



Kyle Rhea Proposed Temporary Slipway

Marine Environmental Assessment
(MEA)

PREPARED FOR



DATE
17 April 2025

REFERENCE
0726961

DOCUMENT NUMBER
LT91-SSEN-XX-XX-RP-MC-001



DOCUMENT DETAILS

The details entered below are automatically shown on the cover and the main page footer. PLEASE NOTE: This table must NOT be removed from this document.

DOCUMENT TITLE	Kyle Rhea Proposed Temporary Slipway
DOCUMENT SUBTITLE	Marine Environmental Assessment (MEA)
PROJECT NUMBER	0726961
DATE	17 April 2025
VERSION	6
AUTHOR	Various
CLIENT NAME	Scottish Hydro Electric Transmission PLC (Scottish and Southern Electricity Networks Transmission)

DOCUMENT HISTORY

				ERM APPROVAL TO ISSUE		
VERSION	REVISION	AUTHOR	REVIEWED BY	NAME	DATE	COMMENTS
Draft	0.1	Maizie Edwards, Hannah Tilley, Raffaella Nobili, Sophie Ward, Marja Aberson, Ally Russell, Liam Dickson, Max McGinn, Liam Porter, Becky Hitchin	Sophie Rice and Beth Owens			Internal Draft
Draft	1.0	Maizie Edwards, Hannah Tilley, Raffaella Nobili, Sophie Ward, Marja Aberson, Ally Russell, Liam Dickson, Max	Jonny Lewis	Jonny Lewis	02.10.24	Internal Draft

				ERM APPROVAL TO ISSUE		
		McGinn, Liam Porter, Becky Hitchin				
	1.1	Dafydd Lloyd Jones			08.11.24	Internal Draft
	1.2	Dafydd Lloyd Jones, Becky Hitchin, Damien Kirby			12.11.24	Internal Draft
	1.3	Ian Reach				Internal Draft
	2.0		Jonny Lewis	Jonny Lewis	14.11.24	First Draft issued to SSENT
	3.0	Jane Warley, Becky Hitchin, Beth Owens	Dafydd Lloyd Jones	Dafydd Lloyd Jones	28.01.25	Revised draft issued to SSENT with updated vessel info.
	3.1		Molly Outhwaite			Client comments
	3.2	Jane Warley, Becky Hitchin, Beth Owens, Christina McIntyre				Internal Draft
	3.3		Dafydd Lloyd Jones	Dafydd Lloyd Jones		Internal Draft
	4.0	Jane Warley, Becky Hitchin, Beth Owens, Christina McIntyre	Dafydd Lloyd Jones	Dafydd Lloyd Jones	14.02.2025	Second Draft issued to SSENT
	4.1		Molly Outhwaite			Client comments
	4.2	Jane Warley, Becky Hitchin, Beth Owens				Internal Draft

				ERM APPROVAL TO ISSUE		
	4.3	Jane Warley, Becky Hitchin, Beth Owens				Internal Draft – other updates
	5.0		Alex Hampson	Alex Hampson	28.03.2025	Third Draft issued to SSENT
	5.1		SSEN Transmission			Client comments
	5.2	Jane Warley, Becky Hitchin, Beth Owens, Alex MacCallum	Ian Reach			Internal Draft
	5.3	Becky Hitchin	Ian Reach			Internal Draft
	6.0		Dafydd Lloyd Jones	Dafydd Lloyd Jones	17.04.2025	Final Draft issued to SSENT

Kyle Rhea Proposed Temporary Slipway Marine Environmental Assessment (MEA)

0726961

[Redacted]

[Redacted]

Beth Owens
Senior Marine Consultant

Dafydd Lloyd Jones
Partner - Geosciences

[Redacted]

[Redacted]

Jonny Lewis
Partner

Jane Warley
Senior Marine Consultant - Ecology

[Redacted]

[Redacted]

Becky Hitchin
Principal Marine Consultant - Ecology

Alex Hampson
Partner

Environmental Resources Management
Limited
2nd Floor, 33 St Mary Axe
London
EC3A 8AA
T: +44(0) 20 3206 5200

CONTENTS

1.	INTRODUCTION	1
1.1	PROJECT BACKGROUND	1
1.2	PURPOSE OF THIS REPORT	2
1.3	STRUCTURE OF THIS REPORT	2
2.	LEGISLATION, POLICY AND STATUTORY CONSENT PROCEDURE	4
2.1	OVERVIEW	4
2.2	LEGISLATION	4
2.2.1	Marine (Scotland) Act 2010	4
2.2.2	The Habitats Directive (Council Directive 92/43/EEC)	5
2.2.3	The Wildlife and Countryside Act	5
2.2.4	The Protection of Seals (Designated Sea Haul-out Sites) (Scotland) Order 2014	6
2.2.5	Water Framework Directive	6
2.3	MARINE PLANNING POLICY	7
2.3.1	UK Marine Policy Statement	7
2.3.2	Scottish National Marine Plan	7
2.3.3	Sectoral Marine Plan: Regional Locational Guidance	9
3.	CONSULTATION	10
4.	PROJECT DESCRIPTION	11
4.1	PROJECT LOCATION AND OVERVIEW	11
4.2	PROPOSED SPECIFICATION	13
4.3	INSTALLATION METHODOLOGY	13
4.4	OPERATION AND MAINTENANCE	14
4.5	DECOMMISSIONING	14
5.	CONSIDERATION OF ALTERNATIVES	17
6.	ENVIRONMENTAL ASSESSMENT METHODOLOGY	18
6.1	INTRODUCTION	18
6.2	TOPICS REQUIRING FURTHER ASSESSMENT	18
6.3	METHODOLOGY FOR ASSESSMENT	20
6.3.1	Sensitivity	21
6.3.2	Magnitude	22
6.3.3	Impact Assessment Matrix	23
6.4	MITIGATION AND RESIDUAL RISK	23
6.4.1	Embedded Mitigation	24
6.4.2	Additional Mitigation	27
6.5	CUMULATIVE IMPACT ASSESSMENT	27
6.6	TRANSBOUNDARY EFFECTS	27
7.	ENVIRONMENTAL ASSESSMENT	28
7.1	PHYSICAL PROCESSES	28
7.1.1	Baseline	28
7.1.2	Potential Impacts	33
7.1.3	Impact Assessment	33
7.2	WATER AND SEDIMENT QUALITY	36

7.2.1	Baseline	36
7.2.2	Potential Impacts	36
7.2.3	Impact Assessment	37
7.3	BENTHIC ECOLOGY	38
7.3.1	Baseline	38
7.3.2	Potential Receptors	43
7.3.3	Potential Impacts	43
7.3.4	Impact Assessment	44
7.4	MARINE MAMMALS (INCLUDING [Redacted])	46
7.4.1	Baseline	46
7.4.2	Potential Impacts	54
7.4.3	Impact assessment	55
7.5	ORNITHOLOGY	57
7.5.1	Baseline	57
7.5.2	Potential Impacts	62
7.5.3	Impact assessment	63
7.6	DESIGNATED SITES AND HABITATS REGULATIONS APPRAISAL	65
7.6.1	Baseline	65
7.6.2	Nature Conservation Marine Protected Area Assessment	75
7.6.3	Habitats Regulations Appraisal	75
7.6.4	Approach to Initial Screening	77
7.6.5	Report to Inform Appropriate Assessment	82
7.7	TOURISM AND RECREATION	82
7.7.1	Baseline	82
7.7.2	Potential Impacts	83
7.7.3	Impact Assessment	84
7.8	SEASCAPE AND VISUAL RECEPTORS	86
7.8.1	Baseline	86
7.8.2	Potential Impacts	86
7.8.3	Impact Assessment	86
8.	SUMMARY AND CONCLUSION	88
9.	REFERENCES	89

APPENDIX A WATER FRAMEWORK DIRECTIVE SCOPING ASSESSMENT

APPENDIX B REPORT TO INFORM APPROPRIATE ASSESSMENT

LIST OF TABLES

TABLE 2-1: RELEVANT SCOTTISH MARINE PLAN POLICIES	7
TABLE 3-1: CONSULTATION SUMMARY	10
TABLE 4-1: PROJECT DESIGN ENVELOPE FOR PROPOSED TEMPORARY SLIPWAY WORKS	15
TABLE 6-1: SCOPING DECISION OF TOPICS TO BE INCLUDED IN THE ASSESSMENT	18
TABLE 6-2: DEFINITION OF SENSITIVITY RATINGS	21
TABLE 6-3: DEFINITIONS OF MAGNITUDE	22
TABLE 6-4: OVERALL IMPACT ASSESSMENT MATRIX	23
TABLE 6-5: EMBEDDED MITIGATION	24
TABLE 7-1: PROJECT PARAMETERS RELEVANT TO EFFECTS ON PHYSICAL ENVIRONMENT	33
TABLE 7-2: PROJECT PARAMETERS RELEVANT TO EFFECTS ON WATER AND SEDIMENT QUALITY	37

TABLE 7-3: EUNIS HABITATS RECORDED AT LOCH ALSH BAY DURING INTERTIDAL SURVEYS (SOURCE: EEA, 2024; OCEAN ECOLOGY LTD, 2024)	41
TABLE 7-4: DESIGNATED SITES AND THEIR PROTECTED BENTHIC FEATURES IN THE VICINITY OF THE PROPOSED TEMPORARY SLIPWAY	43
TABLE 7-5: ABUNDANCE AND DENSITY ESTIMATES WITHIN SCANS IV BLOCK CS-H	46
TABLE 7-6: PROJECT PARAMETERS RELEVANT TO EFFECTS ON MARINE MAMMALS (INCLUDING [Redacted])	54
TABLE 7-7: PROJECT PARAMETERS RELEVANT TO EFFECTS ON ORNITHOLOGY RECEPTORS	62
TABLE 7-8: DESIGNATED AND NOTIFIED SITES WITHIN 100 KM OF THE PROPOSED TEMPORARY SLIPWAY	66
TABLE 7-9: DESIGNATED AND NOTIFIED NCMPS SITES WITHIN 100 KM OF THE PROPOSED TEMPORARY SLIPWAY	75
TABLE 7-10: CRITERIA USED FOR SCREENING OF RELEVANT EUROPEAN SITES	77
TABLE 7-11: DETAILS OF EUROPEAN SITES SCREENED IN FOR STAGE 1 DETERMINATION OF LIKELY SIGNIFICANT EFFECTS	78
TABLE 7-12: PROJECT PARAMETERS RELEVANT TO EFFECTS ON TOURISM AND RECREATIONAL RECEPTORS	83
TABLE B.1: PROTECTED FEATURES AND CONDITION FOR THE LOCHS DUICH, LONG AND ALSH SPECIAL AREA OF CONSERVATION	108
TABLE B.2: ADVERSE EFFECT ON SITE INTEGRITY CONCLUSIONS	111
TABLE B.3: PROTECTED FEATURES AND CONDITION FOR THE INNER HEBRIDES AND MINCHES SPECIAL AREA OF CONSERVATION	122
TABLE B.4: ASSESSMENT OF ADVERSE EFFECT ON SITE INTEGRITY OF QUALIFYING FEATURES OF THE INNER HEBRIDES AND MINCHES SPECIAL AREA OF CONSERVATION	126
TABLE B.5: PROTECTED FEATURES ASSESSED AS PART OF THIS REPORT TO INFORM APPROPRIATE ASSESSMENT AND THEIR CONDITION FOR THE KINLOCH AND KYLEAKIN SPECIAL AREA OF CONSERVATION	131
TABLE B.6: ASSESSMENT OF ADVERSE EFFECT ON SITE INTEGRITY OF QUALIFYING FEATURES OF THE KINLOCH AND KYLEAKIN HILLS SPECIAL AREA OF CONSERVATION	136

LIST OF FIGURES

FIGURE 1-1: PROJECT LOCATION OF THE PROPOSED TEMPORARY SLIPWAY	3
FIGURE 4-1: WORKS AREA (BELOW MHWS) AND INDICATIVE TOTAL AREA OF THE SLIPWAY (ABOVE AND BELOW MHWS)*	12
FIGURE 7-1: TIDAL STREAMS FOR LOCH ALSH, KYLEAKIN AND APPROACHES - AC 2540 (FROM: VISITMYHARBOUR, 2024)	29
FIGURE 7-2: SITE-SPECIFIC INTERTIDAL SEDIMENT SAMPLES	31
FIGURE 7-3: SITE-SPECIFIC BATHYMETRY DATA	32
FIGURE 7-4: EUNIS BIOTOPES PRESENT WITHIN THE INTERTIDAL SURVEY AREA	39
FIGURE 7-5: HARBOUR SEAL TOTAL USAGE 2017	48
FIGURE 7-6: GREY SEAL TOTAL USAGE 2017	49
FIGURE 7-7: [Redacted] , AND EXCLUSION ZONES IN RELATION TO THE SLIPWAY WORKS AREA (BELOW MEAN HIGH WATER SPRINGS)	51
FIGURE 7-8: VESSEL DENSITY IN THE VICINITY OF THE PROPOSED TEMPORARY SLIPWAY	53
FIGURE 7-9: DESIGNATED SITES WITHIN THE WIDER LOCH ALSH AREA	73
FIGURE 7-10: DESIGNATED SITES WITHIN THE VICINITY OF THE PROPOSED TEMPORARY SLIPWAY	74
FIGURE B.1: LOCHS DUICH, LONG AND ALSH SPECIAL AREA OF CONSERVATION	108
FIGURE B.2: TYPICAL REEF SPECIES RECORDED DISTRIBUTIONS (NBN ATLAS, 2024)	118
FIGURE B.3: HORSE MUSSEL SPECIES RECORDED DISTRIBUTIONS (NBN ATLAS, 2024)	121
FIGURE B.4: VESSEL DENSITY IN THE VICINITY OF THE PROPOSED TEMPORARY SLIPWAY	124
FIGURE B.5: [Redacted] , NON-BREEDING [Redacted] , AND EXCLUSION ZONES IN RELATION TO THE SLIPWAY WORKS AREA (BELOW MEAN HIGH WATER SPRINGS).	133

ACRONYMS AND ABBREVIATIONS

Acronym	Description
BSH	Broad-scale Habitat
CAR	Controlled Activities Regime
CEMP	Construction Environmental Management Plan
EC	European Community
EEA	European Environment Agency
EIA	Environmental Impact Assessment
EPS	European Protected Species
EUNIS	European Nature Information System
EQS	Environmental Quality Standard
DEM	Digital Elevation Model
FeAST	Feature Activity Sensitivity Tool
GES	Good Ecological Status
INNS	Invasive Non-Native Species
JNCC	Joint Nature Conservation Committee
LSEs	Likely Significant Effects
MD-LOT	Marine Directorate Licensing Operations Team
MEA	Marine Environmental Assessment
MHWS	Mean High Water Springs
MLA	Marine Licence Application
MLWN	Mean Low Water Neaps
MLWS	Mean Low Water Springs
MNNS	Marine Non-Native Species
MPS	Marine Policy Statement
NCMPA	Nature Conservation Marine Protected Area
NM	Nautical Miles
OHL	Overhead Line
PAC	Pre-application consultation
PMF	Priority Marine Feature
SAC	Special Area of Conservation
SEPA	Scottish Environment Protection Agency
SMRU	Seal Mammal Research Unit
SMU	Seal Management Unit
SMWWC	Scottish Marine Wildlife Watching Code

Acronym	Description
SPA	Special Protection Area
SSENT	Scottish and Southern Electricity Networks Transmission is the trading name for Scottish Hydro Electric Transmission plc, part of the SSE Group
STAR	Seabird Tracking and Research
UAV	Unmanned Aerial Vehicle
WFD	Water Framework Directive

1. INTRODUCTION

1.1 PROJECT BACKGROUND

Scottish and Southern Electricity Networks Transmission (SSENT, 'The Applicant') is the trading name for Scottish Hydro Electric Transmission plc, part of the SSE Group. SSENT is planning to replace the existing electricity transmission power line that runs from Fort Augustus to Ardmore in the north of Skye, Scotland. The current Overhead Line (OHL) was constructed in three distinct sections, between 1956 and 1989, and is now reaching the end of its operational life. The planned replacement is essential to maintain security of supply to homes and businesses along its route, as well as to the Western Isles, which are supplied by two subsea cables from Ardmore Point.

An Environmental Impact Assessment (EIA) has previously been produced for the onshore OHL works and submitted as part of a Section 37 consent application to the Highland Council (SSENT, 2022). A Habitats Regulations Appraisal (HRA) for the onshore overhead line works was submitted to NatureScot (MacArthur Green, 2022), which was submitted as part of the onshore planning application.

A Marine Environmental Assessment (MEA) has previously been produced by MarineSpace Ltd, (now ERM) for the 780 metres (m) of OHL to be replaced over Kyle Rhea; and submitted as part of a Marine Licence Application (MLA) to the Marine Directorate (MarineSpace, 2022).

It has since been concluded that to facilitate the construction of the OHL, a temporary slipway will be required to allow access by landing craft for the transport of construction plant and materials, hereafter referred to interchangeably throughout the report as 'the proposed temporary slipway' or 'the Project'. ERM has been appointed by SSENT to prepare an MEA, in support of the MLA to be delivered to Marine Directorate, for the proposed temporary slipway (Figure 1-1). The proposed temporary slipway will have an operational life of approximately 6 years. The intention is for the proposed temporary slipway to be removed once it is no longer required as part of the OHL construction, hence it has been referred to as 'temporary'.

ERM contracted Ocean Ecology Limited to map intertidal habitats via an Unmanned Aerial Vehicle (UAV), and undertake Phase I and II intertidal surveys. The habitats characterised and the species abundance data collected for the potential construction area have been used to inform this MEA (Ocean Ecology Ltd, 2024). SSENT contracted RJ McLeod to undertake pre-construction otter walkover surveys, which have been used to inform this MEA (RJ McLeod, 2025).

Under Part 4 of the Marine (Scotland) Act 2010, construction of the proposed temporary slipway requires a Marine Licence. However as such projects are not listed on Schedule 1 or Schedule 2a of the Marine Works (Environmental Impact Assessment) Regulations 2017 (as amended), a proportional environmental assessment has been produced in support of the MLA. This MEA represents that proportionate environmental assessment by providing Marine Directorate with environmental information and assessment, and demonstrates how the environment has been considered throughout Project design. This report covers the area associated with the Project below Mean High Water Springs (MHWS); this area is referred to throughout the report as the 'works area'. The consent for the onshore part of the slipway is being addressed separately.

1.2 PURPOSE OF THIS REPORT

This MEA addresses the potential environmental effects associated with the licensable activities required for the proposed temporary slipway. It provides the environmental information and assessment required to support the MLA and demonstrates how the environment has been considered throughout Project design.

1.3 STRUCTURE OF THIS REPORT

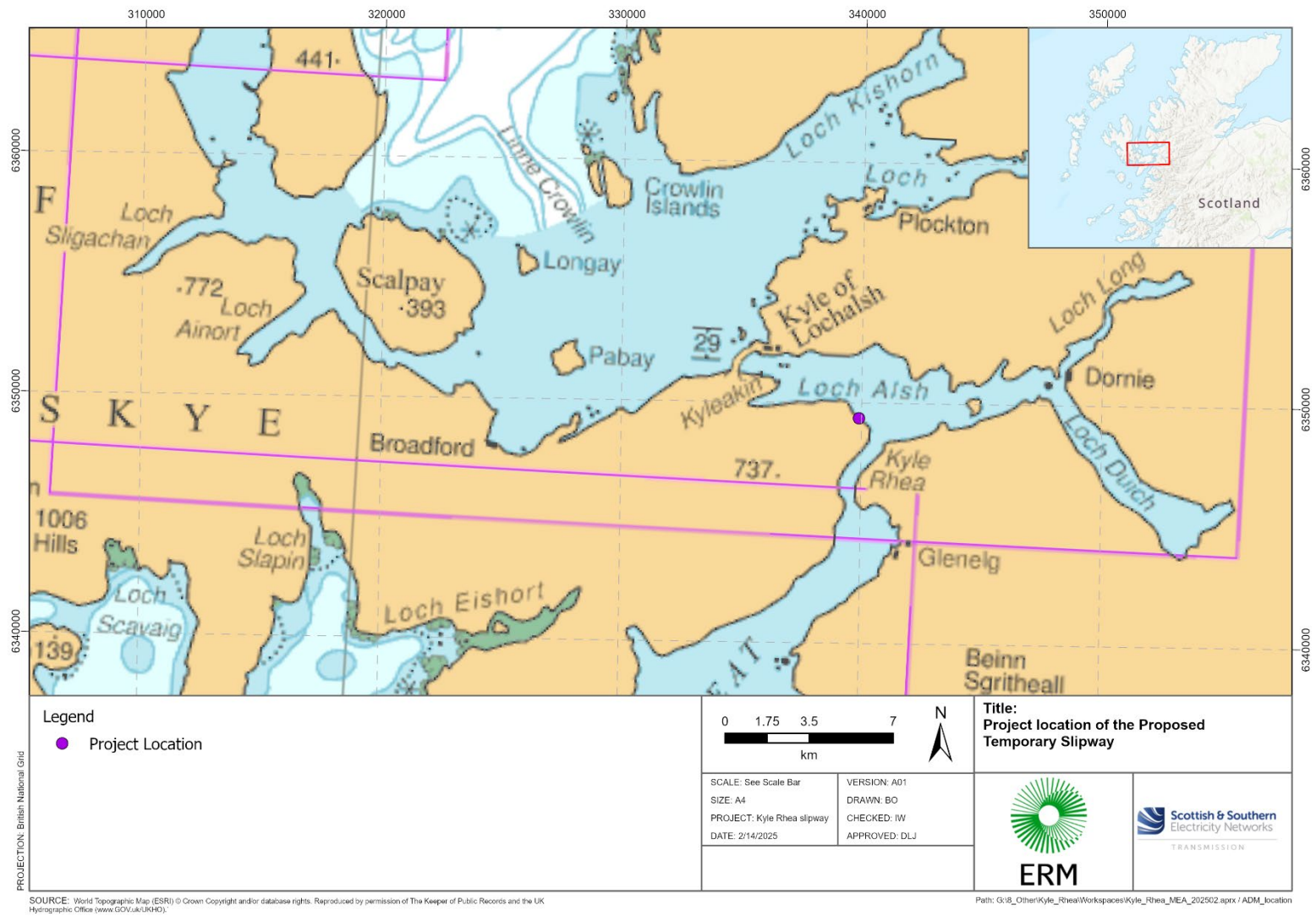
The remainder of this report is structured as follows:

- Section 2: Legislation, Policy and Statutory Consent Procedure;
- Section 3: Consultation;
- Section 4: Project Description;
- Section 5: Consideration of Alternatives;
- Section 6: Environmental Assessment Methodology;
- Section 7: Environmental Assessment;
- Section 8: Summary and Conclusions.

Supporting information is provided in the following Appendix:

- Appendix A: WFD Scoping Assessment.
- Appendix B: Report to Inform Appropriate Assessment

FIGURE 1-1: PROJECT LOCATION OF THE PROPOSED TEMPORARY SLIPWAY



2. LEGISLATION, POLICY AND STATUTORY CONSENT PROCEDURE

2.1 OVERVIEW

This section provides an overview of the legislation and policy applicable to the Project and, where applicable, how these have been addressed in the MLA. It is intended to place the works in the wider context of national plans and policies, as well as providing comment on how the proposed works comply with relevant policies in the Scottish Marine Plan and key nature conservation legislation and directives.

2.2 LEGISLATION

2.2.1 MARINE (SCOTLAND) ACT 2010

The Marine (Scotland) Act 2010 provides the legal framework for the management and protection of the marine and coastal environment in Scotland. The Marine (Scotland) Act 2010 provides a framework which helps balance competing demands on Scotland's seas. It introduced a duty to protect and enhance the marine environment and included measures to help boost economic investment and growth in areas such as marine renewables.

Scottish Government summarises the main measures of the Marine (Scotland) Act 2010 as:

- *"Marine planning: a new statutory marine planning system to sustainably manage the increasing, and often conflicting, demands on our seas;*
- *Marine licensing: a simpler licensing system, minimising the number of licences required for development in the marine environment to cut bureaucracy and encourage economic investment;*
- *Marine conservation: improved marine nature and historic conservation with new powers to protect and manage areas of importance for marine wildlife, habitats and historic monuments;*
- *Seal conservation: much improved protection for seals and a new comprehensive licence system to ensure appropriate management when necessary;*
- *Enforcement: a range of enhanced powers of marine conservation and licensing."*

The Marine Scotland Directorate was established in 2009 and is a directorate of the Scottish Government. Now known as the Scottish Government's Marine Directorate, it manages Scotland's seas and freshwater fisheries, along with delivery partners NatureScot and the Scottish Environment Protection Agency, and provides management and research of devolved responsibilities such as:

- Licensing of marine activities;
- Sea fisheries;
- Salmon and recreational fishing;
- Marine renewable energy;
- Marine conservation;
- Marine spatial planning;
- Scientific research including sea and freshwater fisheries;

- Enforcement of marine and fisheries law.

Part 4 of the Marine (Scotland) Act 2010 sets out the requirements for marine licences within Scottish territorial waters (0 to 12 Nautical Miles (NM)).

Section 21 describes the licensable marine activities, which require a Marine Licence Application submission to Marine Directorate Licensing Operations Team (MD-LOT) and consideration by Scottish Ministers. In line with Section 21, a Marine Licence is required for the Project as an activity *"to construct, alter or improve any works within the Scottish marine area either in or over the sea, or on or under the seabed"*.

Under Section 82 of the Marine (Scotland) Act 2010, MD-LOT is required to consider whether a licensable activity is capable of affecting (other than insignificantly) a protected feature in a Nature Conservation Marine Protected Area (NCMPA). This MEA therefore includes an assessment of any effects on NCMPAs that could be caused by the proposed temporary slipway in order to aid MD-LOT's assessment.

2.2.2 THE HABITATS DIRECTIVE (COUNCIL DIRECTIVE 92/43/EEC)

The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended)¹, The Conservation of Habitats and Species Regulations 2017 (as amended)² and The Conservation of Offshore Marine Habitats and Species Regulations 2017³ (as amended) (known together as the Habitats Regulations) transpose the EU Habitats Directive (Council Directive 92/43/EEC)⁴ and certain elements of the EU Wild Birds Directive (Directive 2009/147/EC)⁵ (known together as the Nature Directives) into UK and Scottish law.

A Project must investigate the potential for Likely Significant Effects (LSEs) to be caused to designated sites in accordance with the Habitats Regulations. An Appropriate Assessment is required where there is a potential for the Project to have an adverse effect on a site within the National Site Network within the meaning of the Habitats Regulations, including Special Areas of Conservation (SAC) or Special Protection Areas (SPA). Effects on these sites are considered in Section 7.6 of this MEA as well as in the Report to Inform Appropriate Assessment (RIAA) in Appendix B.

2.2.3 THE WILDLIFE AND COUNTRYSIDE ACT

The Wildlife and Countryside Act 1981, as amended by the Nature Conservation (Scotland) Act 2004 Wildlife and Natural Environment (Scotland) Act 2011, prohibits certain methods of killing or taking wild animals (as listed under Schedule 5) and includes protection of wild birds and

¹ <https://www.legislation.gov.uk/ukxi/1994/2716/contents/made>

² <https://www.legislation.gov.uk/ukxi/2017/1012/contents/made>

³ <https://www.legislation.gov.uk/ukxi/2017/1013/contents/made>

⁴ Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A31992L0043>

⁵ Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A2009L0147>

certain mammals. Potential impacts on protected species are considered in Section 7.4 and 7.5 of this MEA.

2.2.4 THE PROTECTION OF SEALS (DESIGNATED SEA HAUL-OUT SITES) (SCOTLAND) ORDER 2014

Under Section 117 of the Marine (Scotland) Act 2010, it is an offence to harass a seal (internationally or recklessly) at a designated haul-out site.

In 2011, Marine Directorate and the Sea Mammal Research Unit (SMRU) identified an initial list of potential seal haul-out sites, where seals come ashore to rest, moult or breed, on land. From this identification, a list of haul out sites and key breeding sites were designated through The Protection of Seals (Designation of Haul-Out Sites) (Scotland) Order 2014.

Potential impacts on seals have been considered in Section 7.4 of this MEA.

2.2.5 WATER FRAMEWORK DIRECTIVE

The Water Framework Directive (WFD) provides a framework for managing the water environment. The main aims of the framework are to:

- Prevent deterioration and enhance status of aquatic ecosystems, including groundwater;
- Promote sustainable water use;
- Reduce pollution;
- Contribute to the mitigation of floods and droughts.

