity is medium and the magnitude of impact is low adverse. Therefore, the effect of increased steaming, during the construction phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal seine fishery

- 7.8.2.92 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of increased steaming, during the construction phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Pelagic trawl fishery

- 7.8.2.93 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of increased steaming, during the construction phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Secondary mitigation and residual effect

- 7.8.2.94 No mitigation measures for commercial fisheries are considered necessary because the likely effect in the absence of further mitigation (beyond the commitments outlined in **Table 7.13**) remains **minor adverse**, which is not significant in EIA terms.

Snagging risk – loss or damage to fishing gear

- 7.8.2.95 During the construction phase of the MHPGC Project, the presence of under-construction subsea infrastructure on the seabed, including open trenches, seabed preparation works, and partially installed cables, represents a potential snagging hazard for fishing gear. Interaction between fishing gear and under-construction infrastructure could result in damage to or loss of fishing gear. The navigational and safety aspects associated with snagging, including risks to vessel stability and crew safety, are assessed separately within the **Volume 2, Chapter 8: Shipping and Navigation, of the PEIR**.

Receptor sensitivity

Potting fishery

- 7.8.2.96 Potting and other static gear fisheries deploy gear that is placed on the seabed rather than towed and does not involve continuous seabed penetration. While static gear may be vulnerable to interaction if deployed within or adjacent to under-construction areas, the risk of snagging is reduced relative to mobile gear, particularly where construction areas are avoided. Overall, potting fisheries exhibit low vulnerability, high recoverability through gear redeployment, and medium to high economic value, and are therefore assessed as receptors of **low** sensitivity to snagging risk during construction.

Pelagic trawl fishery

- 7.8.2.97 Pelagic trawl gear does not normally interact with the seabed and therefore has a low inherent vulnerability to snagging subsea infrastructure during construction. While interaction with infrastructure within the water column cannot be entirely discounted, such risk is limited and readily avoided through normal navigation practices. The pelagic trawl fleet is therefore assessed as a receptor of **low** sensitivity to snagging risk during construction.

All other fisheries

- 7.8.2.98 Mobile demersal trawl/seine and dredge fisheries operate gear that is actively towed along the seabed and maintains continuous contact with sediments. As a result, these fisheries are inherently more vulnerable to snagging hazards associated with under-construction subsea infrastructure. Although avoidance behaviour is expected, interaction pathways remain credible during construction. Overall, mobile demersal trawl and dredge fisheries exhibit medium vulnerability, medium recoverability, and medium to high economic value, and are therefore assessed as receptors of **medium** sensitivity to snagging risk during construction.

Magnitude of impact

- 7.8.2.99 If snagging of fishing gear were to occur, the Applicant would respond in accordance with the FLCP/FMMCP (CoT20 / MM-033 and CoT50) [see **Table 7.13**], including alignment with the principles set out in the FLOWW Recommendations for Fisheries Liaison: Best Practice Guidance for Offshore Renewable Developers (FLOWW, 2025), particularly in relation to notification, investigation and handling of claims for loss or damage to fishing gear.
- 7.8.2.100 Snagging poses a risk to fishing equipment and in extreme cases may potentially lead to capsizing of vessel and crew fatalities, as well as damage to subsea offshore infrastructure. Three phases of interaction are possible: initial impact of gear and subsea offshore infrastructure; pullover of gear across subsea offshore infrastructure and snagging or hooking of gear on the subsea offshore infrastructure. The snagging or hooking of fishing gear with offshore infrastructure/cables on the seabed is the most hazardous to the vessel and crew due to the possibility of capsizing.
- 7.8.2.101 However, snagging risk during construction is expected to be limited by the temporary and localised nature of seabed disturbance, the use of advisory safety distances around active works, guard vessels as deemed necessary by risk assessment (CoT32 / MM-086), and the advance promulgation of information on construction locations and activities (CoT04 / MM-004). It is anticipated that fishing vessels will avoid areas of active construction and under-construction infrastructure, particularly given the visibility of construction vessels, guard vessel presence where required, and ongoing fisheries liaison (CoT19 / MM-032).
- 7.8.2.102 The potential impact is predicted to be of local spatial extent, temporary with a medium-term duration over the construction phase, and medium to high reversibility. It is predicted that the impact will affect the receptor directly. Based on commitments to information promulgation and to follow standard protocols should snagging occur, the magnitude is considered to be **low adverse** for all fleets.

Significance of effect

Dredge fishery

- 7.8.2.103 Overall, it is considered that the receptor sensitivity is medium and the magnitude of impact is low adverse. Therefore, the effect of increased snagging risk, during the construction phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal otter trawl fishery (Nephrops)

- 7.8.2.104 Overall, it is considered that the receptor sensitivity is medium and the magnitude of impact is low adverse. Therefore, the effect of increased snagging risk, during the construction phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal otter trawl fishery (haddock and whitefish)

- 7.8.2.105 Overall, it is considered that the receptor sensitivity is medium and the magnitude of impact is low adverse. Therefore, the effect of increased snagging risk, during the construction phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Potting fishery

7.8.2.106 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of increased snagging risk, during the construction phase, is considered to be negligible or minor adverse. While the likelihood of snagging is low and effects would be localised, temporary and reversible, a credible interaction pathway exists during construction; therefore, a **minor adverse** effect has been concluded, which is not significant in EIA terms.

Demersal seine fishery

7.8.2.107 Overall, it is considered that the receptor sensitivity is medium and the magnitude of impact is low adverse. Therefore, the effect of increased snagging risk, during the construction phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Pelagic trawl fishery

7.8.2.108 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of increased snagging risk, during the construction phase, is considered to be negligible or minor adverse. While the likelihood of snagging is low and effects would be localised, temporary and reversible, a credible interaction pathway exists during construction; therefore, a **minor adverse** effect has been concluded, which is not significant in EIA terms.

Secondary mitigation and residual effect

7.8.2.109 No secondary mitigation measures for this potential impact are considered necessary because the likely significance of effect concluded **minor adverse**, is not significant in EIA terms.

Impacts on commercially exploited species

7.8.2.110 Temporary seabed disturbance and associated sediment mobilisation during construction of the MHPGC Project may result in short-term disturbance or displacement of commercially important fish and shellfish species. This section assesses the subsequent effect on commercial fishing activity, where disturbance to fish and shellfish resources may temporarily influence the availability or accessibility of exploitable stocks.

Receptor sensitivity

7.8.2.111 Commercial fishing fleets operating within the Local Commercial Fisheries Study Area target a range of commercially important species, including Nephrops, scallop, brown crab, lobster, haddock and other demersal finfish. These species are widely distributed across the North Sea and exhibit varying degrees of mobility and resilience to temporary seabed disturbance.

7.8.2.112 Given the distribution of key commercial species beyond the immediate MHPGC Project PEIR Red Line Boundary, the temporary nature of construction-related disturbance, and the ability of both target species and fishing fleets to recover or adapt following short-term disruption, all fishing fleets are considered to have low vulnerability and high recoverability in relation to this impact. While the Nephrops fishery is highly dependent on the spatially discrete Farn Deep fishing ground in relation to impacts affecting access to, or displacement from, fishing grounds, this impact relates to the temporary disturbance of commercially exploited species rather than loss of access. The sensitivity of the receptor for all fisheries is therefore assessed as **low**.

Magnitude of impact

7.8.2.113 Detailed assessments of construction-phase impacts on fish and shellfish receptors have been undertaken in **Volume 2, Chapter 4: Fish and Shellfish Ecology, of the PEIR**. The assessment considers the following impact pathways relevant to the MHPGC Project:

- Temporary habitat loss and disturbance of habitats;
- Temporary increases in SSCs and localised sediment deposition; and
- Direct and indirect seabed disturbance associated with seabed preparation works.

7.8.2.114 With respect to the magnitude of impact on commercial fisheries, the conclusions of the fish and shellfish ecology assessment are used as a precautionary proxy for changes in the availability of commercially exploitable resources. This approach is appropriate because any effect on commercial fishing activity would occur only if construction-related disturbance resulted in a measurable change

in the distribution, abundance or availability of target species. Where the fish and shellfish ecology assessment identifies effects as negligible or minor adverse, this indicates that any change to the underlying biological resource is expected to be limited, temporary and/or localised. It is therefore reasonable to conclude that any consequential effect on commercial fishing activity would also be limited, and the corresponding magnitude of impact on commercial fisheries is assessed as low.

7.8.2.115 The fish and shellfish ecology assessment concluded that construction-related impacts would be minor adverse at most, localised in extent, temporary in nature and reversible following completion of works. Most mobile fish and shellfish species respond to construction-related disturbance (e.g. seabed preparation and trenching) through temporary behavioural avoidance of the immediate area of activity. Avoidance is expected to be limited to the duration and spatial extent of active construction, with individuals remaining within the wider area and available habitat. While Nephrops depend on muddy sediment habitats, the disturbance associated with cable installation is temporary and reversible, and evidence indicates that Nephrops burrowing habitat can recover following physical disturbance over short to medium timescales, such that no long-term reduction in habitat availability or stock productivity is anticipated (Whitton and Hiddink, 2023).

7.8.2.116 The potential impact is predicted to be of local spatial extent, of relevance to commercial fishing fleets operating at local and wider scales, and of medium-term duration over the construction phase. It is predicted that the impact will affect the receptor directly through temporary disturbance of exploitable resources. On this basis, the magnitude of impact on commercially exploited fish and shellfish resources during construction is assessed as **low adverse** for all fishing fleets.

Significance of effect

7.8.2.117 For both Scottish and English waters, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of disturbance of commercially exploited species, during the construction phase, is considered to be negligible or minor adverse. Although behavioural responses of fish and shellfish species to construction disturbance are expected to be temporary and localised, a detectable short-term redistribution of commercially exploited species within the vicinity of active works may occur; therefore, a **minor adverse** effect has been concluded, which is not significant in EIA terms.

Secondary mitigation and residual effect

7.8.2.118 No secondary mitigation measures for this potential impact are considered necessary because the likely significance of effect concluded **minor adverse**, is not significant in EIA terms.

7.8.3 O&M phase

Loss or restricted access to fishing grounds

Receptor sensitivity

Dredge fishery

7.8.3.1 The scallop dredge fishery within the Local Commercial Fisheries Study Area, active in both Scottish and English waters, operates predominantly outside the MHPGC Project PEIR Red Line Boundary, with limited reliance on the area intersected by the offshore export cables. The fleet is characterised by high mobility and access to alternative grounds within normal operating ranges. Although scallop dredging involves seabed-towed gear, the anticipated fishability of the cable during operation and the limited spatial overlap with scallop grounds reduce vulnerability to operational restrictions. Overall, the fishery demonstrates low vulnerability, high recoverability, and low to medium economic value within the affected area. The scallop dredge fishery is therefore assessed as a receptor of **low** sensitivity.

Demersal otter trawl fishery (Nephrops)

7.8.3.2 The Nephrops otter trawl fishery operating within the Farn Deep Nephrops ground in English waters is highly dependent on spatially discrete muddy sediment habitats that support Nephrops. The area intersected by the MHPGC Project PEIR Red Line Boundary represents a core fishing ground that contributes substantially to annual landings from the Local Commercial Fisheries Study Area, with limited availability of equivalent alternative grounds within normal operating ranges. Although the offshore export cables are anticipated to be largely fishable over during the O&M phase, the fishery

remains vulnerable to localised restrictions associated with cable protection, repair and remediation activities. Overall, the fishery is characterised by high vulnerability, low to medium recoverability, and high economic value. The Nephrops otter trawl fishery is therefore assessed as a receptor of **high** sensitivity.

Demersal otter trawl fishery (haddock and whitefish)

- 7.8.3.3 The demersal otter trawl fishery targeting haddock and other demersal whitefish operates over a broad spatial area within both Scottish and English waters and does not rely on the area intersected by the MHPGC Project PEIR Red Line Boundary as a core fishing ground. The fleet exhibits a high degree of spatial flexibility and adaptability, with alternative grounds available within normal operating ranges. Given the limited spatial overlap and anticipated fishability of the cable, the fishery shows low vulnerability, high recoverability, and medium economic value at the scale of the Local Commercial Fisheries Study Area. The demersal otter trawl fishery targeting haddock and other demersal whitefish is therefore assessed as a receptor of **low** sensitivity.

Potting fishery

- 7.8.3.4 The inshore section of MHPGC Project PEIR Red Line Boundary overlaps with potting areas, which are expected to contribute materially to the economic viability of the fleet. Opportunities to relocate pots are constrained to some degree by territorial behaviour and limited availability of alternative grounds, particularly for smaller vessels with restricted operating ranges. Although the offshore export cables are expected to be fishable over under normal conditions, the static nature of the gear means the fleet is particularly sensitive to temporary restrictions and seabed disturbance associated with repair and remediation activities. The UK potting fleet is deemed to be of medium vulnerability, medium recoverability and medium to high value. The potting fleet is therefore assessed as a receptor of **medium** sensitivity.

Demersal seine fishery

- 7.8.3.5 The demersal seine fishery represents a small and spatially restricted component of fishing activity within the Local Commercial Fisheries Study Area, within Scottish waters, and shows limited overlap with the MHPGC Project PEIR Red Line Boundary. The fleet operates across wider grounds and demonstrates flexibility in fishing location and seasonality. Overall, the fishery exhibits low vulnerability, high recoverability, and low economic value within the affected area. The demersal seine fishery is therefore assessed as a receptor of **low** sensitivity.

Pelagic trawl fishery

- 7.8.3.6 The pelagic trawl fishery targets mid-water species and does not rely on seabed interaction or the area intersected by the MHPGC Project PEIR Red Line Boundary as a core fishing ground. Activity shows limited spatial overlap with the MHPGC Project and the fleet exhibits high mobility and adaptability. Overall, the fishery demonstrates low vulnerability, high recoverability, and low economic value within the affected area. The pelagic trawl fishery is therefore assessed as a receptor of **low** sensitivity.

Magnitude of impact

Dredge fishery

- 7.8.3.7 During the O&M phase, loss or restricted access to scallop dredging grounds would be limited to temporary exclusion during infrequent cable repair or remediation activities. Given the limited overlap between scallop activity and the MHPGC Project PEIR Red Line Boundary, and the availability of alternative grounds, any displacement would be readily absorbed without measurable effects on fishing activity. The potential impact is predicted to be of local spatial extent, temporary with a short-term duration, and high reversibility. It is predicted that the impact will affect the receptor directly. Operational loss or restricted access for the scallop dredge fishery is therefore assessed as **low adverse** magnitude.

Demersal otter trawl fishery (Nephrops)

- 7.8.3.8 Assessment assumes that fishing will resume following burial of the cable, noting that soft sediment ground conditions associated with the Nephrops fishery are supportive of achieving target cable burial depths. It is, however, recognised that a residual operational risk remains that localised cable exposure could occur over time, potentially necessitating repair or remediation activities. During the O&M phase, loss or restricted access to fishing grounds for the Nephrops fishery would arise

primarily from temporary advisory safety distances associated with cable repair and remediation activities, as well as from areas of permanent cable protection. Four cable crossings are located within the Farn Deep Nephrops ground, representing discrete locations where localised external cable protection may be required and would remain in situ during the O&M phase. The final type and extent of protection at these locations will be confirmed through detailed design. While individual repair or remediation events are localised, the maximum design scenario allows for up to 41 export cable repairs, each with a length of up to 2km and a 20m width over the operational life (35 years); and remediation for up to 4% of the cable route length (up to 13km) per year. Should repair or remediation activities be required within the Farn Deep Nephrops ground, temporary restrictions to fishing activity may occur within this spatially discrete and heavily relied-upon fishing ground. Although fishing access would be restored following individual repair or remediation activities within the Farn Deep Nephrops ground, should they occur intermittently over the operational life, may result in temporary restrictions and displacement pressures. The potential impact is predicted to be of local spatial extent, intermittent and temporary, with the potential to recur throughout the operational life, and medium reversibility. It is predicted that the impact will affect the receptor directly.

- 7.8.3.9 The MHPGC Project has committed to embedded measures relevant to reduction of this impact on commercial fisheries, which are listed in **Table 7.13**. These include development of a CSIP (CoT08 / MM-010), which will confirm cable burial and protection intentions and set out an intended programme of monitoring of cable integrity throughout the lifetime of the MHPGC Project. The CSIP will also provide confirmation of the approach to identifying and addressing any areas of cable exposure. Ongoing fisheries liaison via a CFLO will ensure timely communication with fisheries stakeholders regarding monitoring outcomes, any identified cable exposure, and the timing and location of planned remedial or repair works. Collectively, these embedded commitments are designed to provide assurance of continued fishability and to limit the likelihood, extent and duration of any operational disruption to fishing activities. On this basis, operational loss or restricted access for the Nephrops fishery is assessed as **low adverse** magnitude.

Demersal otter trawl fishery (haddock and whitefish)

- 7.8.3.10 Operational loss or restricted access for the demersal whitefish trawl fleet would be limited to temporary avoidance of advisory safety distances during cable repair or remediation activities. Given the low overlap with the cable route and the fleet's ability to relocate effort, such restrictions are not expected to result in measurable impacts. The potential impact is predicted to be of local spatial extent, temporary with a short-term duration, and high reversibility. It is predicted that the impact will affect the receptor directly. Operational impacts are therefore assessed as negligible to low adverse magnitude. Adopting a precautionary approach, **low adverse** magnitude is concluded.

Potting fishery

- 7.8.3.11 During the O&M phase, loss or restricted access to fishing grounds for the potting fishery would occur during cable repair and remediation events, when advisory safety distances would require the temporary removal of pots from affected areas. While the physical footprint of individual works is limited, the maximum design scenario allows for repeated interventions over the 35-year operational life, which may intermittently restrict access to productive inshore grounds. Although access would be restored following each event, displacement into adjacent areas may increase competition and reduce catch efficiency for some operators. The potential impact is predicted to be of local spatial extent, temporary and intermittent, with individual events occurring as required throughout the operational life, and medium reversibility. It is predicted that the impact will affect the receptor directly. Operational loss or restricted access for the potting fishery is therefore assessed as **low adverse** magnitude.

Demersal seine fishery

- 7.8.3.12 During operation, loss or restricted access to demersal seine grounds would be limited to temporary advisory safety distances during repair or remediation works. Given the limited spatial overlap and low reliance on the affected area, any displacement would be minimal and readily absorbed. The potential impact is predicted to be of local spatial extent, temporary with a short-term duration, and high reversibility. It is predicted that the impact will affect the receptor directly. Operational impacts are therefore assessed as negligible to low adverse magnitude. Adopting a precautionary approach, **low adverse** magnitude is concluded.

Pelagic trawl fishery

- 7.8.3.13 Operational impacts on the pelagic trawl fishery would be limited to temporary avoidance of areas around vessels undertaking cable repair or remediation activities. Given the absence of seabed interaction and the high mobility of the fleet, these restrictions would not result in loss of fishing opportunity. The potential impact is predicted to be of local spatial extent, temporary with a very short-term duration, and high reversibility. It is predicted that the impact will affect the receptor indirectly. Operational impacts are therefore assessed as **negligible adverse** magnitude.

Significance of effect

- 7.8.3.14 In accordance with the significance matrix (**Table 7.9**), where application of the matrix results in either a negligible or minor adverse effect, professional judgement has been applied in assigning the final significance. For the purposes of this assessment, a precautionary minor adverse effect has been assigned where a credible, albeit limited, impact pathway remains, notwithstanding that the effect is expected to be localised, temporary or intermittent, readily reversible and not significant in EIA terms.

Dredge fishery

- 7.8.3.15 It is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the O&M phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal otter trawl fishery (Nephrops)

- 7.8.3.16 It is considered that the receptor sensitivity is high and the magnitude of impact is low adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the O&M phase, is considered to be minor or moderate adverse. Professional judgement has been applied to conclude **minor adverse** significance. This reflects that the offshore export cables are anticipated to be largely fishable over during normal operation, that restrictions are localised, intermittent and temporary in nature, that access is restored following individual repair or remediation activities, and that embedded mitigation measures substantially reduce the likelihood and duration of disruption. The effect is therefore not significant in EIA terms.