The WFD regulatory regime is administered through the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended) in Scotland, enabling control over activities that can affect the water environment. The Controlled Activities Regime (CAR) legislation and the Water Environment and Water Services (Scotland) Act 2003 (WEWS Act) partly transposed the European Community (EC)'s WFD into the law in Scotland. Under CAR, the risk associated with proposed activities is assessed before granting an authorisation, where appropriate.

A WFD assessment can have up to 3 stages, not all of which need to be completed (depending on the outcomes):

- Screening – excludes any activities that do not need to go through the scoping or impact assessment stages;
- Scoping – identifies the receptors that are potentially at risk from the activity and need impact assessment;
- Impact assessment – considers the potential impacts of the activity, identifies ways to avoid or minimise impacts, and shows whether activities may cause deterioration or jeopardise the water body achieving good status.

Section 6.2 considers impacts requiring further assessment. A WFD scoping assessment is included in Appendix A of this MEA.

2.3 MARINE PLANNING POLICY

2.3.1 UK MARINE POLICY STATEMENT

The UK Marine Policy Statement (MPS) applies to all UK waters and has been adopted by the UK Government, the Scottish Government, the Welsh Assembly Government and the Northern Ireland Executive. The function of the MPS is to provide the framework for preparing Marine Plans and taking decisions affecting the marine environment. All national and regional marine plans must be in conformity with the MPS unless relevant considerations indicate otherwise.

The objectives of the MPS are to:

- Promote sustainable economic development;
- Enable the UK to move towards a low-carbon economy, in order to mitigate the causes of climate change and ocean acidification and adapt to their effects;
- Ensure a sustainable marine environment which promotes healthy, functioning marine ecosystems and protects marine habitats, species and our heritage assets;
- Contribute to the societal benefits of the marine area, including the sustainable use of marine resources to address local social and economic issues.

2.3.2 SCOTTISH NATIONAL MARINE PLAN

The Scottish Government adopted the National Marine Plan in early 2015; the National Marine Plan 2 is currently under development and consequently has not been considered further in this report. The Plan provides an overarching framework for marine activity in Scottish waters, including the management of all developments and associated activities and interests, in both inshore (out to 12 nm) and offshore (12-200 nm) waters. The Plan is designed to enable sustainable development, whilst preserving and protecting the natural marine environment and its resources and allowing existing and emerging industries to co-exist. The Scottish National Marine Plan details 21 general policies that are applicable to all future developments and uses within Scottish waters. Key policies, that align with the Project assessed in this MEA, are detailed in Table 2-1:.

TABLE 2-1: RELEVANT SCOTTISH MARINE PLAN POLICIES

Code	Project Alignment
GEN 1 – General Planning Principle There is a presumption in favour of sustainable development and use of the marine environment when consistent with the policies and objectives of this Plan.	The Project will enable future development of renewables generation around the island of Skye, which requires increased capacity of the current OHL. The proposed temporary slipway is proposed to allow access by landing craft, for the transport of construction plant and materials, to facilitate the construction of the OHL.
GEN 2 - Economic Benefit Sustainable development and use which provides economic benefit to Scottish communities is encouraged when consistent with the objectives and policies of this Plan.	The current OHL was built between 1956 and 1989 and has reached the end of its operational capabilities. Replacement is essential to maintain security of supply to Skye and the Western Isles.

Code	Project Alignment
GEN 3 - Social Benefit Sustainable development and use which provides social benefits is encouraged when consistent with the objectives and policies of this Plan.	The Project will enable future development of renewables generation around the island of Skye, which requires increased capacity of the current OHL, which would result in increased economic activity through investment and local spending. The Project will unlock skilled jobs throughout the construction phase and many more through the supply chain and wider economy, providing a boost to local and national economies.
GEN 5 - Climate change Marine planners and decision makers must act in the way best calculated to mitigate, and adapt to, climate change.	The Project will enable future development of renewables generation around the island of Skye, which requires increased capacity of the current OHL, which would result in increased economic activity through investment and local spending.
GEN 7 – Landscape/seascape Marine planners and decision makers should ensure that development and use of the marine environment take seascape, landscape and visual impacts into account.	The Project will result in construction of infrastructure that will have a perceptible effect on the surrounding visual character. However, will be restored once the Project has reached the end of its operational life. The MEA assesses the potential effect of the Project on the local landscape and seascape.
GEN 13 – Noise Development and use in the marine environment should avoid significant adverse effects of man-made noise and vibration, especially on species sensitive to such effects.	The Project will adhere to all relevant policies and guidance regarding generation of noise, and has engaged with relevant bodies, including NatureScot, to ensure all concerns regarding the impact of man-made noise on marine mammals is understood and captured appropriately within the MEA. Mitigation measures are included to reduce noise levels. The MEA assesses the potential for the generation of noise due to the proposed Project activities.
GEN 18 – Engagement Early and effective engagement should be undertaken with the general public and all interested stakeholders to facilitate planning and consenting processes.	The Project will adhere to all relevant engagement policies, through public notices of the Project and has engaged with relevant bodies, including NatureScot at an early stage of the Project.

As might be expected, overhead electricity cables are not specifically noted within the Scottish National Marine Plan, however submarine cables are detailed in Section 14 of the Plan, and the underlying planning policy objectives for submarine cables are also relevant for the proposed temporary slipway assessed within this report, including the following:

- Protect submarine cables whilst achieving successful seabed user co-existence;
- Achieve the highest possible quality and safety standards and reduce risks to all seabed users and the marine environment;
- Support the generation, distribution and optimisation of electricity from traditional and renewable sources to Scotland, UK and beyond.

The Project will adhere to objectives and policies set out in the Scottish National Marine Plan.

2.3.3 SECTORAL MARINE PLAN: REGIONAL LOCATIONAL GUIDANCE

The Project assessed within this report sits within the area covered by the Sectoral Marine Plan: West region for offshore wind energy. Although this guidance is related to offshore wind development, the key risk factors to development within the West region are relevant for this Project, and are indicated as:

- Potential visual impacts and landscape/seascape character impacts;
- Potential impacts on marine mammal receptors;
- Potential impacts on commercial shipping;
- Risks to bird species, including collision risk and displacement, as well as potential impacts to birds on migratory pathways;
- Potential impacts on benthic habitats and species;
- Potential impacts on migratory fish species;
- Potential impacts on commercial fishing;
- Potential impacts on recreational angling;
- Potential cost impacts and associated navigational risk from diverting key commercial shipping routes.

Power interconnectors make up Section 3.3.12 of the Sectoral Marine Plan: West, i.e. infrastructure which connects island communities with mainland electricity, and which allows for the development of island renewables by allowing increased capacity. The proposed temporary slipway will facilitate the development of the OHL, allowing access by landing craft, for the transport of construction plant and materials necessary for construction. This document identifies the risk factors and assesses the potential impacts outlined above that are associated with this Project (Section 7).

3. CONSULTATION

Consultation has been undertaken by SSENT at an early stage of this Project with NatureScot. Table 3-1: provides a summary of this consultation, the key issues and concerns raised, and how these have been addressed by the Project.

TABLE 3-1: CONSULTATION SUMMARY

Stakeholder	Consultation Date	Summary of Consultation	Addressed by Project
NatureScot	13/06/2024	<p>Presentation of proposed temporary slipway and progress to date.</p> <p>Key concerns raised:</p> <ul style="list-style-type: none"> • Vessels and anchoring; • Is the slipway necessary; • Long-term use, e.g. recreation, and impacts, particularly relevant for [Redacted] disturbance. 	<p>Impacts from vessels and anchors have been assessed within Section 7.3 of this MEA.</p> <p>Consideration of alternatives is explained in Section 5.</p> <p>Long-term use is considered within the assessment of this MEA; impacts on recreation are assessed in Section 7.6.5 and impacts on [Redacted] are assessed in Section 7.4. [Redacted] were undertaken to inform the assessment.</p>
NatureScot	23/01/2025	<p>Presentation of construction methodology, slipway design and operational period. Discussion regarding assessments.</p> <p>Key concerns raised:</p> <ul style="list-style-type: none"> • Loch Duich, Long and Alsh Reefs SAC – include consideration of indirect effects; unreliability of reef polygon layer; • Kinloch and Kyleakin Hills SAC – include assessment on [Redacted] • Inner Hebrides and Minches SAC – conservation and advice packages for SAC; • Include reference to pollution prevention plans, vessel management and anchoring. 	<p>RIAA have been produced for the Loch Duich, Long and Alsh Reefs SAC, Kinloch and Kyleakin Hills SAC and Inner Hebrides and Minches SAC; these are included in the Appendix B.</p> <p>Concerns regarding reef layer will be considered within the RIAA.</p> <p>Conservation Advice Packages and Conservation Management Advice documents have been considered for the assessment of this MEA.</p> <p>Mitigation measures, outlined in Section 6.4, have been included for pollution prevention and vessel management plans. Impacts and pressures from vessels and anchors have been assessed within Section 7.3 of this MEA.</p>

4. PROJECT DESCRIPTION

The purpose of this section is to summarise the offshore works associated with the proposed temporary slipway. The following sections describe the proposed slipway design, anticipated key construction works required, and the operational use.

This Project description provides an indicative overview of the anticipated proposed temporary slipway construction and operation works, based on how the current construction contractor may execute the work scope. As such, this overview can be expected to be subject to variation following contractor design refinement. However, to ensure that the realistic worst-case scenario is considered in this impact assessment, estimates presented in this Project description tend towards those that could result in greatest environmental risk.

4.1 PROJECT LOCATION AND OVERVIEW

The proposed temporary slipway is located on the southern shores of Loch Alsh and the isle of Skye, 3 km south-southwest of Balmacara, 4 km west of Ardintoul, and 4.8 km east-southeast of Kyleakin (Figure 1-1).

Figure 4-1 displays the works area (Marine Licensable area, below MHWS) and the indicative total area of the slipway (above and below MHWS), relative to MHWS and Mean Low Water Springs (MLWS). The works area has a total area of 971 m² below MHWS. The proposed temporary slipway below MHWS, will be located within the works area, and have a footprint of 617 m²; this is the maximum worst-case scenario for the area of the proposed temporary slipway. According to the detailed design drawings (AECOM, 2024) the dimensions of the temporary slipway will be 55.8 m in length (below MHWS), by 8 m in width (not inclusive of rock bag placement). When accounting for placement of rock bags, the width of the slipway increases to 11 m. The design life of the proposed slipway is 6 years.

The Project Design Envelope is summarised in Table 4-1.

FIGURE 4-1: WORKS AREA (BELOW MHWS) AND INDICATIVE TOTAL AREA OF THE SLIPWAY (ABOVE AND BELOW MHWS)*



*'Works area (below MHWS)' is the area which is licensable under the Marine (Scotland) Act; 'indicative total area of the slipway (above and below MHWS)' is shown for completeness only.

4.2 PROPOSED SPECIFICATION

The proposed form of construction for the proposed temporary slipway involves a series of precast reinforced concrete blocks with steel running strips, shaped to interlock through removable dowels, on top of a re-profiled seabed. In order to maintain stability of the proposed temporary slipway, the existing foreshore will be lined with a suitable geomembrane/geotextile. The slipway shall form a 1:10 slope to the top surface, providing a suitable landing stage for the delivery vessel ramp, and running surface for all required plant and material deliveries.

As described above, subject to the profile of the beach, seabed and delivery vessel hull, the plan length of the proposed temporary slipway will be 55.6 m (below MHWS), and with an approximate 11 m width (inclusive of rock bag placement).

A small volume of sediment will also be removed from a pocket at the toe of the temporary slipway to provide under keel clearance for operations vessels. Detailed design drawings (AECOM, 2024) indicate that this pocket will have a length of 33.1 m, and a maximum width of 16 m. All landing vessels will be able to conduct operations in normal operating conditions, at all states of the tide above Mean Low Water Neaps (MLWN), providing access to the proposed temporary slipway for loading/offloading operations 76% of the time (measured over a year).

4.3 INSTALLATION METHODOLOGY

The installation methodology will involve construction of pre-cast concrete temporary slipway units. These will be cast off site for ease of transportation, followed by individual lifting on landing vessels for transportation to the site. Two vessels are proposed to be involved in installation (safety boat and workboat) (RJ McLeod, 2024), and works will occur during the hours of 7am to 7pm. Installation works are expected to take 8 weeks in total (including weather downtime).

A bund will be set up around the slipway location, with the seabed subsequently prepared through re-profiling to achieve the required slope, in order to provide a bedding for the precast concrete units. According to the detailed engineering design drawings (AECOM, 2024), approximately 140 m³ of sediment will, potentially, be re-profiled, while approximately 95 m³ of sediment will be removed from a pocket at the toe of the temporary slipway to provide under keel clearance for operations vessels. In total, therefore, approximately 235 m³ of sediment will be disturbed by the installation as provided by the current methodology.

Any material removed will be stockpiled for further construction use. Other excess material will be stockpiled for use in reinstatement of the original seabed morphology at the end of the Project; or used to profile the beach to meet the top edge of the proposed temporary slipway as it crosses the beach. All excavated materials will be stored above the high-water mark (RJ McLeod, 2024). Stockpile will be managed by a responsible Contractor considering proper organisation, access, and protection.

The geotextile sheets will be placed on the seabed running the length of the proposed temporary slipway, followed by placement of the geocells to strengthen soil. Geocells will be fixed and filled on the re-profiled slope, using material from existing seabed sediment to fill them.

Once delivered to site, the pre-cast concrete units will be positioned on the seabed from the lowest extent of the proposed temporary slipway to the shore. Units will be laid by a combination of land operatives, workboat, and excavator. Divers may be required to accurately position the units as they are lifted into position. The workboat will utilize its own anchors during the works and an agreed anchoring location will be agreed with the Contractor prior to slipway operation.

Lastly, removable locking dowels will be placed between the pre-cast concrete units to lock each layer; again, divers may be used to assist this process.

In order to prevent scour holes developing, along either side of the slipway, 1 tonne rock bags will be placed, and will run along the entire length. These will be positioned (toed in) 500 mm deep and tied down in line with the manufacturers' instructions.

The total plan area of the works below MHWS at +5.3mCD (Oban) is 971 m². The plan area for the slipway itself, including the adjacent scour protection rock-bags, below MHWS, is 595 m².

4.4 OPERATION AND MAINTENANCE

The design life of the proposed temporary slipway is 6 years. During operation, the proposed temporary slipway will allow access by landing craft, for the transport of construction plant and materials, to facilitate the construction of the OHL. It is anticipated that the Contractor will transport stone from local quarries, via Loch Alsh or the Kyle Rhea Strait, depending on which of the proposed quarries are used; there may also be an opportunity to win and process stone from local borrow pits within the forestry, adjacent to the slipway location, should these be consented.

During the 6 years, it is anticipated that the slipway will mostly be used throughout March to September-November. During the months when the slipway will be used, it is expected that there will be a maximum of 13 vessels per week. These vessel movements reflect the Contractor's current programme, but are indicative and subject to change.

To maintain intended access at the slipway at MLWNs, sediment removal in a small area at the toe of the slipway may be required throughout the operations period; it is intended that an excavator already present on the site will be able to complete these works. The total area where ongoing maintenance may be required is 160 m².

4.5 DECOMMISSIONING

Decommissioning works for the proposed temporary slipway will be short duration and, broadly, the reverse of the construction sequence. The decommissioning methodology will involve removal of the locking dowels, pre-cast concrete units, geocells and geotextiles, in the opposite sequence to their installation. The filled geocells will be lifted from the seabed, and the material used to fill the cells (i.e. the original seabed sediment from site) will be stockpiled for use in re-grading the seabed to the original profile.

Reinstatement of the seabed will involve re-profiling to match the pre-works bathymetric survey profile. Post-works contamination validation testing will be undertaken as the last step, to confirm the absence of contaminants potentially introduced during the works.

TABLE 4-1: PROJECT DESIGN ENVELOPE FOR PROPOSED TEMPORARY SLIPWAY WORKS

Phase	Parameter	Values	Notes
Construction	Overall construction duration	8 weeks (including weather downtime)	Based on timing from mobilisation to demobilisation from work area
	Total area of construction works below MHWS	971 m ²	Total area below MHWS
	Slipway plan area below MHWS	595 m ²	Including rock bags
	Slipway maximum dimensions (excluding rock bags)	55.6 m (length) x 8 m (width)	Excluding rock bag placement
	Slipway maximum dimensions (including rock bags)	55.6 m (length) x 11 m (width)	Including rock bags
	Sediment removal pocket maximum dimensions	33.1 m (length) x 16 m (width)	Pocket is 16 m wide at its widest point (at the toe of the slipway) but tapers offshore
	Sediment removal pocket maximum area	432 m ²	This area acknowledges that the pocket is not rectangular (as described in the row above)
	Maximum volume of sediment disturbance	235 m ³	Approximately 140 m ³ of reprofiled sediment beneath the slipway, and 95 m ³ within the sediment removal pocket
	Working hours	7am – 7pm	
	Maximum number of vessels on site	2	1 x workboat 1 x safety boat
Operation	Operations timescale	6 years	
	Expected operations vessel use	Maximum 13 vessel movements per week	

Phase	Parameter	Values	Notes
	Sediment removal	As necessary throughout the operations period, within a maximum area of 160m ²	To be completed by excavator already present on site

5. CONSIDERATION OF ALTERNATIVES

The selection of location for the proposed temporary slipway was informed by the onshore EIA (SSNT, 2022), which considered various route options for the OHL, and the associated access tracks. A wider area was surveyed to inform the specific location for the proposed temporary slipway.

An alternative slipway design was initially considered during the design stage. This was explored as an option in order to remove the need for sediment clearance from the toe of the slip. However, this design resulted in a larger overall footprint and increased the cut and fill requirements for construction. Consequently, this design option was not considered further.

The proposed temporary slipway has been designed to ensure that it provides a stable slipway over the required design life, while providing the following advantages over alternatives (e.g. no slipway/other slipway designs/access via land):

- Reduced construction time;
- Reduced construction complexity;
- Reduced seabed disruption;
- Increased ease of slipway removal;
- Increased ease of seabed reinstatement following slipway removal;
- Minimum maintenance;
- Decreased contamination of existing seabed with imported material;
- Decreased risk of loss of slipway during storm events;
- Reduced construction traffic on local road network of small country roads;
- Load limitations on bridges from construction traffic no longer considered a risk.

6. ENVIRONMENTAL ASSESSMENT METHODOLOGY

6.1 INTRODUCTION

As detailed in Section 2.2.1, although an EIA is not required alongside this MLA, this MEA has been carried out using similar EIA terms and definitions for clarity and simplicity.

This Chapter sets out the methodology that has been used to undertake the assessment for the Project.

This MEA assesses whether the Project is likely to result in any significant impacts on the environment. The assessment methodology is based on the environmental risk of the proposed activity, using a standardised methodology for all topics scoped into the assessment and aligns with the following best practice rationale and underpinning principles for an EIA:

- Avoidance: consider options that will avoid harm to ecological features;
- Potential environmental impacts: identify likely significant effects which could result from the Project;
- Mitigation: likely significant effects will be avoided or minimised through mitigation measures that are either designed into the Project (embedded) or are later applied (additional);
- Assessment of the level of significance of residual effects: likely significant effects will be assessed taking account of committed mitigation measures.

These elements have been incorporated into the methodology that has been applied to the risk assessment. The methods applied to developing understanding of significance of an impact or effect utilise the best available evidence of environmental/impact receptor sensitivity (including tolerance and recoverability metrics) and the best available evidence of the nature, spatial scale and extent, and duration and frequency (magnitude) of impacts resulting from the proposals, to determine the severity of the risk.

6.2 TOPICS REQUIRING FURTHER ASSESSMENT

Topics have been assessed and either scoped in or scoped out of this MEA based on the professional judgement of the assessment authors. The potential impacts that may arise from the development of the Project, and their effects on receptors within each topic, have been considered when reaching a scoping decision for each. Table 6-1 outlines the scoping decision for each topic and provides a justification where topics are scoped out for each.

TABLE 6-1: SCOPING DECISION OF TOPICS TO BE INCLUDED IN THE ASSESSMENT

Topic	Scoping Decision	Justification
Physical Processes	Scoped In	There exists the potential for impact to the physical environment, through removal of sediments for concrete blocks and installation of concrete blocks, therefore physical environment impacts have been scoped in.

Topic	Scoping Decision	Justification
Water and Sediment Quality	Scoped In (WFD assessment Scoped Out)	<p>Installation works may cause changes to water quality through sediment re-suspension. This impact pathway has been scoped into assessment.</p> <p>The location of the proposed works is not close to registered dredging and disposal sites, and away from areas of historical industrial or mining activity. As such, it is considered there is negligible risk of mobilising contaminated sediments. As such, this impact pathway is scoped out of assessment.</p> <p>A WFD scoping assessment was undertaken, see Appendix A, and it was determined that a WFD compliance assessment was not required, so this has been scoped out.</p>
Benthic Ecology	Scoped In	<p>Installation of concrete blocks will directly affect benthic habitats, and sediment plumes may indirectly affect benthic habitats, therefore impacts to benthic ecology have been scoped in.</p>
Fish and Shellfish Ecology	Scoped Out	<p>Given the location and temporary nature of the works which are limited in duration, impacts are limited to temporary disturbance from the presence of vessels. Given the frequent use of the Kyle Rhea Strait by other navigation and fishing vessels, fish species will likely be habituated to the level of vessel presence associated with the Project.</p> <p>With regards to loss of habitat associated with the presence of the slipway once operational, the footprint of the slipway constitutes a very minimal area of habitat loss for any mobile fish and shellfish species (971 m²). This is not expected to have an effect on individuals, nor at population levels. Furthermore, the intention is for the slipway to be removed at the end of its operational life with the seabed re-profiled and reinstated as far as possible. This should ensure that the area is returned to its pre-disturbance state for use by fish and shellfish post-decommissioning.</p> <p>While increased levels of suspended sediments associated with the proposed works are anticipated, this is likely to be dispersed relatively rapidly and reincorporated into the local sediment transport regime such that mobile species (e.g. fish) will be unaffected by this temporary change. Though shellfish are comparatively less mobile, the species located within the proximity of the proposed works are likely to be intertidal and therefore well adapted to variable suspended sediment concentrations.</p> <p>Based on the above, fish and shellfish impacts have been scoped out.</p>
Marine Mammals	Scoped In	<p>There exists the potential to impact marine mammals, notably [Redacted] through visual disturbance, vessel presence, and noise generated from construction activities, therefore marine mammal impacts have been scoped in.</p>
Ornithology	Scoped In	<p>There exists the potential for impact to ornithology receptors, through disturbance from vessel presence and</p>

Topic	Scoping Decision	Justification
		noise generated from construction, therefore impacts to ornithology have been scoped in.
Designated Sites and HRA	Scoped In	There exists the potential impact to designated sites, due to an overlap, and close proximity, with the proposed temporary slipway location, therefore designated sites impacts have been scoped in.
Commercial Fisheries	Scoped Out	Given the location and temporary nature of the works, loss of fishing grounds and displacement of fishing vessels will not occur, therefore commercial fisheries impacts have been scoped out.
Shipping and Navigation	Scoped Out	Given the location and temporary nature of the works, displacement of vessels and/or risks to navigation will not occur, therefore shipping and navigation impacts have been scoped out.
Aviation and Radar	Scoped Out	No new structures will be installed that will create a pathway of impact for aviation. Due to the distance of the work site from both military practice areas and the historic munitions disposal site, any effects will be negligible, and no impacts on aviation and military receptors are anticipated. Therefore, aviation and radar impacts have been scoped out.
Marine Archaeology	Scoped Out	Given the location and temporary nature of the works, and that no known wrecks or other coastal archaeology/ cultural heritage are present within the site, marine archaeology impacts have been scoped out.
Tourism and Recreation	Scoped In	Due to the location of the site and the construction of the proposed temporary slipway, there exists the potential for impact to tourism and recreation receptors, therefore tourism and recreation impacts have been scoped in.
Seascape and Visual	Scoped In	Due to the location of the site and the construction of the proposed temporary slipway, there exists the potential for impact to seascape and visual receptors, therefore tourism and seascape and visual have been scoped in.

6.3 METHODOLOGY FOR ASSESSMENT

Topics which have been scoped into the assessment as outlined above have undergone further consideration following key stages:

- Stage 1 - A study area has been identified which will account for the spatial extent which the proposed temporary slipway activities may have an impact on sensitive receptors;
- Stage 2 - The baseline environment within the study area has been described and key receptors identified;
- Stage 3 - The Project activities which may result in impacts to the key receptors at any stage of the Project have been identified;
- Stage 4 - The activities and resulting potential effects have been assessed, determining the sensitivity of the receptors and magnitude of effects to conclude an overall impact (risk) significance.

This MEA provides an assessment of potential impacts due to the effects of the proposed temporary slipway on receptors in the environment. The terms effect and impact are different, as one drives the other. Effects are measurable physical changes in the environment (e.g. volume, time, and area) arising from Project activities, while impacts consider the response of a receptor to an effect. Impacts can be defined as direct or indirect, beneficial or adverse.

In order to implement a systematic assessment of impacts between the different receptors an overall approach to the assessment of impacts in order to determine their significance has been implemented. The process considers:

- Sensitivity and value of the receptor;
- Magnitude of effect;
- Use of the two metrics above to inform determination and qualification of the significance of impact.

Whilst it is important to have a common approach to impact assessment across a Project, there are definitions and issues specific to each topic that the corresponding assessments must account for. To that end, and to ensure that this section does not become a lengthy description of the specifics of each impact, the method for assessing significance is outlined in more detail in the relevant impact assessment section of this report.

6.3.1 SENSITIVITY

The sensitivity of a receptor is defined by how susceptible it may be to an impact with consideration to its resilience (tolerance, adaptability and recoverability) and, where applicable, its value (conservation significance, ecological importance and/or quality).

The sensitivity of a receptor is based on the following factors:

- Tolerance to change;
- Recoverability;
- Adaptability;
- Value.

The scale of sensitivity is as follows; negligible, low, medium and high, and defined in Table 6-2.

It is important to note that the quality, value, rarity or importance of the receptor can vary and where applicable, this is discussed in the respective receptor assessment chapters.

TABLE 6-2: DEFINITION OF SENSITIVITY RATINGS

Sensitivity	Definition
Negligible	The receptor is generally tolerant and can accommodate a particular effect without the need to recover or adapt.
Low	The receptor has some tolerance to accommodate a particular effect or will be able to recover or adapt.

Sensitivity	Definition
Medium	The receptor has a low tolerance to accommodate a particular effect with a low ability to recover or adapt.
High	The receptor has a very low/no tolerance to accommodate a particular effect with a low/no ability to recover or adapt.

6.3.2 MAGNITUDE

The magnitude of an effect can be characterised by considering the following factors:

- Spatial extent;
- Duration;
- Likelihood;
- Frequency;
- Intensity;
- Reversibility.

Categorisation of the magnitude of effect will vary for specific topics. The magnitude categories used are negligible, low, medium and high, as defined in Table 6-3.

TABLE 6-3: DEFINITIONS OF MAGNITUDE

Magnitude	Environmental impact
Negligible	The effect is highly localised and short-term, with full rapid recovery expected to result in very slight or imperceptible changes to baseline conditions or a receptor population.
	The effect is very unlikely to occur; if it does, it will occur at a very low frequency or intensity.
Low	The effect is localised and temporary or short-term, leading to a detectable change in baseline conditions or a noticeable effect on a small proportion of a receptor population.
	The effect is unlikely to occur or may occur but at low frequency or intensity
Medium	The effect occurs over a local to medium extent with recovery likely to occur within 1-2 years following cessation of activities, or localised medium-term degradation with recovery in 2-5 years, OR the impact affects a moderate proportion of a receptor population.
	The effect is likely to occur and/or will occur at a moderate frequency or intensity.

Magnitude	Environmental impact
High	Occurs over a large spatial extent, resulting in widespread, long-term (>5 years following cessation of activity) or permanent changes of the baseline conditions, OR the effect affects a large proportion of a receptor population.
	The effect is very likely to occur and/or will occur at a high frequency or intensity.

6.3.3 IMPACT ASSESSMENT MATRIX

Once the sensitivity and magnitude have been determined using the scoring above, they are combined to conclude the significance of impact as detailed in the impact assessment matrix shown in Table 6-4.