Demersal otter trawl fishery (haddock and whitefish)

- 7.8.3.17 It is considered that the receptor sensitivity is medium and the magnitude of impact is low adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the O&M phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Potting fishery

- 7.8.3.18 It is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the O&M phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal seine fishery

- 7.8.3.19 It is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the O&M phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Pelagic trawl fishery

- 7.8.3.20 It is considered that the receptor sensitivity is low and the magnitude of impact is negligible adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the O&M phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Secondary mitigation and residual effect

- 7.8.3.21 No secondary mitigation measures for this potential impact are considered necessary because the likely significance of effect concluded **minor adverse**, is not significant in EIA terms.

Displacement of fishing activity to other areas

Receptor sensitivity

Dredge fishery

- 7.8.3.22 The scallop dredge fishery operates over broad spatial areas and shows limited spatial overlap with the MHPGC Project PEIR Red Line Boundary. Overall, the fishery exhibits low vulnerability, high recoverability, and low to medium economic value within the affected area. The scallop dredge fishery is therefore assessed as a receptor of **low** sensitivity.

Demersal otter trawl fishery (Nephrops)

- 7.8.3.23 The demersal otter trawl fishery targeting Nephrops is highly dependent on spatially discrete fishing grounds. The Farn Deep, located in English waters, represents a core fishing ground that contributes substantially to annual landings and income, with limited availability of equivalent alternative grounds within normal operating ranges. Displacement of fishing effort from this ground is likely to result in increased competition and reduced catch efficiency on adjacent grounds. Overall, the fishery exhibits high vulnerability, low recoverability, and high economic value. The demersal otter trawl (Nephrops) fishery is therefore assessed as a receptor of **high** sensitivity.

Demersal otter trawl fishery (haddock and whitefish)

- 7.8.3.24 The demersal otter trawl fishery targeting haddock and other demersal whitefish operates across a broad spatial area and does not rely on the MHPGC Project PEIR Red Line Boundary as a core fishing ground. The fleet exhibits a high degree of spatial mobility and flexibility, with alternative grounds available within normal operating ranges. Overall, the fishery exhibits low vulnerability, high recoverability, and medium economic value at the scale of the wider Local and Regional Commercial Fisheries Study Areas. The demersal otter trawl fishery targeting haddock and other demersal whitefish is therefore assessed as a receptor of **low** sensitivity.

Potting fishery

- 7.8.3.25 The potting fishery targeting brown crab and lobster operates across a range of inshore and offshore grounds. The inshore section of the MHPGC Project PEIR Red Line Boundary in English waters overlaps regularly used potting grounds that contribute materially to the economic viability of the fleet; however, these grounds do not represent the sole fishing areas available. While displacement of static gear can result in operational challenges, there remains some capacity for vessels to relocate gear within their normal operating ranges. Overall, the potting fishery exhibits medium vulnerability, medium recoverability, and high economic value. The potting fishery is therefore assessed as a receptor of **medium** sensitivity.

Demersal seine fishery

- 7.8.3.26 The demersal seine fishery represents a small component of fishing activity within the Local Commercial Fisheries Study Area, in Scottish waters, and shows limited overlap with the MHPGC Project PEIR Red Line Boundary. The fleet operates across wider grounds and demonstrates flexibility in fishing location and seasonality. Overall, the fishery exhibits low vulnerability, high recoverability, and low economic value within the affected area. The demersal seine fishery is therefore assessed as a receptor of **low** sensitivity.

Pelagic trawl fishery

- 7.8.3.27 The pelagic trawl fishery targets mid-water species and does not rely on seabed interaction or the area intersected by the MHPGC Project PEIR Red Line Boundary. Activity shows limited overlap with the offshore export cable corridor, and the fleet exhibits high mobility and adaptability. Overall, the fishery exhibits low vulnerability, high recoverability, and low economic value within the affected area. The pelagic trawl fishery is therefore assessed as a receptor of **low** sensitivity.

Magnitude of impact

Dredge fishery

- 7.8.3.28 During operation, displacement of scallop dredge activity would be limited to short-term avoidance of advisory safety distances during cable repair or remediation activities. Given the limited overlap between scallop grounds and the offshore export cable corridor, and the availability of alternative grounds, any displacement would be readily absorbed without measurable effects on fishing activity. The potential impact is predicted to be of local spatial extent, temporary with a short-term duration,

and high reversibility. It is predicted that the impact will affect the receptor directly. Displacement of scallop dredge activity during operation is therefore assessed as negligible to low adverse magnitude; applying a precautionary approach in assessment, **low adverse** magnitude is concluded.

Demersal otter trawl fishery (Nephrops)

- 7.8.3.29 During operation, displacement of Nephrops trawl activity would arise primarily from temporary advisory safety distances associated with cable repair and remediation activities, as well as behavioural avoidance by skippers in response to perceived cable exposure risk. While the offshore export cable is anticipated to be largely fishable over during normal operation, the maximum design scenario allows for up to 41 export cable repairs, each with a length of up to 2km and a 20m width over the 35-year operational life; and remediation for up to 4% of the cable route length (up to 13km) per year. Should such activities be required within the Farn Deep Nephrops ground, displacement effects would be localised and temporary, with fishing activity expected to return following completion of individual works. Where repair or remediation activities occur within the Farn Deep Nephrops ground, temporary redistribution of effort within adjacent Nephrops grounds may occur. The potential impact is predicted to be of local spatial extent, intermittent and temporary, with the potential to recur throughout the operational life, and medium reversibility. It is predicted that the impact will affect the receptor directly. On this basis, displacement of Nephrops trawl activity during operation is assessed as **low adverse** magnitude.

Demersal otter trawl fishery (haddock and whitefish)

- 7.8.3.30 Operational displacement of demersal whitefish trawl activity would be limited to temporary avoidance of advisory safety distances associated with cable repair or remediation activities. Given the limited spatial overlap with the MHPGC Project and the fleet's ability to readily relocate effort, displacement is not expected to result in changes to fishing patterns or increased competition. The potential impact is predicted to be of local spatial extent, temporary with a short-term duration, and high reversibility. It is predicted that the impact will affect the receptor directly. Displacement of demersal whitefish trawl activity during operation is therefore assessed as negligible to low adverse magnitude; applying a precautionary approach in assessment, **low adverse** magnitude is concluded.

Potting fishery

- 7.8.3.31 Operational displacement of potting activity would occur where pots are temporarily removed from areas subject to advisory safety distances during cable repair or remediation activities, or where fishers choose to avoid areas of perceived exposure risk. While such displacement may require pots to be redeployed into adjacent areas, these effects would be intermittent, localised and temporary in nature. Fishing activity is expected to resume within affected areas following completion of individual maintenance activities, and displacement is not anticipated to result in long-term changes to fishing patterns. The potential impact is predicted to be of local spatial extent, temporary and intermittent with a short-term duration for individual events over the operational life, and medium reversibility. It is predicted that the impact will affect the receptor directly. Displacement of potting activity during operation is therefore assessed as **low adverse** magnitude.

Demersal seine fishery

- 7.8.3.32 Any displacement of demersal seine activity during operation would be confined to short-term avoidance of advisory safety distances during repair or remediation works. Given the limited interaction pathway and availability of alternative grounds, displacement would be readily absorbed. The potential impact is predicted to be of local spatial extent, temporary with a short-term duration, and high reversibility. It is predicted that the impact will affect the receptor directly. Displacement of demersal seine activity during operation is therefore assessed as negligible to low adverse magnitude. Applying a precautionary approach in assessment, **low adverse** magnitude is concluded.

Pelagic trawl fishery

- 7.8.3.33 Displacement of pelagic trawl activity during operation would be limited to temporary avoidance of vessels undertaking cable repair or remediation works. Given the high mobility of the fleet and absence of reliance on specific locations, such displacement would not result in measurable changes to fishing patterns. The potential impact is predicted to be of local spatial extent, temporary with a very short-term duration, and high reversibility. It is predicted that the impact will affect the receptor indirectly. Displacement of pelagic trawl activity during operation is therefore assessed as **negligible adverse** magnitude.

Significance of effect

- 7.8.3.34 In accordance with the significance matrix (**Table 7.9**), where application of the matrix results in either a negligible or minor adverse effect, professional judgement has been applied in assigning the final significance. A minor adverse effect has been assigned where a credible, albeit limited, impact pathway remains, notwithstanding that the effect is expected to be localised, temporary or intermittent, readily reversible and not significant in EIA terms.

Dredge fishery

- 7.8.3.35 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the O&M phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal otter trawl fishery (Nephrops)

- 7.8.3.36 Overall, it is considered that the receptor sensitivity is high and the magnitude of impact is low adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the O&M phase, is considered to be minor or moderate adverse. Professional judgement has been applied to conclude **minor adverse** significance. This reflects that the export cable is anticipated to be largely fishable over during normal operation, that restrictions are localised, intermittent and temporary in nature, that access is restored following individual repair or remediation activities, and that embedded mitigation measures substantially reduce the likelihood and duration of disruption. The effect is therefore not significant in EIA terms.

Demersal otter trawl fishery (haddock and whitefish)

- 7.8.3.37 Overall, it is considered that the receptor sensitivity is medium and the magnitude of impact is low adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the O&M phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Potting fishery

- 7.8.3.38 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the O&M phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal seine fishery

- 7.8.3.39 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the O&M phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Pelagic trawl fishery

- 7.8.3.40 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is negligible adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the O&M phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Secondary mitigation and residual effect

- 7.8.3.41 No secondary mitigation measures for this potential impact are considered necessary because the likely significance of effect concluded **minor adverse**, is not significant in EIA terms.

Interference with fishing activity

- 7.8.3.42 This section assesses the likely effects arising from MHPGC Project related vessel traffic and changes to shipping patterns during the O&M phase, leading to interference with fishing activity.

Receptor sensitivity

Potting fishery

- 7.8.3.43 The potting fishery targeting brown crab and lobster operates using static gear that is deployed over extended periods and marked by surface (or 'dhan') buoys. As a result, potting activity can be vulnerable to interference from vessel movements, particularly where O&M vessels transit to and from maintenance locations. Interaction between vessel propellers and surface markers or associated groundlines has the potential to result in gear disturbance or loss, leading to short-term operational disruption.

7.8.3.44 The potting fleet operates across a range of inshore and offshore grounds in Scottish and English waters, and while alternative areas are available, relocation of static gear can be operationally challenging and may reduce fishing efficiency. However, areas that may be subject to O&M vessel activity do not represent the sole fishing grounds for the fleet, and any interference effects are expected to be localised and temporary. Overall, the potting fishery exhibits medium vulnerability to vessel-related interference, medium recoverability given the ability to redeploy gear following disruption, and high economic value. The potting fishery is therefore assessed as a receptor of **medium** sensitivity.

All other fisheries

7.8.3.45 With the exception of the potting fishery, all other commercial fishing fleets operating within the Local Commercial Fisheries Study Area are characterised by mobile fishing gears and a high degree of spatial flexibility. These fleets are generally able to avoid O&M vessels through short-term alterations to fishing patterns, towing direction or timing of activity. While the Nephrops trawl fishery is highly dependent on the spatially discrete Farn Deep's fishing ground, interference arising from O&M vessel movements is expected to be temporary and localised, allowing vessels to continue operating within the wider fishing ground outside active maintenance areas. Interference arising from O&M vessel movements is expected to be limited to temporary disruption associated with vessel transits and short-duration maintenance activities, with no permanent interaction pathway. Overall, these fleets exhibit low vulnerability to vessel-related interference and high recoverability following short-term disruption. All other fishing fleets are therefore assessed as receptors of **low** sensitivity.

Magnitude of impact

7.8.3.46 Vessel movements associated with the operation and maintenance of the MHPGC Project, including maintenance vessels transiting to and from inspection, repair and remediation locations, will add to existing levels of marine traffic within the Local Commercial Fisheries Study Area over the 35-year operational life. In any one year, this may include up to approximately 550 return trips by O&M vessels, comprising cable repair vessels, survey vessels, jack-up vessels, seabed preparation vessels, support vessels and crew transfer vessels. A detailed assessment of navigational risk associated with O&M vessel activity is provided in **Volume 2, Chapter 8: Shipping and Navigation, of the PEIR**.

7.8.3.47 During the O&M phase, a maximum of up to 12 vessels may be present on site at any one time. O&M vessel activity will be intermittent in nature and typically of short duration at any given location. While some vessels may be RAM during specific maintenance activities, such events are expected to be infrequent and localised.

7.8.3.48 All O&M vessels will be fitted with AIS and will operate in compliance with applicable Flag State requirements, including the International Regulations for Preventing Collisions at Sea (COLREGs), as confirmed in **Table 7.13**.

7.8.3.49 Where required for specific O&M activities, temporary advisory safety distances may be established around vessels undertaking repair or remediation works. The location and duration of such activities, including any advisory safety distances or advisory safe passing distances identified through risk assessment, will be appropriately promulgated to support advance planning by fishing vessels. Ongoing liaison with the fishing industry will be maintained throughout the O&M phase (CoT19 / MM-032 and CoT04 / MM-004), including communication of the timing, location and duration of maintenance activities and associated vessel movements.

7.8.3.50 Taking account of the intermittent and localised nature of O&M vessel activity, the limited number of vessels present at any one time, the use of marine coordination and advance communication, and the ability of fishing vessels to adjust activities in response to short-term vessel presence, interference with fishing activity during the O&M phase is predicted to be limited. The magnitude of impact is therefore assessed as **low adverse** for all fisheries.

Significance of effect

Dredge fishery

7.8.3.51 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of interference within fishing activity, during the O&M phase, is considered to be **minor adverse**, which is not significant in EIA terms.

7.8.3.52 Demersal otter trawl fishery (Nephrops)

7.8.3.53 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of interference within fishing activity, during the O&M phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal otter trawl fishery (haddock and whitefish)

7.8.3.54 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of interference within fishing activity, during the O&M phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Potting fishery

7.8.3.55 Overall, it is considered that the receptor sensitivity is medium and the magnitude of impact is low adverse. Therefore, the effect of interference within fishing activity, during the O&M phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal seine fishery

7.8.3.56 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of interference within fishing activity, during the O&M phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Pelagic trawl fishery

7.8.3.57 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of interference within fishing activity, during the O&M phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Secondary mitigation and residual effect

7.8.3.58 No secondary mitigation measures for this potential impact are considered necessary because the likely significance of effect concluded minor adverse, is not significant in EIA terms.

Increased steaming distances and times

Receptor sensitivity

Potting fishery

7.8.3.59 The potting fishery operating within the Local Commercial Fisheries Study Area in both Scottish and English waters undertakes regular steaming between ports and established fishing grounds to deploy, haul and reset fleets of static gear. While the O&M phase of the MHPGC Project will involve periodic vessel activity associated with inspection, maintenance, repair and remediation, these activities will be intermittent, localised and of short duration at any given location. Areas that may be subject to O&M vessel activity do not represent the sole fishing grounds available to the potting fleet, and alternative grounds are available within normal operating ranges. With adequate prior notification of maintenance activities, vessels are expected to be able to plan fishing operations to minimise any need for additional steaming beyond normal practices. Overall, the potting fishery exhibits medium vulnerability, medium recoverability, and high economic value, and is therefore assessed as a receptor of **medium** sensitivity to increased steaming during the O&M phase.

All other fisheries

7.8.3.60 All other commercial fishing fleets operating within the Local Commercial Fisheries Study Area, including demersal otter trawl (Nephrops and whitefish), demersal seine, scallop dredge and pelagic trawl fisheries, operate across relatively wide spatial areas and demonstrate a high degree of mobility and operational flexibility. These fleets have moderate to high availability of alternative fishing grounds and are able to adjust fishing locations, routes and timing in response to short-term vessel presence. Accordingly, the sensitivity of all other fisheries receptors to increased steaming distances and times during the O&M phase is considered to be **low**.

Magnitude of impact

- 7.8.3.61 During the O&M phase of the MHPGC Project, there will be no fixed surface infrastructure or permanent exclusion areas associated with the cables that would require fishing vessels to alter transit routes or steam around the MHPGC Project infrastructure during normal operation. Temporary advisory safe passing distances may be implemented around cable inspection, repair or remediation activities where required, but these would be localised and of limited duration. The cables will be buried along the majority of their length, with any cable protection confined to localised, linear seabed features that do not impose restrictions on vessel navigation or transit during normal operation.
- 7.8.3.62 As a result, fishing vessels will continue to access fishing grounds using established transit routes, and the presence of the operational offshore export cables will not necessitate increased steaming distances or times. While periodic O&M activities may involve temporary vessel presence at discrete locations, these activities do not create route-defining obstacles and would not require vessels to undertake alternative transit routes beyond normal navigational practice.
- 7.8.3.63 Although some fishers may choose to locally avoid specific seabed features for operational reasons, such avoidance would be highly localised and would not translate into increased steaming distance or time between ports and fishing grounds. Consequently, increased steaming during the O&M phase is not driven by the presence of MHPGC Project infrastructure.
- 7.8.3.64 The potential impact is predicted to be of local spatial extent, intermittent and temporary over the operational life of the MHPGC Project, and with high reversibility. It is predicted that the impact will affect the receptor directly. On this basis, increased steaming distances and times during the O&M phase are assessed as **low adverse** magnitude for all fisheries.

Significance of effect

Dredge fishery

- 7.8.3.65 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of increased steaming, during the O&M phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal otter trawl fishery (Nephrops)

- 7.8.3.66 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of increased steaming, during the O&M phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal otter trawl fishery (haddock and whitefish)

- 7.8.3.67 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of increased steaming, during the O&M phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Potting fishery

- 7.8.3.68 Overall, it is considered that the receptor sensitivity is medium and the magnitude of impact is low adverse. Therefore, the effect of increased steaming, during the O&M phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal seine fishery

- 7.8.3.69 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of increased steaming, during the O&M phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Pelagic trawl fishery

- 7.8.3.70 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of increased steaming, during the O&M phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Secondary mitigation and residual effect

- 7.8.3.71 No secondary mitigation measures for this potential impact are considered necessary because the likely significance of effect concluded **minor adverse**, is not significant in EIA terms.

Snagging risk – loss or damage to fishing gear

- 7.8.3.72 During the O&M phase of the MHPGC Project, the physical presence of localised sections of cable protection and any areas of cable exposure may represent potential snagging hazards for fishing gear and could result in damage to, or loss of, fishing gear. The navigational and safety aspects associated with snagging risk, including potential risks to vessel stability and crew safety, are assessed separately within **Volume 2, Chapter 8: Shipping and Navigation, of the PEIR**.

Receptor sensitivity

- 7.8.3.73 The sensitivity of commercial fishing receptors to snagging risk during the O&M phase is the same as that described for the construction phase. Mobile demersal otter trawl, demersal seine and dredge fisheries, which operate gear in continuous contact with the seabed, are assessed as receptors of **medium** sensitivity, reflecting greater inherent vulnerability to seabed interaction.
- 7.8.3.74 Potting and pelagic trawl fisheries, which involve limited or no routine seabed contact, are assessed as receptors of **low** sensitivity to snagging risk during the O&M phase.

Magnitude of impact

- 7.8.3.75 Should snagging of fishing gear occur during the O&M phase, the same protocols and procedures outlined for the construction phase would be followed, as will be set out in the FLCP/FMMCP and in accordance with FLOWW best practice guidance (CoT20 / MM-033, as per commitments in **Table 7.13**).
- 7.8.3.76 O&M activities are intermittent, localised and of short duration at any given location, and the extent of seabed features that could present a snagging hazard is limited to discrete areas of cable protection or temporary exposure. In addition, routine burial monitoring and remediation will act to reduce the likelihood and persistence of snagging hazards over the operational life of the MHPGC Project.
- 7.8.3.77 The potential impact is predicted to be of local spatial extent, intermittent over the operational life, and with high reversibility. It is predicted that the impact will affect the receptor directly. On this basis, the magnitude of snagging risk during the O&M phase is assessed as **low adverse** for all fishing fleets.

Significance of effect

Dredge fishery

- 7.8.3.78 Overall, it is considered that the receptor sensitivity is medium and the magnitude of impact is low adverse. Therefore, the effect of increased snagging risk, during the O&M phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal otter trawl fishery (Nephrops)

- 7.8.3.79 Overall, it is considered that the receptor sensitivity is medium and the magnitude of impact is low adverse. Therefore, the effect of increased snagging risk, during the O&M phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal otter trawl fishery (haddock and whitefish)

- 7.8.3.80 Overall, it is considered that the receptor sensitivity is medium and the magnitude of impact is low adverse. Therefore, the effect of increased snagging risk, during the O&M phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Potting fishery

- 7.8.3.81 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of increased snagging risk, during the O&M phase, is considered to be negligible or minor adverse. While the likelihood of snagging is low and effects would be localised, temporary and reversible, a credible interaction pathway exists during O&M; therefore, a **minor adverse** effect has been concluded, which is not significant in EIA terms.

Demersal seine fishery

- 7.8.3.82 Overall, it is considered that the receptor sensitivity is medium and the magnitude of impact is low adverse. Therefore, the effect of increased snagging risk, during the O&M phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Pelagic trawl fishery

- 7.8.3.83 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of increased snagging risk, during the O&M phase, is considered to be negligible or minor adverse. While the likelihood of snagging is low and effects would be localised, temporary and reversible, a credible interaction pathway exists during O&M; therefore, a **minor adverse** effect has been concluded, which is not significant in EIA terms.

Secondary mitigation and residual effect

- 7.8.3.84 No secondary mitigation measures for this potential impact are considered necessary because the likely significance of effect concluded **minor adverse**, is not significant in EIA terms.

Impacts on commercially exploited species

- 7.8.3.85 During the O&M phase of the MHPGC Project, disturbance of commercially important fish and shellfish species may occur on a temporary and localised basis in association with intermittent cable inspection, repair and remediation activities. This section assesses the subsequent effect on commercial fishing activity, where such disturbance may temporarily influence the local availability or accessibility of exploitable stocks.

Receptor sensitivity

- 7.8.3.86 Commercial fishing fleets operating within the Local Commercial Fisheries Study Area target a range of commercially important species, including Nephrops, scallop, brown crab, lobster, haddock and other demersal finfish. These species are widely distributed across the North Sea and exhibit varying degrees of mobility and resilience to temporary disturbance.
- 7.8.3.87 Given the intermittent nature of O&M activities, the limited spatial extent of disturbance at any given time, and the ability of both target species and fishing fleets to recover or adapt following short-term disruption, all fishing fleets are considered to have low vulnerability and high recoverability in relation to this impact. The sensitivity of the receptor for all fisheries is therefore assessed as **low**.

Magnitude of impact

- 7.8.3.88 Potential O&M-phase impacts on fish and shellfish receptors have been assessed in **Volume 2, Chapter 4: Fish and Shellfish Ecology, of the PEIR**. The assessment considers the following impact pathways relevant to the MHPGC Project during O&M:
- Localised and temporary seabed disturbance associated with cable repair or remediation activities;
 - Short-term sediment mobilisation and localised increases in SSCs;
 - Temporary disturbance to benthic and demersal habitats associated with maintenance activities.
- 7.8.3.89 With respect to the magnitude of impact on commercial fisheries, the conclusions of the fish and shellfish ecology assessment are used as a proxy for changes in the availability of commercially exploitable resources. This is considered appropriate because the pathway by which disturbance to fish and shellfish may affect commercial fisheries is through a temporary change in the local distribution or availability of target species to fishing activity. Where disturbance to commercially exploited species is localised, short-term and reversible, with individuals expected to remain within the wider area or return following cessation of the disturbance, the potential for a material reduction in the availability of exploitable resources to fishing fleets is limited. On this basis, and taking account of the spatial extent, duration and reversibility of the disturbance described below, the corresponding magnitude of impact on commercial fisheries is considered to be low.
- 7.8.3.90 The fish and shellfish ecology assessment concluded that O&M-related impacts would be localised, short-term and reversible, and would occur intermittently over the operational life of the MHPGC Project. Most mobile fish and shellfish species are expected to respond to O&M related disturbance through temporary behavioural avoidance of the immediate area of activity, with individuals remaining within the wider area and available habitat and returning once activities cease. Routine monitoring of cable burial and targeted remediation will act to minimise the extent and persistence of any seabed disturbance.

- 7.8.3.91 The potential impact is predicted to be of local spatial extent, intermittent over the operational life of the MHPGC Project, and of short-term duration at any given location. It is predicted that the impact will affect the receptor directly through temporary disturbance of exploitable resources. On this basis, the magnitude of impact on commercially exploited fish and shellfish resources during the O&M phase is assessed as **low adverse** for all fishing fleets.

Significance of effect

- 7.8.3.92 For both Scottish and English waters, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of disturbance of commercially exploited species during the O&M phase is considered to be negligible or minor adverse. Although effects are expected to be intermittent, highly localised and reversible, short-term behavioural responses of mobile fish and shellfish species to O&M activities may result in temporary redistribution at a local scale; therefore, a **minor adverse** effect has been concluded, which is not significant in EIA terms.

Additional mitigation and residual effect

- 7.8.3.93 No secondary mitigation measures for this potential impact are considered necessary because the likely significance of effect concluded **minor adverse**, is not significant in EIA terms.

7.8.4 Decommissioning phase

- 7.8.4.1 The final decommissioning methodology and any associated mitigation measures will be developed through the Offshore Decommissioning Programme (CoT44) [see **Table 7.13**], in consultation with relevant stakeholders, and will be informed by the requirements, legislation, policy and guidance applicable at that time.
- 7.8.4.2 The effects of decommissioning activities are expected to be the same or similar to those identified for the construction phase [see **Section 7.8.2**], as the primary activities (e.g. vessel presence, seabed activity associated with removal of infrastructure, and temporary safety or exclusion zones) are comparable in nature and spatial extent. As such, the sensitivities of commercial fisheries receptors are considered to be the same as those assessed for construction. The magnitude of impacts is also anticipated to be similar, being short-term, localised and temporary in duration, with effects reversible following completion of works. On this basis, the significance of effect during decommissioning is predicted to be comparable to that identified for the construction phase. While final decommissioning methodologies will be confirmed closer to the end of the operational life of the MHPGC Project, it is anticipated that activities would not exceed those assessed for construction in terms of spatial extent, duration or intensity.

Loss or restricted access to fishing grounds

- 7.8.4.3 The effects of decommissioning activities are expected to be the same or similar to the effects from construction and of a short-term and temporary nature.

Significance of effect

Dredge fishery

- 7.8.4.4 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the decommissioning phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal otter trawl fishery (Nephrops)

- 7.8.4.5 Overall, it is considered that the receptor sensitivity is high and the magnitude of impact is medium adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the decommissioning phase, is considered to be moderate or major adverse. While the combination of high receptor sensitivity and medium adverse magnitude indicates that the effect could reasonably be characterised as either moderate or major adverse, professional judgement has been applied to conclude a **moderate adverse** effect, which is significant in EIA terms. This reflects the temporary and localised nature of decommissioning activities, the absence of permanent loss of access, the progressive and linear nature of works across the fishing ground, and the expectation that fishing activity will resume following completion of decommissioning.

Demersal otter trawl fishery (haddock and whitefish)

- 7.8.4.6 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the decommissioning phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Potting fishery

- 7.8.4.7 Overall, it is considered that the receptor sensitivity is medium and the magnitude of impact is medium adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the decommissioning phase, is considered to be **moderate adverse**, which is significant in EIA terms.

Demersal seine fishery

- 7.8.4.8 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the decommissioning phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Pelagic trawl fishery

- 7.8.4.9 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is negligible adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the decommissioning phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Secondary mitigation and residual effect

- 7.8.4.10 The Applicant has committed to producing a FLCP/FMMCP (CoT20 / MM-033 and CoT50) which are expected to remain applicable during decommissioning and will provide the framework through which any additional secondary mitigation measures identified as necessary at that stage will be developed and implemented. The requirement for, and nature of, any such measures will be informed by the final decommissioning methodology and relevant stakeholder engagement.
- 7.8.4.11 For the UK potting fleet, where temporary removal or relocation of static fishing gear is required to facilitate decommissioning activities, secondary mitigation may include evidence-based cooperation agreements and associated justifiable disturbance payments, where appropriately evidenced, in accordance with the FLOWW guidance (2025). Any such measures would be developed and implemented through the FLCP/FMMCP (CoT20 / MM-033 and CoT50), as appropriate.
- 7.8.4.12 Given that decommissioning activities are anticipated to be no greater than those assessed for construction, the residual effect for the UK potting fleet is predicted to be **minor adverse**, which is not significant in EIA terms. For the UK Nephrops trawl fleet, the residual effect is conservatively assessed as **moderate adverse**, which is significant in EIA terms.

Displacement of fishing activity to other areas

- 7.8.4.13 The effects of decommissioning activities are expected to be the same or similar to the effects from decommissioning and of a short-term and temporary nature.

Significance of effect

Dredge fishery

- 7.8.4.14 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the decommissioning phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal otter trawl fishery (Nephrops)

- 7.8.4.15 Overall, it is considered that the receptor sensitivity is high and the magnitude of impact is medium adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the decommissioning phase, is considered to be moderate or major adverse. While the combination of high receptor sensitivity and medium adverse magnitude indicates that the effect could reasonably be characterised as either moderate or major adverse, professional judgement has been applied to conclude a **moderate adverse** effect, which is significant in EIA terms. This reflects the temporary and localised nature of decommissioning activities, the absence of permanent loss of access, the progressive and linear nature of works across the fishing ground, and the expectation that fishing activity will resume following completion of decommissioning.

Demersal otter trawl fishery (haddock and whitefish)

- 7.8.4.16 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the decommissioning phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Potting fishery

- 7.8.4.17 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is medium adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the decommissioning phase, is considered to be **minor adverse**, which is significant in EIA terms.

Demersal seine fishery

- 7.8.4.18 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the decommissioning phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Pelagic trawl fishery

- 7.8.4.19 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is negligible adverse. Therefore, the effect of loss or restricted access to fishing grounds, during the decommissioning phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Secondary mitigation and residual effect

- 7.8.4.20 The Applicant has committed to producing a FLCP/FMMCP (CoT20 / MM-033 and CoT50) which are expected to remain applicable during decommissioning and will provide the framework through which any additional secondary mitigation measures identified as necessary at that stage will be developed and implemented. The requirement for, and nature of, any such measures will be informed by the final decommissioning methodology and relevant stakeholder engagement.
- 7.8.4.21 For the UK potting fleet, where temporary removal or relocation of static fishing gear is required to facilitate decommissioning activities, secondary mitigation may include evidence-based cooperation agreements and associated justifiable disturbance payments, where appropriately evidenced, in accordance with the FLOWW guidance (2025). Any such measures would be developed and implemented through the FLCP/FMMCP (CoT20 / MM-033 and CoT50), as appropriate.
- 7.8.4.22 Given that decommissioning activities are anticipated to be no greater than those assessed for construction, the residual effect for the UK potting fleet is predicted to be **minor adverse**, which is not significant in EIA terms. For the UK Nephrops trawl fleet, the residual effect is conservatively assessed as **moderate adverse**, which is significant in EIA terms.

Interference with fishing activity

- 7.8.4.23 The effects of decommissioning activities are expected to be the same or similar to the effects from decommissioning and of a short-term and temporary nature.

Significance of effect

Dredge fishery

- 7.8.4.24 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of interference within fishing activity, during the decommissioning phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal otter trawl fishery (Nephrops)

- 7.8.4.25 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of interference within fishing activity, during the decommissioning phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal otter trawl fishery (haddock and whitefish)

- 7.8.4.26 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of interference within fishing activity, during the decommissioning phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Potting fishery

- 7.8.4.27 Overall, it is considered that the receptor sensitivity is medium and the magnitude of impact is low adverse. Therefore, the effect of interference within fishing activity, during the decommissioning phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal seine fishery

- 7.8.4.28 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of interference within fishing activity, during the decommissioning phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Pelagic trawl fishery

- 7.8.4.29 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of interference within fishing activity, during the decommissioning phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Secondary mitigation and residual effect

- 7.8.4.30 No secondary mitigation measures for this potential impact are considered necessary because the likely significance of effect concluded **minor adverse**, is not significant in EIA terms.

Increased steaming distances and times

- 7.8.4.31 The effects of decommissioning activities are expected to be the same or similar to the effects from decommissioning and of a short-term and temporary nature.

Significance of effect

Dredge fishery

- 7.8.4.32 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of increased steaming, during the decommissioning phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal otter trawl fishery (Nephrops)

- 7.8.4.33 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of increased steaming, during the decommissioning phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal otter trawl fishery (haddock and whitefish)

- 7.8.4.34 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of increased steaming, during the decommissioning phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Potting fishery

- 7.8.4.35 Overall, it is considered that the receptor sensitivity is medium and the magnitude of impact is low adverse. Therefore, the effect of increased steaming, during the decommissioning phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal seine fishery

- 7.8.4.36 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of increased steaming, during the decommissioning phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Pelagic trawl fishery

- 7.8.4.37 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of increased steaming, during the decommissioning phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Secondary mitigation and residual effect

- 7.8.4.38 No secondary mitigation measures for this potential impact are considered necessary because the likely significance of effect concluded **minor adverse**, is not significant in EIA terms.

Snagging risk – loss or damage to fishing gear

- 7.8.4.39 The effects of decommissioning activities are expected to be the same or similar to the effects from decommissioning and of a short-term and temporary nature.

Significance of effect

Dredge fishery

- 7.8.4.40 Overall, it is considered that the receptor sensitivity is medium and the magnitude of impact is low adverse. Therefore, the effect of increased snagging risk, during the decommissioning phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal otter trawl fishery (Nephrops)

- 7.8.4.41 Overall, it is considered that the receptor sensitivity is medium and the magnitude of impact is low adverse. Therefore, the effect of increased snagging risk, during the decommissioning phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Demersal otter trawl fishery (haddock and whitefish)

- 7.8.4.42 Overall, it is considered that the receptor sensitivity is medium and the magnitude of impact is low adverse. Therefore, the effect of increased snagging risk, during the decommissioning phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Potting fishery

- 7.8.4.43 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of increased snagging risk, during the decommissioning phase, is considered to be negligible or minor adverse. While the likelihood of snagging is low and effects would be localised, temporary and reversible, a credible interaction pathway exists during decommissioning; therefore, a **minor adverse** effect has been concluded, which is not significant in EIA terms.

Demersal seine fishery

- 7.8.4.44 Overall, it is considered that the receptor sensitivity is medium and the magnitude of impact is low adverse. Therefore, the effect of increased snagging risk, during the decommissioning phase, is considered to be **minor adverse**, which is not significant in EIA terms.

Pelagic trawl fishery

- 7.8.4.45 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of increased snagging risk, during the decommissioning phase, is considered to be negligible or minor adverse. While the likelihood of snagging is low and effects would be localised, temporary and reversible, a credible interaction pathway exists during decommissioning; therefore, a **minor adverse** effect has been concluded, which is not significant in EIA terms.

Secondary mitigation and residual effect

- 7.8.4.46 No secondary mitigation measures for this potential impact are considered necessary because the likely significance of effect concluded **minor adverse**, is not significant in EIA terms.

Impacts on commercially exploited species

- 7.8.4.47 The effects of decommissioning activities are expected to be the same or similar to the effects from decommissioning and of a short-term and temporary nature.

Significance of effect

- 7.8.4.48 Overall, it is considered that the receptor sensitivity is low and the magnitude of impact is low adverse. Therefore, the effect of disturbance of commercially exploited species, during the decommissioning phase, is considered to be negligible or minor adverse. Although behavioural responses of fish and shellfish species to decommissioning disturbance are expected to be temporary and localised, a detectable short-term redistribution of commercially exploited species within the vicinity of active works may occur; therefore, a **minor adverse** effect has been concluded, which is not significant in EIA terms.

Secondary mitigation and residual effect

- 7.8.4.49 No secondary mitigation measures for this potential impact are considered necessary because the likely significance of effect concluded **minor adverse**, is not significant in EIA terms.

7.9 Cumulative effects

7.9.1 Whole project assessment and Cumulative Effects Assessment methodology

- 7.9.1.1 The Morven Programme comprises four distinct projects: Morven North, Morven South, MHPGC Project, and Morven Branxton Area Grid Connection Project (MBAGC Project).
- 7.9.1.2 The following assessment scenarios have been considered to identify the LSE of MHPGC Project in combination with other projects on the same receptor, as follows (and summarised in **Table 7.14**):
- Whole project assessment: to identify the potential impacts associated with MHPGC Project together with Morven North and Morven South in turn, (Scenario 1: Morven North and Scenario 2: Morven South), each of which would comprise a “Whole Project”;
 - Morven Programme assessment: to identify potential impacts associated with all four components of the Morven Programme (Morven North, Morven South, MHPGC Project, and MBAGC Project) together with other relevant projects, plans and activities (Scenario 3);
 - Cumulative Effects Assessment (CEA): to identify the potential impacts associated with MHPGC Project together with relevant projects, plans and activities, including other components of the Morven Programme, using a tiered approach (Scenario 4).
- 7.9.1.3 The whole project assessment and CEA have been undertaken in accordance with the methodology described in **Volume 1, Chapter 4: Approach to Environmental Impact Assessment, of the PEIR**.

Table 7.14: Scenarios to be considered in the MHPGC Project whole project assessment and Cumulative Effects Assessment for commercial fisheries

Whole project assessment		Morven Programme assessment (Offshore Ornithology and Shipping and Navigation chapters only)	CEA
Scenario 1	Scenario 2	Scenario 3	Scenario 4
MHPGC Project and Morven North	MHPGC Project and Morven South	MHPGC Project, Morven North, Morven South and MBAGC Project	MHPGC Project, Tier 1 (including Morven North and Morven South), Tier 2 and Tier 3 (including MBAGC Project) projects and plans screened in

- 7.9.1.4 For the purposes of commercial fisheries, Scenarios 1, 2, and 4 have been taken forward for assessment; Scenario 3 has not been included as it is not applicable to this chapter. As discussed in **Volume 1, Chapter 4: Approach to Environmental Impact Assessment, of the PEIR**, the Morven Programme assessment (Scenario 3) is only required for specific chapters to provide further context to, and to support, the conclusions of the CEA scenario (Scenario 4), in agreement with the relevant stakeholders for these topics. As Scenario 3 does not form the basis of the CEA conclusions, it is considered a supplementary assessment to the CEA scenario (Scenario 4) for these specific topics. The approach to Cumulative Effects Assessment presented in this commercial fisheries chapter complies with the requirements under the EIA Regulations to assess the LSE on the environment arising from a project cumulatively with other relevant plans, projects and activities, and no supplementary assessment of the Morven Programme (Scenario 3) is required or has been requested by relevant stakeholders with regard to commercial fisheries.
- 7.9.1.5 The projects and plans selected as relevant to the CEA presented within this chapter are based upon the results of a screening exercise (see **Volume 1, Annex 4.3: Cumulative Screening and Location Plan, of the PEIR**). Each project or plan has been considered on a case-by-case basis for screening in or out of this chapter's assessment based upon data confidence, effect-receptor pathways and the spatial/temporal scales involved.