TABLE 6-4: OVERALL IMPACT ASSESSMENT MATRIX

		Sensitivity			
		Negligible	Low	Medium	High
Magnitude	Negligible	Negligible	Negligible	Negligible	Minor
	Low	Negligible	Negligible	Minor	Minor
	Medium	Negligible	Minor	Moderate	Moderate
	High	Minor	Minor	Moderate	Major

The outcome of the overall risk assessment equates to a rating of 'significance'. An overall risk determined to be **Negligible** or **Minor** is 'Not Significant', and an overall risk determined to be **Moderate** or **Major** is 'Significant' and will require further mitigations to be implemented to minimise or remove the residual risk.

6.4 MITIGATION AND RESIDUAL RISK

Mitigation measures have been identified within this MEA to avoid, minimise or remove potential environmental impacts, or improve environmental benefits.

There are two types of mitigation measures that can be applied, these are either embedded into the Project design or are additional measures implemented by the Project to reduce environmental impact and residual risk.

6.4.1 EMBEDDED MITIGATION

Certain measures are incorporated into the Project design as adherence to best practices or embedded mitigation / management measures in accordance with standard industry practice. Details on these types of mitigation are presented in Table 6-5.

TABLE 6-5: EMBEDDED MITIGATION

Measure	Details
Production of Construction Environmental Management Plans (CEMPs) for construction and operation of the slipway.	Measures will be adopted to ensure that the potential for environmental impact from construction, operation and decommissioning is minimised through the implementation of appropriate mitigation.
All Project personnel will be trained and informed of their responsibility to implement the environmental and ecological mitigation outlined in the CEMPs.	Toolbox talks, inductions, and awareness notices will be used to disseminate this information among all relevant Project personnel.
Control measures will be in place to prevent fuel leak. In the event of an accidental fuel release occurring appropriate standard practice management procedures will be implemented accordingly.	<p>Control measures include:</p> <ul style="list-style-type: none"> • Ensure fuel tanks are secured after refuelling; • Refuel moving plant at designated area using spillage kits round fuel tanks; • Have spill kits to hand ready to use in event of spillage; • Refuelling or storing will not take place near any watercourses or water drains. <p>If applicable, a vessel carrying dangerous goods shall comply with the International Maritime Dangerous Goods Code and carry appropriate shipboard oil pollution emergency plan (SOPEP) equipment.</p> <p>Where applicable, workboats must comply with the latest edition of the Workboat Code, including the requirements regarding fuel carriage.</p> <ul style="list-style-type: none"> • Fuel lids should be watertight and vessels should have adequate securing equipment.
Where applicable, vessels will be equipped with waste disposal facilities (sewage treatment or waste storage) to IMO MARPOL Annex IV Prevention of Pollution by Sewage from Ships standards.	Measures will be adopted to ensure that the potential for release of pollutants from construction, operation and decommissioning is minimised.
Ballast water discharges from vessels will be managed under the International Convention for the Control and	The BWM Convention, adopted in 2004, aims to prevent the spread of harmful aquatic

Measure	Details
Management of Ships' Ballast Water and Sediments, 2004 (BWM Convention).	organisms from one region to another, by establishing standards and procedures for the management and control of ships' ballast water and sediments. Measures will be adopted to ensure that the risk of Marine Non-Native Species (MNNS) introduction during construction, operation and decommissioning is minimised.
Vessels will adhere to the IMO guidelines for the control and management of ships' biofouling to minimise the transfer of invasive aquatic species (Biofouling Guidelines) (resolution MEPC.207(62)).	The Biofouling Guidelines provide a consistent approach to minimising the risk of MNNS introduction via biofouling on ship's hulls.
All vessels will adhere to vessel management measures.	The vessel management will include measures to decrease disturbance to marine wildlife and minimise collision risk with marine mammals. Measures will include, for example, agreed routes and speed restrictions. Vessel management measures will be captured in the CEMPs.
All vessels will adhere to the Scottish Marine Wildlife Watching Code (SMWWC).	<p>NatureScot (formally SNH) developed the Code as part of its duties under the Nature Conservation (Scotland) Act 2004. The Code was first published in 2006 and was revised in 2017. The code aims to:</p> <ul style="list-style-type: none"> • Help minimise disturbance to marine wildlife; • Help to enjoy watching marine wildlife; • Improve chances of seeing wildlife; • Provide a standard for the wildlife watching industry; • Help to stay within the law.
All vessels will adhere to the Basking Shark Code of Conduct.	Under section 9 of the Wildlife and Countryside Act 1981 it is illegal to kill, injure or recklessly disturb Basking Sharks in British waters. By following the Code of Conduct boat handlers reduce the risk of killing, injuring or harassing basking sharks.
Project operations will adhere to Marine Directorate's (2014) Guidance on the Offence of Harassment at Seal Haul-out Sites.	Seals at designated haul-outs garner strict protection under Section 117 of the Marine (Scotland) Act 2010, with the Protection of Seals (Designation of Haul-Out Sites) (Scotland) Order 2014 (as amended) specifying the sites, and it is an offence to

Measure	Details
	cause disturbance to any seal hauled-out at such a designated site.
Crew will be made aware of all protected species within the marine environment, and their responsibility to implement all proposed mitigation	Toolbox talks will be held to communicate all relevant information to ensure staff understand their responsibility to implement the mitigation measures proposed for the Project.
Notice to Mariners (including local), Kingfisher bulletins, Radio Navigational Warnings, NAVTEX, and/or broadcast warnings will be promulgated in advance of any proposed works. The notices will include the time and location of any work being carried out, and emergency event procedures.	Ensure navigational safety and minimise the risk and equipment snagging.
Work activities to be restricted to 7am to 7pm during construction. Work activities to be restricted to daylight hours during operation.	Working hours to occur only between 7am to 7pm for construction and decommissioning. Work activities restricted to daylight hours for operation.
Machinery fitted with noise reduction systems.	Machinery fitted with noise reduction systems to minimise noise during operating hours.
Checks for ecological receptors prior to works commencing.	Check will be undertaken for ecological receptors such as nests or signs of [Redacted] and their places of shelter prior to works being carried out.
All excavated material from sediment removal will be stored above the high water mark.	A laydown area which may be used for storing materials and stockpiling is located above mean high water. This area was included in the Section 37 application. Any stockpile will be managed by a responsible Contractor considering proper organisation, access and protection.
Protective bund to be set-up around the slipway location during construction.	Protective bund will be used for securing ground conditions around the slipway.
All material equipment and material for the slipway will be removed and the seabed restored to its original profile.	The filled geocells will be lifted from the seabed, and the material used to fill the cells (i.e. the original seabed sediment from site) will be stockpiled for use in re-grading the seabed to the original profile.

Measure	Details
	<p>Reinstatement of the seabed will involve re-profiling to match the pre-works bathymetric survey profile.</p> <p>Post-works contamination validation testing will be undertaken as the last step, to confirm the absence of contaminants potentially introduced during the works.</p>
Safety management systems will be in place throughout the Project.	Ensures that vessels and equipment comply with mandatory safety rules and regulations and follows appropriate codes, guidelines and standards. This will be outlined in the RJM Site Safety Procedures and SSENT Safety Procedures documents.
Equipment and Training for Site Personnel.	Site personnel will be suitably equipped and trained for work offshore including firefighting, first aid and offshore survival.
Species protection plan for [Redacted]	The species protection plan will include mitigation measures in place to minimise disturbance to [Redacted] including the implementation of exclusion zones of 200 m around [Redacted] 30 m around non-breeding [Redacted].

6.4.2 ADDITIONAL MITIGATION

No additional mitigation has been suggested on a receptor specific basis. During the assessment of impacts in the receptor specific assessments, all proposed embedded mitigation is taken into account when assessing the significance of an impact.

6.5 CUMULATIVE IMPACT ASSESSMENT

This Project is not considered to be of a scale which will give rise to cumulative or in combination effects with other Projects.

6.6 TRANSBOUNDARY EFFECTS

No transboundary effects are possible as a result of this Project, given the location and nature of the Project, therefore transboundary effects are scoped out and not considered further in this MEA.

7. ENVIRONMENTAL ASSESSMENT

The environmental assessment process followed in this MEA follows the systematic process of an environmental impact assessment, which evaluates the impact of change or effect that the Project might have, and the subsequent importance of this effect or change on the receiving environment; the methodology is summarised in Section 6.3. The sections below provide the environmental assessment for those receptors scoped in for consideration, as outlined in Table 6-1.

7.1 PHYSICAL PROCESSES

7.1.1 BASELINE

7.1.1.1 METOCEAN CONDITIONS

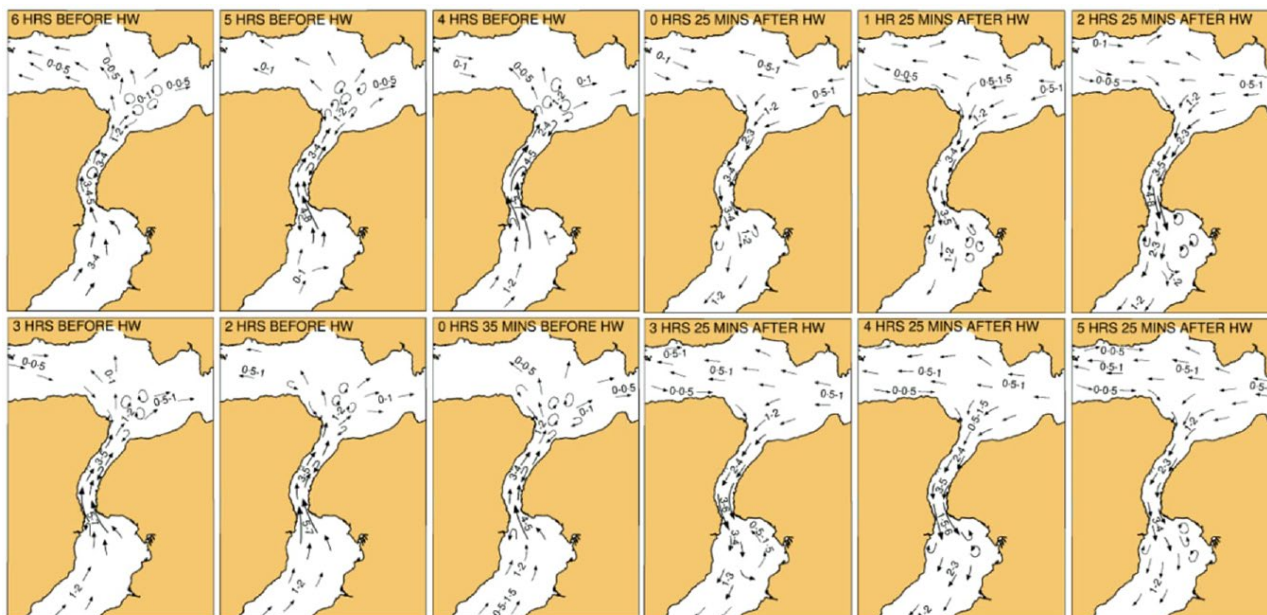
Tides

The tides around Scotland are strongly semi-diurnal and can be described by the principal semi-diurnal lunar (M2) and semi-diurnal solar (S2) constituents (Neill *et al.*, 2017).

Maximum tidal currents during mean spring tides, in the region around the east of Skye, are generally between 0.75 and 1.25 m/s, these are approximate average values for tidal currents in the UK. They are typical for water bodies around Skye, with tidal currents exceeding these values in channels (Barne *et al.*, 1997). The tidal streams are shown in Figure 7-1.

The tidal currents within Kyle Rhea flood northwards into Loch Alsh, and ebb southwards into the Sound of Raasay (Figure 7-1). As the tidal currents travel around the Kyle Rhea headland, the currents travel approximately parallel to the coastline in a general northwest-southeast direction. As a result of tides travelling around landmasses surrounding Loch Alsh, local eddies are likely, where water may flow in the opposite direction to the main flow. The tidal currents are strongest where they are squeezed between Skye and mainland Scotland, exceeding 8 knots on both spring ebb and flood tides (Royal Haskoning, 2013).

**FIGURE 7-1: TIDAL STREAMS FOR LOCHALSH, KYLEAKIN AND APPROACHES - AC 2540
(FROM: VISITMYHARBOUR, 2024)**



Wind

The dominant wind direction in the Loch Alsh region is southwest, with mean wind speeds exceeding 3 m/s across Kyle Rhea for 75% of the time (Barne *et al.*, 1997). The Kyle Rhea Strait is largely sheltered from the dominant winds by the land mass of southern Skye.

Waves

The wave heights across the Kyle Rhea Strait, and in the Loch Alsh region, are likely to be less than that of the surrounding water bodies, with protection from North Atlantic driven waves provided by the Skye land mass to the west. 75% of the time, significant wave heights in the area are less than 1 m, and only during 10% of the year do they exceed 2.0 m (Barne *et al.*, 1997). These values are in accordance with data on the National Marine Plan Interactive (NMPi) maps, which have typical annual average significant wave heights for waters to the south of Skye of 1.16 m.

7.1.1.2 GEOLOGY

Bedrock

The predominant geological marine bedrock in Loch Alsh, where the offshore component of the proposed temporary slipway is located, is predominantly sandstone, siltstone, and mudstone, which form part of the Torridonian Group; with areas of gneiss, and metasandstone and metamudstone to the east (BGS, 2024a).

Seabed Substrate

According to the British Geological Survey (BGS), the thickness of Quaternary deposits in the Loch Alsh region) ranges from 5-20 m (BGS, 2022). However, it is likely the deposits are locally much thinner, or absent, particularly in the nearshore region.

Previous studies have shown that in offshore areas, particularly in the southern entrance to the Kyle Rhea Strait, where the seabed is swept by the tide, the seabed consists of uneven cobbles and boulders overlaying coarse gravel, with areas of outcropping bedrock (MarineSpace, 2022).

According to the 250k BGS seabed sediments Chart, the predominant seabed sediment near the proposed temporary slipway is classified as gravelly Sand and sandy Gravel, under the Folk (1954) classification scheme (BGS, 2024b)⁶. Gravelly muddy Sand and sandy Mud are identified within approximately 1.5 km to the northwest of the proposed temporary slipway.

Figure 7-2 shows the results of the site-specific intertidal sampling campaign (consisting of 2x 15 cm cores, and 110x quadrats) and results show the presence of mixed sediment types, including sand, sandy Gravel, gravelly Sand, and Gravel; with cobbles, boulders, and rock outcrops also present (Ocean Ecology Ltd, 2024). Within the works area, samples identified cobbles, boulders and sandy Gravel. Full details of the survey methods and Project parameters are available in the survey report (Ocean Ecology Ltd, 2024).

Bathymetry and Geomorphology

Water depth within the works area ranges from 0 to approximately 0.4 m (Figure 7-23). The geomorphology of the area is primarily controlled by the bedrock, which is exposed at places and overlain by cobbles and boulders. There is no evidence of significant mobile sediments contributing to nearshore pathways.

⁶ The Folk classification scheme is a sediment classification based on the relative ratios of gravel, sand and mud.

FIGURE 7-2: SITE-SPECIFIC INTERTIDAL SEDIMENT SAMPLES

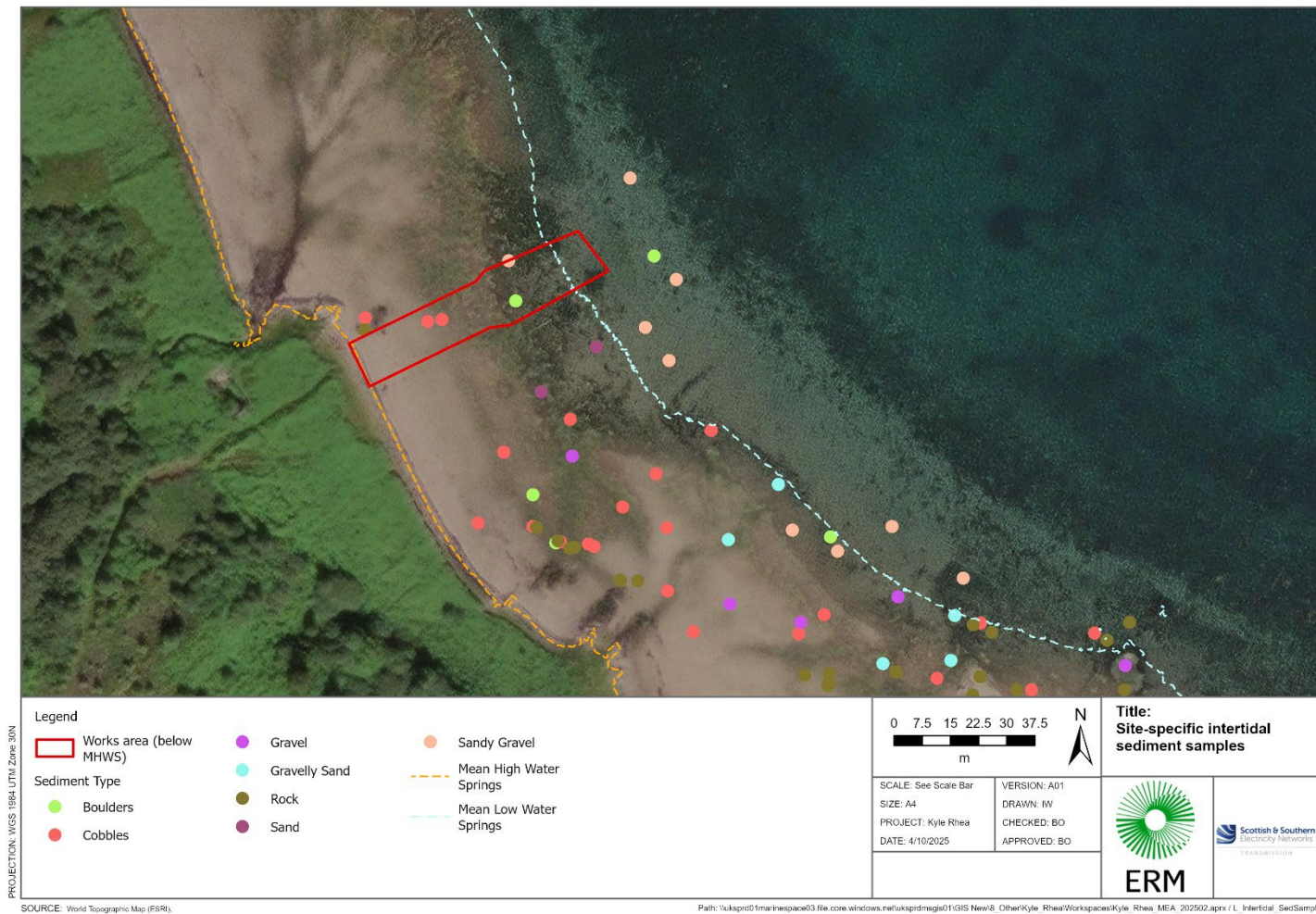
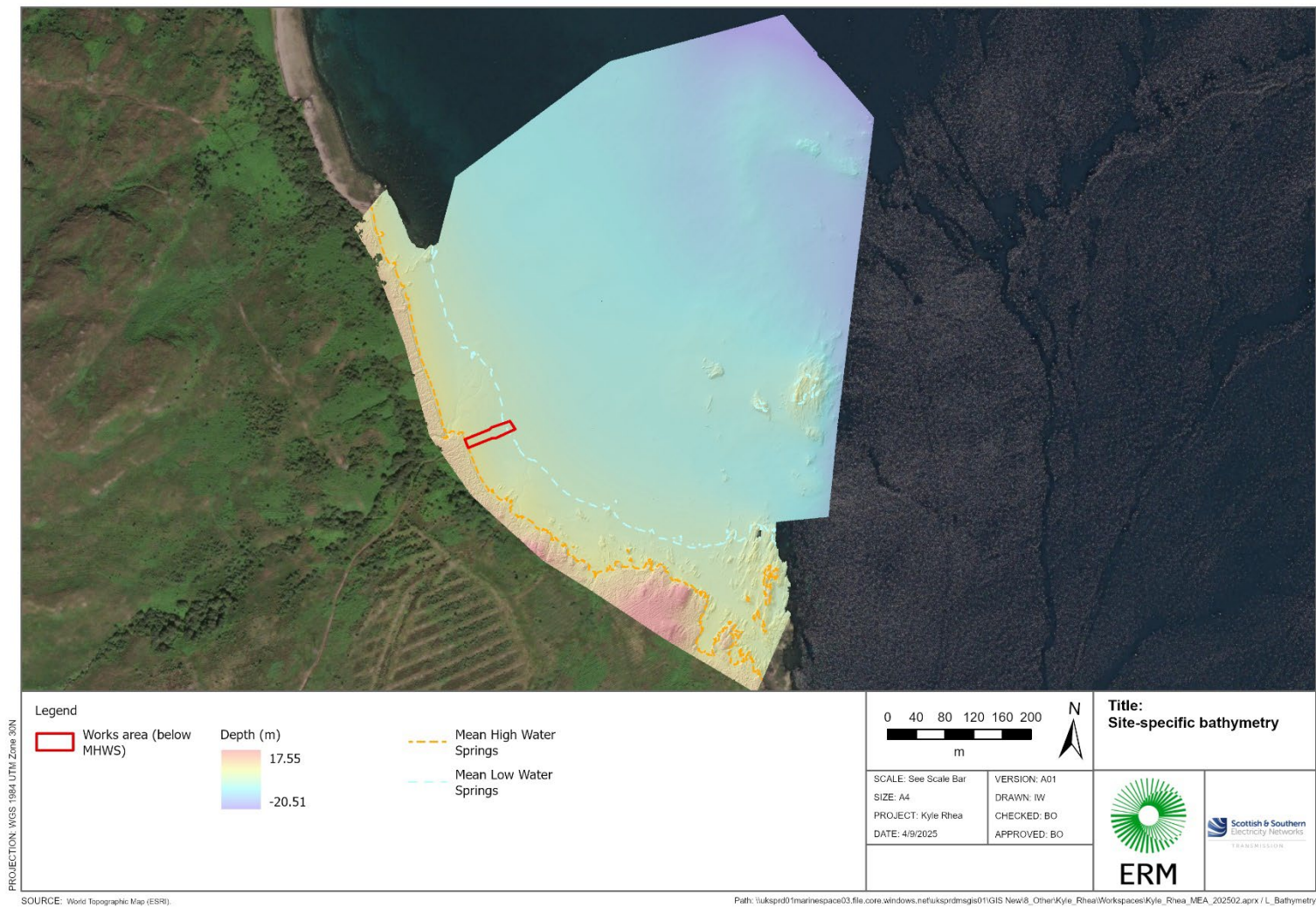


FIGURE 7-3: SITE-SPECIFIC BATHYMETRY DATA



7.1.2 POTENTIAL IMPACTS

It should be noted that in most cases, the physical environment is not in itself a receptor, but is, instead, a pathway that has the potential to indirectly impact other environmental receptors. The sensitivity of associated (non-physical environment) receptors are not assessed in this section but are instead assessed where relevant in the subsequent sections of the MEA. The magnitude of effect is, however, considered in this assessment.

The following potential impacts that may affect marine physical processes, during the construction, operation, and maintenance phases have been assessed:

- Change in hydrodynamics and change to related sediment transport system (pathway);
- Increase in suspended sediment concentration (pathway);
- Change in coastal morphology (receptor).

Table 7-1 summarises the worst-case parameters for physical environment effects.

TABLE 7-1: PROJECT PARAMETERS RELEVANT TO EFFECTS ON PHYSICAL ENVIRONMENT

Effect	Worst-case Scenario	Justification
Change in hydrodynamics and related sediment transport (pathway)	Slipway plan area below MHWS = 595 m ² 1:10 slope, and side slopes have a 1:1.5 gradient	Potential effects will occur from start of construction, with worst-case occurring once the slipway construction is complete and the structure is in operation. Effects will decrease from the beginning of decommissioning, returning to baseline (pre-construction) conditions.
Increase in suspended sediment concentration (pathway)	Total area of seabed disturbance from construction = 971 m ² (0.00094 km ²) The total volume of sediment disturbed (slipway area plus sediment removal pocket) is 235 m ³	Construction, decommissioning
Change in coastal morphology (receptor)	Slipway plan area below MHWS = 595 m ² 1:10 slope, and side slopes have a 1:1.5 gradient	Potential effects will occur from start of construction, with worst-case occurring once the slipway construction is complete and the structure is in operation. Effects will decrease from the beginning of decommissioning, returning to baseline (pre-construction) conditions.

7.1.3 IMPACT ASSESSMENT

7.1.3.1 CHANGE IN HYDRODYNAMICS AND RELATED SEDIMENT TRANSPORT

Infrastructure in the inter-tidal/shallow sub-tidal areas during the construction phase may result in indirect changes to the physical environment including causing the blockage of waves, tides and sediment transport processes and, potentially, resulting in localised scour.

The worst-case for changes to the hydrodynamics will occur during the operation phase of the slipway, once the entire structure is complete.

Changes to the sediment transport system occur when temporary or permanent infrastructure blocks the waves, tides, and sediment transport processes, potentially causing sediment accumulation or depletion (e.g. scour). The slipway has been designed with a 1:10 slope, and side slopes have a 1:1.5 gradient, to not interfere with wave runup, and prevent damage to the structure from hydrodynamic stress.

Using the methodology outlined in Section 6.3, the magnitude of effect on the hydrodynamic regime during the construction and operation phase is **Negligible**, since any effects are highly localised and small-scale. Therefore, even in the worst-case, any changes to the related sediment transport system due to hydrodynamic effects are also **Negligible**, because of the short timescale and localised area.

7.1.3.2 INCREASE IN SUSPENDED SEDIMENT CONCENTRATION

The proposed works involve the construction of a temporary slipway, with direct physical disturbance of the seabed from construction activities. Sediment dispersion modelling studies have not been undertaken as part of this assessment; nevertheless, previous studies can be used to estimate the theoretical zone of influence for sediment dispersion, that has the potential to disturb the seabed and produce sediment plumes.

The area of seabed impacted by slipway construction, including the sediment removal pocket (the source for suspended sediment) is 971 m² (0.00094 km²) (Table 4-1). Suspended sediment concentrations (SSC) may be locally elevated within this area, and will disperse in the local hydrodynamic regime. The total volume of sediment likely to be disturbed (slipway area plus sediment removal pocket) is 235 m³, and the total volume of sediment likely to be disturbed in the sediment removal pocket, alone, is approximately 95 m³.

Sediments of different particle sizes behave differently after being brought into suspension by mechanical disturbance. Coarse material settles to the seabed relatively quickly (in the order of seconds to tens of seconds for sand or gravel), whereas fine particles (i.e. muds <63 µm) settle more slowly and can produce a plume. The distance over which the plume can travel depends on the height in the water column to which the material is ejected, and the current speed at the time of release. The majority of the slipway lies above Chart Datum and, hence, will not be submerged during construction (and decommissioning), and there is a negligible pathway of effect. The magnitude of effect on suspended sediment concentration of construction (and decommissioning) is, therefore, **Negligible**.

Some minor sediment removal, within the sediment removal pocket, may be required during operation. The detailed engineering drawings indicate that the total volume of sediment likely to be disturbed within the sediment removal pocket is approximately 95 m³ (AECOM, 2024). While seabed at much of the site consists of hard substrates (OEL, 2024), some softer seabed sediments are present at the slipway site. AECOM (2024) describes the seabed sediments as consisting of gravels, sands and silts (i.e. containing some sub-63 µm particles), while a sediment core taken by OEL (2024), near the proposed slipway location, describes the sediment as Sand (according to the Folk (1954) classification).

Sand, under the Folk (1954) classification, contains no more than 10% sub-63 µm diameter particles. This would suggest that, of the 95 m³ of potentially disturbed sediment in the sediment removal pocket, no more than 9.5 m³ would be of sub-63 µm diameter. Given the shallow water of the site, even fine-grained sediment would settle in tens to hundreds of seconds, rather than persisting. Fine sediment will be advected away from the release location by the prevailing tidal current, and will be subject to rapid dispersion, both laterally and vertically, to near-background levels. Given that the volume of finer sediment, which could form a plume is negligible, it will not accumulate on the seafloor in measurable thickness in any location.

Given the sediment composition, an increase in suspended sediment concentration during operations will be short-lived and is likely to be localised to within a few tens to hundreds of metres of the slipway; therefore, the magnitude of the effect is **Negligible**. As a consequence of the low concentrations of suspended sediment, the rapid dispersion to background levels, the temporary nature of operations, the limited depositional thickness, and the fact that sediments are clean, with no chemical constituents, the magnitude of effect to the suspended sediment pathway and the physical environment are likely to be **Negligible**. The impacts of operations on water quality are discussed further in Section 7.2.3.

7.1.3.3 CHANGE IN COASTAL MORPHOLOGY

There is potential for morphological change to the coast (receptor) in response to the construction of temporary infrastructure. Much of the coastline within the area consists of hard substrate, with a **Low** sensitivity to changes in the sediment transport regime and hydrodynamics. The scale of the effect is dependent on the installation methodology and the physical characteristics of the coastline. Changes in coastal morphology may arise as a result of changes in the sediment transport regime in the nearshore region during the construction (or decommissioning) of the structure; however, the magnitude of changes to the sediment transport are considered to be relatively short-term, spatially restricted and, hence, **Negligible**.

In addition, morphological change to the coast may occur as a result of changes to tides, waves and the associated patterns of sediment transport arising from blockage caused by constructed infrastructure. The magnitude of effect of the proposed temporary slipway, on the hydrodynamic regime during the construction, operation and decommissioning phases is **Negligible**, since any effects are highly localised and small-scale.

Assessment Conclusion

Physical Environment changes are pathways that have the potential to indirectly impact other environmental receptors. The magnitude of effect on these pathways has been considered in this Section and, overall, the Physical Environment assessment has concluded **Negligible** magnitudes for all effects on physical process pathways, as a result of the construction, operation and decommissioning phases of the proposed temporary slipway.

The sensitivity of associated (non-Physical Environment) receptors to these changes, and the determination of the significance of those effects, have not been assessed in this Section, but are instead addressed in the following, receptor-specific, sections of this MEA.

Key Mitigation Measures

Impacts are not significant; therefore, mitigation measures are not necessary to reduce significance further. Despite this, embedded best-practice operating procedures for construction will ensure that materials used will conform to specification to minimise risk of resuspension.

7.2 WATER AND SEDIMENT QUALITY

7.2.1 BASELINE

Water quality is regulated at EU level through a range of environmental directives, which have been transposed into domestic law. The most relevant Directives for Kyle Rhea are the Water Framework Directive (WFD) (2000/60/EC) and the Environmental Quality Standards Directive (208/105/EC).

Marine water bodies within the vicinity of the Project are all considered by the Scottish Environment Protection Agency (SEPA) to be in Good condition. As of 2022, the Loch Alsh coastal water body (ID 200352) and the adjacent Sound of Sleat coastal water body (ID 200109) had a Good Ecological Status (GES). Classification under the WFD is determined in accordance with the 'one out, all out' principle, meaning that the worst assessment result for quality element determines the overall assessment result. This means that the chemical and ecological status of water bodies and their statutory quality elements (including water quality), are Good and that the parameters monitored (including metals, nutrients, hydrocarbons and other Environmental Quality Standard (EQS) parameters) are all below contamination level.

Unlike water quality, there are no statutory quality standards for sediment. However, guidelines are available and determine, through the applicability of Action Levels (1 and 2), the suitability of sediment for marine disposal based on levels of key contaminants (Marine Directorate, 2017).

Maps on the NMPI website show no records of registered dredging or disposal sites within Loch Alsh. This also indicates there are no chemical and munitions disposal sites located in this area. Given the physical nature of the Strait and its relatively large hydrodynamic features and high energy environment (strong water flow and tidal currents), as well as coarse seabed sediment (decreasing adsorption potential), it is unlikely significant contamination is present in benthic substrates. This conclusion is supported by the abundant marine flora and fauna present in the loch, which is considered indicative of a clean and relatively undisturbed environment (see Section 7.3.1).

7.2.2 POTENTIAL IMPACTS

The following potential impact that may affect marine water and sediment quality, during the construction, operation, and maintenance phases has been assessed:

- Increase in suspended sediment concentration.

Table 7-2 summarises the worst-case parameters for effects on water and sediment quality.

TABLE 7-2: PROJECT PARAMETERS RELEVANT TO EFFECTS ON WATER AND SEDIMENT QUALITY

Effect	Worst-case Scenario	Justification
Increase in suspended sediment concentration	<p>Total area of seabed disturbance from construction = 971 m² (0.00094 km²)</p> <p>The total volume of sediment disturbed (slipway area plus sediment removal pocket) is 235 m³</p>	Construction, decommissioning

7.2.3 IMPACT ASSESSMENT

7.2.3.1 INCREASE IN SUSPENDED SEDIMENT CONCENTRATION

Sensitivity of Receptors

In view of the large volume of receiving waters and expected tidal driven dispersal, any changes would be expected to become diluted and disperse within receiving waters in a short period of time. Background levels of suspended sediment at the site of the proposed works vary naturally and short-term elevations may be caused, such as during storm events. It should therefore be expected that the characterising environment shows a degree of natural habituation to changes in turbidity. As such sensitivity to temporary increases in suspended sediment concentration is determined to be **Low**.

Magnitude of Effect

Section 7.1.3.2 provides an assessment of the effects of the proposed works will have on sediment dispersal following the construction of a temporary slipway. This considers the physical pathway, which has potential to affect environmental receptors: in this case water quality. While background suspended sediment concentrations in the region are low, the volume of sediment potentially disturbed as a result of construction and decommissioning is low, at approximately 235 m³. This volume will be readily reincorporated into the local sediment transport system and will ultimately result in an increase in suspended sediment concentration of **Negligible** magnitude. Increased concentrations will be short-lived and are likely to be localised to within a few tens to hundreds of metres of the slipway.

Given the sediment composition, an increase in suspended sediment concentration during operations will be short-lived and is likely to be localised to within a few tens to hundreds of metres of the slipway; therefore, the magnitude of the effect is **Negligible**.

Assessment Conclusion

As a consequence of the **Low** sensitivity of the receiving water environment to changes in suspended sediments concentrations and the **Negligible** magnitude, increased suspended sediment concentration on water quality has been assessed as having a **Negligible** effect. As such, the impact is considered **Not Significant**.

Key Mitigation Measures

Impacts are not significant, therefore mitigation measures are not necessary to reduce significance further. Despite this, embedded best practice operating procedures for construction will ensure that material used will conform to specification to minimise risk of resuspension.

7.3 BENTHIC ECOLOGY

7.3.1 BASELINE

The proposed temporary slipway landing point is situated near Rubhan a Callich on the eastern edge of Skye, and lies within one site designated for benthic features (Lochs Duich, Long and Alsh Reefs SAC) and adjacent to one site designated for benthic features (Lochs Duich, Long and Alsh NCMPA).

Intertidal surveys were conducted by Ocean Ecology Ltd (2024) in May 2024. Figure 7-4 shows the Intertidal Survey Area which covered an area approximately 260 m wide and from MHWS to the extent of the Spring low tide on the day of survey; a 25 m buffer was added to the Intertidal Survey Area. The surveys included UAV mapping, walkover surveys, and core sampling to identify a range of broad-scale habitats (BSH).

The UAV mapping was conducted using a drone to cover the Intertidal Survey Area; 99 high-resolution nadir images were compiled to produce a high resolution orthomosaic model and Digital Elevation Model (DEM).

The Phase I intertidal walkover surveys, conducted on 7 May and 8 May 2024, identified biotopes according to the European Nature Information System (EUNIS) classification (EEA, 2024), with features of conservation interest and Invasive Non-Native Species (INNS) recorded. 110 target notes were taken to identify species and taxa present, and record abundance based on the SACFOR scale⁷.

Phase II sampling included two sediment cores and 110 quadrats, which were taken to allow for assigning of EUNIS classifications *in situ*. Note that only two cores were required due to the large extent of hard substrate across the survey area.

Full details of the survey methods and Project parameters are available in the survey report (Ocean Ecology Ltd, 2024). The survey report also outlines confidence levels associated with the data outputs. Confidence was high across a large area of the Intertidal Survey Area, with only two discrete areas of low confidence which did not overlap with the works area and therefore are not discussed further in this report.

Key epifaunal species observed during the Phase I survey included various fucoid seaweeds, the calcareous tubed polychaete *Spirorbis* sp., the common periwinkle *Littorina littorea*, barnacles such as the common rock barnacle *Semibalanus balanoides*, the common limpet *Patella vulgata*, the beadlet anemone *Actinia equina*, and amphipods.

During the Phase II survey, 0.25 m² quadrats assessed epibiota, while 0.01 m² hand cores characterised infaunal communities. Two sediment cores and 110 quadrats were analysed for assigning EUNIS classification *in situ*.

⁷ The SACFOR scale is a unified system for recording marine benthic flora and fauna abundance, based on their observed coverage or frequency. The scale categorises species as Superabundant, Abundant, Frequent, Occasional or Rare.

FIGURE 7-4: EUNIS BIOTOPES PRESENT WITHIN THE INTERTIDAL SURVEY AREA

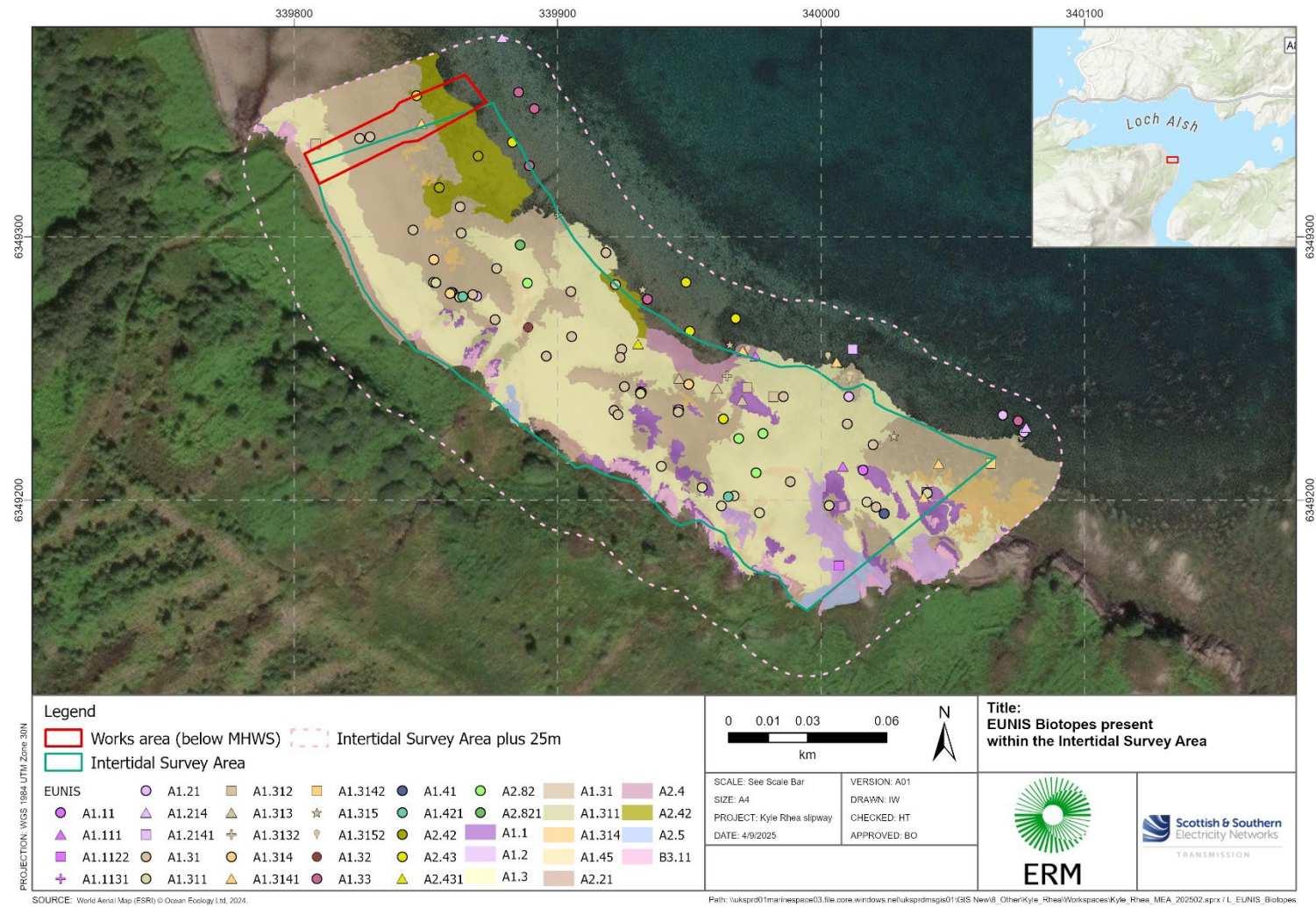


Figure 7-4 shows the spatial distribution of the BSHs and biotopes present within the Intertidal Survey Area. The survey site encompassed a variety of littoral rock and sediment habitats, characterised by diverse algal and faunal communities typical of the intertidal areas within the wider Loch Alsh region.

The upper shore was primarily dominated by high energy littoral rock, extending down to the mid shore, as well as low energy littoral rock biotope A1.314, and supralittoral rock B3.11. The mid shore featured fucoid dominated communities in the biotope A1.31, which extended across the entire length of the Intertidal Survey Area. Closer to low tide, low energy littoral rock biotopes A1.3152 and A1.33, and littoral mixed sediment biotopes A2.42 and A2.43 became more prevalent. Within the works area, the upper shore consisted of littoral sand and muddy sand, as well as low energy littoral rock; the mid shore consisted of fucoid dominated communities A1.31; the lower shore was dominated by littoral mixed sediment biotope A2.42.

Table 7-3 summarises the dominant littoral rock, sedimentary, and coastal biotopes present within the Intertidal Survey Area, as described by Ocean Ecology Ltd (2024).

Earlier surveys by Moore and Roberts (2011) had recorded in the infralittoral zone the following dominant biotopes (as listed under the JNCC Marine Habitat Classification; JNCC, 2024a) in the shallow, tide-swept areas of the southern Kyle Rhea in waters of 12-17 m:

- CR.HCR.FaT.CTub.Adig: *Alcyonium digitatum* with dense *Tubularia indivisa* and anemones on strongly tide-swept circalittoral rock;
- IR.MIR.KR.LhypT.Pk: *Laminaria hyperborea* park with hydroids, bryozoans and sponges on tide-swept lower infralittoral rock;
- IR.MIR.KR.LhypTX.Pk: *Laminaria hyperborea* forest and foliose red seaweeds on tide-swept upper infralittoral mixed substrata.

In the northern region of Kyle Rhea, areas with cobbles and pebbles over sandy gravel show sparse bryozoan and coralline algae communities, with more diverse communities found where bedrock is present (Moore and Roberts, 2011).

TABLE 7-3: EUNIS HABITATS RECORDED AT LOCH ALSH BAY DURING INTERTIDAL SURVEYS (SOURCE: EEA, 2024; OCEAN ECOLOGY LTD, 2024)

EUNIS Broad Scale Habitat	EUNIS 2022 Habitat Classification	EUNIS 2012 (amended 2019) Habitat Classification	Description
High energy littoral rock	MA122	A1.11	Mussel and/or barnacle communities
	MA1221	A1.111	<i>Mytilus edulis</i> and barnacles on very exposed eulittoral rock
	MA12222	A1.1122	<i>Chthamalus</i> spp. and <i>Lichina pygmaea</i> on steep exposed upper eulittoral rock
	MA12231	A1.1131	<i>Semibalanus balanoides</i> , <i>Patella vulgata</i> and <i>Littorina</i> spp. on exposed to moderately exposed or vertical sheltered eulittoral rock
Moderate energy littoral rock	MA124	A1.21	Barnacles and fucoids on moderately exposed shores
	MA1244	A1.214	<i>Fucus serratus</i> on moderately exposed lower eulittoral rock
	MA12441	A1.2141	<i>Fucus serratus</i> and red seaweeds on moderately exposed lower eulittoral rock
Low energy littoral rock	MA123	A1.31	Fucoids on sheltered marine shores
		A1.33	Red algal turf in lower eulittoral, sheltered from wave action
		A1.45	Ephemeral green or red seaweeds (freshwater or sand-influenced) on non-mobile substrata
	MA123B	A1.311	<i>Pelvetia canaliculata</i> on sheltered littoral fringe rock
	MA123C	A1.312	<i>Fucus spiralis</i> on sheltered upper eulittoral rock
	MA123D	A1.313	<i>Fucus vesiculosus</i> on moderately exposed to sheltered mid eulittoral rock
	MA123D2	A1.3132	<i>Fucus vesiculosus</i> on mid eulittoral mixed substrata
	MA123E	A1.314	<i>Ascophyllum nodosum</i> on very sheltered mid eulittoral rock
	MA123E1	A1.3141	<i>Ascophyllum nodosum</i> on full salinity mid eulittoral rock
	MA123E2	A1.3142	<i>Ascophyllum nodosum</i> on full salinity mid eulittoral mixed substrata
	MA123F	A1.315	<i>Fucus serratus</i> on sheltered lower eulittoral rock

EUNIS Broad Scale Habitat	EUNIS 2022 Habitat Classification	EUNIS 2012 (amended 2019) Habitat Classification	Description
	MA123F2	A1.3152	<i>Fucus serratus</i> on full salinity lower eulittoral mixed substrata
	MA125	A1.32	Fucoids in variable salinity
Features of littoral rock	MA126	A1.41	Communities of littoral rockpools
	MA1261	A1.421	Green seaweeds (<i>Enteromorpha</i> spp. and <i>Cladophora</i> spp.) in shallow upper shore rockpools
Littoral sand and muddy sand	MA422	A2.21	Strandline
Littoral mixed sediments	MA423	A2.42	Species-rich mixed sediment shores
		A2.43	Species-poor mixed sediment shores
Coastal saltmarshes and saline reedbeds	MA211	A2.5	Coastal saltmarshes and saline reedbeds
Features of littoral sediment	MA421	A2.82	Ephemeral green or red seaweeds (freshwater or sand-influenced) on mobile substrata
	MA4211	A2.821	Ephemeral green and red seaweeds on variable salinity and/or disturbed eulittoral mixed substrata
Supralittoral rock (lichen or splash zone)	MA121	B3.11	Lichens or small green algae on supralittoral and littoral fringe rock

7.3.1.1 NATURE CONSERVATION FEATURES

The proposed temporary slipway landing point lies within the Lochs Duich, Long and Alsh Reefs SAC and lies adjacent to the Lochs Duich, Long and Alsh NCMPS. The protected features of these sites are presented in Table 7-4. Burrowed mud and flame shell beds are both also Priority Marine Features (PMFs) in Scottish waters (Tyler-Walters *et al.*, 2016), while reefs are Annex I habitats.

TABLE 7-4: DESIGNATED SITES AND THEIR PROTECTED BENTHIC FEATURES IN THE VICINITY OF THE PROPOSED TEMPORARY SLIPWAY

Designated Site	Protected Benthic Feature
Lochs Duich, Long and Alsh Nature Conservation Marine Protected Area	Burrowed mud Flame shell beds
Lochs Duich, Long and Alsh Reefs Special Area of Conservation	Reefs

Bedrock and stony reef habitats were recorded throughout the intertidal area, often supporting dense populations of fucoid seaweeds *Ascophyllum nodosum* and *Fucus serratus*. These intertidal habitats may qualify as Annex I reef habitats if the reefs extend from the subtidal zone (JNCC, 2024b; Ocean Ecology Ltd, 2024). Two individual blue mussels *Mytilus edulis* were observed on highly exposed eu littoral rock (Ocean Ecology Ltd, 2024); these were not located within the works area. Although this species receives protection when found in bed formations, no evidence of mussel beds was recorded within the intertidal survey area.

The subtidal bedrock known in the Lochs Duich, Long and Alsh Reefs SAC supports diverse communities that constitute reef and are typically dominated by the hydroids *Tubularia indivisa* and *Sertularia argentea*. Also abundant in the shallower rocky areas are the barnacle *Balanus crenatus*, a diverse community of sponges including *Halichondria panicea* and *Pachymatisma johnstoni*, anemones and ascidians (JNCC, 2024c; Moore and Roberts, 2011).

7.3.2 POTENTIAL RECEPTORS

While Feature Activity Sensitivity Tool (FeAST) does not include reef as a feature that can be interrogated in relation to pressures and activities, a number of different benthic habitats that include hard-bottomed are listed for consideration under the activity of infrastructure – the installation, operation and maintenance of coastal infrastructure such as ports, marinas and leisure facilities. These are considered most likely to overlap in sensitivities. The features that are therefore used for impact assessment are:

- Kelp and seaweed communities on sublittoral sediment;
- Tide swept coarse sands with burrowing bivalves;
- Tide-swept algal communities.

7.3.3 POTENTIAL IMPACTS

These assessments primarily used NatureScot's FeAST (NatureScot, 2023) to identify pressures that:

- 1) Fall under the activity of 'infrastructure – the installation, operation and maintenance of coastal infrastructure such as ports, marinas and leisure facilities';
- 2) Have the potential to interact with medium or high sensitivity to habitats being impacted by the activities associated with the Project.

Appropriate pressures for assessment were concluded to be:

- Introduction or spread of non-indigenous species & translocations (competition);
- Physical loss (to land or freshwater habitat);
- Physical removal (extraction of substratum);
- Removal of non-target species (including lethal);
- Removal of target species (including lethal);
- Surface abrasion;

Sub-surface abrasion/penetration.

All kelp habitats have medium sensitivity to 'Removal of target species (including lethal)' and 'non-target species (including lethal)'. However, these were not deemed appropriate pressures for a temporary slipway installation, operation and decommissioning given that the pressure definition relates mainly to damage or loss of species from harvesting.

Kelp habitats are considered of medium sensitivity to 'Introduction or spread of non-indigenous species and translocations (competition)'. Again, this is not deemed an appropriate pressure for the proposed type of operation given the length of the operations and the short distances of ship travel to construct the slipway.

As such, these pressures are not considered further in this assessment, and the assessment focusses on:

- Physical loss (to land or freshwater habitat);
- Physical removal (extraction of substratum);
- Surface abrasion;
- Sub-surface abrasion/penetration.

7.3.4 IMPACT ASSESSMENT

7.3.4.1 TEMPORARY LOCALISED DISTURBANCE OF SEABED SEDIMENTS

The proposed works involve the disturbance and removal of seabed sediments during construction and decommissioning, thereby resulting in temporary disturbance to benthic habitats and species. Impacts during operation are considered long-term, localised disturbance and are assessed separately in Section 7.3.4.2.

Sensitivity of Receptors

The Scottish Government's Feature Activity Sensitivity Tool (FeAST) includes a matrix which provides information on the sensitivity of key marine habitats and species to pressures in the marine environment (FeAST, 2024). Much of the evidence presented within FeAST has been derived from sensitivity assessments originally undertaken by the Marine Evidence based Sensitivity Assessment (MarESA) (Tyler-Walters *et al.*, 2023).

For this, sensitivity of kelp habitats to physical removal (extraction of substratum), surface abrasion and sub-surface abrasion/penetration were determined. It was considered that the sensitivity of the kelp habitats mentioned above are considered to have **Low** sensitivity to temporary localised disturbance of seabed sediments.

Magnitude of Effect

The total area of temporary localised disturbance of seabed habitats associated with the works is considered to represent a very small percentage loss of the total area of kelp habitats locally and in the wider region. As such, Magnitude has been considered **Low** for all receptors.

Assessment Conclusion

Due to the **Low** sensitivity of kelp habitats, combined with **Low** magnitude of impact, temporary localised disturbance of seabed sediments has been assessed as having a **Negligible** effect. As such, the impact of temporary localised disturbance of seabed sediments on the receptors is considered **Not Significant**.

7.3.4.2 LONG-TERM LOSS TO BENTHIC HABITATS AND SPECIES

The presence of the slipway will result in long-term loss to benthic habitats and species over the operation and maintenance phases of the Project. In addition to this long-term habitat loss from slipway installation, it is considered that, during the operation and maintenance phases of the proposed temporary slipway, there may be the requirement for maintenance, resulting in potential localised additional long-term habitat loss.

Sensitivity of Receptors

Sensitivity to physical loss (to land or freshwater habitat) (representing the loss of the natural sediment to artificial substrates) was determined for kelp habitats and assessed as **High**. If the soft sediments that are initially there are lost and replaced by hard substrata, this would lead to a fundamental change in habitat. Although the addition of rock or artificial hard substrate is likely to cause damage to species immediately within the footprint, in time the new hard substrate may provide additional substrate on which species could colonise or recolonise.

Magnitude of Effect

The magnitude of long-term localised disturbance of seabed habitats is based on the seabed footprint loss. Magnitude for these receptors has been considered **Low**.

Assessment Conclusion

Due to the **High** sensitivity of kelp habitats combined with **Low** magnitude of impact, long-term loss to benthic habitats and species has been assessed as having a **Minor** effect. As such the impact of long-term loss to benthic habitats and species on these receptors has been considered **Not Significant**.

7.4 MARINE MAMMALS (INCLUDING

[Redacted]

7.4.1 BASELINE

7.4.1.1 CETACEANS

There are seven species that are commonly found off the coast of Scotland, including the waters around the Isle of Skye, in Loch Alsh, and the Kyle Rhea Strait:

- Bottlenose dolphin *Tursiops truncatus*;
- Harbour porpoise *Phocoena phocoena*;
- Minke whale *Balaenoptera acutorostrata*;
- White-beaked dolphin *Lagenorhynchus albirostris*;
- Risso's dolphin *Grampus griseus*;
- Common dolphin *Delphinus delphis*;
- Orca *Orcinus orca*.

Abundance and density estimates for the area of the proposed temporary slipway can be extracted from the most recent Cetaceans in European Atlantic waters and the North Sea (SCANS) surveys, conducted in 2022 (SCANS-IV; Gilles *et al.*, 2023). The aim of these surveys is to provide abundance estimates of cetacean species in shelf and oceanic waters of the European Atlantic to enable effective and efficient future monitoring, and to enable management of cetacean populations at favourable conservation status (Hammond *et al.*, 2002). The proposed temporary slipway overlaps Block CS-H of the most recent SCANS surveys (SCANS-IV; Gilles *et al.*, 2023). Abundances and densities of the species observed within the survey block are presented in Table 7-5.

TABLE 7-5: ABUNDANCE AND DENSITY ESTIMATES WITHIN SCANS IV BLOCK CS-H

Species	Abundance (n) in SCANS Block CS-H	Species Density (animals/km ²) in SCANS Block CS-H	Abundance (n) by UK portion of Management Unit (MU)
Bottlenose dolphin <i>Tursiops truncatus</i>	4,784	0.3421	45 (CWSH MU)*
Harbour porpoise <i>Phocoena phocoena</i>	5,470	0.3911	24,305 (WS MU)*
Minke whale <i>Balaenoptera acutorostrata</i>	493	0.0353	10,288 (CGNS MU)*
White-beaked dolphin <i>Lagenorhynchus albirostris</i>	1,930	0.1380	34,025 (CGNS MU)*
Risso's dolphin <i>Grampus griseus</i>	341	0.0244	8,687 (CGNS MU)*
Common dolphin <i>Delphinus delphis</i>	12,958	0.9266	54,417 (CGNS MU)*
Orca <i>Orcinus orca</i>	NA	NA	NA*

*CGNS = Celtic and Greater North Sea, WS = West Scotland, CWSH = Coastal West Scotland and Hebrides, MU = Management Unit NA= No assigned management unit

All cetaceans in Northern European waters are listed under Annex IV of the EU Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (the 'Habitats Directive'), as European Protected Species (EPS) of Community Interest and in need of strict protection. The harbour porpoise and bottlenose dolphin have additional protection under Annex II as species of Community Interest whose conservation requires the designation of SACs. Potential impacts on designated sites are covered in Section 7.6 of this assessment.

7.4.1.2 PINNIPEDS

There are two pinniped species resident in the UK: harbour seal *Phoca vitulina* and grey seal *Halichoerus grypus*. The Kyle Rhea strait and Isle of Skye are encompassed within the Seal Management Unit (SMU) 2 (West Coast) as defined by the Special Committee on Seals (SCOS) in 2022. Populations of harbour seal in the North Sea continue to increase, though their numbers are plateauing recently with 15,600 individuals counted between 2016–2019 (SCOS, 2022).

Grey seal populations continue to increase nationally, although in the West Scotland SMU, their trend is slower than in the North of Scotland, with an estimated 4,174 individuals counted in 2018 within the West Scotland SMU (SCOS, 2022). No designated seal haul out sites are present along the Strait, with the closest, the Pabay and Ardnish Peninsula, lying approximately 9.6 km west of the proposed temporary slipway (Marine Directorate, 2019). The harbour seal and grey seal usage of the area can be seen in Figure 7-5 and Figure 7-6.