- 7.9.1.6 In undertaking the CEA for the MHPGC Project, it should be noted that other projects and plans under consideration will have differing potential for proceeding to an operational stage and hence a differing potential to ultimately contribute to a cumulative impact alongside MHPGC Project. Therefore, a tiered approach has been adopted, whereby all third-party projects and plans considered have been allocated into 'tiers' reflecting their current stage within the planning and development process. This provides a framework for placing relative weight upon the potential for each project/plan included in the CEA to ultimately be realised, based upon the project/plan's current stage of maturity and certainty in the project/plan's parameters. The tiered approach utilised within the MHPGC Project CEA employs the following tiers:
- Tier 1 assessment – Existing developments either built (operational) or under construction; approved developments awaiting implementation; and permitted/submitted application(s), but not yet determined, plus Morven North and Morven South;
 - Tier 2 assessment – All plans/projects assessed under Tier 1, plus plans/projects where a scoping report has been submitted and is in the public domain;
 - Tier 3 assessment – All plans/projects assessed under Tier 1 and 2, plus MBAGC Project, and plans/projects that are reasonably foreseeable (e.g. projects identified in development plans, projects in other plans and programmes, offshore renewable energy projects that have a Crown Estate Scotland or The Crown Estate Lease Option Agreement).
- 7.9.1.7 The specific projects and plans screened into the commercial fisheries CEA are outlined in **Table 7.15**.
- 7.9.1.8 In addition to offshore development projects, the cumulative effects assessment has taken account of MPAs and associated fisheries management measures as relevant plans and programmes. In particular, the potential for fisheries management measures associated with the Farnes East and Swallow Sand MPAs to influence commercial fishing activity has been considered. While management measures for these MPAs are currently under development and subject to consultation, their potential interaction with project-related effects, including loss or restricted access to fishing grounds and displacement of fishing activity, has been considered qualitatively within the cumulative assessment.
- 7.9.1.9 The cumulative effects assessment for commercial fisheries focuses on the following impact pathways, which have the potential to interact cumulatively with other developments and plans:
- Loss or restricted access to fishing grounds;
 - Displacement of fishing activity to other areas; and
 - Impacts on commercially exploited species.
- 7.9.1.10 Other impacts assessed for the MHPGC Project alone, including interference from vessel movements, snagging risk and additional steaming distances, are considered to be highly localised, temporary and project-specific. These impacts are therefore scoped out of the cumulative assessment as they are not expected to interact cumulatively with similar effects from other projects at a meaningful spatial or temporal scale.
- 7.9.1.11 The commercial fisheries CEA Study Area is defined as the Regional Commercial Fisheries Study Area [see **Figure 7.1**], comprising 22 ICES rectangles off the north-east coast of England and south-east Scotland, reflecting the spatial extent of fishing grounds exploited by fleets operating within and beyond the Local Commercial Fisheries Study Area. This study area captures the spatial scale over which cumulative interactions between the MHPGC Project and other relevant developments may occur in relation to commercial fisheries. The Regional Commercial Fisheries Study Area is considered appropriate for assessing cumulative effects as it reflects the operational ranges of affected fleets while avoiding unnecessary inclusion of distant or unrelated fishing grounds.

Table 7.15: List of other projects and plans considered within the Cumulative Effects Assessment for commercial fisheries

Project/plan	Status	Minimum distance from MHPGC Project PEIR Red Line Boundary (km)	Description of project/plan	Estimated dates of construction (If applicable)	Estimated dates of operation (If applicable)	Overlap with MHPGC Project
Tier 1						
Offshore wind projects and associated cables						
Morven North and Morven South	Application submitted	0.00	Offshore wind farm (fixed foundation)	2033–2037	2038 onwards	Yes. Overlap of construction phase or operational phase with the construction or operational phases of MHPGC Project.
Ossian	Application submitted	5.50	Offshore wind farm (floating foundation)	2031–2034	2035 onwards	Yes. Overlap of construction phase or operational phase with the construction or operational phases of MHPGC Project.
Bowdun	Application submitted	10.03	Offshore wind farm (fixed foundation)	2031–2033	2034 onwards	Yes. Overlap of construction phase or operational phase with the construction or operational phases of MHPGC Project.
Blyth Demonstration Site	Operational	13.23	Offshore wind farm (floating foundation)	Unknown	Unknown	Yes. Overlap of construction phase or operational phase with the construction or operational phases of MHPGC Project.
Berwick Bank	Consented	18.22	Offshore wind farm (fixed foundation)	2028–2032	2033 onwards	Yes. Overlap of construction phase or operational phase with the construction or operational phases of MHPGC Project.
Bellrock	Application submitted	34.98	Offshore wind farm (floating foundation)	2029–2033	2034 onwards	Yes. Overlap of construction phase or operational phase with the construction or operational phases of MHPGC Project.

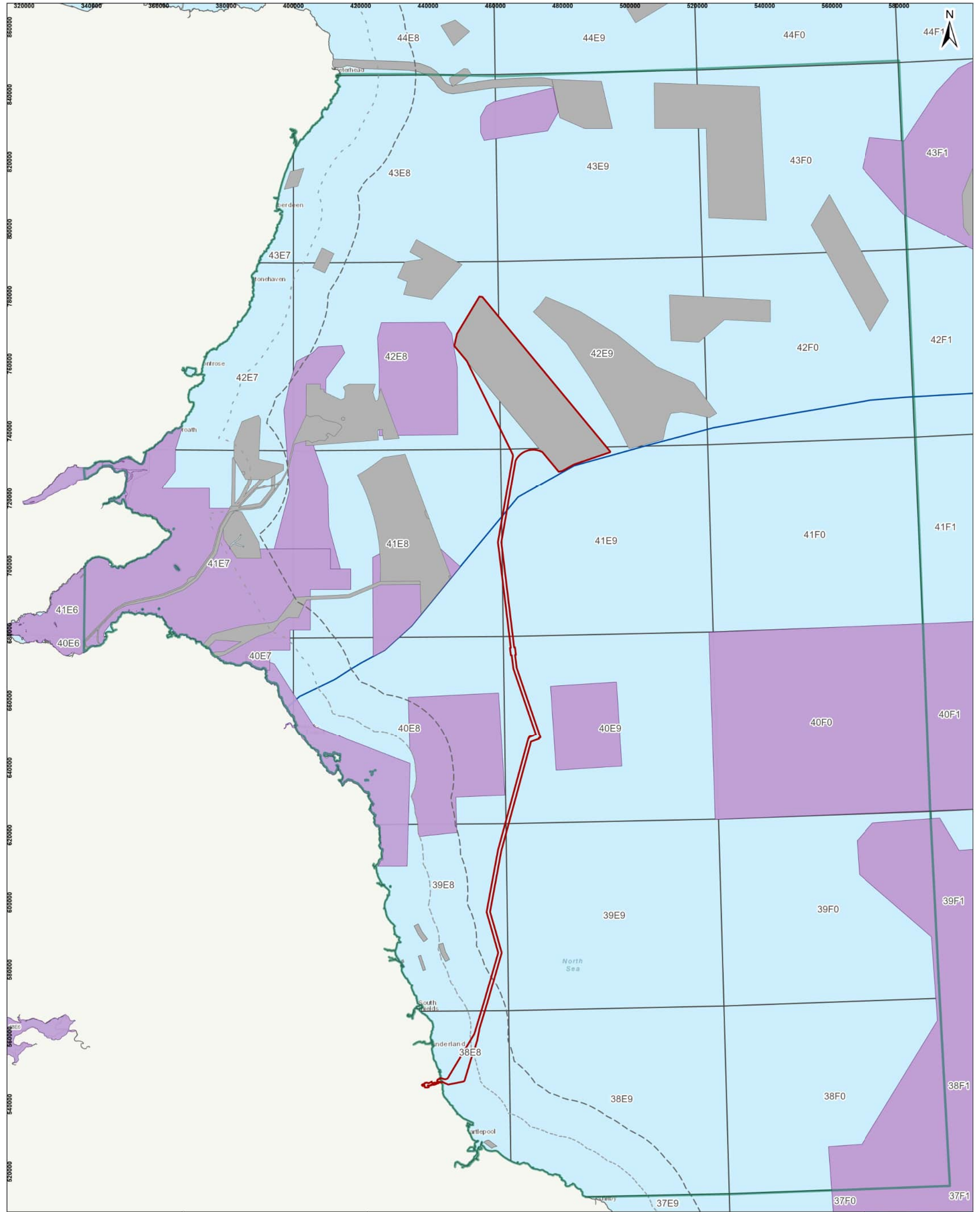
Project/plan	Status	Minimum distance from MHPGC Project PEIR Red Line Boundary (km)	Description of project/plan	Estimated dates of construction (If applicable)	Estimated dates of operation (If applicable)	Overlap with MHPGC Project
Seagreen Phase 1A	Consented	40.96	Offshore wind farm (fixed foundation)	2029–2032	2033 onwards	Yes. Overlap of construction phase or operational phase with the construction or operational phases of MHPGC Project.
Muir Mhòr	Application submitted	58.16	Offshore wind farm (floating foundation)	2029–2033	2034 onwards	Yes. Overlap of construction phase or operational phase with the construction or operational phases of MHPGC Project.
Inch Cape	Under construction	61.40	Offshore wind farm (fixed foundation)	2026–2028	2029 onwards	Yes. Overlap of operational phase with the construction or operational phases of MHPGC Project.
Salamander	Consented	74.94	Offshore wind farm (floating foundation)	2027–2032	2033 onwards	Yes. Overlap of operational phase with the construction or operational phases of MHPGC Project.
Aspen	Application submitted	93.34	Offshore wind farm (floating foundation)	2028–2032	2033 onwards	Yes. Overlap of operational phase with the construction or operational phases of MHPGC Project.
Green Volt	Consented	105.33	Offshore wind farm (floating foundation)	2026–2029	2030 onwards	Yes. Overlap of operational phase with the construction or operational phases of MHPGC Project.
Forthwind	Consented	123.22	Offshore wind farm (fixed foundation)	Unknown	Unknown	Yes. Overlap of construction phase or operational phase with the construction or operational phases of MHPGC Project.
Cenos	Consented	124.45	Offshore wind farm (floating foundation)	2030–2033	2034 onwards	Yes. Overlap of operational phase with the construction or operational phases of MHPGC Project.
Berwick Bank ECC (Branxton, Dunbar)	Application submitted	0.25	Offshore wind farm export cable	2028-2031	2032 onwards	Yes. Overlap of operational phase with the construction or operational phases of MHPGC Project.
Berwick Bank ECC (Cambois Connection, Northumberland)	Application submitted	0.25	Offshore wind farm export cable	2028-2031	2032 onwards	Yes. Overlap of operational phase with the construction or operational phases of MHPGC Project.

Project/plan	Status	Minimum distance from MHPGC Project PEIR Red Line Boundary (km)	Description of project/plan	Estimated dates of construction (If applicable)	Estimated dates of operation (If applicable)	Overlap with MHPGC Project
Bowdun ECC	Application report submitted	19.54	Offshore wind farm export cable	2031-2034	2035 onwards	Yes. Overlap of construction phase or operational phase with the construction or operational phases of MHPGC Project.
Bellrock ECC	Application submitted	24.70	Offshore wind farm export cable	2029-2033	2034 onwards	Yes. Overlap of construction phase or operational phase with the construction or operational phases of MHPGC Project.
Dogger Bank C ECC	Under construction	25.75	Offshore wind farm export cable	2026	2027 onwards	Yes. Overlap of operational phase with the construction or operational phases of MHPGC Project.
Aspen ECC	Application submitted	44.04	Offshore wind farm export cable	2028-2030	2031 onwards	Yes. Overlap of operational phase with the construction or operational phases of MHPGC Project.
Seagreen Phase 1A Offshore ECC	Consented	48.45	Offshore wind farm export cable	2029-2033	2034 onwards	Yes. Overlap of construction phase or operational phase with the construction or operational phases of MHPGC Project.
Muir Mhòr ECC	Application submitted	60.80	Offshore wind farm export cable	2029-2033	2034 onwards	Yes. Overlap of construction phase or operational phase with the construction or operational phases of MHPGC Project.
Inch Cape ECC	Under construction	65.61	Offshore wind farm export cable	2026	2027 onwards	Yes. Overlap of operational phase with the construction or operational phases of MHPGC Project.
Cenos ECC	Consented	68.51	Offshore wind farm export cable	2030-2031	2032 onwards	Yes. Overlap of operational phase with the construction or operational phases of MHPGC Project.
Green Volt ECC	Consented	73.91	Offshore wind farm export cable	2026-2028	2029 onwards	Yes. Overlap of operational phase with the construction or operational phases of MHPGC Project.
Salamander ECC	Consented	74.22	Offshore wind farm export cable	2027-2029	2030 onwards	Yes. Overlap of operational phase with the construction or operational phases of MHPGC Project.

Project/plan	Status	Minimum distance from MHPGC Project PEIR Red Line Boundary (km)	Description of project/plan	Estimated dates of construction (If applicable)	Estimated dates of operation (If applicable)	Overlap with MHPGC Project
Buchan Preferred ECC	Application submitted	84.21	Offshore wind farm export cable	2030-2032	2033 onwards	Yes. Overlap of operational phase with the construction or operational phases of MHPGC Project.
Marram	Application submitted	124.55	Offshore wind farm (floating foundation)	2028–2034	2035 onwards	Yes. Overlap of construction phase or operational phase with the construction or operational phases of MHPGC Project.
Other cables and pipelines						
Eastern Green Link 1 (EGL1)	Under construction	0.00	Transmission cable			Yes. Overlap of operational phase with the construction or operational phases of MHPGC Project.
Eastern Green Link 2 (EGL2)	Under construction	0.00	Transmission cable	2026-2028	2029 onwards	Yes. Overlap of operational phase with the construction or operational phases of MHPGC Project.
Eastern Green Link 3 (EGL3) Scoping Route	Scoping report submitted	2.33	Transmission cable	2029-2032	2033 onwards	Yes. Overlap of operational phase with the construction or operational phases of MHPGC Project.
Tier 2						
Offshore wind projects and associated cables						
Broadshore	Scoping report submitted	141.43	Offshore wind farm (floating foundation)	2029–2033	2034 onwards	Yes. Overlap of construction phase or operational phase with the construction or operational phases of MHPGC Project.
Scaraben	Scoping report submitted	145.09	Offshore wind farm (floating foundation)	2029–2032	2033 onwards	Yes. Overlap of operational phase with the construction or operational phases of MHPGC Project.
Ossian ECC	Scoping report submitted	33.50	Offshore wind farm export cable	2031-2034	2035 onwards	Yes. Overlap of construction phase or operational phase with the construction or operational phases of MHPGC Project.

Project/plan	Status	Minimum distance from MHPGC Project PEIR Red Line Boundary (km)	Description of project/plan	Estimated dates of construction (If applicable)	Estimated dates of operation (If applicable)	Overlap with MHPGC Project
Other cables and pipelines						
Eastern Green Link 4 (EGL4) Scoping Route	Scoping report submitted	0.00	Transmission cable	2028-2032	2033 onwards	Yes. Overlap of operational phase with the construction or operational phases of MHPGC Project.
Eastern Green Link 5 (EGL5) (indicative location - English section)	Scoping report submitted	3.10	Transmission cable	Unknown	Unknown	Yes. Overlap of operational phase with the construction or operational phases of MHPGC Project.
Eastern Green Link 5 (EGL5) (indicative location - English section)	Scoping report submitted	4.00	Transmission cable	Unknown	Unknown	Yes. Overlap of operational phase with the construction or operational phases of MHPGC Project.
Tier 3						
Offshore wind projects and associated cables						
MBAGC Project	Pre-application	0.00	Potential transmission for Morven North or Morven South	Unknown	Unknown	Unknown. Construction, O&M and decommissioning phases may overlap with MHPGC Project construction, O&M and decommissioning phases.
Flora	Proposed	63.00	Offshore wind farm (floating foundation)	2033–2037	2038 onwards	Yes. Overlap of construction phase or operational phase with the construction or operational phases of MHPGC Project.
Cedar	Proposed	84.91	Offshore wind farm (floating foundation)	2028–2032	2033 onwards	Yes. Overlap of operational phase with the construction or operational phases of MHPGC Project.
Flora ECC	Proposed	63.00	Offshore wind farm export cable	Unknown	Unknown	Yes. Overlap of construction phase or operational phase with the construction or operational phases of MHPGC Project.
Cedar ECC	Proposed	84.91	Offshore wind farm export cable	2028-2030	2031 onwards	Yes. Overlap of operational phase with the construction or operational phases of MHPGC Project.

Project/plan	Status	Minimum distance from MHPGC Project PEIR Red Line Boundary (km)	Description of project/plan	Estimated dates of construction (If applicable)	Estimated dates of operation (If applicable)	Overlap with MHPGC Project
Other cables and pipelines						
Buchan Oil Field (Power from Shore)	Proposed	55.33	Power cable	Unknown	Unknown	Yes. Overlap of construction phase or operational phase with the construction or operational phases of MHPGC Project.
Central North Sea Electrification (CNSE) Project	Proposed	55.67	Power cable	2027	2028 onwards	Yes. Overlap of operational phase with the construction or operational phases of MHPGC Project.
North Connect	Proposed	74.96	Power cable	Unknown	Unknown	Yes. Overlap of construction phase or operational phase with the construction or operational phases of MHPGC Project.
UK MPA network	Network of SAC, Special Protected Areas (SPA), Marine Conservation Zones (MCZ) are designated but management measures may not yet be implemented. Implementation of management measures for all MPAs expected from 2024 onwards with potential for an overlap in cumulative impacts associated with construction activities and the operation phase. There is a potential for cumulative impacts arising from reduction in access to fishing grounds and displacement. Potentially relevant sites include Farnes East and Swallow Sand MCZs with a proposed prohibition on bottom towed gear (to protect seabed features/habitats listed for the site) (MMO, 2025).					





Project Name:
MORVEN HAWTHORN PIT GRID CONNECTION PROJECT

Drawing Title:
FIGURE 7.6: OFFSHORE WIND FARM PROJECTS AND MPAS SCREENED INTO COMMERCIAL FISHERIES CEA

0 1 2 4 6 8 10 12 14 16 18 20 22 24 nm

Scale@A3:1:1,000,000

Service Layer Credits:
Datum: OSGB 1936
Projection: British National Grid



Drawing Number:
MHPGC-NIM-CF-0002

Data Sources:
Ordnance Survey, ICES

Geodetic Information:
World Topographic Map: CHL, PERE, GERM, FRO, ROMA, USGS
World Topographic Map: CHL, OR, GERM, PERE, GERM, USGS, NGA

VER	DATE	DETAILS	BY	CHECK
00	20/11/25	Initial Issue	FN	SM
01	14/07/26	Final Issue	FN	SM
-	-	-	-	-
-	-	-	-	-

LEGEND

 MHPGC Project PEIR Red Line Boundary

 Commercial Fisheries Regional Study Area

 ICES Rectangles

 6 nm Limit

 12 nm Limit

 Territorial Limits

 Marine Protected Areas

 Offshore Wind Farm Sites



7.9.2 Maximum Design Scenario – Whole project assessment and Cumulative Effects Assessment

- 7.9.2.1 The MDSs identified in **Table 7.16** have been selected as those having the potential to result in the greatest potential effect on an identified receptor or receptor group in relation to the whole project assessment and CEA. The MDSs have been based on the MHPGC Project alone assessment MDS (**Table 7.12**), as well as publicly available information on other third-party projects and plans that have been screened into the CEA (**Table 7.15**). Where applicable, the Morven North and Morven South alone assessment MDSs have also informed the MDSs outlined in **Table 7.16**.