FIGURE 7-5: HARBOUR SEAL TOTAL USAGE 2017

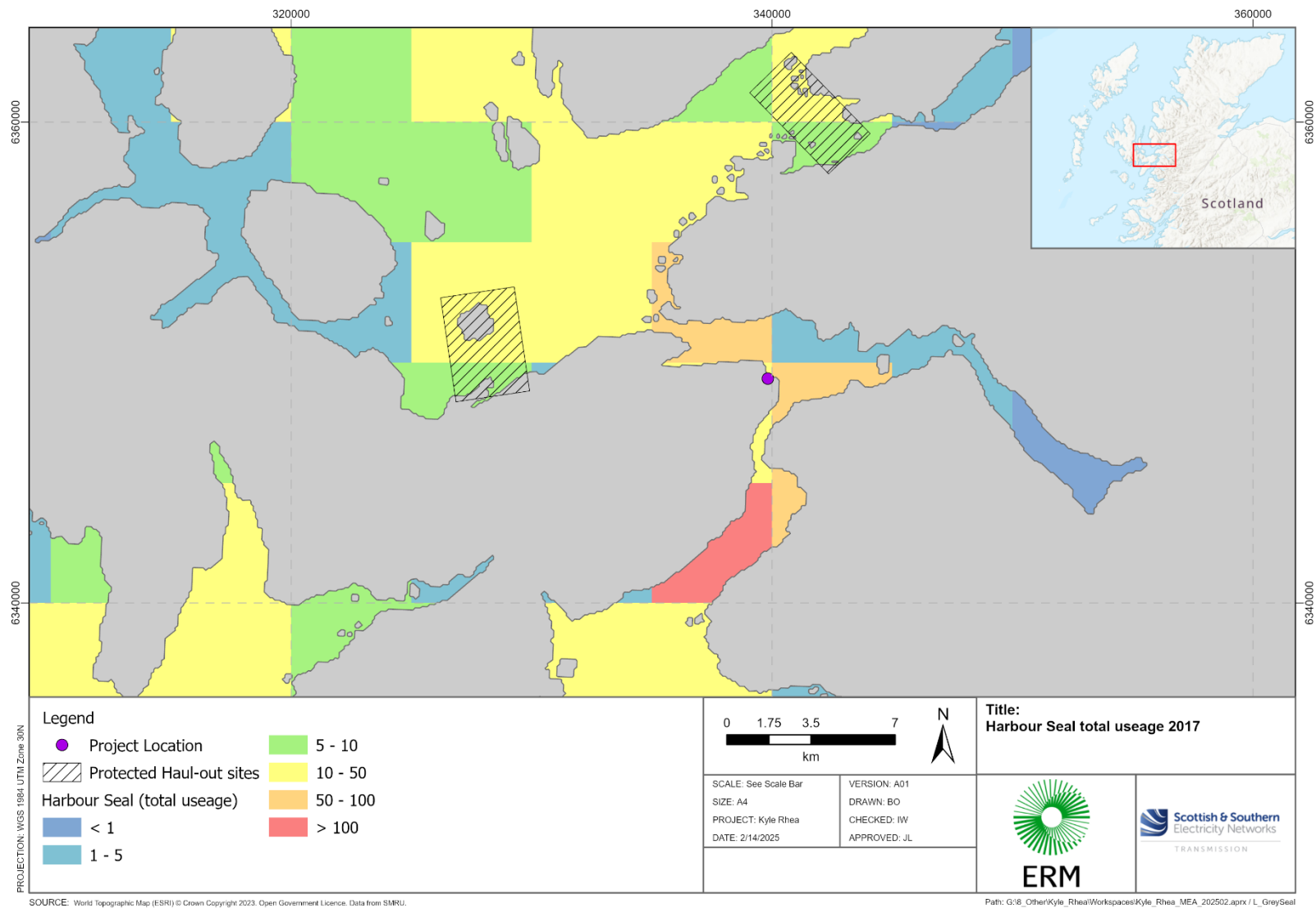
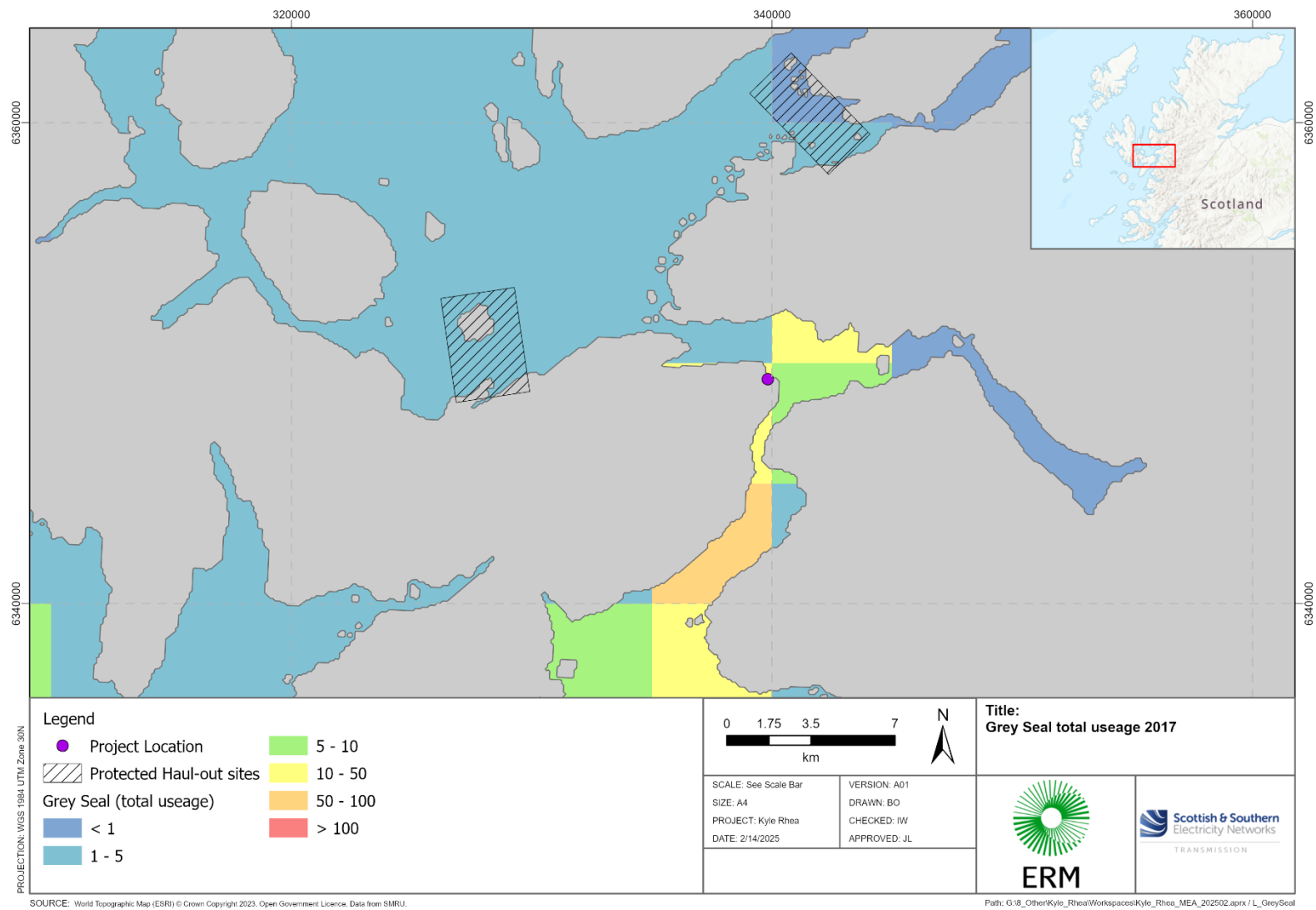


FIGURE 7-6: GREY SEAL TOTAL USAGE 2017



Environmental Assessment

As with harbour porpoise and bottlenose dolphin, harbour seal and grey seal have protection under Annex II as Species of Community Interest whose conservation is facilitated by the designation of SACs. Both grey seals and harbour seals are also listed under Annex V of the Habitats Directive, which requires any exploitation to be managed. Potential impacts on designated sites are covered in Section 7.6 of this assessment.

7.4.1.3 MUSTELIDS

[Redacted] are the only species of [Redacted] resident to the UK. They are present throughout the country, with the highest numbers in Scotland, Wales, and Southeast England. The Isle of Skye is an important area for [Redacted] which is a designated Annex II feature of the Kinloch and Kyleakin Hills SAC. They are coastal dwelling in the area, feeding mainly in inshore waters on shellfish and crab species (Chanin, 2003; RJ McLeod, 2025). They also require access to vegetation and clean, unpolluted freshwater (Chanin, 2003).

Two [Redacted] surveys were conducted by a licenced ecologist in February and March 2025. The surveys focused on the shoreline either side of the works area (below MHWS) and extended to cover immediate adjacent freshwater and terrestrial habitats; the surveys covered at minimum the area 200 m around the works area (below MHWS). Within the area surveyed, [Redacted] activity appears mainly focused along the shoreline and in adjacent areas of vegetation, which are characterized by conifer plantation woodland, acid grassland, dense bracken, and scattered to dense scrub. The following [Redacted] and [Redacted], displayed in Figure 7-7 along with 200 m and 30 m exclusion zones, were identified during the surveys (RJ McLeod, 2025):

- [Redacted] ;
- [Redacted] ;
- [Redacted] .

As the [Redacted] are greater than 200 m from the works area, breeding activity has not been assessed at the [Redacted]. The full extent of the [Redacted] structure was visible, and no breeding activity is anticipated. However, cameras were set up under licence to monitor activity to confirm extent of use by [Redacted] (RJ McLeod, 2025).

These surveys provided an indication of [Redacted] presence and activity within the area. However, to ensure information is accurate at the start of construction, further surveys will be completed prior to works beginning; these will take place within 3 months of the start date and will cover, at minimum the area 200 m around the works area (below MHWS). If changes in [Redacted] activity are identified during these surveys, for example if previously unknown [Redacted] or [Redacted] are found or breeding activity is discovered, works will not begin until a suitably qualified and experienced ecologist has assessed the situation and appropriate mitigation is in place, including obtaining licences for disturbance, if required.

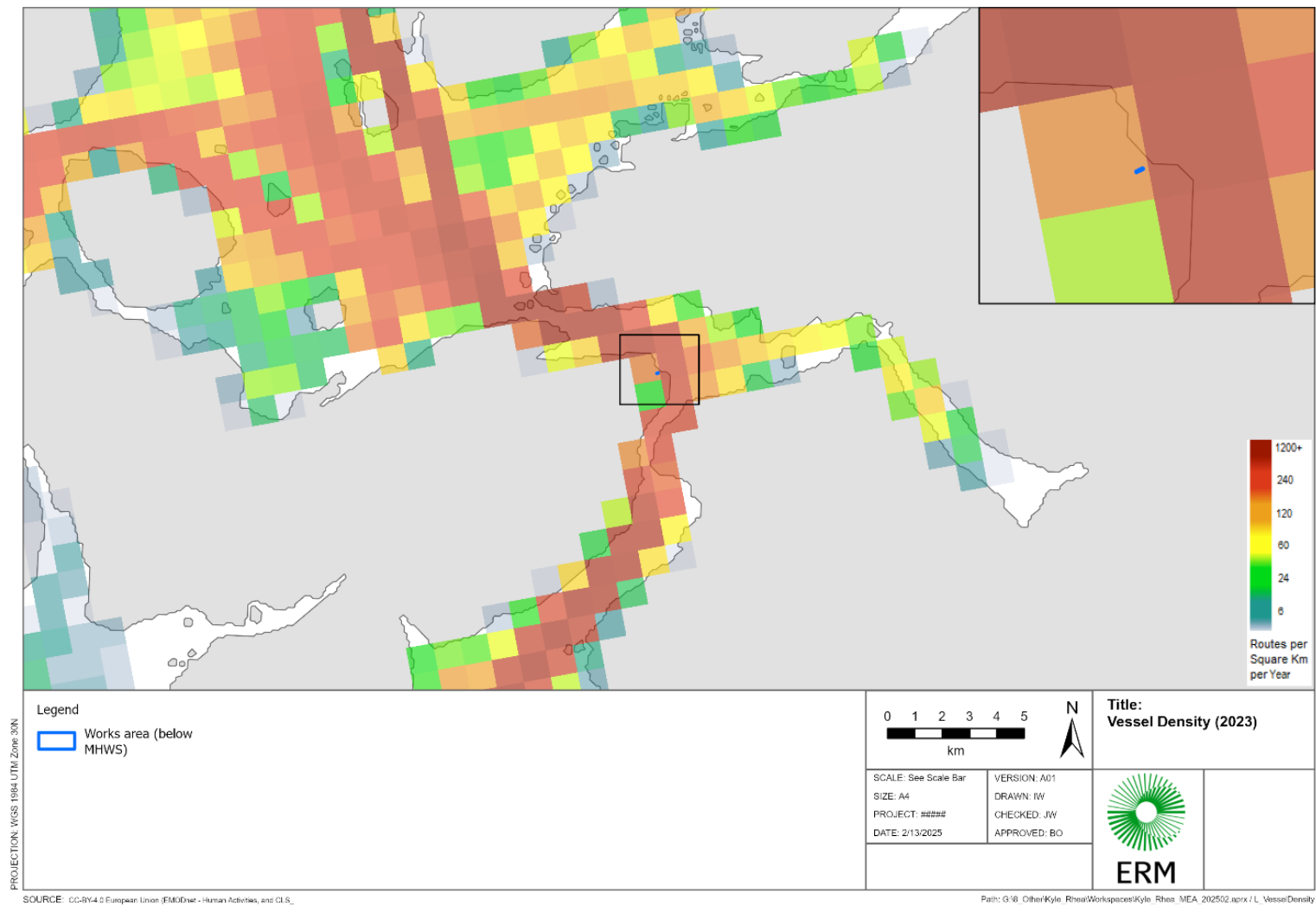
[Redacted] are designated as a European protected species under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) (NatureScot, 2022a). They are also designated under Annex II as a species of Community Interest whose conservation requires the designation of SACs. Potential impacts on [Redacted] within the Kinloch and Kyleakin Hills SAC are covered in Section 7.6 of this assessment and within Appendix B.

FIGURE 7-7: [Redacted] , [Redacted] , AND EXCLUSION ZONES IN RELATION TO THE SLIPWAY WORKS AREA
(BELOW MEAN HIGH WATER SPRINGS)
[Redacted]

7.4.1.4 VESSEL TRAFFIC

Vessel traffic (EMODnet, 2023) within the area around the proposed slipway location, including within the Kyle Rhea Strait and Loch Alsh, is high density, as shown in Figure 7-8.

FIGURE 7-8: VESSEL DENSITY IN THE VICINITY OF THE PROPOSED TEMPORARY SLIPWAY



7.4.2 POTENTIAL IMPACTS

Marine mammals are considered to have a high conservation value as they are listed on Annex IV of the EC Habitats Directive, and are protected under the Wildlife and Countryside Act 1981. Given the use of vessels during construction of the proposed temporary slipway and the transportation of large plant, steel, and stone once the slipway is operational, there exists some potential for impact to marine mammals (including [Redacted] from the following key effects:

- Disturbance as a result of the presence of vessels;
- Noise generated by vessels and construction activities;
- Collision risk increase due to vessel presence.

These potential impacts align with the known sensitivities of marine mammals. Other potential impacts include a change in water quality and alterations to habitats and prey availability. Impacts to benthic ecology and water and sediment quality have been assessed in sections 7.2 and 7.3, respectively, and impacts to both are considered to be negligible and not significant. Therefore, any impacts to marine mammals because of changes to habitats, prey species availability, or water quality are likely to be minimal and are thus not considered further.

No construction activity will occur in the vicinity of the closest seal haul out, on the Pabay and Ardnish Peninsula, which lies approximately 9.6 km west of the Project site. Therefore, there is no effect pathway for impacts at haul out sites, and given that the proposed temporary slipway will be for construction purposes only, there is no pathway for disturbance from increased recreational use of the area; site fencing, locked gates, and clear signage will be in place to prevent public access during the construction phase and while the proposed temporary slipway is operational.

Impacts on [Redacted] have been assessed based on known activity in the area, as reported by RJ McLeod (2025) following [Redacted] surveys in February and March 2025. There will also be no construction activity within 200 m of [Redacted] or within 30 m from non-breeding [Redacted]. Therefore, there is no requirement for a licence from NatureScot. A species protection plan, detailing mitigation measures and the use of exclusion zones around [Redacted] and [Redacted], will be implemented throughout all stages of the Project.

TABLE 7-6: PROJECT PARAMETERS RELEVANT TO EFFECTS ON MARINE MAMMALS
(INCLUDING [Redacted])

Effect	Worst-case Scenario	Justification
Disturbance from vessels and construction activity	Two vessels are likely to be present during the construction period. Stone is either being transported to the slipway via Loch Alsh or up the Kyle Rhea Strait.	The maximum number of vessels, and associated vessel movements, represents the maximum potential for disturbance, noise, and collision risk.
Noise from vessels and construction activity		
Collision risk with vessels		

Effect	Worst-case Scenario	Justification
	<p>It is anticipated that the construction would take a total of 8 weeks (including weather downtime).</p> <p>Operations vessel movements are anticipated to be no more than 13 visits per week over the 6 year operation phase of the slipway.</p> <p>Decommissioning is anticipated to be undertaken using a similar method to construction.</p>	

7.4.3 IMPACT ASSESSMENT

7.4.3.1 VESSEL DISTURBANCE, DISPLACEMENT THROUGH UNDERWATER NOISE, AND COLLISION RISK

Two vessels, a safety boat and a workboat, will be onsite during construction of the proposed temporary slipway. During the 6 year operation phase, a maximum of 13 vessel visits a week will occur.

Shipping activity produces underwater noise with the main processes that contribute to noise associated with the engine and propellor. Underwater noise can lead to varied direct effects on marine mammals, including mortality and auditory injury, the latter of which can be classified as permanent threshold shift (PTS) or temporary threshold shift (TTS) (Richardson *et al.*, 1995; Erbe *et al.*, 2018). Other potential impacts include masking of communication signals, behavioural changes, stress, and displacement from habitats (Richardson *et al.*, 1995; OSPAR Commission 2009; Erbe *et al.*, 2018). The level of effect is related to the frequency, sound levels, and duration of the noise, as well as variation in the individual receptor and environmental conditions.

The noise produced by vessels is continuous, low frequency, and low intensity, with specific characteristics depending on factors such as vessel type and speed (OSPAR Commission 2009). Generally, most energy is below 1 kHz, though noise can extend above this range, with, for example, propellor cavitation for small vessels known to extend beyond 10 kHz (OSPAR Commission 2009). Source levels for small vessels, including small work boats, range between 160-175 dB re 1 µPa, while larger support and supply vessels have higher source levels of between 165-180 dB re 1 µPa (OSPAR Commission, 2009).

The low intensity nature of vessel noise means there is minimal risk of PTS or TTS (OSPAR Commission, 2009; Heinis *et al.*, 2013). There is potential for the shipping operations associated with the proposed temporary slipway to mask communications between marine mammals using low frequency communication – for example, harbour seal vocalisations typically have a peak frequency of 1.2 kHz (DOSITS, 2020), which overlaps with frequencies

produced by vessels. Masking is of less concern for high frequency cetaceans, such as the harbour porpoise, as vessel noise is in the outer limits of their hearing and vocalisation ranges.

Disturbance from construction activity and the physical presence of vessels is a possibility and may lead to avoidance of areas and changes in behaviour. Any disturbance related to construction activities will, however, be short-term (maximum of 8 weeks). Furthermore, given that construction is occurring close to shore and not within the constrained narrows of Kyle Rhea Strait, they will not create a barrier to movement or impact use of other foraging areas for cetaceans or pinnipeds. Likewise, works will not impede [Redacted] movement throughout their habitat; they will be able move freely between coastal, freshwater, and terrestrial areas. Disturbance from increased vessel movements during operations is possible, though any avoidance is likely to be localised to the area directly around the vessel; vessel avoidance distances for harbour porpoise range between 300 m and 4 km (Benhemma-Le Gall *et al.*, 2021; Frankish *et al.*, 2023). This represents a small proportion of the habitat available. Furthermore, a significant amount of marine traffic use Loch Alsh and the Kyle Rhea Strait, including a regular ferry service, as shown in Figure 7-8. Additional vessel movements will, therefore, not represent a substantial increase above the overall baseline of vessel traffic in the area.

Another potential source of impact from vessel activity is collision with a boat or ship, resulting in mortality, injury, or stress. While there is little information on the frequency of vessel collisions as a source of marine mammal mortality, there is little evidence from marine mammal strandings in the UK that injury from vessel collisions is an important source of mortality. The UK Cetacean Strandings Investigation Programme (CSIP) documents the annual number of reported strandings and the data show that very few strandings have been attributed to vessel collisions. Marine mammals are relatively small and highly mobile, and given observed responses to noise, are expected to be able to detect vessels in close proximity and largely avoid collision. Vessel speed and predictability of vessel movement is known to be a key aspect in minimising the potential risks to marine mammals of collision; work vessels travelling a set course at slow speeds are less likely to be involved in collisions than faster recreational vessels (Nowacek *et al.*, 2001; Lusseau 2003, 2006).

Impact Assessment

Sensitivity of Receptors

Noise generated by the vessels associated with proposed temporary slipway construction and operation is outside the threshold for PTS or TTS, and marine mammals (including [Redacted]) are habituated to the high level of vessel activity around Skye, and within Loch Alsh and the Kyle Rhea Strait. The overall level of sensitivity is, therefore, considered **Low**.

Magnitude of Effect

During construction of the proposed temporary slipway, marine mammals will only be affected whilst they are within the area of effect of vessel operations (including while vessels are in transit) and construction activity, which is a short duration (maximum 8 weeks, including weather downtime). Marine mammals are highly mobile and have a wide foraging range available. The area of effect is negligible in the context of the total habitat available to marine mammals in the region and set in the context of vicinity of the Project to key habitat areas,

such as seal haul out locations (closest is approximately 9.6 km west of the Project site) and [Redacted] (closest is 320 m from the works area (below MHWS)) and [Redacted] (90 m from the works area (below MHWS)).

While there will be some additional vessel movements (maximum of 13 vessel movements a week) associated with the operations, a significant amount of marine traffic typically uses Loch Alsh and the Kyle Rhea Strait, including a regular ferry service. Any additional shipping movements and noise associated with the operations will be small when compared with the overall baseline. Furthermore, all vessels will follow the Scottish Marine Wildlife Watching Code (SMWWC) and a vessel management plan that specifies, for example, agreed routes and speed limits that will reduce collision risk. The magnitude of impacts is therefore considered **Low**.

Assessment Conclusion

Low sensitivity, combined with **Low** magnitude, mean that risk to marine mammals (including [Redacted]) from vessel disturbance, displacement through underwater noise and construction activity, and collision risk associated with the Project is **Negligible, Not Significant**.

Key Mitigation Measures

Impacts are not significant; therefore, mitigation measures are not necessary to reduce significance further for cetaceans and pinnipeds. A vessel management plan which follows embedded standard best-practice operating procedures for vessels will ensure that vessel movements are predictable and travelling speeds are minimised as far as possible. Vessels will also adhere to the Scottish Marine Wildlife Watching Code (SMWWC). A species protection plan for [Redacted] will be implemented, as outlined within the embedded mitigation measures.

7.5 ORNITHOLOGY

7.5.1 BASELINE

The Kyle Rhea Strait supports a wide variety of seabird species and colonies (Kober *et al.*, 2010; Waggitt *et al.*, 2019; also refer to Section 7.6 for information on classified populations of SPAs). Kober *et al.* (2010) and, more recently, Waggitt *et al.* (2019) modelled seabird abundance and usage of the marine area for several species, based on survey data and environmental variables. These studies, along with area specific, regional, and national studies, have been used to inform the baseline environment and to identify potentially sensitive ornithological receptors. The main data sources reviewed in order to develop an understanding of the baseline environment include:

- Baseline surveys conducted within the Kyle Rhea Strait for the Kyle Rhea Tidal Array Project (NRP, 2012);
- Seabird Tracking and Research (STAR) seabird tracking study (Wakefield *et al.*, 2017);
- Seabird distribution and abundance modelled using a combination of tracking data and environmental variables (Kober *et al.*, 2010; Waggitt *et al.*, 2019);
- Supporting information and data used for classification of Special Protection Areas (SPAs) in the region.

7.5.1.1 DIVERS (GAVIIDAE)

Red throated diver *Gavia stellata* and black throated diver *G. arctica* are large seabirds (RSPB, 2022a-b). Both reside in Scotland for at least part of the year, particularly in western Scotland and the Scottish Isles where these species are present in the summer (RSPB, 2022a-b). Both species breed in Scotland, although there are no notable breeding colonies within the species-specific breeding foraging range (9 km; Woodward *et al.*, 2019). NRP (2012) recorded extremely low numbers of both species in the baseline surveys for the Kyle Rhea Tidal Array (1 individual of each species). As such, the area is considered to be of low importance to divers.

7.5.1.2 FULMARS AND SHEARWATERS (PROCELLARIIFORMES)

Northern Fulmar

Northern fulmar *Fulmarus glacialis* is typically more associated with the northern and northwestern offshore islands than the Scottish mainland, with at sea distribution largely associated with trawl fishing activity (Kober *et al.*, 2010). As such, although individuals may nest within foraging range, the inshore areas of the Kyle Rhea Strait do not represent preferred foraging habitat.

Manx Shearwater

Manx shearwater *Puffinus puffinus* are small seabirds (RSPB, 2022c). Kober *et al.* (2010) identified 3 main areas of Manx shearwater distribution at sea, 1 of which is the Isle of Rum, located approximately 42 km to the southwest of the Kyle Rhea Strait. Manx shearwater have an extensive foraging range, of over 2,000 km (Woodward *et al.*, 2019), however, individuals raft (sit on the surface of the water) in the evenings, much closer to the shoreline (McSorley *et al.*, 2008). Manx shearwater abundance is likely to be low in the Kyle Rhea Strait (Kober *et al.*, 2010; Waggitt *et al.*, 2019) as this does not contain preferential foraging or loafing habitat for the species.

Other petrels and shearwaters are unlikely to have a significant presence in the region.

7.5.1.3 GANNETS (SULIDAE)

Northern Gannet

Northern gannet *Morus bassanus* distribution at sea is generally widespread, with higher density surrounding St Kilda, Shetland, and south-west Ireland colonies outside of the breeding season. The foraging range for Northern gannets is also variable dependent on their individual colony, 229 km generally (Woodward *et al.*, 2019). There are colonies represented by SPAs (Flannan Islands, St Kilda, and North Rona and Sula Sgeir) within the Northern gannet foraging range surrounding Kyle Rhea (NRP, 2012).

Despite the aggregation of Northern gannets around colonies both during and outside the breeding season, there is a likelihood that gannets will be active in the area surrounding Kyle Rhea and the Isle of Skye.

7.5.1.4 CORMORANTS AND SHAGS (PHALACROCORACIDAE)

Great Cormorant

Great cormorant *Phalacrocorax carbo* distribution at sea is generally widespread but restricted to coastal waters and preferred depths <10 m (Kober *et al.*, 2010). The maximum foraging

range for great cormorant is 25.6 ± 8.3 km (Woodward et al., 2019), and therefore outside the influence of SPAs as the nearest is Sheep Island at 235 km, however feeding and roosting great cormorant regularly occur within the Kyle Rhea area (NRP, 2012).

European Shag

European shag *Gulosus (Phalacrocorax) aristotelis* are found at high densities around the west coast of Scotland, preferring more inshore areas (Kober et al., 2010). The maximum foraging distance for European shag is 13.2 ± 10.5 km (Woodward et al., 2019) and therefore outside the influence of SPAs, however feeding and roosting European shag regularly occur within the Kyle Rhea area (NRP, 2013).

7.5.1.5 SKUAS (STERCORARIIDAE)

Great Skua

Great skua *Stercorarius skua* are moderately sized seabirds found at highest densities around Orkney and Shetland during the breeding season (Kober et al., 2010).

The foraging range of Great skua is highly variable (443.3 ± 487.9 km; Woodward et al., 2019), and commonly linked to white-fish fishing vessels and other seabird species foraging ranges due to the klepto-parasitism feeding strategy (Kober et al., 2010). The likelihood of great skua interacting with the Kyle Rhea area is low, with only a single observation made during the NRP survey (NRP, 2012).

Arctic Skua

Arctic skua *Stercorarius parasiticus* are moderately sized seabirds, widely distributed around the UK's coastline, with no specific areas that support high density colonies of Arctic skua (Kober et al., 2010). This is likely due to the general solitary nature of the species. There is limited information on foraging range of Arctic skuas, however it is likely linked to white-fish fishing vessels and other seabird species foraging ranges due to the klepto-parasitism feeding strategy (Kober et al., 2010). The likelihood of great skuas interacting with the Kyle Rhea area is low, with no observations recorded during the NRP survey (NRP, 2012).

7.5.1.6 GULLS (LARIDAE)

Black-headed Gull

Black-headed gull *Chroicocephalus ridibundus* are moderately sized seabirds (RSPB, 2022i). The UK breeding population is around 140,000 pairs, with a wintering population of 2.2 million individuals (RSPB, 2022i). Kober et al. (2010) identified that black-headed gulls exhibit a smaller distribution at sea in comparison to other species. The likelihood of black-headed gulls interacting with the Kyle Rhea area is low, with only three individual observations recorded during the NRP survey (NRP, 2012).

Common (Mew) Gull

Common (Mew) gull *Larus canus* are small seabirds (RSPB, 2022j). The UK breeding population is around 49,000 pairs, with a wintering population of 710,000 individuals (RSPB, 2022j). Kober et al. (2010) identified that common gulls exhibit a smaller distribution at sea than other species and are commonly found at medium densities along the west coast of Scotland, in particular the Inner Hebrides. Common gull observations were recorded in small

numbers, with seasonal patterns of abundance, during the NRP survey and are likely to interact with the Kyle Rhea area.

Mediterranean Gull

Mediterranean gull *Ichthyaetus melanocephalus* are small seabirds (RSPB, 2022k). Kober *et al.* (2010) identified that Mediterranean gulls are not distributed along the west coast of Scotland. The likelihood of Mediterranean gull being present in the Kyle Rhea area is very low due to the limited distribution of this species along the west coast of Scotland.

European Herring Gull

Herring gull *Larus argentatus*, also identified as European herring gulls, are widely distributed around the UK coastlines. Areas of high density are located between the Rhins of Galloway and the Isle of Arran on the west coast of Scotland, with areas of medium density around the Inner Hebrides (Kober *et al.*, 2010). European herring gulls are highly tolerant of human activity and are likely to occur within the Kyle Rhea area based on the numerous observations (47 in total) recorded during the NRP survey (NRP, 2012).

Great Black-backed Gull

Great black-backed gull *Larus marinus* are large seabirds. The Kyle Rhea area is near the Isle of Skye and Lochalsh, which supports 151 known breeding pairs (Mitchell *et al.*, 2004), and the NRP survey recorded up to 60 individuals on a regular basis (NRP, 2012).

Lesser Black-backed Gull

Lesser black-backed gull *Larus fuscus* resemble small European herring gulls in appearance but not in abundance, with concern over future population decline (RSPB, 2022n) despite an overall rise in population in recent decades (Kober *et al.*, 2010). Kober *et al.* (2010) identified that Lesser black-backed gulls have an uneven distribution in the Irish and Celtic Seas. The likelihood of lesser black-backed gulls interacting with the Kyle Rhea region is limited and supported by only 2 observations of adult lesser black-backed gulls recorded during the NRP survey (NRP, 2012).

Black-legged Kittiwake

Black-legged kittiwake *Rissa tridactyla* have a maximum foraging range of 83 km and their distribution at sea is concentrated around the coastlines of Scotland, with medium individual density modelled around the west-coast of Scotland and within the Kyle Rhea area (Kober *et al.*, 2010). Black legged kittiwake observations were recorded during the NRP survey, with small groups (1-4 individuals) the most commonly occurring observation, and one observation of a flock of 32 individuals (NRP, 2012).

7.5.1.7 TERNS (STERNIDAE)

Little Tern

Little tern *Sternula albifrons* are distributed sporadically throughout the UK, with limited recorded individuals in the Outer Hebrides and the Isles of Coll and Tiree (Mitchell *et al.*, 2004). No little tern were recorded during the NRP survey (NRP, 2012), therefore there is very limited likelihood of little tern interacting with the Kyle Rhea area.

Common Tern

Common terns *Sterna hirundo* have a sporadic UK distribution (Kober *et al.*, 2010). There is some evidence for common tern being present in the Kyle Rhea area, but only in transit between foraging grounds and breeding colonies, and in low numbers (NRP, 2012).

Arctic Tern

Arctic tern *Sterna paradisaea* distribution is patchy but wider than common tern, with the highest density of individuals modelled around Orkney, Shetland, and discrete locations along the east coast of England (Kober *et al.*, 2010). The likelihood of Arctic tern being present in the Kyle Rhea area is limited, with no observations recorded during the NRP survey (NRP, 2012).

Roseate Tern

Roseate tern *Sterna dougallii* have a very limited breeding population within the UK, at only 111 pairs, making the roseate tern one of the UK's rarest seabird species (RSPB, 2022s). As a result of this rarity the distribution of roseate tern is extremely limited. It is unlikely to be present in the Kyle Rhea area.

Sandwich Tern

Sandwich tern *Thalasseus sandvicensis* were identified by Kober *et al.* (2010) in numerous discrete areas of high sandwich tern density, in which the majority of individuals appear to show site fidelity to their colonies. These areas were most frequent along the east coast of Scotland (Kober *et al.*, 2010). The likelihood that Sandwich tern are present within the Kyle Rhea area is limited, based on the Seabird Census 2000 (Mitchell *et al.*, 2004) or the NRP survey (NRP, 2012).

7.5.1.8 AUKS (ALCIDAE)

Black Guillemot

Black guillemot *Cephus grylle* are evenly distributed along the northern and western coasts of Scotland, including the Outer Hebrides (Mitchell *et al.*, 2004). The greatest concentrations of black guillemot was around Orkney, Shetland, the Outer Hebrides, and the Isle of Rum (Mitchell *et al.*, 2004). Few black guillemot observations were recorded in the NRP survey (NRP, 2012); however, the proximity of the Rum colony indicates a likely presence of black guillemot in the Kyle Rhea area.

Common Guillemot

Common guillemot *Uria aalge* have a UK breeding population of 950,000 pairs (RSPB, 2022v). Common guillemot observations in the NRP survey of the Kyle Rhea area were infrequent, with 2 individuals that were potentially recurrent in the common guillemot records.

Razorbill

Razorbill *Alca torda* have a similar distribution of high-density areas as common guillemot, however the general Atlantic razorbill distribution at sea is slightly more restricted, as populations retreat to core colonies along north and western coasts of Scotland and the Outer Hebrides (Kober *et al.*, 2010). Few razorbills were recorded during the NRP survey, of which the majority of observations occurred during the summer (NRP, 2012).

Atlantic Puffin

Atlantic puffin *Fratercula arctica* have a relatively wide distribution in the east and northwest coast of Scotland (Kober *et al.*, 2010). The density of individuals is concentrated in the waters of the Inner and Outer Hebrides (Kober *et al.*, 2010; Waggitt *et al.*, 2019). Despite the high density of Atlantic puffin in the wider area, the NRP survey did not record any observations (NRP, 2012).

7.5.1.9 COASTAL AND TERRESTRIAL BIRDS

Eagles

[Redacted] are listed on Annex 1 of the Birds Directive, and on Schedule 1 of the Wildlife and Countryside Act, and a (successful) breeding pair has been identified within the area of the Kyle Rhea sound (Royal HaskoningDHV, 2013). The UK breeding population is limited, at around 150 pairs as of 2020 (RSPB, 2022ak). The NRP survey observed the pair foraging individually within the Kyle Rhea area on several occasions, in which they klepto-parasited fish from other species – primarily great black-backed gull (NRP, 2012).

The UK Golden eagle *Aquila chrysaetos* breeding population is larger than [Redacted], at 440 pairs (RSPB, 2022a). Golden eagle are also listed on Annex 1 of the Birds Directive, and on Schedule 1 of the Wildlife and Countryside Act, however no breeding pairs have been identified in the Kyle Rhea area. Only one individual was observed hunting on a neighbouring hill on three occasions but was not seen interacting with the Kyle Rhea sound (NRP, 2012).

7.5.2 POTENTIAL IMPACTS

The Project intends on constructing a temporary slipway, as set out in Section 3. No construction activity will occur in the vicinity of the closest nesting sites, therefore there is no effect pathway for impacts at nesting sites.

Given the location, small-scale and temporary nature of the works, and minimal impacts limited to temporary disturbance from the presence of vessels, impacts on prey species, in the form of fish and shellfish, have been scoped out of this MEA. The potential impacts on foraging success of seabirds is also, therefore, scoped out.

However, given the use of work and safety vessels in the water during construction, operation and decommissioning, and the use of lights during periods of darkness during construction, there exists some potential for impact to birds from disturbance.

Table 7-7 summarises the realistic worst-case potential effects of vessels on birds.

TABLE 7-7: PROJECT PARAMETERS RELEVANT TO EFFECTS ON ORNITHOLOGY RECEPTORS

Effect	Worst-case Scenario	Justification
Disturbance from vessels/plant	Two vessels are likely to be present during construction period.	The maximum numbers of vessels, and associated vessel movements, represents the maximum potential for vessel disturbance and collision risk.
Collision risk with vessels	It is anticipated that the construction would take a total	

Effect	Worst-case Scenario	Justification
	<p>of 8 weeks (including weather downtime).</p> <p>Construction times will be between 7am–7pm, and lights may be used during hours of darkness.</p> <p>Operations vessel movements are anticipated to be no more than 13 visits per week over the 6 year operation phase of the slipway.</p> <p>Decommissioning is anticipated to be undertaken using a similar method to construction.</p>	<p>Lights may be used during the construction period, during hours of darkness. Construction is anticipated to take no more than 8 weeks (including weather downtime).</p>

7.5.3 IMPACT ASSESSMENT

7.5.3.1 DISTURBANCE AND COLLISION RISK

Birds have a high value as many species are red-listed as Birds of Conservation Concern, and some species are listed under Annex 1 of the Wildlife and Countryside Act 1981. Species differ in their sensitivity to disturbance as identified in Furness *et al.* (2013). Bird disturbance by ship traffic was assessed by Furness *et al.* (2013), who identified that species of diver were the most sensitive group to disturbance, followed by auks and terns. Gulls and petrels were the least sensitive groups to disturbance.

Continuous disturbance can become problematic for species with specific foraging habitat requirements, which temporarily reduces access to potential foraging grounds in close proximity to vessels. Disturbance has been shown to cause birds that are holding fresh prey to swallow their catch, which in turn may impact the feeding regime of both adults and chicks during the breeding season (Speckman *et al.*, 2004).

In the EIA associated with the installation and operation phases of the Kyle Rhea tidal device, Royal HaskoningDHV (2013) determined that the sensitivity to disturbance of all birds, including sensitive groups such as divers, was low. Royal HaskoningDHV (2013) concluded that the impacts on bird receptors of disturbance associated with lighting would be negligible.

Vessel collisions are an impact pathway normally associated with marine mammals; however, birds that are attracted to vessels, such as gulls and petrels, have an increased risk of colliding with any part of the vessel. There is little research on the causes of collisions during daylight hours, with some research conducted on light-induced bird strikes at night (Merkel and Johansen, 2011).

It should also be noted that a significant amount of marine traffic typically uses the Kyle Rhea Strait, and birds will be habituated to this. Any additional shipping movements associated with

the 2 vessels involved in construction operations will be negligible, when compared with the overall baseline of vessels in the area.

While additional vessel movements are expected during the operation phase, these will also be small when compared with the overall baseline of other vessels in the area. Decommissioning is anticipated to be undertaken in a similar manner to construction, but in reverse. Therefore, vessel movements associated with decommissioning are also expected to be negligible, compared with the baseline.

In addition, birds are relatively small and highly mobile, and given observed avoidance behaviour in many species, are expected to be able to detect vessels in close proximity and largely avoid collision.

Impact Assessment

Sensitivity of Receptors

As established previously, vessel presence will be limited during the construction and operation phases of the Project. Furthermore, given the intended purpose of the proposed temporary slipway, and the Project's proximity to shore, it is assumed that vessel transit speeds will be slow. Given the expected low levels of disturbance and the relative habituation of species found in the area, the sensitivity of birds to disturbance during the construction, operation, and decommissioning phases of the temporary slipway is **Low**.

Magnitude of Effect

While construction will be undertaken between 7am and 7pm, some lighting may be required at the beginning and end of each 123 hour period. While lighting can potentially cause displacement (including disorientation) of nocturnal birds, the birds using Kyle Rhea already experience multiple sources of a range of lighting types, and the sea birds (and eagles) using the area are predominantly diurnal species. It is therefore concluded the magnitude of impact is considered **Negligible**.

During construction, birds will only be affected by vessel disturbance whilst they are within the area of effect of vessel operations, which will have a short duration (maximum 8 weeks, for construction (including weather downtime)). Birds are highly mobile and have a wide foraging range available both during and between vessel operations. The area of effect is negligible in the context of the total habitat available to birds in the region, as many species transit through the area from external colonies and feeding grounds. It is therefore concluded the magnitude of impact is considered **Negligible**.

Collision risk is considered unlikely during daylight hours and in good weather. While there will be some additional vessel movements (maximum of 13 vessel movements a week) associated with the operations, a significant amount of marine traffic typically uses Loch Alsh and the Kyle Rhea Strait, including a regular ferry service. Any additional shipping movements with the operations will be small when compared with the overall baseline. Furthermore, all vessels will follow the Scottish Marine Wildlife Watching Code (SMWWC) and a vessel management plan that specifies, for example, agreed routes and speed limits that will reduce disturbance and collision risk. The magnitude of impacts is therefore considered **Low**.

Assessment Conclusion

Low sensitivity, combined with **Low** magnitude, mean that risk to birds from vessel disturbance and collision risk associated with the proposed temporary slipway is **Negligible, Not Significant** in EIA terms.

Key Mitigation Measures

Impacts are not significant, therefore mitigation measures are not necessary to reduce significance further. Despite this, embedded standard best-practice operating procedures for vessels will ensure that vessel movements are predictable and travelling speeds will be minimised as far as possible.

7.6 DESIGNATED SITES AND HABITATS REGULATIONS APPRAISAL

7.6.1 BASELINE

There are a total of 18 Special Areas of Conservation (SACs), 7 Special Protection Areas (SPAs) and 11 Nature Conservation Marine Protected Areas (NCMPAs) designated sites within 100 km of the proposed temporary slipway, as listed in Table 7-8. Figure 7-9 displays the designated sites within the wider Loch Alsh area, and Figure 7-10 displays the designated sites in relation to the works area.

TABLE 7-8: DESIGNATED AND NOTIFIED SITES WITHIN 100 KM OF THE PROPOSED TEMPORARY SLIPWAY

Note that NCMPAs are presented first, then SACs, followed by SPAs.

Site Designation	Site Name	Site Code	Distance (km) to proposed temporary slipway	Qualifying Features
NCMPA	Lochs Duich, Long and Alsh	10416	Adjacent	Burrowed mud Flame shell beds
NCMPA	Loch Carron	10543	4.6	Flame Shell Bed Maerl beds
NCMPA	Red Rocks and Longay	10584	14.3	Flapper Skate <i>Dipturus intermedius</i>
NCMPA	Small Isles	10422	33	Black guillemot <i>Cephus grylle</i> Northern feather star aggregations on mixed substrata White cluster anemones <i>Parazoanthus anguicomus</i> Northern sea fan and sponge communities Burrowed mud Circalittoral sand and mud communities Fan mussel aggregations Horse mussel beds Quaternary of Scotland – glaciated channels/troughs, glacial lineations, meltwater channels, moraines and streamlined bedforms
NCMPA	Sea of the Hebrides	10474	33	Basking Shark <i>Cetorhinus maximus</i> Minke Whale <i>Balaenoptera acutorostrata</i> Marine geomorphology of the Scottish shelf seabed - Inner Hebrides Carbonate Production Area
NCMPA	Wester Ross	10421	56	Burrowed mud Circalittoral muddy sand communities Flame shell beds Kelp and seaweed communities on sublittoral sediment Maerl beds Maerl or coarse shell gravel with burrowing sea cucumbers Northern feather star aggregations on mixed substrata Marine Geomorphology of the Scottish Shelf Seabed – banks of unknown substrate

Site Designation	Site Name	Site Code	Distance (km) to proposed temporary slipway	Qualifying Features
				Quaternary of Scotland – glaciated channels/troughs, megascale glacial lineations, moraines Seabed Fluid and Gas Seep – pockmarks Submarine Mass Movement – slide scars
NCMPA	Loch Sunart	10417	62	Northern feather star aggregations on mixed substrata Flame shell beds Serpulid aggregations
NCMPA	Loch Sunart to the Sound of Jura	10418	62	Flapper Skate <i>Dipturus intermedius</i> Quaternary of Scotland – glaciated channels/troughs
NCMPA	Shiant East Bank	10475	75	Circalittoral sands and mixed sediment communities Northern sea fan and sponge communities Shelf banks and mounds Geodiversity Quaternary of Scotland (drumlinoid forms, glacial lineations, iceberg ploughmarks, streamlined bedrock)
NCMPA	Loch Creran	10415	82	Flame shell beds Quaternary of Scotland
NCMPA	North-east Lewis	10476	99	Marine Geomorphology of the Scottish Shelf Seabed Quaternary Scotland Risso's dolphin <i>Grampus griseus</i> Sandeels <i>Ammodytes marinus</i> / <i>Ammodytes tobianus</i>
SAC	Lochs Duich, Long and Alsh Reefs	UK0017077	Overlap	Reefs
SAC	Kinloch and Kyleakin Hills	UK0030176	Overlap	[Redacted]
SAC	Inner Hebrides & Minches	UK0030393	Adjacent	Harbour Porpoise <i>Phocoena phocoena</i>
SAC	Glen Beasdale	UK0030154	39	[Redacted] [Redacted]
SAC	Rum	UK0012594	44	[Redacted]

Site Designation	Site Name	Site Code	Distance (km) to proposed temporary slipway	Qualifying Features
SAC	Sound of Arisaig (Loch Ailort to Loch Ceann Traigh)	UK0019802	44	Sandbanks which are slightly covered by sea water all the time
SAC	Loch Moidart and Loch Shiel Woods	UK0030209	45	[Redacted]
SAC	Sunart	UK0019803	59	[Redacted] Reefs
SAC	Ascrib, Isay and Dunvegan	UK0030230	60	Harbour seal <i>Phoca vitulina</i>
SAC	Eileanan agus Sgeiran Lios mor	UK0030182	76	Harbour seal <i>Phoca vitulina</i>
SAC	Loch Creran	UK0030190	82	Reefs
SAC	Inverpolly	UK0030171	88	[Redacted]
SAC	Mull Oakwoods	UK0030219	92	[Redacted]
SAC	Treshnish Isles	UK0030289	92	Grey seal <i>Halichoerus grypus</i> Reefs
SAC	Loch nam Madadh	UK0017070	93	[Redacted] Coastal lagoons Large shallow inlets and bays
SAC	Sound of Barra	UK0012705	96	Harbour seal <i>Phoca vitulina</i> Sandbanks which are slightly covered by sea water all the time Reefs
SAC	Obain Loch Euphoirt	UK0017101	96	Coastal lagoons
SAC	South Uist Machair	UK0012713	100	Slender naiad <i>Najas flexilis</i> [Redacted] Coastal lagoons
SPA	Cuillins	UK9001781	14	[Redacted] , breeding

Site Designation	Site Name	Site Code	Distance (km) to proposed temporary slipway	Qualifying Features
SPA	Rum	UK9001341	36	[Redacted] (breeding) Red-throated diver <i>Gavia stellata</i> (breeding) Manx shearwater <i>Puffinus puffinus</i> (breeding) Black-legged kittiwake <i>Rissa tridactyla</i> (breeding) Common guillemot <i>Uria aalge</i> (breeding) Seabird assemblage (breeding)
SPA	Canna and Sanday	UK9001431	51	Atlantic puffin <i>Fratercula arctica</i> European herring gull <i>Larus argentatus</i> European shag <i>Phalacrocorax aristotelis</i> Black-legged kittiwake <i>Rissa tridactyla</i> Common guillemot <i>Uria aalge</i>
SPA	Coll and Tiree	UK9020310	73	Great northern diver <i>Gavia immer</i> Common eider <i>Somateria mollissima</i>
SPA	Shiant Isles	UK9001041	77	Razorbill <i>Alca torda</i> Barnacle goose <i>Branta leucopsis</i> Atlantic puffin <i>Fratercula arctica</i> Northern fulmar <i>Fulmarus glacialis</i> European shag <i>Phalacrocorax aristotelis</i> Black-legged kittiwake <i>Rissa tridactyla</i> Common guillemot <i>Uria aalge</i>
SPA	West Coast of the Outer Hebrides	UK9020319	91	Great northern diver <i>Gavia immer</i> Red-throated diver <i>Gavia stellata</i> Black-throated diver <i>Gavia arctica</i> [Redacted] Common eider <i>Somateria mollissima</i> Long-tailed duck <i>Clangula hyemalis</i> Red-breasted merganser <i>Mergus serrator</i>
SPA	South Uist Machair and Lochs	UK9001082	99	Corncrake <i>Crex crex</i> Dunlin <i>Calidris alpina schinzii</i> [Redacted] Oystercatcher <i>Haematopus ostralegus</i> Redshank <i>Tringa totanus</i> Ringed plover <i>Charadrius hiaticula</i>

Site Designation	Site Name	Site Code	Distance (km) to proposed temporary slipway	Qualifying Features
				Sanderling <i>Calidris alba</i>

Special Areas of Conservation

The proposed temporary slipway is situated within the Lochs Duich, Long and Alsh Reefs SAC. This SAC was designated in 2005 for the protection of Annex I reefs. The reefs in Kyle Rhea are subject to some of the strongest tidal streams in the UK, and the bedrock supports rich communities typically dominated by the hydroids *Tubularia indivisa* and *Sertularia argentea*, the barnacle *Balanus crenatus*, anemones, sponges and ascidians. Loch Alsh also hosts dense beds of the brittlestar *Ophiopholis aculeata*, an uncommon feature within the UK (JNCC, 2024c).

As the proposed temporary slipway involves the intertidal zone, the Kinloch and Kyleakin Hills SAC is also of relevance; the SAC overlaps with the proposed temporary slipway. This SAC was designated in 2005 for the protection of alpine and subalpine heaths, blanket bog, dry heaths, mixed woodland on base-rich soils associated with rocky slopes, [Redacted], western acidic oak woodland and wet heathland with cross-leaved heath. This site is terrestrial and is characterised by sedimentary, acidic, peat, nutrient-poor sandstone with a landscape consisting of crags, ledges, uplands, coastlines and hills (JNCC, 2018).

The proposed temporary slipway is adjacent to the Inner Hebrides and the Minches SAC. This SAC was designated in 2018 for the protection of harbour porpoise *Phocoena phocoena*. The SAC covers a large part of the west coast of Scotland.

Special Protection Areas

Several Special Protection Areas (SPAs) are situated within proximity of the proposed temporary slipway. The closest site is the Cuillins SPA, located approximately 14 km from the proposed temporary slipway, on the Isle of Skye. This site is designated for the protection of the [Redacted]. Last updated in 2002, this site supports 8 breeding pairs of [Redacted] comprising approximately 1.9% of the population in Great Britain.

Rum SPA is located approximately 36 km from the proposed temporary slipway, featuring rocky coasts and cliffs alongside the adjacent coastal waters, which act as a nursery area for multiple fish species. The SPA is designated for supporting multiple bird species and approximately 130,000 seabirds each year, including red-throated diver *Gavia stellata* (13-18 pairs representing 1% of the Great Britain population), [Redacted] (4 pairs representing 1% of the Great Britain population), Manx shearwater *Puffinus puffinus* (61,000 pairs representing 23% of the world population), black-legged kittiwake *Rissa tridactyla* (1,500 pairs representing 0.3% of the Great Britain population), and common guillemot *Uria aalge* (4,000 individuals representing 0.4% of the Great Britain population).

Canna and Sanday SPA is located approximately 52 km from the Project location. The island of Canna is the most western of the Small Isles in the Inner Hebrides, and the site also includes part of the island of Sanday. The site consists mainly of steep cliffs capped by a ridge of wet heath and blanket bog, supporting a varied range of coastal grassland and heath communities. The boundary of the Special Protection Area extends approximately 1 km into the marine environment. Canna and Sanday SPA regularly supports in excess of 20,000 individual seabirds, including nationally important populations of the following species: European shag *Gulosus (Phalacrocorax) aristotelis* (1,000 pairs; 3% of GB population), herring gull *Larus argentatus* (1,300 pairs, 0.8% of GB population), black-legged kittiwake (930 pairs, 0.1% of

GB population), common guillemot *Uria aalge* (5,800 individuals, 0.4% of GB population) and Atlantic puffin *Fratercula arctica* (1,200 individuals, 0.1% of GB population).

Shiant Isles SPA is located approximately 78 km from the proposed temporary slipway, situated in the Minch. Despite this greater distance, due to large foraging ranges, certain species have the potential to overlap with the area of proposed development (see Section 7.5.1). This SPA is designated for a large number of species. These include Annex 1 Greenland barnacle goose *Branta leucopsis* (490 individuals representing 2% of the Great Britain population), European shag (1,780 pairs representing 1.5% of the western European population), razorbill *Alca torda* (10,950 individuals), Atlantic puffin (77,000 pairs), northern fulmar *Fulmarus glacialis* (6,820 pairs representing 1% of the Great Britain population), common guillemot (18,380 individuals representing 2% of the Great Britain population), and black-legged kittiwake (1,800 pairs representing 0.4% of the Great Britain population).

In addition to the sites discussed above, details on all of the other designated sites within 100 km of the proposed temporary slipway are provided in Table 7-8.