Table 7.16: Maximum Design Scenario considered for the assessment of potential whole project and cumulative effects on commercial fisheries

Potential Cumulative Effect	Phase			Maximum Design Scenario	Justification
	C	O	D		
Cumulative loss or restricted access to fishing grounds	✓	✓	✓	<u>Scenario 1</u> MDS as described for MHPGC Project [see Table 7.12], assessed cumulatively with Morven North. <u>Scenario 2</u> MDS as described for MHPGC Project [see Table 7.12], assessed cumulatively with Morven South. <u>Scenario 4</u> Tier 1 • 15 offshore wind farms; • 16 subsea cables. Tier 2 • Two offshore wind farms; • Four subsea cables. Tier 3 • Two offshore wind farms; • Six subsea cables; • MPAs with fisheries management measures.	Outcome of the CEA will be greatest when the greatest number of other schemes are considered.
Cumulative displacement of fishing activity into other areas	✓	✓	✓	As per ‘Cumulative loss or restricted access to fishing grounds’.	
Cumulative impacts on commercially exploited species	✓	✓	✓	As described for Volume 2, Chapter 4: Fish and Shellfish Ecology, of the PEIR.	
C= Construction, O= Operations and maintenance, D= Decommissioning phases					
"✓" is used to denote the phase the potential impact can occur, "X" outlines there is no impact within this project phase					

7.10 Whole project assessment and Cumulative Effects Assessment

7.10.1 Overview

- 7.10.1.1 A description of the significance of whole project and cumulative effects upon commercial fisheries receptors arising from each identified impact is given below.
- 7.10.1.2 Commercial fisheries are assessed on a fleet-by-fleet basis rather than by administrative jurisdiction. Many fishing fleets routinely operate across both Scottish and English waters, and their sensitivity and recoverability are influenced by the spatial distribution of fishing activity rather than jurisdictional boundaries. Accordingly, separate cumulative effects assessment conclusions for Scottish and English waters are not presented. Instead, where relevant, the assessment considers differences in the interaction between individual fishing fleets and the MHPGC Project within each jurisdiction. In particular, the principal interactions with the MHPGC Project in English waters, occur where the offshore export cable corridor overlaps the Farn Deep Nephrops ground and inshore potting grounds. In contrast, within Scottish waters, interactions are generally limited to more widely dispersed mobile fishing fleets, where overlap with the MHPGC Project is lower and fleets exhibit wider normal operating ranges.

7.10.2 Cumulative loss or restricted access to fishing grounds

- 7.10.2.1 There is potential for cumulative reduction in access to or exclusion from established fishing grounds as a result of activities associated with the MHPGC Project and other projects that are under construction, in operation or with planned decommissioning.
- 7.10.2.2 The summary of the whole project assessment and cumulative effects assessment for loss or restricted access to fishing grounds are presented in **Table 7.17** and **Table 7.18**, respectively.

Table 7.17: MHPGC whole project assessment for loss or restricted access to fishing grounds

	Whole project assessment	
	Scenario 1: MHPGC Project and Morven North	Scenario 2: MHPGC Project and Morven South
Construction phase		
Magnitude of impact	The whole project assessment for Scenario 1 considers MHPGC Project together with Morven North. The impact of Morven North together with the MHPGC Project is not considered likely to result in an impact magnitude greater than that concluded in the MHPGC Project-alone assessment [see Section 7.8]. During construction of Morven North, mandatory safety zones may be established around infrastructure where construction or pre-commissioning activities are taking place, subject to the relevant safety zone application. These restrictions would be temporary and localised to the relevant areas of construction activity. For cable installation activities, temporary restrictions would instead be associated with the presence and operation of construction vessels and associated advisory safe passing distances. The impact is predicted to be of local spatial extent, temporary with a medium-term duration, and medium reversibility. It is predicted that the impact will affect the receptor directly. The impact magnitude is therefore, considered to be low adverse for the demersal seine, demersal otter trawl (whitefish) and dredge fisheries, medium adverse for potting fisheries and demersal otter trawl (Nephrops) fisheries, and negligible adverse for pelagic fisheries.	The whole project assessment for Scenario 2 considers MHPGC Project together with Morven South The impact of Morven South together with the MHPGC Project is not considered likely to result in an impact magnitude greater than that concluded in the MHPGC Project-alone assessment [see Section 7.8]. During construction of Morven South, mandatory safety zones may be established around infrastructure where construction or pre-commissioning activities are taking place, subject to the relevant safety zone application. These restrictions would be temporary and localised to the relevant areas of construction activity. For cable installation activities, temporary restrictions would instead be associated with the presence and operation of construction vessels and associated advisory safe passing distances. The impact is predicted to be of local spatial extent, temporary with a medium-term duration, and medium reversibility. It is predicted that the impact will affect the receptor directly. The impact magnitude is therefore, considered to be low adverse for the demersal seine, demersal otter trawl (whitefish) and dredge fisheries, medium adverse for potting fisheries and demersal otter trawl (Nephrops) fisheries, and negligible adverse for pelagic fisheries.
Sensitivity of receptor	The sensitivity of the commercial fishing receptors is the same or similar to that assessed for the MHPGC Project-alone assessment and summarised as low for pelagic, demersal seine, demersal otter trawl (whitefish) and dredge fisheries, medium for potting fisheries and high for demersal otter trawl (Nephrops) fisheries.	
Significance of effect	Dredge fishery: Overall, the sensitivity of the receptor is considered to be low and the magnitude of the whole project impact is deemed to be low adverse. The whole project effect of loss or restricted access to fishing grounds during the construction phase will, therefore, be of minor adverse significance, which is not significant in EIA terms. Demersal Otter Trawl Fishery (Nephrops): Overall, the sensitivity of the receptor is considered to be high and the magnitude of the whole project impact is deemed to be medium adverse. The whole project effect of loss or restricted access to fishing grounds during the construction phase will, therefore, be of moderate adverse significance, which is significant in EIA terms. This is principally driven by temporary restrictions to access within the Farn Deep Nephrops ground associated with construction of the MHPGC Project. Morven North and Morven South do not overlap the Farn Deep Nephrops ground and are therefore not anticipated to result in additional restriction of access within this area. At the PEIR stage, the residual whole project effect is therefore assessed as moderate adverse, which is significant in EIA terms.	

	Whole project assessment	
	Scenario 1: MHPGC Project and Morven North	Scenario 2: MHPGC Project and Morven South
	Demersal Otter Trawl Fishery (Haddock and Whitefish): Overall, the sensitivity of the receptor is considered to be low and the magnitude of the whole project impact is deemed to be low adverse. The whole project effect of loss or restricted access to fishing grounds during the construction phase will, therefore, be of minor adverse significance, which is not significant in EIA terms. Potting Fishery: Overall, the sensitivity of the receptor is considered to be medium and the magnitude of the whole project impact is deemed to be medium adverse. The whole project effect of loss or restricted access to fishing grounds during the construction phase will, therefore, be of moderate adverse significance, which is significant in EIA terms. Demersal Seine Fishery: Overall, the sensitivity of the receptor is considered to be low and the magnitude of the whole project impact is deemed to be low adverse. The whole project effect of loss or restricted access to fishing grounds during the construction phase will, therefore, be of minor adverse significance, which is not significant in EIA terms. Pelagic Trawl Fishery: Overall, the sensitivity of the receptor is considered to be low and the magnitude of the whole project impact is deemed to be negligible adverse. The whole project effect of loss or restricted access to fishing grounds during the construction phase will, therefore, be of minor adverse significance, which is not significant in EIA terms.	
Further mitigation and residual significance	For the potting fishery, the FLCP/FMMCP (CoT20 / MM-033 and CoT50) will provide the framework through which secondary mitigation identified for the MHPGC Project, as set out in Section 7.8.2, will be developed and implemented, including evidence-based cooperation agreements and associated justifiable disturbance payments, where appropriate. Following application of this secondary mitigation, the residual whole project effect is assessed as minor adverse, which is not significant in EIA terms. For the demersal otter trawl (Nephrops) fishery, the Outline FLCP/draft FMMCP will focus on measures to minimise the duration and extent of construction-related disruption. At the PEIR stage, the package of secondary mitigation is being developed through ongoing engagement with the fishing industry. The Applicant will continue to work with commercial fisheries stakeholders during and following PEIR consultation to identify and refine proportionate mitigation measures. The ES will present the final package of mitigation measures, informed by consultation responses and continued stakeholder engagement, and will review the residual effect where appropriate. Accordingly, at the PEIR stage, the residual whole project effect is conservatively assessed as moderate adverse, which is significant in EIA terms.	
Operations and maintenance phase		
Magnitude of impact	The whole project assessment for Scenario 1 considers MHPGC Project together with Morven North. The impact of Morven North together with the MHPGC Project is not considered likely to result in an impact magnitude greater than that concluded in the MHPGC Project-alone assessment [see Section 7.8]. This reflects the assumption that fishing will be possible within the Morven North Boundary where turbine spacing and turbine layout allow productive grounds to be targeted, and within the MHPGC Project with potential exception to this in locations where cable protection is deployed. This impact will lead to highly localised loss of access to fishing grounds, which will directly affect fleets over a long-term duration. The	The whole project assessment for Scenario 2 considers MHPGC Project together with Morven South. The impact of Morven South together with the MHPGC Project is not considered likely to result in an impact magnitude greater than that concluded in the MHPGC Project-alone assessment [see Section 7.8]. This reflects the assumption that fishing will be possible within the Morven South Boundary where turbine spacing and turbine layout allow productive grounds to be targeted, and within the MHPGC Project with potential exception to this in locations where cable protection is deployed. This impact will lead to highly localised loss of access to fishing grounds, which will directly affect fleets over a long-term duration. The

	Whole project assessment	
	Scenario 1: MHPGC Project and Morven North	Scenario 2: MHPGC Project and Morven South
	impact is predicted to be continuous with low reversibility for the lifetime of Morven North and the MHPGC Project and is of relevance to national and international fishing fleets. The impact magnitude is therefore, considered to be negligible adverse for the pelagic fishery and low adverse for all other fisheries.	impact is predicted to be continuous with low reversibility for the lifetime of Morven South and the MHPGC Project and is of relevance to national and international fishing fleets. The impact magnitude is therefore, considered to be negligible adverse for the pelagic fishery and low adverse for all other fisheries.
Receptor sensitivity	The sensitivity of the commercial fishing receptors is the same or similar to that assessed for the MHPGC Project-alone assessment and summarised as low for pelagic, demersal seine, demersal otter trawl (whitefish) and dredge fisheries, medium for potting fisheries and high for demersal otter trawl (Nephrops) fisheries.	
Significance of effect	Dredge Fishery: Overall, the sensitivity of the receptor is considered to be low and the magnitude of the whole project impact is deemed to be low adverse. The whole project effect of loss or restricted access to fishing grounds during the O&M phase will, therefore, be of minor adverse significance, which is not significant in EIA terms. Demersal Otter Trawl Fishery (Nephrops): Overall, the sensitivity of the receptor is considered to be high and the magnitude of the whole project impact is deemed to be low adverse. The whole project effect of loss or restricted access to fishing grounds during the O&M phase will, therefore, be of minor adverse significance, which is not significant in EIA terms. Demersal Otter Trawl Fishery (Haddock and Whitefish): Overall, the sensitivity of the receptor is considered to be medium and the magnitude of the whole project impact is deemed to be low adverse. The whole project effect of loss or restricted access to fishing grounds during the O&M phase will, therefore, be of minor adverse significance, which is not significant in EIA terms. Potting Fishery: Overall, the sensitivity of the receptor is considered to be low and the magnitude of the whole project impact is deemed to be low adverse. The whole project effect of loss or restricted access to fishing grounds during the O&M phase will, therefore, be of minor adverse significance, which is not significant in EIA terms. Demersal Seine Fishery: Overall, the sensitivity of the receptor is considered to be low and the magnitude of the whole project impact is deemed to be low adverse. The whole project effect of loss or restricted access to fishing grounds during the O&M phase will, therefore, be of minor adverse significance, which is not significant in EIA terms. Pelagic Trawl Fishery: Overall, the sensitivity of the receptor is considered to be low and the magnitude of the whole project impact is deemed to be negligible adverse. The whole project effect of loss or restricted access to fishing grounds during the O&M phase will, therefore, be of minor adverse significance, which is not significant in EIA terms.	
Further mitigation and residual significance	No further mitigation measures are considered necessary for this impact, as the likely whole project effect in the absence of further mitigation is not significant in EIA terms.	
Decommissioning phase		
Magnitude of impact	The whole project assessment for Scenario 1 considers MHPGC Project together with Morven North. During the decommissioning phase, this impact relates to the temporary loss or temporary restricted access to fishing grounds due	The whole project assessment for Scenario 2 considers MHPGC Project together with Morven South. During the decommissioning phase, this impact relates to the temporary loss or temporary restricted access to fishing grounds due

	Whole project assessment	
	Scenario 1: MHPGC Project and Morven North	Scenario 2: MHPGC Project and Morven South
	to decommissioning activities related to the removal of wind turbines, OSPs, their foundations, and subsea cabling. The decommissioning sequence will generally be the reverse of the construction sequence and involve similar types and numbers of vessels and equipment. It is assumed that the decommissioning phase will have a similar duration as the construction phase. The magnitude of impact is the same or similar to that assessed during construction. The impact is predicted to be of local spatial extent, medium term duration, intermittent and medium reversibility. It is predicted that the impact will affect the receptor directly. The impact magnitude is therefore, considered to be low adverse for the demersal seine, demersal otter trawl (whitefish) and dredge fisheries, medium adverse for potting fisheries and demersal otter trawl (Nephrops) fisheries, and negligible adverse for pelagic fisheries.	to decommissioning activities related to the removal of wind turbines, OSPs, their foundations, and subsea cabling. The decommissioning sequence will generally be the reverse of the construction sequence and involve similar types and numbers of vessels and equipment. It is assumed that the decommissioning phase will have a similar duration as the construction phase. The magnitude of impact is the same or similar to that assessed during construction. The impact is predicted to be of local spatial extent, medium term duration, intermittent and medium reversibility. It is predicted that the impact will affect the receptor directly. The impact magnitude is therefore, considered to be low adverse for the demersal seine, demersal otter trawl (whitefish) and dredge fisheries, medium adverse for potting fisheries and demersal otter trawl (Nephrops) fisheries, and negligible adverse for pelagic fisheries.
Receptor sensitivity	The sensitivity of the commercial fishing receptors is the same or similar to that assessed for the MHPGC Project-alone assessment and summarised as low for pelagic, demersal seine, demersal otter trawl (whitefish) and dredge fisheries, medium for potting fisheries and high for demersal otter trawl (Nephrops) fisheries.	
Significance of effect	Dredge fishery: Overall, the sensitivity of the receptor is considered to be low and the magnitude of the whole project impact is deemed to be low adverse. The whole project effect of loss or restricted access to fishing grounds during the decommissioning phase will, therefore, be of minor adverse significance, which is not significant in EIA terms. Demersal Otter Trawl Fishery (Nephrops): Overall, the sensitivity of the receptor is considered to be high and the magnitude of the whole project impact is deemed to be medium adverse. The whole project effect of loss or restricted access to fishing grounds during the decommissioning phase will, therefore, be of moderate adverse significance, which is significant in EIA terms. This reflects the temporary restriction of access associated with decommissioning activities, the high sensitivity of the receptor, and the temporary, progressive and linear nature of the works. At the PEIR stage, the residual whole project effect is therefore assessed as moderate adverse, which is significant in EIA terms. Demersal Otter Trawl Fishery (Haddock and Whitefish): Overall, the sensitivity of the receptor is considered to be low and the magnitude of the whole project impact is deemed to be low adverse. The whole project effect of loss or restricted access to fishing grounds during the decommissioning phase will, therefore, be of minor adverse significance, which is not significant in EIA terms. Potting Fishery: Overall, the sensitivity of the receptor is considered to be medium and the magnitude of the whole project impact is deemed to be medium adverse. The whole project effect of loss or restricted access to fishing grounds during the decommissioning phase will, therefore, be of moderate adverse significance, which is significant in EIA terms. Demersal Seine Fishery: Overall, the sensitivity of the receptor is considered to be low and the magnitude of the whole project impact is deemed to be low adverse. The whole project effect of loss or restricted access to fishing grounds during the decommissioning phase will, therefore, be of minor adverse significance, which is not significant in EIA terms.	

	Whole project assessment	
	Scenario 1: MHPGC Project and Morven North	Scenario 2: MHPGC Project and Morven South
	Pelagic Trawl Fishery: Overall, the sensitivity of the receptor is considered to be low and the magnitude of the whole project impact is deemed to be negligible adverse. The whole project effect of loss or restricted access to fishing grounds during the decommissioning phase will, therefore, be of minor adverse significance, which is not significant in EIA terms.	
Further mitigation and residual significance	The FLCP/FMMCP are expected to remain applicable during decommissioning and will provide the framework through which any secondary mitigation identified as necessary at that stage will be developed and implemented. For the potting fishery, this may include evidence-based cooperation agreements and associated justifiable disturbance payments, where appropriate. For the demersal otter trawl (Nephrops) fishery, the requirement for additional proportionate mitigation will be considered through ongoing stakeholder engagement and in light of the final decommissioning methodology. At the PEIR stage, the residual whole project effect is assessed as minor adverse for the potting fishery and moderate adverse for the demersal otter trawl (Nephrops) fishery.	

Table 7.18: CEA for loss or restricted access to fishing grounds

	CEA
	Scenario 4: MHPGC Project and Tier 1 (including Morven North and Morven South), Tier 2 and Tier 3 (including MBAGC Project) projects and plans screened in
Construction phase	
Magnitude of impact	The CEA for Scenario 4 considers the MHPGC Project together with all Tier 1, Tier 2 and Tier 3 projects and plans screened into the assessment, including Morven North, Morven South and the MBAGC Project. Cumulative loss or restricted access to fishing grounds may arise during construction due to the presence of advisory safe passing distances and active works associated with the MHPGC Project and other Tier 1, 2 and 3 developments within the Regional Commercial Fisheries Study Area. The cumulative assessment does take account of the potential for fisheries management measures associated with MPAs, including the Farnes East and Swallow Sand MPAs, to contribute to broader spatial pressures on commercial fishing activity at a regional scale. The MHPGC Project will result in temporary exclusion of fishing activity within defined advisory safe passing distances during active construction works. Where construction activities associated with other Tier 1, 2 and 3 projects overlap spatially and temporally, cumulative restrictions may occur. While potential fisheries management measures associated with the Farnes East and Swallow Sand MPAs remain under development, their possible interaction with temporary project-related restrictions has been considered qualitatively within the cumulative assessment. However, the MHPGC Project does not result in permanent exclusion of fishing grounds. Construction-related restrictions are temporary and localised, and fishing is anticipated to resume following completion of works. As a linear subsea cable project, the MHPGC Project does not incrementally reduce the long-term availability of fishing grounds at a regional scale. The contribution of the MHPGC Project to these regional cumulative pressures is limited by its linear nature, narrow footprint and temporary, reversible construction effects. Although the MHPGC Project directly overlaps the Farn Deeps

	CEA
	Scenario 4: MHPGC Project and Tier 1 (including Morven North and Morven South), Tier 2 and Tier 3 (including MBAGC Project) projects and plans screened in
	Nephrops ground, it does not materially alter the overall scale, duration or reversibility of cumulative construction effects when considered alongside the wider portfolio of Tier 1, Tier 2 and Tier 3 projects and potential MPA-related fisheries management measures. Accordingly, the cumulative magnitude of impact during construction is assessed as low adverse for all fishing fleets.
Sensitivity of receptor	During construction, commercial fishing fleets may be sensitive to cumulative loss or restriction of access where multiple developments are constructed concurrently within established fishing grounds. Sensitivity varies by fleet, with spatially constrained and high-value fisheries (such as the Nephrops trawl fishery) being particularly sensitive to cumulative pressures. Commercial fisheries are assessed on a fleet-by-fleet basis; however, for the purposes of the cumulative assessment, the overall sensitivity reflects the combined response of commercial fishing receptors to regional-scale cumulative pressures. While certain fisheries, such as the Nephrops trawl fishery, are more sensitive due to their reliance on spatially discrete fishing grounds, other fleets demonstrate greater spatial flexibility and recoverability. Taking these factors together, overall receptor sensitivity to cumulative loss or restricted access during construction is assessed as medium.
Significance of effect	All fisheries: Overall, it is considered that the receptor sensitivity is medium and the cumulative magnitude of low adverse. Therefore, the cumulative effect of loss or restricted access with Tier 1, 2 and 3 projects and plans, during the construction phase, is considered to be minor adverse , which is not significant in EIA terms.
Further mitigation and residual significance	No mitigation measures for commercial fisheries are considered necessary because the likely effect in the absence of further mitigation is not significant in EIA terms.
O&M phase	
Magnitude of impact	The CEA for Scenario 4 considers the MHPGC Project together with all Tier 1, Tier 2 and Tier 3 projects and plans screened into the assessment, including Morven North, Morven South and the MBAGC Project. Cumulative loss or restricted access during O&M may arise from intermittent advisory safety distances associated with repair or remediation activities. These activities are infrequent, localised and short-term across all Tier 1, 2 and 3 projects. The cumulative magnitude of impact during O&M is therefore assessed as low adverse, and lower than that experienced during construction.
Sensitivity of receptor	During the O&M phase, fishing is anticipated to resume across the cable route. Sensitivity to cumulative loss or restricted access is therefore lower than during construction, although fleets remain sensitive to intermittent restrictions associated with maintenance activities. Recoverability is high due to the temporary and localised nature of effects. Receptor sensitivity during O&M is assessed as medium .
Significance of effect	All fisheries: Overall, it is considered that the receptor sensitivity is medium and the cumulative magnitude of low adverse. Therefore, the cumulative effect of loss or restricted access with Tier 1, 2 and 3 projects and plans, during the O&M phase, is considered to be minor adverse , which is not significant in EIA terms.