FIGURE 7-9: DESIGNATED SITES WITHIN THE WIDER LOCH ALSH AREA

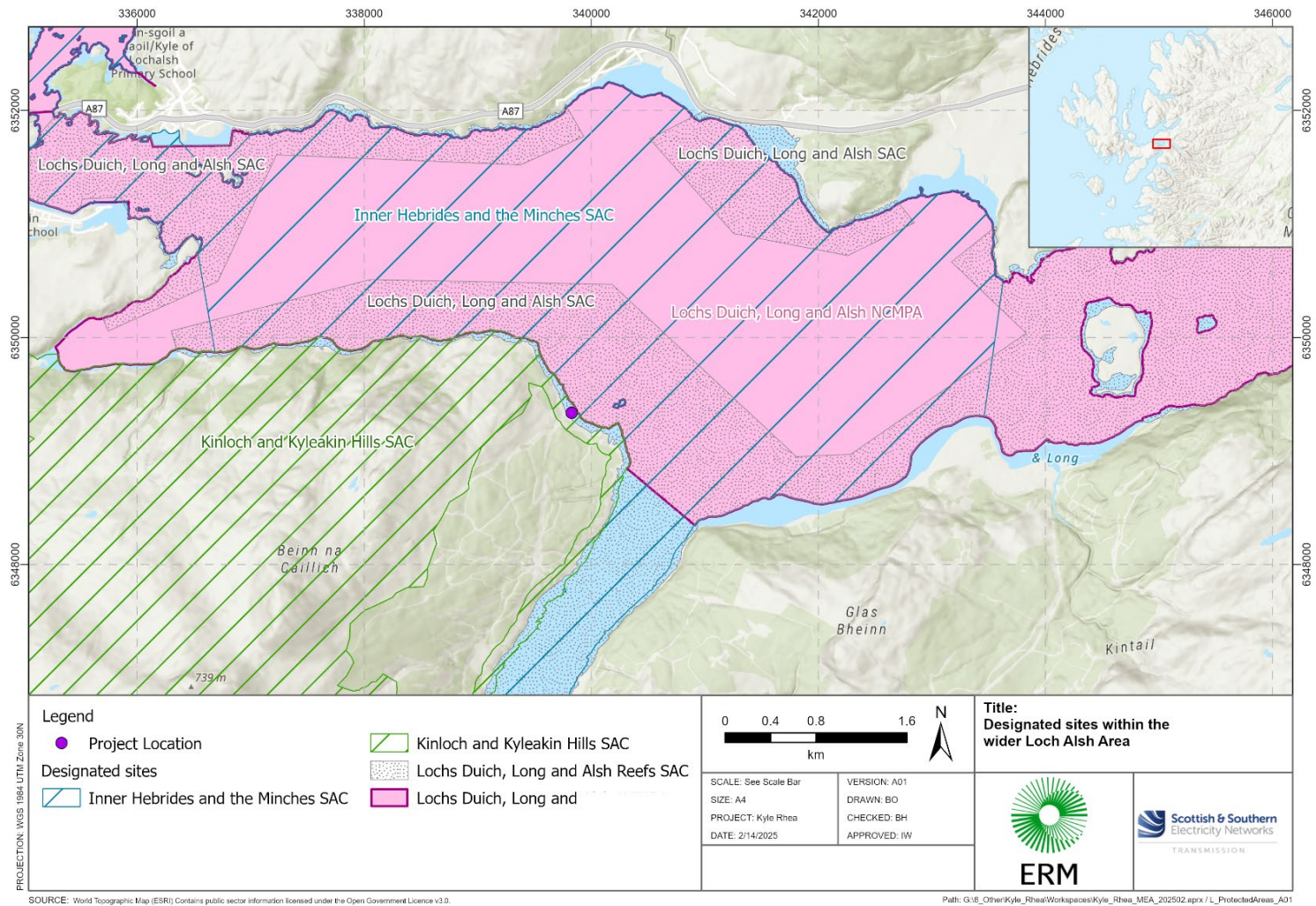
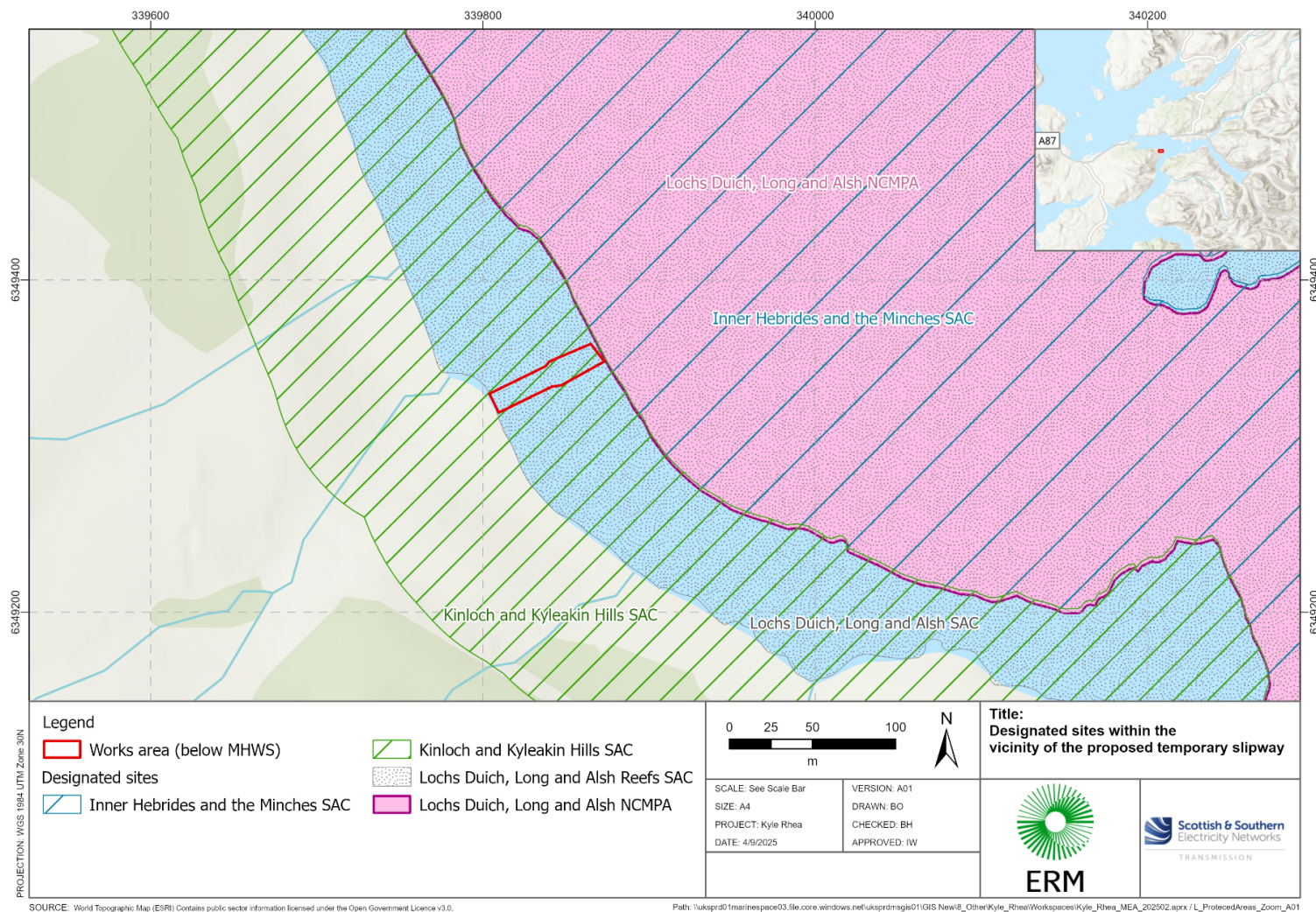


FIGURE 7-10: DESIGNATED SITES WITHIN THE VICINITY OF THE PROPOSED TEMPORARY SLIPWAY



7.6.2 NATURE CONSERVATION MARINE PROTECTED AREA ASSESSMENT

Impacts from the construction, operation and/or decommissioning of the proposed temporary slipway have the potential to interact with two NCMPAs – Lochs Duich, Long and Alsh, and Seas of the Hebrides (Table 7-9).

TABLE 7-9: DESIGNATED AND NOTIFIED NCMPA SITES WITHIN 100 KM OF THE PROPOSED TEMPORARY SLIPWAY

Site Designation	Site Name	PA Code	Distance (km) to proposed temporary slipway	Qualifying Features
NCMPA	Lochs Duich, Long and Alsh	10416	Adjacent	Burrowed mud Flame shell beds
NCMPA	Seas of the Hebrides	10474	36	Minke whale Basking shark Fronts Marine geomorphology of the Scottish shelf seabed - Inner Hebrides Carbonate Production Area

Lochs Duich, Long and Alsh NCMPA

The work area is adjacent to the Lochs Duich, Long and Alsh NCMPA, designated for burrowed mud and flame shell beds (Table 7-9). As there is no spatial overlap, it is considered that there is no direct effect on the protected features. Given that the nearest known flame shell bed is 3.1km from the proposed temporary slipway, and the nearest burrowed mud evidence is approximately 0.6km away from the proposed temporary slipway, it is also expected that there will be no indirect effect (other than insignificantly) with the protected features of the site. This site is therefore not considered further in this assessment.

Seas of the Hebrides NCMPA

The works are within 36 km of the Seas of the Hebrides NCMPA (Table 7-9). Given that the works are not expected to have any direct or indirect effect (other than insignificantly) on any of the protected features of the NCMPA, this is not considered further here.

Assessment Conclusion

The proposed works are not expected to have any direct or indirect effect (other than insignificantly) on any NCMPA, and as such, no further assessment is needed.

7.6.3 HABITATS REGULATIONS APPRAISAL

The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended)⁸, The Conservation of Habitats and Species Regulations 2017 (as amended)⁹ and The Conservation of Offshore

⁸ <https://www.legislation.gov.uk/uksi/1994/2716/contents/made>

⁹ <https://www.legislation.gov.uk/uksi/2017/1012/contents/made>

Marine Habitats and Species Regulations 2017¹⁰ (as amended) transpose the EU Habitats Directive (Council Directive 92/43/EEC)¹¹ and certain elements of the Wild Birds Directive (Directive 2009/147/EC)¹² (known together as the Nature Directives) into UK and Scottish law. Given that the operations for the construction, operation and decommissioning of the proposed temporary slipway may directly or indirectly impact sites covered under these directives, an HRA screening for Likely Significant Effects is undertaken here.

7.6.3.1 STAGE 1 – SCREENING AND DETERMINATION OF LIKELY SIGNIFICANT EFFECT

The screening stage examines the likely effects of a project either alone, or in combination with other projects and plans on a European site (including SPAs and SACs) and seeks to answer the question “*can it be concluded that no likely significant effect will occur?*”.

To determine if the construction, operation and decommissioning of the proposed temporary slipway is likely to have any significant effects on the designated sites, the issues listed below have been considered:

- Could the proposals affect the qualifying interest and are they sensitive/vulnerable to the effect;
- The probability of the effect happening;
- The likely consequences for the site’s conservation objectives if the effect occurred;
- The magnitude, duration, and reversibility of the effect, considering any mitigation built into the proposed temporary slipway design.

Decommissioning works will be of short duration and, broadly, the reverse of the construction sequence. As such, impacts are expected to be similar to, but not greater than, those expected during construction. Please note, it has been assumed that effects from decommissioning would be addressed in full by the Competent Authority (being the local planning authority) closer to the time when it may occur, based on more specific information about the activities and processes involved, and also the prevailing environmental conditions.

The screening stage will therefore conclude one of the outcomes listed below.

- No likely significant effect;
- A likely significant effect will occur;
- It cannot be concluded that there will be no likely significant effect.

Where the assessment concludes the second or third outcome, then the need for an Appropriate Assessment (AA) is triggered¹³.

¹⁰ <https://www.legislation.gov.uk/ukxi/2017/1013/contents/made>

¹¹ Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A31992L0043>

¹² Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32009L0147>

¹³ In the case of the third outcome, European guidance (Assessment of Plans and Projects Significantly affecting Natura 2000 sites (2001)) advises that sufficient uncertainty remains to indicate that an appropriate assessment should be carried out.

7.6.4 APPROACH TO INITIAL SCREENING

This stage is essentially a site-identification/selection process which effectively identifies all those designated sites and the relevant qualifying features that are at risk of likely significant effects (LSE), should those features be sensitive to the relevant effects.

The criteria used in this first stage of selection takes account of the location of the European site(s), the area of influence (AoI) of potential impacts associated with the proposed temporary slipway, and the ecology and distribution of qualifying features. These criteria are described in Table 7-10.

TABLE 7-10: CRITERIA USED FOR SCREENING OF RELEVANT EUROPEAN SITES

Criteria	
1	European or Ramsar site with physical overlap with the proposed temporary slipway.
2	European or Ramsar site with adjoining 'functionally linked habitat' with physical overlap with the proposed temporary slipway.
3	<p>European or Ramsar site with a qualifying feature located within the potential area of influence (the AoI) associated with the proposed temporary slipway; the area of influence is variable dependent upon different pressures interacting with different receptors (qualifying habitats and species). For marine habitats (including Annex I habitats and supporting habitat features) the following AoIs were used:</p> <ul style="list-style-type: none"> • Secondary impacts from suspended sediment plumes and deposition are estimated to be at 1 km (in a precautionary manner).
4	<p>European or Ramsar site with qualifying mobile species whose range (e.g., foraging, roosting, overwintering, breeding, or natural habitat range) may interact with potential effects from the proposed temporary slipway. The following AoIs were used:</p> <ul style="list-style-type: none"> • Seabird foraging ranges were screened at a radius of 100 km; • Underwater noise emissions were screened to a maximum distance of 60 km in consideration of potential underwater noise disturbance for marine mammals.

Details of European sites screened in to assessment under one or more of the above criteria are provided in below Table 7-11. The qualifying features for each site are detailed, using key publicly available information obtained from:

- National Marine Plan Interactive (NMPi) tool (Marine Directorate, 2024);
- NatureScot SiteLink (NatureScot, 2024);
- Joint Nature Conservation Committee (JNCC) online sites (JNCC, 2024).

Five SACs and three SPAs are screened in for Stage 1 determination of Likely Significant Effects (LSE).

TABLE 7-11: DETAILS OF EUROPEAN SITES SCREENED IN FOR STAGE 1 DETERMINATION OF LIKELY SIGNIFICANT EFFECTS

Site Name	Qualifying Features (underlined are not included in HRA)	Pressures assessed	Conclusions
Lochs Duich, Long and Alsh SAC	Reefs	Physical loss (to land or freshwater habitat); Physical removal (extraction of substratum); Siltation rate changes (light); Surface abrasion; Sub-surface abrasion/penetration.	There is no direct impact to SAC features as per the reefs layer available on NMPI. This layer was produced by NatureScot and Joint Nature Conservation Committee from the Geodatabase of Marine features adjacent to Scotland (GeMS). The layer shows that the nearest reef feature is approximately 0.6km from the slipway. From the understanding of physical processes in the area, indirect impact to SAC features is also not expected, though due to lack of availability of detailed reef mapping in the area of the slipway, no LSE could not be concluded and therefore this site is subject to further consideration within the RIAA in Appendix B.
Kinloch and Kyleakin Hills SAC	[Redacted]	Death or injury by collision; Death of injury as a result of pollution; Visual disturbance; Above water noise; Physical loss (to land or freshwater habitat); Removal of non-target species; Underwater noise changes; Introduction of light.	While no works are taking place within 200 m of identified [Redacted] or 30 m of non-breeding [Redacted], there is potential for some disturbance related to noise and presence of construction activity. Therefore, no LSE could not be concluded so this site is subject to further consideration within the RIAA in Appendix B.
Inner Hebrides and the Minches SAC	Harbour Porpoise <i>Phocoena phocoena</i>	Removal of non-target and target species; Underwater noise; Death or injury by collision.	The proposed construction and maintenance operations are expected to produce low levels of acoustic disturbance. While noise will be below the onset threshold for PTS and TTS, there is potential for behavioural disturbance related to noise and vessel presence. Therefore, no LSE could not be concluded so this site is subject to further consideration within the RIAA in Appendix B.
Ascrib, Isay and Dunvegan SAC	Harbour seal <i>Phoca vitulina</i>	Above water noise;	The proposed construction and maintenance operations are expected to produce only low levels of acoustic disturbance, and any noise would

Site Name	Qualifying Features (underlined are not included in HRA)	Pressures assessed	Conclusions
		Underwater noise changes; Barrier to species movement; Visual disturbance	<p>be expected to attenuate within a small distance from the source. In transit vessels may add to these acoustic signatures, though a significant amount of marine traffic typically uses the Kyle Rhea Strait, including a regular ferry service. However, the area of effect is considered to represent a negligible portion of their available foraging area and harbour seals from within the SAC are known to forage outside of the operations area, mainly in the Minch and around the northwest coast of Skye between Loch Bracadale and Waternish Point. Furthermore, there are good foraging habitats within 50 km of the site, which is the accepted foraging range of harbour seal.</p> <p>Therefore, for the purposes of this assessment, no LSE is concluded for above water, underwater noise and visual disturbance.</p> <p>Given that the operations are occurring close to shore and not within the constrained narrows of Kyle Rhea Strait, no LSE is concluded for barrier to species movement.</p>
Treshnish Isles SAC	Grey seal <i>Halichoerus grypus</i> Reefs	Above water noise; Underwater noise changes; Barrier to species movement; Visual disturbance	<p>The proposed construction and maintenance operations are expected to produce only low levels of acoustic disturbance, and any noise would be expected to attenuate within a small distance from the source. In transit vessels may add to these acoustic signatures, though a significant amount of marine traffic typically uses the Kyle Rhea Strait, including a regular ferry service. However, the area of effect is considered to represent a negligible portion of their available foraging area.</p> <p>Therefore, for the purposes of this assessment, no LSE is concluded for above water, underwater noise and visual disturbance.</p> <p>Given that the operations are occurring close to shore and not within the constrained narrows of Kyle Rhea Strait, no LSE is concluded for barrier to species movement.</p>
Rum SPA	[Redacted] (breeding)	Light; Vessel Disturbance; Collision risk.	Lighting may be required for construction activities that occur during hours of darkness. Birds using Kyle Rhea already experience multiple sources of a range of lighting types, and the sea birds (and eagles)

Site Name	Qualifying Features (underlined are not included in HRA)	Pressures assessed	Conclusions
	Red-throated diver <i>Gavia stellata</i> (breeding) Manx shearwater <i>Puffinus puffinus</i> (breeding) Black-legged kittiwake <i>Rissa tridactyla</i> (breeding) Common guillemot <i>Uria aalge</i> (breeding) Seabird assemblage (breeding)		<p>using the area are predominantly diurnal species. No LSE is concluded for disturbance due to light.</p> <p>Birds will only be affected by vessel disturbance during the maximum 8 weeks, for construction and 13 visits per week over the 6 year operation phase. The area of effect is negligible in the context of the total habitat available to birds in the region. No LSE is concluded for disturbance due to vessel disturbance.</p> <p>Collision risk is considered unlikely during daylight hours and in good weather. While there will be some additional vessel movements associated with the operations, a significant amount of marine traffic typically uses the Kyle Rhea Strait, including a regular ferry service.</p> <p>No LSE is concluded for disturbance due to collision risk.</p>
Canna and Sanday SPA	Atlantic puffin <i>Fratercula arctica</i> (breeding) European herring gull <i>Larus argentatus</i> (breeding) European shag <i>Phalacrocorax aristotelis</i> (breeding) Black-legged kittiwake <i>Rissa tridactyla</i> (breeding) Common guillemot <i>Uria aalge</i> (breeding)	Light; Vessel disturbance; Collision risk.	<p>Lighting may be required for construction activities that occur during hours of darkness. Birds using Kyle Rhea already experience multiple sources of a range of lighting types, and the sea birds (and eagles) using the area are predominantly diurnal species. No LSE is concluded for disturbance due to light.</p> <p>Birds will only be affected by vessel disturbance during the maximum 8 weeks, for construction and 13 visits per week over the 6 year operation phase. The area of effect is negligible in the context of the total habitat available to birds in the region. No LSE is concluded for disturbance due to vessel disturbance.</p> <p>Collision risk is considered unlikely during daylight hours and in good weather. While there will be some additional vessel movements associated with the operations, a significant amount of marine traffic typically uses the Kyle Rhea Strait, including a regular ferry service.</p> <p>No LSE is concluded for disturbance due to collision risk.</p>
Shiant Isles SPA	Razorbill <i>Alca torda</i> (breeding) Barnacle goose <i>Branta leucopsis</i> (non-breeding)	Disturbance.	<p>Lighting may be required for construction activities that occur during hours of darkness. Birds using Kyle Rhea already experience multiple sources of a range of lighting types, and the sea birds (and eagles)</p>

Site Name	Qualifying Features (underlined are not included in HRA)	Pressures assessed	Conclusions
	Atlantic puffin <i>Fratercula arctica</i> (breeding) Northern fulmar <i>Fulmarus glacialis</i> (breeding) European shag <i>Phalacrocorax</i> <i>aristotelis</i> (breeding) Black-legged kittiwake <i>Rissa tridactyla</i> (breeding) Common guillemot <i>Uria</i> <i>aalge</i> (breeding)		<p>using the area are predominantly diurnal species. No LSE is concluded for disturbance due to light.</p> <p>Birds will only be affected by vessel disturbance during the maximum 8 weeks, for construction and 13 visits per week over the 6 year operation phase. The area of effect is negligible in the context of the total habitat available to birds in the region. No LSE is concluded for disturbance due to vessel disturbance.</p> <p>Collision risk is considered unlikely during daylight hours and in good weather. While there will be some additional vessel movements associated with the operations, a significant amount of marine traffic typically uses the Kyle Rhea Strait, including a regular ferry service.</p> <p>No LSE is concluded for disturbance due to collision risk.</p>

7.6.5 REPORT TO INFORM APPROPRIATE ASSESSMENT

During initial screening, no LSE could not be concluded for the following three sites:

- Reefs - Lochs Duich, Long and Alsh SAC;
- Harbour porpoise - Inner Hebrides and the Minches SAC;
- [Redacted] - Kinloch and Kyleakin Hills SAC.

A Report to Inform Appropriate Assessment (RIAA) have been completed for all three sites to assess LSE (Appendix B). The conclusion of the RIAA is no adverse effect on site integrity is determined for all of the sites screened into assessment and their designated features as a result of slipway construction or operation. The full RIAA is presented in Appendix B.

7.7 TOURISM AND RECREATION

7.7.1 BASELINE

7.7.1.1 SAILING AND RECREATIONAL BOATING

No ports and harbours are located in the immediate vicinity of the proposed temporary slipway. Sailing and recreational boating activity exhibits high average vessel densities in the wider region surrounding Skye (EMODnet, 2023). In the direct vicinity of the proposed temporary slipway, vessel densities for both sailing and pleasure craft are low. Close to the Skye Bridge (approximately 5 km northwest of the proposed temporary slipway) vessel densities for both sailing and pleasure craft are observed to reach medium to high annual density averages (EMODnet, 2023).

7.7.1.2 DIVE SITES

Given its clear water and high ecological value, the waters surrounding Skye are popular amongst recreational SCUBA divers. Based on dive hot spot data presented on the Marine Directorate interactive mapper it is understood recreational drift diving occurs around Skye with a higher density along Kyle Rhea Strait (Scottish Government (Marine Directorate), 2015).

7.7.1.3 SEA KAYAKING

Sea kayaking and canoeing are popular around western Scotland and Skye; the Kyle Rhea Strait is particularly popular given the high tidal flow of the channel.

7.7.1.4 NATURE TOURISM

The Isle of Skye is a hub for wildlife and attracts wildlife watchers from a wide outreach. Nature tourism on the island draws in tourists wanting to see a range of notable marine species including (Isle of Skye, 2024a):

- [Redacted]
- [Redacted]
- Dolphins;
- Whales;
- Seals;

- Atlantic Salmon;
- Gannets;
- Puffins.

Species of note in direct vicinity to the proposed temporary slipway include [Redacted]. The shoreline at Kyle Rhea, approximately 200 m inland of the Glenelg to Kyle Rhea ferry, houses an [Redacted], that is commonly used by hikers and wildlife watchers in the area. Seals are also often spotted within this area (Isle of Skye, 2024b). Potential impacts on marine mammals (including [Redacted]) are discussed further in Section 7.4.

7.7.2 POTENTIAL IMPACTS

The Project involves the construction of a temporary slipway, as set out in Section 3. Given the location, and the onshore use of earthmoving plant and machinery, during construction and decommissioning; and the use of work and safety vessels in the water during construction, operation and decommissioning, there exists some potential for impact to recreation and tourism from disturbance.

Table 7-12 summarises the realistic worst-case potential effects of tourism and recreation.

TABLE 7-12: PROJECT PARAMETERS RELEVANT TO EFFECTS ON TOURISM AND RECREATIONAL RECEPTORS

Effect	Worst-case Scenario	Justification
Disturbance/reduced access for coastal recreational users from onshore activity	It is anticipated that the construction would take a total of 8 weeks (including weather downtime).	The scenario represents the maximum spatial and temporal disturbances to users and could result in a temporary displacement of access in the area.
Disturbance from marine activities, including disruption to recreational water activities	Two vessels are likely to be present during construction period. Operations vessel movements are anticipated to be no more than 13 visits per week over the 6 year operation phase of the slipway. Decommissioning is anticipated to be undertaken using a similar method to construction.	Numbers of vessels, and associated vessel movements, represents the maximum potential for disturbance and collision risk.

7.7.3 IMPACT ASSESSMENT

7.7.3.1 DISRUPTION/REDUCED ACCESS FOR COASTAL TOURISM

Changes to access and amenity, and other sources of disruption caused during the construction phase, such as increase in noise, air quality and visual impacts can affect the amenity value for users of the coastline.

Sensitivity of Receptors

The key receptors, namely tourism and recreation users of the area, are assessed as being of **Medium** sensitivity. Although the wider area is of importance to tourism and recreation users, use of the location surrounding the proposed temporary slipway is limited. It is approximately 1 hour's walk from the nearest car park, and recreational use heatmaps show limited recorded activity between the Kyle Rhea [Redacted] car park, and the proposed temporary slipway location.

Magnitude of Effect

The Construction Environmental Risk Assessment Schedule (ERAS) (RJ McLeod, 2024) notes that noise in the working area is highly likely, however mitigation will be embedded, such that all working machinery will be fitted with noise reduction systems, so that levels of noise will not affect the public. The ERAS assesses the scale of effect, following mitigation, to be Negligible.

The ERAS (RJ McLeod, 2024) also notes that airborne fumes from exhausts, in the working area are highly likely. Mitigation will be embedded, so that all working machinery will be fitted with carbon emissions reduction systems, and will be regularly maintained. Therefore, levels of airborne fumes will not affect the public. The ERAS assesses the scale of effect, following mitigation, to be **Negligible**.

The worst-case for disruption to coastal recreational users is assessed to occur during the 8 weeks (including weather downtime) when construction is progressing when mobile plant and vessels will be on site. Decommissioning works will be of short duration and, broadly, the reverse of the construction sequence. As such, impacts are expected to be similar to, but not greater than, those expected during construction. Disruption during the operation phase will be reduced, compared with construction/decommissioning activities.

It is not considered likely that disruption and reduced access will increase to such a degree that it discourages people from visiting the area (i.e. will not reduce visitor numbers) or affect tourism in and around Skye, including specific events or attractions. However, there may be some temporary reduced amenity to local users for the duration of the construction phase. The magnitude of impact is assessed as **Low**, to reflect the localised and short-term nature of changes.

Assessment Conclusion

Medium sensitivity, combined with **Low** magnitude, mean that the impact of disruption/reduced access for coastal tourism is assessed as **Minor** adverse, **Not Significant** in EIA terms.

7.7.3.2 DISTURBANCE FROM MARINE ACTIVITIES

Recreational marine users are likely to experience obstruction/alteration, and potentially increased collision risks via construction (and decommissioning) and operation activity, associated with work vessels; as well as displacement of recreational vessels (short term or temporary) due to Safety Zones during construction (and/or decommissioning) phase. It is not anticipated that the proposed temporary slipway will enable additional access to the area, as the use of the slipway will be restricted.

Sensitivity of Receptors

Within the vicinity of the proposed temporary slipway location, vessel densities are low for sailing and pleasure craft; so, although there is possibility of disturbance due to increased presence of vessels, this receptor has some tolerance to accommodate this particular effect and will be able to adapt. The sensitivity of marine recreational users to disturbance associated with construction (and decommissioning) is therefore assessed as **Medium**.

Magnitude of Effect

It is noted that boat-based activity shows low vessel densities for both sailing and pleasure craft in the vicinity of the proposed temporary slipway location; whilst vessel densities for both sailing and pleasure craft are higher close to the Skye Bridge, which is approximately 5 km northwest of the proposed temporary slipway.

Slipway construction will occur at the shoreline, in very shallow water, and one safety boat will be present, at all times, during the construction period. Embedded mitigations such as the promulgation of information, including Notices to Mariners (NtMs), will notify sea users of the construction work.

The magnitude of impact is assessed as **Negligible**, due to the short-time scale of construction, the shallow water depths at the construction site, and the use of Safety Zones and the presence of a safety vessel at all times of construction (or decommissioning).

During operation, there will be a maximum of 13 vessel movements per week. A significant amount of marine traffic typically uses the Kyle Rhea Strait, so the additional shipping movements associated with the operations will be small when compared with the overall baseline of other vessels in the wider area. The magnitude of impact is assessed as **Low**, due to the small increase in presence of vessels over the operation phase.

Assessment Conclusion

The impact of disruption/reduced access during construction and decommissioning for coastal tourism is assessed as **Negligible, Not Significant** in EIA terms. The impact of disruption/reduced access during operation for coastal tourism is assessed as **Minor Adverse, Not Significant** in EIA terms.

Key Mitigation Measures

Impacts are not significant, therefore mitigation measures are not necessary to reduce significance further.

7.8 SEASCAPE AND VISUAL RECEPTORS

7.8.1 BASELINE

The area surrounding the proposed temporary slipway is considered to be an area of a highly scenic landscape, common to Skye and the northwest of Scotland. Approximately 10 km south of the proposed temporary slipway is the Knoydart National Scenic Area, which has outstanding scenic value derived from the combination of sea lochs and rugged mountains (NatureScot 2022b). To the northeast of Skye there is a Local Landscape Area.

The seascape of the west coast of Scotland is characterised by views of long, narrow stretches of water between land masses, creating a highly scenic landscape with a variety of views with a backdrop of the sea. The visual aspect of the Kyle Rhea Strait includes ferry crossings within this stretch of water.

7.8.2 POTENTIAL IMPACTS

The Project involves the construction of a temporary slipway, as set out in Section 3. During construction, the following activities are expected to take place:

- Mobilisation of plant and work vessels to site;
- Commence sediment removal and preparing seabed for slipway;
- Form temporary bund with ton bags filled with gravel to protect works;
- Install geotextile and prepare foundations;
- Install pre-cast blocks to seabed and connect with dowels;
- Complete infill works at top of slipway;
- Demobilise equipment from work area.

Decommissioning works will be of short duration and broadly the reverse of the construction sequence. As such, impacts are expected to be similar to, but not greater than, those expected during construction.