	CEA
	Scenario 4: MHPGC Project and Tier 1 (including Morven North and Morven South), Tier 2 and Tier 3 (including MBAGC Project) projects and plans screened in
Further mitigation and residual significance	No mitigation measures for commercial fisheries are considered necessary because the likely effect in the absence of further mitigation is not significant in EIA terms.
Decommissioning phase	
Magnitude of impact	The CEA for Scenario 4 considers the MHPGC Project together with all Tier 1, Tier 2 and Tier 3 projects and plans screened into the assessment, including Morven North, Morven South and the MBAGC Project. Cumulative loss or restricted access to fishing grounds may arise during decommissioning due to the presence of advisory safety distances and active works associated with the MHPGC Project and other Tier 1, 2 and 3 developments within the Regional Commercial Fisheries Study Area. The cumulative assessment also takes account of the potential for fisheries management measures associated with MPAs, including the Farnes East and Swallow Sand MPAs, to contribute to broader spatial pressures on commercial fishing activity at a regional scale. The MHPGC Project may result in temporary exclusion of fishing activity within defined advisory safety distances during active decommissioning works. Where decommissioning activities associated with other Tier 1, 2 and 3 projects overlap spatially and temporally, cumulative restrictions may occur. While potential fisheries management measures associated with the Farnes East and Swallow Sand MPAs remain under development, their possible interaction with temporary project-related restrictions has been considered qualitatively within the cumulative assessment. However, the MHPGC Project does not result in permanent exclusion of fishing grounds during decommissioning. Decommissioning-related restrictions are temporary and localised, and fishing is anticipated to resume following completion of works. As a linear subsea cable project, decommissioning activities would be short-term and would not incrementally reduce the long-term availability of fishing grounds at a regional scale. At a regional scale, the cumulative presence of offshore developments undergoing decommissioning, together with emerging spatial management measures, may contribute to broader spatial pressures on commercial fisheries. However, the contribution of the MHPGC Project to these pressures is limited by its linear nature, narrow footprint and temporary, reversible decommissioning effects. The MHPGC Project does not materially alter the scale, duration or reversibility of cumulative effects when considered alongside other Tier 1, Tier 2 and Tier 3 developments or potential MPA-related management measures. Accordingly, the cumulative magnitude of impact during decommissioning is assessed as low adverse for all fishing fleets.
Sensitivity of receptor	During decommissioning, commercial fishing fleets may be sensitive to cumulative loss or restriction of access where multiple developments undertake activities concurrently within established fishing grounds. Sensitivity varies by fleet, with spatially constrained and high-value fisheries (such as the Nephrops trawl fishery) being particularly sensitive to cumulative pressures. However, receptor vulnerability is moderated by the temporary and intermittent nature of decommissioning activities, the absence of long-term exclusion where infrastructure is fully removed or made safe, and the restoration of access following completion of works. The availability of alternative grounds within normal operating ranges further reduces potential

	CEA
	Scenario 4: MHPGC Project and Tier 1 (including Morven North and Morven South), Tier 2 and Tier 3 (including MBAGC Project) projects and plans screened in
	disruption. Recoverability is therefore considered to be medium, and overall receptor sensitivity to cumulative loss or restricted access during the decommissioning phase is assessed as medium .
Significance of effect	All fisheries: Overall, it is considered that the receptor sensitivity is medium and the cumulative magnitude of low adverse. Therefore, the cumulative effect of loss or restricted access with Tier 1, 2 and 3 projects and plans, during the decommissioning phase, is considered to be minor adverse , which is not significant in EIA terms.
Further mitigation and residual significance	No mitigation measures for commercial fisheries are considered necessary because the likely effect in the absence of further mitigation is not significant in EIA terms.

7.10.3 Cumulative displacement of fishing activity into other areas

7.10.3.1 There is potential for cumulative displacement leading to gear conflict and increased fishing pressure on adjacent grounds associated with the MHPGC Project and other projects that are under construction, in operation or with planned decommissioning.

The summary of the whole project assessment, Morven Programme assessment and cumulative effects assessment for loss or restricted access to fishing grounds are presented in **Table 7.17**: and **Table 7.18**, respectively.

Table 7.19: Whole project assessment for displacement of fishing activity into other areas

	Whole project assessment	
	Scenario 1: MHPGC Project and Morven North	Scenario 2: MHPGC Project and Morven South
Construction phase		
Magnitude of impact	The whole project assessment for Scenario 1 considers MHPGC Project together with Morven North. Reduced access or exclusion from fishing grounds due to Morven North and the MHPGC Project may lead to increases in fishing effort in other areas that may already be exploited thereby leading to increased pressure and gear conflict. The impact of Morven North together with the MHPGC Project is not considered likely to result in an impact magnitude greater than that concluded in the MHPGC Project-alone assessment [see Section 7.8]. During construction of Morven North, mandatory safety zones may be established around infrastructure where construction or pre-commissioning activities are taking place, subject to the relevant safety zone application. For cable installation activities, temporary restrictions would instead be associated with construction vessels and associated advisory safe passing distances. The extent of displacement is therefore expected to be temporary and spatially limited. Established spatial management practices, communication between fleets, and avoidance behaviour are expected to limit the likelihood of sustained or widespread gear conflict. The impact is predicted to be of local to regional spatial extent, temporary with a medium-term duration, and medium reversibility. It is predicted that the impact will affect the receptor directly. The impact magnitude is therefore, considered to be low for the demersal seine, demersal otter trawl (whitefish) and dredge fisheries, medium for potting fisheries and demersal otter trawl (Nephrops) fisheries, and negligible for pelagic fisheries.	The whole project assessment for Scenario 2 considers MHPGC Project together with Morven South. Reduced access or exclusion from fishing grounds due to Morven South and the MHPGC Project may lead to increases in fishing effort in other areas that may already be exploited thereby leading to increased pressure and gear conflict. The impact of Morven South together with the MHPGC Project is not considered likely to result in an impact magnitude greater than that concluded in the MHPGC Project-alone assessment [see Section 7.8]. During construction of Morven South, mandatory safety zones may be established around infrastructure where construction or pre-commissioning activities are taking place, subject to the relevant safety zone application. For cable installation activities, temporary restrictions would instead be associated with construction vessels and associated advisory safe passing distances. The extent of displacement is therefore expected to be temporary and spatially limited. Established spatial management practices, communication between fleets, and avoidance behaviour are expected to limit the likelihood of sustained or widespread gear conflict. The impact is predicted to be of local to regional spatial extent, temporary with a medium-term duration, and medium reversibility. It is predicted that the impact will affect the receptor directly. The impact magnitude is therefore, considered to be low for the demersal seine, demersal otter trawl (whitefish) and dredge fisheries, medium for potting fisheries and demersal otter trawl (Nephrops) fisheries, and negligible for pelagic fisheries.
Sensitivity of receptor	The sensitivity of the commercial fishing receptors is the same or similar to that assessed for the MHPGC Project-alone assessment and summarised as low for pelagic, demersal seine, demersal otter trawl (whitefish) and dredge fisheries, medium for potting fisheries and high for demersal otter trawl (Nephrops) fisheries.	
Significance of effect	Dredge fishery: Overall, the sensitivity of the receptor is considered to be low and the magnitude of the whole project impact is deemed to be low adverse. The whole project effect of loss or restricted access to fishing grounds during the construction phase will, therefore, be of minor adverse significance, which is not significant in EIA terms.	

	Whole project assessment	
	Scenario 1: MHPGC Project and Morven North	Scenario 2: MHPGC Project and Morven South
	Demersal Otter Trawl Fishery (Nephrops): Overall, the sensitivity of the receptor is considered to be high and the magnitude of the whole project impact is deemed to be medium adverse. The whole project effect of displacement of fishing activity into other areas during the construction phase will, therefore, be of moderate adverse significance, which is significant in EIA terms. This reflects the temporary displacement of fishing activity from part of the Farn Deep Nephrops ground during construction, the high sensitivity of the receptor, and the temporary, progressive and linear nature of construction activities. At the PEIR stage, the residual whole project effect is therefore assessed as moderate adverse, which is significant in EIA terms. Demersal Otter Trawl Fishery (Haddock and Whitefish): Overall, the sensitivity of the receptor is considered to be low and the magnitude of the whole project impact is deemed to be low adverse. The whole project effect of loss or restricted access to fishing grounds during the construction phase will, therefore, be of minor adverse significance, which is not significant in EIA terms. Potting Fishery: Overall, the sensitivity of the receptor is considered to be medium and the magnitude of the whole project impact is deemed to be medium adverse. The whole project effect of loss or restricted access to fishing grounds during the construction phase will, therefore, be of moderate adverse significance, which is significant in EIA terms. Demersal Seine Fishery: Overall, the sensitivity of the receptor is considered to be low and the magnitude of the whole project impact is deemed to be low adverse. The whole project effect of loss or restricted access to fishing grounds during the construction phase will, therefore, be of minor adverse significance, which is not significant in EIA terms. Pelagic Trawl Fishery: Overall, the sensitivity of the receptor is considered to be low and the magnitude of the whole project impact is deemed to be negligible adverse. The whole project effect of loss or restricted access to fishing grounds during the construction phase will, therefore, be of minor adverse significance, which is not significant in EIA terms.	
Further mitigation and residual significance	For the potting fishery, the FLCP/FMMCP (CoT20 / MM-033 and CoT50) will provide the framework through which secondary mitigation identified for the MHPGC Project, as set out in Section 7.8.2, will be developed and implemented, including evidence-based cooperation agreements and associated justifiable disturbance payments, where appropriate. Following application of this secondary mitigation, the residual whole project effect is assessed as minor adverse, which is not significant in EIA terms. For the demersal otter trawl (Nephrops) fishery, the Outline FLCP/FMMCP will focus on measures to minimise the duration and extent of construction-related disruption. At the PEIR stage, the package of secondary mitigation is being developed through ongoing engagement with the fishing industry. The Applicant will continue to work with commercial fisheries stakeholders during and following PEIR consultation to identify and refine proportionate mitigation measures. The ES will present the final package of mitigation measures, informed by consultation responses and continued stakeholder engagement, and will review the residual effect where appropriate. Accordingly, at the PEIR stage, the residual whole project effect is conservatively assessed as moderate adverse, which is significant in EIA terms.	
O&M phase		
Magnitude of impact	The whole project assessment for Scenario 1 considers MHPGC Project together with Morven North. Loss of access or exclusion from fishing grounds during O&M of Morven North and the MHPGC Project may lead to increases in fishing effort in other areas that may already be exploited thereby leading to gear conflict and increased pressure on adjacent fishing grounds.	The whole project assessment for Scenario 2 considers MHPGC Project together with Morven South. Loss of access or exclusion from fishing grounds during O&M of Morven South and the MHPGC Project may lead to increases in fishing effort in other areas that may already be exploited thereby leading to gear conflict and increased pressure on adjacent fishing grounds.

	Whole project assessment	
	Scenario 1: MHPGC Project and Morven North	Scenario 2: MHPGC Project and Morven South
	The impact of Morven North together with the MHPGC Project is not considered likely to result in an impact magnitude greater than that concluded in the Morven North-alone assessment. This reflects the assumption that fishing will be possible within the Morven North Boundary where turbine spacing and turbine layout allow productive grounds to be targeted, and within the MHPGC Project with potential exception to this in locations where cable protection is deployed, and that the impact of displacement during the operational and maintenance phase is expected to be similar or more likely lower than the magnitude assessed during construction. This impact will lead to very minimal displacement, which will directly affect fleets over a long-term duration. The impact is predicted to be continuous with low reversibility for the lifetime of Morven North and the MHPGC Project and is of relevance to national and international fishing fleets. The impact magnitude is therefore, considered to be negligible for the pelagic fishery and low for all other fisheries.	The impact of Morven South together with the MHPGC Project is not considered likely to result in an impact magnitude greater than that concluded in the Morven North-alone assessment. This reflects the assumption that fishing will be possible within the Morven South Boundary where turbine spacing and turbine layout allow productive grounds to be targeted, and within the MHPGC Project with potential exception to this in locations where cable protection is deployed, and that the impact of displacement during the operational and maintenance phase is expected to be similar or more likely lower than the magnitude assessed during construction. This impact will lead to very minimal displacement, which will directly affect fleets over a long-term duration. The impact is predicted to be continuous with low reversibility for the lifetime of Morven South and the MHPGC Project and is of relevance to national and international fishing fleets. The impact magnitude is therefore, considered to be negligible for the pelagic fishery and low for all other fisheries.
Sensitivity of receptor	The sensitivity of the commercial fishing receptors is the same or similar to that assessed for the MHPGC Project-alone assessment and summarised as low for pelagic, demersal seine, demersal otter trawl (whitefish) and dredge fisheries, medium for potting fisheries and high for demersal otter trawl (Nephrops) fisheries.	
Significance of effect	Dredge Fishery: Overall, the sensitivity of the receptor is considered to be low and the magnitude of the whole project impact is deemed to be low adverse. The whole project effect of displacement of fishing activity during the O&M phase will, therefore, be of minor adverse significance, which is not significant in EIA terms. Demersal Otter Trawl Fishery (Nephrops): Overall, the sensitivity of the receptor is considered to be high and the magnitude of the whole project impact is deemed to be low adverse. The whole project effect of displacement of fishing activity during the O&M phase will, therefore, be of minor adverse significance, which is not significant in EIA terms. Demersal Otter Trawl Fishery (Haddock and Whitefish): Overall, the sensitivity of the receptor is considered to be medium and the magnitude of the whole project impact is deemed to be low adverse. The whole project effect of displacement of fishing activity during the O&M phase will, therefore, be of minor adverse significance, which is not significant in EIA terms. Potting Fishery: Overall, the sensitivity of the receptor is considered to be low and the magnitude of the whole project impact is deemed to be low adverse. The whole project effect of displacement of fishing activity during the O&M phase will, therefore, be of minor adverse significance, which is not significant in EIA terms. Demersal Seine Fishery: Overall, the sensitivity of the receptor is considered to be low and the magnitude of the whole project impact is deemed to be low adverse. The whole project effect of displacement of fishing activity during the O&M phase will, therefore, be of minor adverse significance, which is not significant in EIA terms.	

	Whole project assessment	
	Scenario 1: MHPGC Project and Morven North	Scenario 2: MHPGC Project and Morven South
	Pelagic Trawl Fishery: Overall, the sensitivity of the receptor is considered to be low and the magnitude of the whole project impact is deemed to be negligible adverse. The whole project effect of displacement of fishing activity during the O&M phase will, therefore, be of minor adverse significance, which is not significant in EIA terms.	
Further mitigation and residual significance	No further mitigation measures are considered necessary for this impact, as the likely whole project effect in the absence of further mitigation is not significant in EIA terms.	
Decommissioning phase		
Magnitude of impact	The whole project assessment for Scenario 1 considers MHPGC Project together with Morven North. Exclusion from fishing grounds during the decommissioning phase of Morven North and the MHPGC Project may lead to increases in fishing effort in other areas that may already be exploited thereby leading to gear conflict. The decommissioning sequence will generally be the reverse of the construction sequence and involve similar types and numbers of vessels and equipment. It is assumed that the decommissioning phase will have a similar duration as the construction phase. The impact is predicted to be of local spatial extent, medium term duration, intermittent and medium reversibility. It is predicted that the impact will affect the receptor directly. The impact magnitude is therefore, considered to be low for the demersal seine, demersal otter trawl (whitefish) and dredge fisheries, medium for potting fisheries and demersal otter trawl (Nephrops) fisheries, and negligible for pelagic fisheries.	The whole project assessment for Scenario 2 considers MHPGC Project together with Morven South. Exclusion from fishing grounds during the decommissioning phase of Morven South and the MHPGC Project may lead to increases in fishing effort in other areas that may already be exploited thereby leading to gear conflict. The decommissioning sequence will generally be the reverse of the construction sequence and involve similar types and numbers of vessels and equipment. It is assumed that the decommissioning phase will have a similar duration as the construction phase. The impact is predicted to be of local spatial extent, medium term duration, intermittent and medium reversibility. It is predicted that the impact will affect the receptor directly. The impact magnitude is therefore, considered to be low for the demersal seine, demersal otter trawl (whitefish) and dredge fisheries, medium for potting fisheries and demersal otter trawl (Nephrops) fisheries, and negligible for pelagic fisheries.
Sensitivity of receptor	The sensitivity of the commercial fishing receptors is the same or similar to that assessed for the MHPGC Project-alone assessment and summarised as low for pelagic, demersal seine, demersal otter trawl (whitefish) and dredge fisheries, medium for potting fisheries and high for demersal otter trawl (Nephrops) fisheries.	
Significance of effect	Dredge fishery: Overall, the sensitivity of the receptor is considered to be low and the magnitude of the whole project impact is deemed to be low adverse. The whole project effect of displacement of fishing activity during the decommissioning phase will, therefore, be of minor adverse significance, which is not significant in EIA terms. Demersal Otter Trawl Fishery (Nephrops): Overall, the sensitivity of the receptor is considered to be high and the magnitude of the whole project impact is deemed to be medium adverse. The whole project effect of displacement of fishing activity into other areas during the decommissioning phase will, therefore, be of moderate adverse significance, which is significant in EIA terms. This reflects the temporary displacement of fishing activity associated with decommissioning activities, the high sensitivity of the receptor, and the temporary, progressive	

	Whole project assessment	
	Scenario 1: MHPGC Project and Morven North	Scenario 2: MHPGC Project and Morven South
	and linear nature of the works. At the PEIR stage, the residual whole project effect is therefore assessed as moderate adverse, which is significant in EIA terms. Demersal Otter Trawl Fishery (Haddock and Whitefish): Overall, the sensitivity of the receptor is considered to be low and the magnitude of the whole project impact is deemed to be low adverse. The whole project effect of displacement of fishing activity during the decommissioning phase will, therefore, be of minor adverse significance, which is not significant in EIA terms. Potting Fishery: Overall, the sensitivity of the receptor is considered to be medium and the magnitude of the whole project impact is deemed to be medium adverse. The whole project effect of displacement of fishing activity during the decommissioning phase will, therefore, be of moderate adverse significance, which is significant in EIA terms. Demersal Seine Fishery: Overall, the sensitivity of the receptor is considered to be low and the magnitude of the whole project impact is deemed to be low adverse. The whole project effect of displacement of fishing activity during the decommissioning phase will, therefore, be of minor adverse significance, which is not significant in EIA terms. Pelagic Trawl Fishery: Overall, the sensitivity of the receptor is considered to be low and the magnitude of the whole project impact is deemed to be negligible adverse. The whole project effect of displacement of fishing activity during the decommissioning phase will, therefore, be of minor adverse significance, which is not significant in EIA terms.	
Further mitigation and residual significance	The FLCP/FMMCP are expected to remain applicable during decommissioning and will provide the framework through which any secondary mitigation identified as necessary at that stage will be developed and implemented. For the potting fishery, this may include evidence-based cooperation agreements and associated justifiable disturbance payments, where appropriate. For the demersal otter trawl (Nephrops) fishery, the requirement for additional proportionate mitigation will be considered through ongoing stakeholder engagement and in light of the final decommissioning methodology. At the PEIR stage, the residual whole project effect is assessed as minor adverse for the potting fishery and moderate adverse for the demersal otter trawl (Nephrops) fishery.	

Table 7.20: CEA for displacement of fishing activity into other areas

	CEA
	Scenario 4: MHPGC Project and Tier 1 (including Morven North and Morven South), Tier 2 and Tier 3 (including MBAGC Project) projects and plans screened in
Construction phase	
Magnitude of impact	The CEA for Scenario 4 considers the MHPGC Project together with all Tier 1, Tier 2 and Tier 3 projects and plans screened into the assessment, including Morven North, Morven South and the MBAGC Project. Displacement effects associated with the MHPGC Project during construction are intrinsically linked to temporary loss or restricted access to fishing grounds. At a cumulative level, displacement pressures may arise where multiple projects are constructed concurrently and, together with fisheries management measures associated with MPAs, contribute to broader

	CEA
	Scenario 4: MHPGC Project and Tier 1 (including Morven North and Morven South), Tier 2 and Tier 3 (including MBAGC Project) projects and plans screened in
	regional spatial pressures on commercial fishing activity. However, the MHPGC Project does not permanently displace fishing effort and does not materially increase long-term competition for alternative grounds. As a linear subsea cable project, construction effects are temporary, localised and reversible, with fishing activity anticipated to resume following completion of works. Accordingly, the cumulative magnitude of displacement during construction is assessed as low adverse .
Sensitivity of receptor	Displacement of fishing activity during construction may occur where access restrictions cumulatively result in fishing effort being redistributed to alternative grounds. Sensitivity reflects the ability of fleets to relocate effort without undue economic or operational impact. While some fleets may experience short-term disruption, overall recoverability is moderate due to operational flexibility. Receptor sensitivity is therefore assessed as medium .
Significance of effect	All fisheries: Overall, it is considered that the receptor sensitivity is medium and the cumulative magnitude of low adverse. Therefore, the cumulative effect of displacement of fishing activity into other areas with Tier 1, 2 and 3 projects and plans, during the construction phase, is considered to be minor adverse , which is not significant in EIA terms.
Further mitigation and residual significance	No mitigation measures for commercial fisheries are considered necessary because the likely effect in the absence of further mitigation is not significant in EIA terms.
O&M phase	
Magnitude of impact	The CEA for Scenario 4 considers the MHPGC Project together with all Tier 1, Tier 2 and Tier 3 projects and plans screened into the assessment, including Morven North, Morven South and the MBAGC Project. Displacement effects during O&M are expected to be intermittent and localised, with no sustained redistribution of fishing effort. Any temporary displacement associated with maintenance activities would be short-term and would not materially alter regional fishing patterns. The cumulative magnitude of impact is therefore assessed as low adverse .
Sensitivity of receptor	Sensitivity to cumulative displacement during O&M is reduced relative to construction, as displacement would be limited to short-term responses to maintenance activities. Receptor sensitivity is assessed as low to medium .
Significance of effect	All fisheries: Overall, it is considered that the receptor sensitivity is low to medium and the cumulative magnitude of low adverse. Therefore, the cumulative effect displacement of fishing activity into other areas with Tier 1, 2 and 3 projects and plans, during the O&M phase, is considered to be minor adverse , which is not significant in EIA terms.
Further mitigation and residual significance	No mitigation measures for commercial fisheries are considered necessary because the likely effect in the absence of further mitigation is not significant in EIA terms.
Decommissioning phase	
Magnitude of impact	The CEA for Scenario 4 considers the MHPGC Project together with all Tier 1, Tier 2 and Tier 3 projects and plans screened into the assessment, including Morven North, Morven South and the MBAGC Project.

	CEA
	Scenario 4: MHPGC Project and Tier 1 (including Morven North and Morven South), Tier 2 and Tier 3 (including MBAGC Project) projects and plans screened in
	Cumulative displacement of fishing activity into other areas may arise during decommissioning due to the presence of advisory safety distances and active works associated with the MHPGC Project and other Tier 1, 2 and 3 developments within the Regional Commercial Fisheries Study Area. Where activities overlap spatially and temporally, fishing effort may be redistributed into adjacent grounds, potentially increasing competition and operational pressures at a local or regional scale. The cumulative assessment also takes account of the potential for fisheries management measures associated with MPAs, including the Farnes East and Swallow Sand MPAs, to influence patterns of fishing activity and contribute to broader spatial redistribution of effort. The MHPGC Project may result in temporary and localised displacement of fishing activity during active decommissioning works. Where decommissioning activities associated with other developments overlap, cumulative redistribution of fishing effort could occur. However, decommissioning-related activities would be short term, localised and reversible, with fishing activity anticipated to return to established grounds following completion of works. As a linear subsea cable project, the MHPGC Project would not incrementally reduce the long-term availability of fishing grounds nor lead to sustained redistribution of fishing effort at a regional scale. At a regional scale, the cumulative presence of offshore developments undergoing decommissioning, together with emerging spatial management measures, may contribute to broader patterns of effort redistribution. However, the contribution of the MHPGC Project to such cumulative displacement is limited by its linear nature, narrow footprint and temporary, reversible decommissioning effects. The MHPGC Project does not materially alter the scale, duration or reversibility of cumulative effects when considered alongside other Tier 1, Tier 2 and Tier 3 developments or potential MPA-related management measures. Accordingly, the cumulative magnitude of impact during decommissioning is assessed as low adverse for all fishing fleets.
Sensitivity of receptor	During decommissioning, commercial fishing fleets may be sensitive to the cumulative displacement of fishing activity into other areas where multiple developments undertake activities concurrently within established fishing grounds. Displacement may result in increased competition, gear conflict, reduced catch efficiency and economic pressure in adjacent fishing grounds. Sensitivity varies by fleet, with spatially constrained and high-value fisheries (such as the Nephrops trawl fishery) being particularly sensitive to cumulative displacement pressures due to their reliance on specific seabed types and established fishing patterns. Commercial fisheries are assessed on a fleet-by-fleet basis; however, for the purposes of the cumulative assessment, the overall sensitivity reflects the combined response of commercial fishing receptors to regional-scale cumulative displacement pressures. While certain fisheries, such as the Nephrops trawl fishery, are more sensitive due to their reliance on spatially discrete fishing grounds, other fleets demonstrate greater spatial flexibility and recoverability. Taking these factors together, overall receptor sensitivity to cumulative displacement during the decommissioning phase is assessed as medium.
Significance of effect	All fisheries: Overall, it is considered that the receptor sensitivity is medium and the cumulative magnitude is low adverse. Therefore, the cumulative effect of displacement of fishing activity into other areas with Tier 1, 2 and 3 projects and plans during the decommissioning phase is considered to be minor adverse, which is not significant in EIA terms.

	CEA
	Scenario 4: MHPGC Project and Tier 1 (including Morven North and Morven South), Tier 2 and Tier 3 (including MBAGC Project) projects and plans screened in
Further mitigation and residual significance	No mitigation measures for commercial fisheries are considered necessary because the likely effect in the absence of further mitigation is not significant in EIA terms.

7.10.4 Cumulative impacts on commercially exploited species

- 7.10.4.1 There is potential for cumulative disturbance of commercially exploited fish and shellfish species as a result of seabed disturbance, sediment mobilisation, underwater sound and the presence or removal of infrastructure associated with the MHPGC Project and other projects that are under construction, in operation or planned for decommissioning. This may temporarily alter the availability or accessibility of exploitable stocks and displace or disrupt fishing activity.
- 7.10.4.2 The summary of the whole project assessment and cumulative effects assessment for impacts on commercially exploited species is presented in **Table 7.21** and **Table 7.22**, respectively.

Table 7.21: Whole project assessment for impacts on commercially exploited species

	Whole project assessment	
	Scenario 1: MHPGC Project and Morven North	Scenario 2: MHPGC Project and Morven South
Construction phase		
Magnitude of impact	The whole project assessment considers the MHPGC Project together with Morven North. During construction, seabed preparation, cable installation, foundation and cable works, UXO clearance and vessel activity may combine to cause temporary habitat loss and disturbance, increased suspended sediment concentrations and deposition, sediment contaminant remobilisation and underwater sound. The Fish and Shellfish Ecology whole project assessment concludes that these effects would be minor adverse at most and not significant in EIA terms because they would be temporary, localised and reversible. Any change in the availability or accessibility of commercially exploited stocks would be short term and would not be detectable at stock level. The whole project magnitude for commercial fisheries is therefore assessed as low adverse for all fishing fleets.	The whole project assessment considers the MHPGC Project together with Morven South. During construction, seabed preparation, cable installation, foundation and cable works, UXO clearance and vessel activity may combine to cause temporary habitat loss and disturbance, increased suspended sediment concentrations and deposition, sediment contaminant remobilisation and underwater sound. The Fish and Shellfish Ecology whole project assessment concludes that these effects would be minor adverse at most and not significant in EIA terms because they would be temporary, localised and reversible. Any change in the availability or accessibility of commercially exploited stocks would be short term and would not be detectable at stock level. The whole project magnitude for commercial fisheries is therefore assessed as low adverse for all fishing fleets.
Sensitivity of receptor	The sensitivity of commercial fishing receptors is the same as in the MHPGC Project-alone assessment. Key commercial species, including Nephrops, scallop, brown crab, lobster, haddock and other demersal fish, occur across the wider North Sea and are expected to recover following temporary disturbance. Receptor sensitivity is therefore assessed as low for all fishing fleets.	
Significance of effect	All fisheries: Overall, receptor sensitivity is low and the whole project magnitude is low adverse . The whole project effect on commercially exploited species during construction is therefore minor adverse , which is not significant in EIA terms.	
Further mitigation and residual significance	No further mitigation measures for commercial fisheries are considered necessary because the likely whole project effect, taking account of the designed-in measures identified in the Fish and Shellfish Ecology assessment, is not significant in EIA terms.	
O&M phase		
Magnitude of impact	The whole project assessment considers the MHPGC Project together with Morven North. During operation and maintenance, potential pathways include long-term habitat loss associated with infrastructure and cable protection, intermittent seabed disturbance and sediment mobilisation during maintenance, underwater sound, the introduction and spread of invasive non-native species, colonisation of hard structures, electromagnetic fields and thermal emissions. The Fish and Shellfish Ecology whole project assessment concludes that these effects would	The whole project assessment considers the MHPGC Project together with Morven South. During operation and maintenance, potential pathways include long-term habitat loss associated with infrastructure and cable protection, intermittent seabed disturbance and sediment mobilisation during maintenance, underwater sound, the introduction and spread of invasive non-native species, colonisation of hard structures, electromagnetic fields and thermal emissions. The Fish and Shellfish Ecology whole project assessment concludes that these effects would

	Whole project assessment	
	Scenario 1: MHPGC Project and Morven North	Scenario 2: MHPGC Project and Morven South
	be minor adverse at most and not significant in EIA terms, with effects generally confined to the immediate vicinity of infrastructure or temporary maintenance activity. The effects are not expected to alter the availability or productivity of commercially exploited stocks at a scale that would affect fishing activity. The whole project magnitude for commercial fisheries is therefore assessed as low adverse for all fishing fleets.	be minor adverse at most and not significant in EIA terms, with effects generally confined to the immediate vicinity of infrastructure or temporary maintenance activity. The effects are not expected to alter the availability or productivity of commercially exploited stocks at a scale that would affect fishing activity. The whole project magnitude for commercial fisheries is therefore assessed as low adverse for all fishing fleets.
Sensitivity of receptor	The sensitivity of commercial fishing receptors remains low for all fishing fleets. This reflects the limited spatial extent of operational effects, the intermittent nature of maintenance activity, the wider distribution of key commercial species and the ability of stocks and fishing fleets to recover or adapt.	
Significance of effect	All fisheries: Overall, receptor sensitivity is low and the whole project magnitude is low adverse . The whole project effect on commercially exploited species during the operation and maintenance phase is therefore minor adverse , which is not significant in EIA terms.	
Further mitigation and residual significance	No further mitigation measures for commercial fisheries are considered necessary because the likely whole project effect, taking account of the designed-in measures identified in the Fish and Shellfish Ecology assessment, is not significant in EIA terms.	
Decommissioning phase		
Magnitude of impact	The whole project assessment considers the MHPGC Project together with Morven North. Decommissioning may involve overlapping seabed disturbance, sediment mobilisation, underwater sound and the removal of infrastructure or hard substrate. The Fish and Shellfish Ecology whole project assessment concludes that decommissioning effects would be comparable to construction effects and no more than minor adverse , with effects temporary, localised and reversible following completion of the works. No stock-level change in commercially exploited fish or shellfish is anticipated. The whole project magnitude for commercial fisheries is therefore assessed as low adverse for all fishing fleets.	The whole project assessment considers the MHPGC Project together with Morven South. Decommissioning may involve overlapping seabed disturbance, sediment mobilisation, underwater sound and the removal of infrastructure or hard substrate. The Fish and Shellfish Ecology whole project assessment concludes that decommissioning effects would be comparable to construction effects and no more than minor adverse , with effects temporary, localised and reversible following completion of the works. No stock-level change in commercially exploited fish or shellfish is anticipated. The whole project magnitude for commercial fisheries is therefore assessed as low adverse for all fishing fleets.
Sensitivity of receptor	The sensitivity of commercial fishing receptors is the same as during construction and is assessed as low for all fishing fleets. The temporary nature of decommissioning effects and the wider distribution and recoverability of key commercial species limit vulnerability to changes in resource availability.	
Significance of effect	All fisheries: Overall, receptor sensitivity is low and the whole project magnitude is low adverse . The whole project effect on commercially exploited species during decommissioning is therefore minor adverse , which is not significant in EIA terms.	

	Whole project assessment	
	Scenario 1: MHPGC Project and Morven North	Scenario 2: MHPGC Project and Morven South
Further mitigation and residual significance	No further mitigation measures for commercial fisheries are considered necessary because the likely whole project effect, taking account of the designed-in measures identified in the Fish and Shellfish Ecology assessment, is not significant in EIA terms.	

Table 7.22: CEA for impacts on commercially exploited species

	CEA
	Scenario 4: MHPGC Project and Tier 1 (including Morven North and Morven South), Tier 2 and Tier 3 (including MBAGC Project) projects and plans screened in
Construction phase	
Magnitude of impact	The CEA for Scenario 4 considers the MHPGC Project together with all Tier 1, Tier 2 and Tier 3 projects and plans screened into the assessment, including Morven North, Morven South and the MBAGC Project. The Fish and Shellfish Ecology CEA considers cumulative temporary habitat loss and disturbance, increased suspended sediment concentrations and deposition, remobilisation of sediment-bound contaminants, underwater sound including UXO clearance, and the introduction and spread of invasive non-native species during construction. These cumulative effects are assessed as low magnitude and minor adverse at most, and are not significant in EIA terms after the relevant designed-in measures are applied. Although multiple projects may contribute to disturbance across the wider study area, the effects would be temporary and geographically dispersed and are not expected to affect commercially exploited species at stock level. The cumulative magnitude for commercial fisheries is therefore assessed as low adverse for all fishing fleets.
Sensitivity of receptor	All commercial fishing fleets depend on the continued availability of their target resources and may be affected if cumulative ecological effects alter the distribution or accessibility of those resources. However, the key commercial species are widely distributed, the underlying effects are localised or temporary, and stocks and fleets are expected to recover or adapt. Taking these factors together, overall receptor sensitivity is assessed as medium .
Significance of effect	All fisheries: Overall, receptor sensitivity is medium and the cumulative magnitude is low adverse . The cumulative effect on commercially exploited species with Tier 1, Tier 2 and Tier 3 projects and plans during construction is therefore minor adverse , which is not significant in EIA terms.
Further mitigation and residual significance	No further mitigation measures for commercial fisheries are considered necessary because the likely cumulative effect, taking account of the designed-in measures identified in the Fish and Shellfish Ecology assessment, is not significant in EIA terms.
O&M phase	

	CEA
	Scenario 4: MHPGC Project and Tier 1 (including Morven North and Morven South), Tier 2 and Tier 3 (including MBAGC Project) projects and plans screened in
Magnitude of impact	The CEA for Scenario 4 considers the MHPGC Project together with all Tier 1, Tier 2 and Tier 3 projects and plans screened into the assessment, including Morven North, Morven South and the MBAGC Project. During operation and maintenance, the Fish and Shellfish Ecology CEA considers long-term habitat loss, intermittent habitat disturbance and sediment effects from maintenance, underwater sound, invasive non-native species, colonisation of hard structures, electromagnetic fields and thermal emissions. Each pathway is assessed as low magnitude and no more than minor adverse, and none is significant in EIA terms. Effects are generally highly localised around infrastructure or temporary maintenance activity and are not expected to be detectable at stock level. The cumulative magnitude for commercial fisheries is therefore assessed as low adverse for all fishing fleets.
Sensitivity of receptor	All commercial fishing fleets remain dependent on the availability of their target resources. The localised nature of operational ecological effects, together with the wider distribution and recoverability of commercially exploited species, limits the potential for sustained disruption to fishing activity. Overall receptor sensitivity is assessed as medium .
Significance of effect	All fisheries: Overall, receptor sensitivity is medium and the cumulative magnitude is low adverse . The cumulative effect on commercially exploited species with Tier 1, Tier 2 and Tier 3 projects and plans during operation and maintenance is therefore minor adverse , which is not significant in EIA terms.
Further mitigation and residual significance	No further mitigation measures for commercial fisheries are considered necessary because the likely cumulative effect, taking account of the designed-in measures identified in the Fish and Shellfish Ecology assessment, is not significant in EIA terms.
Decommissioning phase	
Magnitude of impact	The CEA for Scenario 4 considers the MHPGC Project together with all Tier 1, Tier 2 and Tier 3 projects and plans screened into the assessment, including Morven North, Morven South and the MBAGC Project. Cumulative decommissioning pathways include temporary habitat loss and disturbance, increased suspended sediment concentrations and deposition, sediment contaminant remobilisation, underwater sound and removal of hard substrate. The Fish and Shellfish Ecology CEA concludes that these effects would be low magnitude and minor adverse at most, and not significant in EIA terms. Effects would be temporary or localised and are not expected to affect commercially exploited species at stock level. The cumulative magnitude for commercial fisheries is therefore assessed as low adverse for all fishing fleets.
Sensitivity of receptor	Commercial fishing fleets may be sensitive to changes in the distribution or availability of target species where several projects are decommissioned concurrently. The temporary and reversible nature of the underlying effects, the wider distribution of key commercial species and the absence of a stock-level effect moderate this sensitivity. Overall receptor sensitivity is assessed as medium .

	CEA
	Scenario 4: MHPGC Project and Tier 1 (including Morven North and Morven South), Tier 2 and Tier 3 (including MBAGC Project) projects and plans screened in
Significance of effect	All fisheries: Overall, receptor sensitivity is medium and the cumulative magnitude is low adverse . The cumulative effect on commercially exploited species with Tier 1, Tier 2 and Tier 3 projects and plans during decommissioning is therefore minor adverse , which is not significant in EIA terms.
Further mitigation and residual significance	No further mitigation measures for commercial fisheries are considered necessary because the likely cumulative effect, taking account of the designed-in measures identified in the Fish and Shellfish Ecology assessment, is not significant in EIA terms.

7.11 Transboundary effects

- 7.11.1.1 A screening of transboundary impacts has been carried out and any potential for significant transboundary effects with regard to commercial fisheries from the construction, O&M and decommissioning phases of the MHPGC Project upon interests of other states has been assessed as part of the PEIR.
- 7.11.1.2 The potential transboundary impacts are screened within **Volume 1, Annex 4.2: Transboundary Screening, of the PEIR** and are summarised below:
- Loss or restricted access to fishing grounds for non-UK fishing fleets; and
 - Displacement of non-UK fleet fishing activity to other areas.

7.11.2 Loss or restricted access to fishing grounds

- 7.11.2.1 Commercial fishing fleets from other European Economic Area (EEA) States, including non-UK pelagic trawl vessels, operate within the wider North Sea and may occasionally be present within or adjacent to the MHPGC Project PEIR Red Line Boundary. As such, there is potential for effects on non-UK commercial fishing fleets arising from temporary constraints on access to fishing grounds during construction and decommissioning, and from intermittent restrictions associated with repair or maintenance activities during operation.
- 7.11.2.2 Effects on non-UK commercial fishing fleets, in terms of reduced access to fishing grounds, have already been intrinsically considered throughout the commercial fisheries EIA process and assessment outcomes are presented in the impact assessment [see **Section 7.8**] and CEA [see **Section 7.9**]. These assessments consider all fishing activity within the Local and Regional Commercial Fisheries Study Area irrespective of vessel flag state, and therefore intrinsically capture any transboundary interactions. Embedded mitigation measures, including fisheries liaison (CoT19 / MM-032), promulgation of NtMs (CoT04 / MM-004), guard vessels where required (CoT32 / MM-086), and clear communication of construction and maintenance programmes (CoT14 / MM-022 and CoT07 / MM-007), apply equally to UK and non-UK vessels. Where secondary mitigation is identified as necessary for affected fleets, this will similarly apply irrespective of vessel flag state.
- 7.11.2.3 Evidence indicates that levels of activity by non-UK fishing fleets within the Local Commercial Fisheries Study Area are relatively low compared to domestic fleets, and that any restrictions on access would be temporary, localised and reversible. In addition, no permanent exclusion of fishing grounds is anticipated, and fishing activity would be able to resume following completion of works or outside periods of maintenance activity.
- 7.11.2.4 On this basis, the magnitude of effect on non-UK commercial fishing fleets is considered to be low adverse, and the overall significance of loss or restricted access to fishing grounds at a transboundary level is assessed as **minor adverse**, which is not significant in EIA terms.

7.11.3 Displacement of fishing activity to other areas

- 7.11.3.1 Displacement of fishing activity associated with the MHPGC Project would be temporary, localised and limited to the immediate vicinity of active works and associated advisory safety distances. As set out in **Section 7.4**, the commercial fisheries baseline incorporates all fishing activity recorded within the Local and Regional Commercial Fisheries Study Areas, irrespective of vessel flag state. Non-UK vessels are therefore intrinsically considered within the baseline characterisation and subsequent impact assessment.
- 7.11.3.2 The impact assessment presented in **Section 7.8** and the CEA presented in **Section 7.9** assess displacement effects for all fleets operating within the Local and Regional Commercial Fisheries Study Areas, including non-UK vessels. Embedded mitigation measures, including fisheries liaison, promulgation of NtMs, guard vessels where required, and clear communication of construction and maintenance programmes, apply equally to UK and non-UK vessels. Where secondary mitigation is identified as necessary for affected fleets, this will similarly apply irrespective of vessel flag state.
- 7.11.3.3 Evidence presented within **Section 7.4** indicates that levels of fishing activity by non-UK vessels within the Local Commercial Fisheries Study Area are relatively low compared to domestic fleets.

Furthermore, alternative fishing grounds are available within the normal operating range of affected fleets. No permanent loss of fishing grounds is anticipated, and no long-term redistribution of fishing effort across national boundaries is predicted as a result of the MHPGC Project.

- 7.11.3.4 On this basis, no transboundary displacement effects additional to, or of greater significance than, those identified for the commercial fishing fleets assessed in **Sections 7.8 and 7.9** are anticipated. The magnitude of effect at a transboundary level is therefore considered to be low adverse and the overall significance is assessed as **minor adverse**, which is not significant in EIA terms.

7.12 Inter-related effects

- 7.12.1.1 Inter-related effects are the combined impact of multiple aspects of the MHPGC Project on a single receptor. These are as follows:

- **Project lifetime effects:** Assessment of the scope for effects that occur throughout more than one phase of the MHPGC Project (construction, O&M and decommissioning), to interact to potentially create a more significant effect on a receptor than if just assessed in isolation in these three phases;
- **Receptor led effects:** Assessment of the scope for all effects (including inter-relationships between environmental topics) to interact, spatially and temporally, to create inter-related effects on a receptor.

- 7.12.1.2 Inter-related effects are assessed within **Volume 4, Chapter 5: Inter-related Effects, of the PEIR**.

7.13 Summary

7.13.1 Summary of effects

- 7.13.1.1 This chapter has assessed the potential impacts on commercial fisheries from the construction, O&M and decommissioning phases of the MHPGC Project **Table 7.23** presents a summary of impacts and confirms the residual effects.

7.13.2 Summary of secondary mitigation and monitoring

- 7.13.2.1 Where the assessment identifies likely significant effects on commercial fisheries, secondary mitigation measures have been identified or are being developed through ongoing engagement with the fishing industry, to further reduce impacts and support co-existence between the MHPGC Project and fishing activity. For the potting fishery, identified secondary mitigation includes evidence-based cooperation agreements and associated justifiable disturbance payments, where appropriately evidenced. For the Nephrops trawl fishery, the package of secondary mitigation is being developed through ongoing engagement with the fishing industry and will be refined through the EIA process.
- 7.13.2.2 The FLCP (English waters) and FMMCP (Scottish waters) will provide the framework through which relevant fisheries mitigation measures and commitments will be implemented and secured. The Plans will be developed in consultation with representatives of the fishing industry and relevant regulators. Outline Plan(s) will be prepared to accompany final consent applications for the MHPGC Project, specifically the Outline FLCP to accompany the DCO application (English waters), and draft FMMCP to accompany the Marine Licence application (Scottish waters).
- 7.13.2.3 Where temporary removal or relocation of static fishing gear is required to facilitate construction or decommissioning activities, the Outline FLCP/FMMCP will provide a framework for considering evidence-based cooperation agreements and associated justifiable disturbance payments, where appropriately evidenced, in accordance with established industry guidance. These measures are intended to address temporary economic effects on the inshore potting fishery. For the Nephrops trawl fishery, the Outline FLCP/FMMCP will focus on measures to minimise the duration and spatial extent of disruption, including continued fisheries liaison, advance communication of works, refinement of construction methodologies and sequencing where practicable, and maximisation of cable burial and minimisation of cable protection where feasible. The Applicant will also continue to engage with the fishing industry during the post-PEIR period to identify and refine proportionate mitigation measures to minimise construction-related disruption.

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- 7.13.2.4 In addition to the mitigation measures described above, proportionate monitoring is proposed to support ongoing fisheries liaison and provide contextual information on commercial fishing activity following construction. Monitoring will not form part of the mitigation relied upon to reach the assessment conclusions.
- 7.13.2.5 For the Nephrops trawl fishery, monitoring will comprise two complementary elements. First, standard cable integrity and burial monitoring undertaken in accordance with the CSIP will confirm cable burial status, identify any areas of cable exposure or protection, and inform the need for any remedial or repair works. This will provide assurance regarding the continued fishability of the seabed along the cable route and support the assumption that fishing can resume following installation and outside periods of maintenance activity. Second, proportionate desk-based monitoring of commercial fisheries activity will be undertaken through the FLCP and FMMCP, informed by review of available fisheries datasets (e.g. landings statistics and VMS data, where available) together with ongoing fisheries liaison.
- 7.13.2.6 The final methodology for decommissioning, and the requirement for any decommissioning-specific mitigation measures, will be considered through the Offshore Decommissioning Programme in consultation with relevant stakeholders and in accordance with the requirements, legislation, policy and guidance applicable at that time.
- 7.13.2.7 **Table 7.23** includes a summary of the secondary mitigation and monitoring proposed.

Table 7.23: Summary of potential impacts and residual effects

Impact	Receptor	Sensitivity of receptor	Magnitude of impact	Significance of impact	Secondary mitigation and monitoring	Residual effect
Construction phase						
Loss or restricted access to fishing grounds	Dredge fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Demersal otter trawl fishery (Nephrops)	High	Medium	Moderate adverse	At the PEIR stage, the package of secondary mitigation for the Nephrops trawl fishery is still being developed. The residual effect is therefore conservatively assessed as moderate adverse and significant in EIA terms at the PEIR stage. The assessment will be reviewed within the ES to reflect the final package of secondary mitigation.	Moderate adverse
	Demersal otter trawl fishery (haddock/whitefish)	Low	Low	Minor adverse	Not required.	Minor adverse
	Potting fishery	Medium	Medium	Moderate adverse	Evidence-based cooperation agreements and associated justifiable disturbance payments, where appropriately evidenced, will be secured through the FLCF/FMMCP.	Minor adverse
	Demersal seine fishery	Low	Low	Minor adverse	N/A	Minor adverse

Impact	Receptor	Sensitivity of receptor	Magnitude of impact	Significance of impact	Secondary mitigation and monitoring	Residual effect
	Pelagic trawl fishery	Low	Negligible	Minor adverse	N/A	Minor adverse
Displacement of fishing activity to other areas	Dredge fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Demersal otter trawl fishery (Nephrops)	High	Medium	Moderate adverse	At the PEIR stage, the package of secondary mitigation for the Nephrops trawl fishery is still being developed. The residual effect is therefore conservatively assessed as moderate adverse and significant in EIA terms at the PEIR stage. The assessment will be reviewed within the ES to reflect the final package of secondary mitigation.	Moderate adverse
	Demersal otter trawl fishery (haddock/whitefish)	Low	Low	Minor adverse	N/A	Minor adverse
	Potting fishery	Medium	Medium	Moderate adverse	Evidence-based cooperation agreements and associated justifiable disturbance payments, where appropriately evidenced, will be secured through the FLCP/FMMCP.	Minor adverse
	Demersal seine fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Pelagic trawl fishery	Low	Negligible	Minor adverse	N/A	Minor adverse

Impact	Receptor	Sensitivity of receptor	Magnitude of impact	Significance of impact	Secondary mitigation and monitoring	Residual effect
Interference with fishing activity	Dredge fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Demersal otter trawl fishery (Nephrops)	Low	Low	Minor adverse	N/A	Minor adverse
	Demersal otter trawl fishery (haddock/whitefish)	Low	Low	Minor adverse	N/A	Minor adverse
	Potting fishery	Medium	Low	Minor adverse	N/A	Minor adverse
	Demersal seine fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Pelagic trawl fishery	Low	Low	Minor adverse	N/A	Minor adverse
Increased steaming distances and times	Dredge fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Demersal otter trawl fishery (Nephrops)	Low	Low	Minor adverse	N/A	Minor adverse
	Demersal otter trawl fishery (haddock/whitefish)	Low	Low	Minor adverse	N/A	Minor adverse
	Potting fishery	Medium	Low	Minor adverse	N/A	Minor adverse
	Demersal seine fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Pelagic trawl fishery	Low	Low	Minor adverse	N/A	Minor adverse
Snagging risk – loss or damage to fishing gear	Dredge fishery	Medium	Low	Minor adverse	N/A	Minor adverse
	Demersal otter trawl fishery (Nephrops)	Medium	Low	Minor adverse	N/A	Minor adverse
	Demersal otter trawl fishery (haddock/whitefish)	Medium	Low	Minor adverse	N/A	Minor adverse
	Potting fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Demersal seine fishery	Medium	Low	Minor adverse	N/A	Minor adverse
	Pelagic trawl fishery	Low	Low	Minor adverse	N/A	Minor adverse
Impacts on commercially exploited species	Dredge fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Demersal otter trawl fishery (Nephrops)	Low	Low	Minor adverse	N/A	Minor adverse

Impact	Receptor	Sensitivity of receptor	Magnitude of impact	Significance of impact	Secondary mitigation and monitoring	Residual effect
	Demersal otter trawl fishery (haddock/whitefish)	Low	Low	Minor adverse	N/A	Minor adverse
	Potting fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Demersal seine fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Pelagic trawl fishery	Low	Low	Minor adverse	N/A	Minor adverse
O&M phase						
Loss or restricted access to fishing grounds	Dredge fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Demersal otter trawl fishery (Nephrops)	High	Low	Minor adverse	Monitoring only: no secondary mitigation is required as the effect is not significant in EIA terms. Relevant project monitoring will be undertaken as described above but is not relied upon to reach the assessment conclusion.	Minor adverse
	Demersal otter trawl fishery (haddock/whitefish)	Low	Low	Minor adverse	N/A	Minor adverse
	Potting fishery	Medium	Low	Minor adverse	N/A	Minor adverse
	Demersal seine fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Pelagic trawl fishery	Low	Negligible	Minor adverse	N/A	Minor adverse
Displacement of fishing activity to other areas	Dredge fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Demersal otter trawl fishery (Nephrops)	High	Low	Minor adverse	Monitoring only: no secondary mitigation is required as the effect is not significant in EIA terms. Relevant project monitoring will	Minor adverse

Impact	Receptor	Sensitivity of receptor	Magnitude of impact	Significance of impact	Secondary mitigation and monitoring	Residual effect
					be undertaken as described above but is not relied upon as mitigation or to reach the assessment conclusion.	
	Demersal otter trawl fishery (haddock/whitefish)	Low	Low	Minor adverse	N/A	Minor adverse
	Potting fishery	Medium	Low	Minor adverse	N/A	Minor adverse
	Demersal seine fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Pelagic trawl fishery	Low	Negligible	Minor adverse	N/A	Minor adverse
Interference with fishing activity	Dredge fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Demersal otter trawl fishery (Nephrops)	Low	Low	Minor adverse	N/A	Minor adverse
	Demersal otter trawl fishery (haddock/whitefish)	Low	Low	Minor adverse	N/A	Minor adverse
	Potting fishery	Medium	Low	Minor adverse	N/A	Minor adverse
	Demersal seine fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Pelagic trawl fishery	Low	Low	Minor adverse	N/A	Minor adverse
Increased steaming distances and times	Dredge fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Demersal otter trawl fishery (Nephrops)	Low	Low	Minor adverse	N/A	Minor adverse
	Demersal otter trawl fishery (haddock/whitefish)	Low	Low	Minor adverse	N/A	Minor adverse
	Potting fishery	Medium	Low	Minor adverse	N/A	Minor adverse
	Demersal seine fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Pelagic trawl fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Dredge fishery	Medium	Low	Minor adverse	N/A	Minor adverse

Impact	Receptor	Sensitivity of receptor	Magnitude of impact	Significance of impact	Secondary mitigation and monitoring	Residual effect
Snagging risk – loss or damage to fishing gear	Demersal otter trawl fishery (Nephrops)	Medium	Low	Minor adverse	N/A	Minor adverse
	Demersal otter trawl fishery (haddock/whitefish)	Medium	Low	Minor adverse	N/A	Minor adverse
	Potting fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Demersal seine fishery	Medium	Low	Minor adverse	N/A	Minor adverse
	Pelagic trawl fishery	Low	Low	Minor adverse	N/A	Minor adverse
Impacts on commercially exploited species	Dredge fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Demersal otter trawl fishery (Nephrops)	Low	Low	Minor adverse	N/A	Minor adverse
	Demersal otter trawl fishery (haddock/whitefish)	Low	Low	Minor adverse	N/A	Minor adverse
	Potting fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Demersal seine fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Pelagic trawl fishery	Low	Low	Minor adverse	N/A	Minor adverse
Decommissioning phase						
Loss or restricted access to fishing grounds	Dredge fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Demersal otter trawl fishery (Nephrops)	High	Medium	Moderate adverse	At the PEIR stage, the package of secondary mitigation for the Nephrops trawl fishery is still being developed. The residual effect is therefore conservatively assessed as moderate adverse and significant in EIA terms at the PEIR stage. The	Moderate adverse

Impact	Receptor	Sensitivity of receptor	Magnitude of impact	Significance of impact	Secondary mitigation and monitoring	Residual effect
					assessment will be reviewed within the ES to reflect the final package of secondary mitigation.	
	Demersal otter trawl fishery (haddock/whitefish)	Low	Low	Minor adverse	N/A	Minor adverse
	Potting fishery	Medium	Medium	Moderate adverse	Evidence-based cooperation agreements and associated justifiable disturbance payments, where appropriately evidenced, will be secured through the FLCP/FMMCP.	Minor adverse
	Demersal seine fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Pelagic trawl fishery	Low	Negligible	Minor adverse	N/A	Minor adverse
Displacement of fishing activity to other areas	Dredge fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Demersal otter trawl fishery (Nephrops)	High	Medium	Moderate adverse	At the PEIR stage, the package of secondary mitigation for the Nephrops trawl fishery is still being developed. The residual effect is therefore conservatively assessed as moderate adverse and significant in EIA terms at the PEIR stage. The assessment will be reviewed within the	Moderate adverse

Impact	Receptor	Sensitivity of receptor	Magnitude of impact	Significance of impact	Secondary mitigation and monitoring	Residual effect
					ES to reflect the final package of secondary mitigation.	
	Demersal otter trawl fishery (haddock/whitefish)	Low	Low	Minor adverse	N/A	Minor adverse
	Potting fishery	Medium	Medium	Moderate adverse	Evidence-based cooperation agreements and associated justifiable disturbance payments, where appropriately evidenced, will be secured through the FLCP/FMMCP.	Minor adverse
	Demersal seine fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Pelagic trawl fishery	Low	Negligible	Minor adverse	N/A	Minor adverse
Interference with fishing activity	Dredge fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Demersal otter trawl fishery (Nephrops)	Low	Low	Minor adverse	N/A	Minor adverse
	Demersal otter trawl fishery (haddock/whitefish)	Low	Low	Minor adverse	N/A	Minor adverse
	Potting fishery	Medium	Low	Minor adverse	N/A	Minor adverse
	Demersal seine fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Pelagic trawl fishery	Low	Low	Minor adverse	N/A	Minor adverse
Increased steaming distances and times	Dredge fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Demersal otter trawl fishery (Nephrops)	Low	Low	Minor adverse	N/A	Minor adverse
	Demersal otter trawl fishery (haddock/whitefish)	Low	Low	Minor adverse	N/A	Minor adverse
	Potting fishery	Medium	Low	Minor adverse	N/A	Minor adverse

Impact	Receptor	Sensitivity of receptor	Magnitude of impact	Significance of impact	Secondary mitigation and monitoring	Residual effect
	Demersal seine fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Pelagic trawl fishery	Low	Low	Minor adverse	N/A	Minor adverse
Snagging risk – loss or damage to fishing gear	Dredge fishery	Medium	Low	Minor adverse	N/A	Minor adverse
	Demersal otter trawl fishery (Nephrops)	Medium	Low	Minor adverse	N/A	Minor adverse
	Demersal otter trawl fishery (haddock/whitefish)	Medium	Low	Minor adverse	N/A	Minor adverse
	Potting fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Demersal seine fishery	Medium	Low	Minor adverse	N/A	Minor adverse
	Pelagic trawl fishery	Low	Low	Minor adverse	N/A	Minor adverse
Impacts on commercially exploited species	Dredge fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Demersal otter trawl fishery (Nephrops)	Low	Low	Minor adverse	N/A	Minor adverse
	Demersal otter trawl fishery (haddock/whitefish)	Low	Low	Minor adverse	N/A	Minor adverse
	Potting fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Demersal seine fishery	Low	Low	Minor adverse	N/A	Minor adverse
	Pelagic trawl fishery	Low	Low	Minor adverse	N/A	Minor adverse

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