Following construction, a temporary slipway will be present on-site, in a location where no slipway was previously located. During operation, there will be a maximum of 13 vessel movements per week. The presence of the slipway, for the 6 year duration of the Project, is deemed the realistic worst-case in terms of visual impact.

7.8.3 IMPACT ASSESSMENT

Sensitivity of Receptors

The sensitivity of visual receptors is assessed in terms of the susceptibility of the receptor to the type of change proposed, and the scale of change depends on the degree to which the character of the landscape is changed through removal of existing components, or addition of new ones. Of particular importance is how the changes affect the key characteristics of the landscape. The landscape and seascape of this part of Skye consists of landscapes and seascapes which include marine operations and usage, including slipways and larger developments, such as the Skye ferry terminal and pier at Glenelg and the pier at Kyle Rhea. The landscape and seascape is assessed as having a **Medium** sensitivity to the presence of the proposed temporary slipway.

Magnitude of Effect

The presence of the proposed temporary slipway will constitute a perceptible, but small change to the characteristics and character of the area as a result of the addition of a feature, however the slipway will be present for a limited duration, and effects are reversible when the proposed temporary slipway is decommissioned and removed. The magnitude of changes is assessed as **Low**.

Assessment Conclusion

The visual impact of the construction and operation of the proposed temporary slipway is, therefore, assessed as **Minor** adverse, **Not Significant** in EIA terms.

Key Mitigation Measures

Impacts are not significant, therefore mitigation measures are not necessary to reduce significance further.

8. SUMMARY AND CONCLUSION

The Project description presented in Section 4 outlines the marine activities proposed for the proposed temporary slipway. An environmental assessment has been completed in order to understand the impacts of the proposed temporary slipway on the physical, biological and human environment. On the basis of known sensitivities and proposed activities, specific impact assessments were undertaken for the following topics:

- Physical Processes (Section 7.1);
- Water and Sediment Quality (Section 7.2);
- Benthic Ecology (Section 7.3);
- Marine Mammals (including [Redacted] (Section 7.4);
- Ornithology (Section 7.5);
- Designated Sites and HRA (Section 7.6);
- Tourism and Recreation (Section 7.6.5);
- Seascape and Visual Receptors (Section 7.8);
- Water Framework Directive Compliance (Appendix A);
- RIAA (Appendix B).

As outlined in Sections 7.1-7.8 and Appendix A and B, for the majority of features it is predicted that there will be **No Significant Effect** on the receptors identified as a result of the proposed activities for the proposed temporary slipway. However, due to the requirements of Habitats Regulations assessment processes (in a precautionary manner) three SACs have been taken forward to appropriate assessment (see Appendix B for the RIAA):

- Reefs - Lochs Duich, Long and Alsh SAC;
- Harbour porpoise - Inner Hebrides and the Minches SAC;
- [Redacted] - Kinloch and Kyleakin Hills SAC.

The conclusion of the RIAA is no adverse effect on the integrity of the three SACs screened into appropriate assessment as a result of slipway construction or operation.

Such conclusions can be drawn because the inherent nature of the proposed temporary slipway will not result in a significant impact and due to SSENT developing control and mitigation measures to ensure that the scale of any impact is of an acceptable level. SSENT recognises that the effective implementation of these control and mitigation measures, summarised in Table 6-5 will be critical to ensuring that the Project activities do not result in a significant impact.

Construction Environmental Management Plans (CEMPs) will be developed as part of the Project's embedded mitigation, which will ensure that all personnel involved in the Project are fully aware of the manner in which activities must be conducted. It is noted that these documents will be provided to MD-LOT for acceptance prior to the commencement of relevant installation activities. On the basis of the impact assessments presented in Sections 7.1-7.8, Appendix A and Appendix B, and the control and mitigation measures summarised in Table 6-5, it is anticipated that the Project outlined in Section 4 will be conducted with **No Significant Effect** on any environmental or societal receptors identified.

9. REFERENCES

- Barne JH, Robson CF, Kaznowska SS, Doody JP, Davidson NC and Buck AL, 1997. *Coasts and seas of the United Kingdom. Regions 15 & 16. North-west Scotland: the Western Isles and west Highland*. Peterborough, Joint Nature Conservation Committee. (Coastal Directories Series.).
- Benhemma-Le Gall A, Thompso, P, Merchan, N and Graham I, 2023. Vessel noise prior to pile driving at offshore windfarm sites deters harbour porpoises from potential injury zones. *Environmental Impact Assessment Review*, 103, 107271.
- British Geological Survey, 2024a. Offshore Bedrock 250k: Lithostratigraphic Units. BGS GeoIndex Offshore WMS, electronic dataset [Accessed September 2024].
- British Geological Survey 2024b. Seabed Sediments 250k. BGS GeoIndex Offshore WMS, electronic dataset [Accessed September 2024].
- British Geological Survey 2022. Quaternary deposits thickness across the UK Continental Shelf (2014 Version). NERC EDS National Geoscience Data Centre. Available online at <https://doi.org/10.5285/0cc60652-c02c-4931-b5bf-def9299b68f2> [Accessed September 2024].
- EMODnet, 2023. EMODnet Human Activities, Vessel Density Map. Available at: <https://emodnet.ec.europa.eu/geonetwork/srv/eng/catalog.search#/metadata/0f2f3ff1-30ef-49e1-96e7-8ca78d58a07c> [Accessed September 2024].
- Erbe C, Dunlop R and Dolman S. 2018. Effects of Noise on Marine Mammals. In Slabbekoorn H, Dooling RJ, Popper AN and Fay RR (Eds.), *Effects of Anthropogenic Noise on Animals* pp. 277–309. Springer New York. https://doi.org/10.1007/978-1-4939-8574-6_10
- European Environment Agency (EEA), 2024. EUNIS habitat classification 2012 amended 2019. Available online at: <https://eunis.eea.europa.eu/habitats-code-browser.jsp> [Accessed September 2024].
- Folk RL, 1954. The Distinction between Grain Size and Mineral Composition in Sedimentary-Rock Nomenclature. *The Journal of Geology*, 62, 344-359. <https://doi.org/10.1086/626171>.
- Forrester R, Andrews IA, McInery C, Murray R, Zonfrillo B, Jardine D, and Grundy D, 2007. *Birds of Scotland*. Scottish Ornithological Society.
- Frankish CK, von Benda-Beckmann AM, Teilmann J, Tougaard J, Dietz R, Sveegaard S, Binnerts B, de Jong CAF and Nabe-Nielsen J. 2023. Ship noise causes tagged harbour porpoises to change direction or dive deeper. *Marine Pollution Bulletin*, 197, 115755. <https://doi.org/10.1016/j.marpolbul.2023.115755>
- Furness RW, Wade HM, and Masden EA, 2013. Assessing vulnerability of marine bird populations to offshore wind farms. *Journal of Environmental Management*, 119: pp. 56-66.
- Gilles A, Authier M, Ramirez-Martinez NC, Araújo H, Blanchard A, Carlström J, Eira C, Dorémus G, FernándezMaldonado C, Geelhoed SCV, Kyhn L, Laran S, Nachtsheim D, Panigada S, Pigeault R, Sequeira M, Sveegaard S, Taylor NL, Owen K, Saavedra C, Vázquez-Bonales JA, Unger B, and Hammond PS, 2023. Estimates of cetacean abundance in European Atlantic

waters in summer 2022 from the SCANS-IV aerial and shipboard surveys. Final report published 29 September 2023. 64 pp.

Guilford T, Meade J, Freeman R, Biro D, Evans T, Bonadonna F, Boyle D, Roberts S, and Perrins CM, 2008. GPS tracking of the foraging movements of Manx Shearwaters *Puffinus puffinus* breeding on Skomer Island, Wales. *Ibis*, 150: pp.462-473.

Hammond PS, Berggren P, Benke H, Borchers DL, Collet A, Heide-Jørgensen MP, Heimlich S, Hiby aRR, Leopold MFF, and Øien N, 2002. Abundance of harbour porpoise and other cetaceans in the North Sea and adjacent waters. *Journal of Applied Ecology*, 39: 361–376pp.

Heinis F, de Jong C, Ainslie M, Borst W and Vellinga T. 2013. *Monitoring programme for the Maasvlakte 2, Part III - The effects of underwater sound*.

Isle of Skye, 2024a. Available at: <https://www.isleofskye.com/skye-guide/wildlife> [Accessed August 2024].

Isle of Skye, 2024b. Available at: <https://www.isleofskye.com/skye-guide/skye-walks/island-walks/kylerrhea> [Redacted] [Accessed August 2024].

JNCC, 2018. Kinloch and Kyleakin Hills SAC. Available online at: <https://jncc.gov.uk/jncc-assets/SAC-N2K/UK0030176.pdf> [Accessed September 2024].

JNCC, 2024a. Marine Habitat Classification for Britain and Ireland. Available online at: <https://mhc.jncc.gov.uk/> [Accessed September 2024]. <https://mhc.jncc.gov.uk/> [Accessed September 2024].

JNCC, 2024b. 1170 Reefs. Available online at: <https://sac.jncc.gov.uk/habitat/H1170/> [Accessed September 2024]. <https://sac.jncc.gov.uk/habitat/H1170/> [Accessed September 2024].

JNCC, 2024c. Lochs Duich, Long, and Alsh Reefs SAC. Available online at: <https://sac.jncc.gov.uk/site/UK0017077> [Accessed September 2024].

Kober K, Webb A, Win I, Lewis M, O'Brien S, Wilson LJ, and Reid JB, 2010. An analysis of the numbers and distribution of seabirds within the British Fishery Limit aimed at identifying areas that qualify as possible marine SPAs. JNCC Report No. 431. JNCC, Peterborough. Available online at: <https://hub.jncc.gov.uk/assets/7db38547-5074-4136-8973-fd7d97666120> [Accessed September 2024].

MacArthur Green (2022). Skye Reinforcement Project Appendix V2-4.7: Kinloch and Kyleakin Hills Special Area of Conservation Shadow Habitats Regulations Appraisal. Available online at: <https://www.ssen-transmission.co.uk/globalassets/projects/skye-reinforcement---section-37-application/section-37-application---volume-5---appendices/volume-5---appendix-v2-4.7---kinloch-and-kyleakin-hills-sac-shadow-hra.pdf> [Accessed September 2024].

Marine Directorate (2019). *Designated haul-out sites for seals (Protection of Seals Orders) | Marine Scotland Information*. [online] Available at: <https://marine.gov.scot/maps/446>. [Accessed September 2024].

MarineSpace Ltd, 2022. Kyle Rhea Overhead Cable Replacement: Marine Environmental Assessment Report. [Accessed August 2024].

- Merkel FR, and Johansen KL, 2011. Light-induced bird strikes on vessels in Southwest Greenland. *Mar Pollut Bull*, 62 (11): pp. 2330-2336.
- Mitchell PI, Newton SF, Ratcliffe N, Dunn TE, 2004. Seabird populations of Britain and Ireland: results of the Seabird 2000 census (1998-2002). T & A D Poyser: London.
- Moore CG, and Roberts JM, 2011. An assessment of the conservation importance of species and habitats identified during a series of recent research cruises around Scotland. Scottish Natural Heritage Commissioned Report No. 446.
- NatureScot, 2014. Lochs Duich, Long and Alsh Marine Protected Area Site Summary. Available online at: <https://sitelink.nature.scot/site/10416> [Accessed September 2024].
- NatureScot, 2022a. Available online here: <https://www.nature.scot/plants-animals-and-fungi/mammals/land-mammals> [Redacted] :text=Today%2C%20the%20species%20is%20flourishing,lochs%2C%20rivers%20or%20the%20sea [Accessed September 2024].
- NatureScot, 2022b. Available online here: <https://sitelink.nature.scot/site/9132> [Accessed September 2024].
- Neill *et al.*, 2017. The wave and tidal resource of Scotland. *Renewable Energy*, 114: pp. 3-17.
- NRP (Natural Research Projects Limited), 2012. Kyle Rhea Tidal Array Project Year 1 Birds Technical Report. September 2012. Available online at: <https://tethys.pnnl.gov/publications/kyle-rhea-tidal-stream-array-volume-ii-environmental-statement> [Accessed September 2024].
- Oakley JA, Williams AT and Thomas T. 2017. Reactions of harbour porpoise (*Phocoena phocoena*) to vessel traffic in the coastal waters of South West Wales, UK. *Ocean and Coastal Management*, 138, 158–169.
<https://doi.org/https://doi.org/10.1016/j.ocecoaman.2017.01.003>
- Ocean Ecology Ltd, 2024. Kyle Rhea Intertidal Surveys 2024: Survey Report. Report No. OEL_MARKYLE0124_SYR.
- Richardson WJ, Greene Jr CR, Malme CI and Thomson DH. 1995. *Marine Mammals and Noise*. Academic Press.
- RJ McLeod, 2025. Environmental Inspection Report Kylerhea Slipway [Redacted] Report.
- Royal HaskoningDHV, 2013. The Kyle Rhea Tidal Stream Array Volume II Environmental Statement. Available online at: <https://tethys.pnnl.gov/publications/kyle-rhea-tidal-stream-array-volume-ii-environmental-statement> [Accessed September 2024].
- RSPB (Royal Society for the Protection of Birds), 2022a. Red-throated diver. Available online at: <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/red-throated-diver/> [Accessed September 2024].
- RSPB (Royal Society for the Protection of Birds), 2022b. Black-throated diver. Available online at: <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/black-throated-diver/> [Accessed September 2024].

RSPB (Royal Society for the Protection of Birds), 2022c. Manx shearwater. Available online at: <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/manx-shearwater/> [Accessed September 2024].

RSPB (Royal Society for the Protection of Birds), 2022d. Gannet. Available online at: <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/gannet/> [Accessed September 2024].

RSPB (Royal Society for the Protection of Birds), 2022e. Cormorant. Available online at: <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/cormorant/> [Accessed September 2024].

RSPB (Royal Society for the Protection of Birds), 2022f. Shag. Available online at: <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/shag/> [Accessed September 2024].

RSPB (Royal Society for the Protection of Birds), 2022g. Great skua. Available online at: <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/great-skua/> [Accessed September 2024].

RSPB (Royal Society for the Protection of Birds), 2022h. Arctic skua. Available online at: <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/arctic-skua/> [Accessed September 2024].

RSPB (Royal Society for the Protection of Birds), 2022i. Black-headed gull. Available online at: <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/black-headed-gull/> [Accessed September 2024].

RSPB (Royal Society for the Protection of Birds), 2022j. Common gull. Available online at: <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/common-gull/> [Accessed September 2024].

RSPB (Royal Society for the Protection of Birds), 2022k. Mediterranean gull. Available online at: <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/mediterranean-gull/> [Accessed September 2024].

RSPB (Royal Society for the Protection of Birds), 2022l. Herring gull. Available online at: <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/herring-gull/> [Accessed September 2024].

RSPB (Royal Society for the Protection of Birds), 2022m. Great black-backed gull. Available online at: <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/great-black-backed-gull/> [Accessed September 2024].

RSPB (Royal Society for the Protection of Birds), 2022n. Lesser black-backed gull. Available online at: <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/lesser-black-backed-gull/> [Accessed September 2024].

RSPB (Royal Society for the Protection of Birds), 2022o. Kittiwake. Available online at: <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/kittiwake/> [Accessed September 2024].

RSPB (Royal Society for the Protection of Birds), 2022p. Little tern. Available online at: <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/little-tern/> [Accessed September 2024].

RSPB (Royal Society for the Protection of Birds), 2022q. Common tern. Available online at: <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/common-tern/> [Accessed September 2024].

RSPB (Royal Society for the Protection of Birds), 2022r. Arctic tern. Available online at: <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/arctic-tern/> [Accessed September 2024].

RSPB (Royal Society for the Protection of Birds), 2022s. Roseate tern. Available online at: <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/roseate-tern/> [Accessed September 2024].

RSPB (Royal Society for the Protection of Birds), 2022t. Sandwich tern. Available online at: <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/sandwich-tern/> [Accessed September 2024].

RSPB (Royal Society for the Protection of Birds), 2022u. Black guillemot. Available online at: <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/black-guillemot/> [Accessed September 2024].

RSPB (Royal Society for the Protection of Birds), 2022v. Guillemot. Available online at: <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/guillemot/> [Accessed September 2024].

RSPB (Royal Society for the Protection of Birds), 2022w. Razorbill. Available online at: <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/razorbill/> [Accessed September 2024].

RSPB (Royal Society for the Protection of Birds), 2022x. Puffin. Available online at: <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/puffin/> [Accessed September 2024].

RSPB (Royal Society for the Protection of Birds), 2022aj. White-tailed eagle. Available online at: <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/white-tailed-eagle/> [Accessed September 2024].

RSPB (Royal Society for the Protection of Birds), 2022ak. [Redacted] Available online at: [https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/\[Redacted\]](https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/[Redacted]) [Accessed September 2024].

SCOS (Special Committee on Seals), 2022. Scientific Advice on Matters Related to the Management of Seal Populations: 2022. 206pp. Available online at: <http://www.smru.st-andrews.ac.uk/files/2023/09/SCOS-2022.pdf> [Accessed September 2024].

Scottish Government (Marine Directorate), 2015. Marine Recreation and Tourism Survey 2015 - SCUBA diving in the sea (restricted zoom). Available at: <https://marine.gov.scot/maps/1025> [Accessed September 2024].

SEPA, 2024. Regulations: Water. Available at: <https://www.sepa.org.uk/regulations/water/> [Accessed August 2024].

Southall BL, Finneran JJ, Reichmuth C, Nachtigall PE, Ketten DR, Bowles AE, Ellison WT, Nowacek DP & Tyack PL, 2019. Marine mammal noise exposure criteria: Updated scientific recommendations. *Aquatic Mammals*, 45:125-232

SSENT (2022) Skye Reinforcement Project EIA Report: Volume 1 - Main Report September 2022. Available online at: <https://www.ssen-transmission.co.uk/globalassets/projects/skye-reinforcement---section-37-application/section-37-application---volume-1---main-report/volume-1---main-report---front-cover-contents-glossary-and-preface.pdf> [Accessed September 2024].

Todd VL, Todd IB, Gardiner JC, Morrin EC, MacPherson NA, DiMarzio NA & Thomsen F, 2015. A review of impacts of marine dredging activities on marine mammals. *ICES Journal of Marine Science*, 72:328-340.

Tyler-Walters H, James B, Carruthers M (eds.), Wilding C, Durkin O, Lacey C, Philpott E, Adams L, Chaniotis PD, Wilkes PTV, Seeley R, Neilly M, Dargie J, and Crawford-Avis OT, 2016. Descriptions of Scottish Priority Marine Features (PMFs). Scottish Natural Heritage Commissioned Report No. 406.

visitMyHarbour.com, 2024. Kyle of Lochalsh, Kyleakin and Approaches. Available online at: <https://www.visitmyharbour.com/harbours/west-scotland-northern-ireland/kyle-akin/expanded.asp> [Accessed September 2024].

Waggitt JJ, Evans PGH, Andrade J, Banks AN, Boisseau O, Bolton M, Bradbury G, Brereton T, Camphuysen CJ, Durinck J, Felce T, Fijn RC, Garcia-Baron I, Garthe S, Geelhoed SCV, Gilles A, Goodall M, Haelters J, Hamilton S, Hartney-Mills L, Hodgins N, James K, Jessopp M, Kavanagh AS, Leopold M, Lohrengel K, Louzao M, Markones N, Martínez-Cedeira J, Cadhla OÓ, Perry SL, Pierce GJ, Ridoux V, Robinson KP, Santos MB, Saavedra C, Skov H, Stienen EWM, Sveegaard S, Thompson P, Vanerman N, Wall D, Webb A, Wilson J, Wanless S, and Hiddink JG, 2019. Distribution maps of cetacean and seabird populations in the North-East Atlantic. *Journal of Applied Ecology*, 57: pp.253-269.

Wakefield ED, Owen E, Baer J, Carroll MJ, Daunt F, Dodd SG, Green JA, Guilford T, Mavor RA, Miller PI, Newell MA, 2017. Breeding density, fine-scale tracking, and large-scale modeling reveal the regional distribution of four seabird species. *Ecological Applications*, 27: pp.2074-2091.

Wisniewska DM, Johnson M, Teilmann J, Siebert U, Galatius A, Dietz R and Madsen PT 2018. High rates of vessel noise disrupt foraging in wild harbour porpoises (*Phocoena phocoena*). *Proceedings of the Royal Society B: Biological Sciences*, 285(1872), 20172314. <https://doi.org/10.1098/rspb.2017.2314>

Woodward I, Thaxter CB, Owen E, and Cook ASCP, 2019. Desk based revision of seabird foraging ranges used for HRA screening. BTO Report No. 724: 139pp. The British Trust for Ornithology, Thetford.



APPENDIX A

WATER FRAMEWORK DIRECTIVE SCOPING ASSESSMENT



Water Framework Directive assessment: scoping template for activities in estuarine and coastal waters

Form adapted from Environment Agency Scoping Template¹⁴

Activity Details	Description, notes or more information
Applicant name	Scottish Hydro Electric Transmission PLC (Scottish and Southern Electricity Networks Transmission)
Application reference number (where applicable)	<i>n/a</i>
Name of activity	Proposed temporary slipway
Brief description of activity	Proposed construction of a temporary slipway which shall support the delivery and off-loading of plant and material used in the construction works to the Skye Reinforcement project (over-head line).
Location of activity (central point XY coordinates or national grid reference)	NG797245
Footprint of activity (ha)	0.06 hectares
Timings of activity (including start and finish dates)	Construction 8 weeks (including weather downtime). Operation for 6 years.
Extent of activity (for example size, scale frequency, expected volumes of output or discharge)	Construction of temporary slipway to be in place for 5 years. Slipway will be removed after the 6 years.
Use or release of chemicals (state which ones)	None

Water body	Description, notes or more information
WFD water body name	Loch Alsh
Water body ID	200352

¹⁴ Available from https://assets.publishing.service.gov.uk/media/5a7f3831e5274a2e8ab4ad9b/wfd_scoping_template.odt [Accessed November 2024]



River basin district name	<i>Scotland</i>
Water body type (estuarine or coastal)	<i>Coastal</i>
Water body total area (ha)	<i>28.85 km²</i>
Overall water body status (2015)	<i>Good</i>
Ecological status	<i>Good</i>
Chemical status	<i>Pass</i>
Target water body status and deadline	<i>Good (2021)</i>
Hydromorphology status of water body	<i>High</i>
Heavily modified water body and for what use	<i>No</i>
Phytoplankton status	<i>High</i>
History of harmful algae	<i>No evidence</i>
WFD protected areas within 2km	<i>Yes: Kinloch and Kyleakin Hills SAC, Loch Duich, Long and Alsh Reefs SAC and Inner Hebrides and the Minches SAC</i>



Specific risk information

Section 1: Hydromorphology

Risk	Yes	No	Hydromorphology risk issue(s)
Activity could impact on the hydromorphology (for example morphology or tidal patterns) of a water body at high status	Requires impact assessment	Impact assessment not required	Not within a water body at high status.
Activity could significantly impact the hydromorphology of any water body	Requires impact assessment	Impact assessment not required	No. The impact area is small relative to the size of the receiving environment. The impact is not predicted to cause significant, non-temporary deterioration.
Activity is in a water body that is heavily modified for the same use as your activity	Requires impact assessment	Impact assessment not required	No. The water body is not classified as HMWB.



Section 2: Biology

Habitats

Higher sensitivity habitats	Lower sensitivity habitats
chalk reef	cobbles, gravel and shingle
clam, cockle and oyster beds	intertidal soft sediments like sand and mud
intertidal seagrass	rocky shore
maerl	subtidal boulder fields
mussel beds, including blue and horse mussel	subtidal rocky reef
polychaete reef	subtidal soft sediments like sand and mud
saltmarsh	
subtidal kelp beds	
subtidal seagrass	

Risk where activity is:	Yes	No	Biology habitats risk issue(s)
0.5km ² or larger	Yes to one or more – requires impact assessment	No to all – impact assessment not required	No. The slipway footprint is 0.000595km ² .
1% or more of the water body's area			No. Considering a realistic footprint of 0.000595km ² , the Project activity will cover 0.0027% of the water body surface (28.85km ²).
Within 500m of any higher sensitivity habitat			No. No higher sensitivity habitats have been identified within 500 m of the Project activities (Marine Directorate Maps, 2024). The nearest known rocky reef feature is approximately 0.6 km from the slipway operations. Distribution evidence for this rocky reef feature is sourced from the Geodatabase of Marine features adjacent to Scotland (GeMS), currently GEMS v10 (i26). GeMS does not provide an understanding of the full coverage of the reef feature of the site. There may be other areas of reef, including areas of stony reef, that



			are not represented in this layer. Potential impacts on reefs are considered in Appendix B.
1% or more of any lower sensitivity habitat			No. Site-specific data shows that the Project activity overlaps an area of intertidal soft sediment (classed as a lower sensitivity habitat under the WFD). However, this sediment type is commonly found locally, and the scale of works will be insufficient to exceed 1% of similar habitat within the waterbody.

Fish

Risks for activities located is in an estuary or could affect fish in or entering an estuary	Yes	No	Biology fish risk issue(s)
Activity is in an estuary and could affect fish in the estuary, outside the estuary but could delay or prevent fish entering it or could affect fish migrating through the estuary	Continue with questions	Go to next section	The Project is not located near an Estuary. However, given the enclosed nature of the Scottish lochs, it cannot be ruled out that fish pass this area when migrating to/from estuaries. As such, the following questions have been completed in accordance with a precautionary approach.
Activity could impact on normal fish behaviour like movement, migration or spawning (for example creating a physical barrier, noise, chemical change or a change in depth or flow)	Requires impact assessment	Impact assessment not required	No. The proposed construction activities are of small spatial scale and temporary therefore, the impact is not predicted to cause significant and/or non-temporary deterioration.
Activity could cause entrainment or impingement of fish	Requires impact assessment	Impact assessment not required	No. No entrainment or impingement of fish will occur as a result of Project activities.



Section 3: Water quality

Risk	Yes	No	Water quality risk issue(s)
Activity could affect water clarity, temperature, salinity, oxygen levels, nutrients or microbial patterns continuously for longer than a spring neap tidal cycle (about 14 days)	Requires impact assessment	Impact assessment not required	No. An area of sediment will be disturbed during slipway construction. The effect this has on turbidity within the receiving waters differs dependent on sediment composition. Coarse material settles to the seabed relatively quickly (in the order of seconds to tens of seconds for sand or gravel), whereas fine particles (i.e. muds <63 µm) settle more slowly and can produce a plume. The residence of any plume that is produced depends on the height in the water column to which the material is ejected. The majority of the slipway lies above Chart Datum and, hence, will not be submerged during construction (and decommissioning), and sediment would be expected to settle in tens to hundreds of seconds. As such, it is not predicted that there would be any non-temporary effects
Activity is in a water body with a phytoplankton status of moderate, poor or bad	Requires impact assessment	Impact assessment not required	No. The water body has a status of High (2022).
Activity is in a water body with a history of harmful algae	Requires impact assessment	Impact assessment not required	No. There is no evidence of a history of harmful algae events.

Risks relevant to activities that use or release chemicals (for example through sediment disturbance or building works)	Yes	No	Water quality risk issue(s)
The chemicals are on the Environmental Quality Standards Directive (EQSD) list	Requires impact assessment	Impact assessment not required	No



It disturbs sediment with contaminants above Cefas Action Level 1	Requires impact assessment	Impact assessment not required	No
The chemicals released are on the Environmental Quality Standards Directive (EQSD) list	Requires impact assessment	Impact assessment not required	No

Section 4: WFD protected areas

Risk	Yes	No	Protected areas risk issue(s)
Activity is within 2km of any WFD protected area	Requires impact assessment	Impact assessment not required	Yes: Kinloch and Kyleakin Hills SAC, Loch Duich, Long and Alsh Reefs SAC and Inner Hebrides and the Minches SAC. The impacts of the Project activities on the protected areas are discussed in Section 7.6. No Bathing Waters, nutrient sensitive waters, nor Shellfish Water are located within 2 km of the Project activity.



Section 5: Invasive non-native species (INNS)

Risk	Yes	No	INNS risk issue(s)
Activity may introduce or spread INNS	Requires impact assessment	Impact assessment not required	No. Vessels will comply with the International Maritime Organization (IMO) ballast water management guidelines will ensure that the risk of potential introduction and spread of INNS will be minimised. The impact is not predicted to cause significant, non-temporary deterioration.

Summary

Receptor	Potential risk to receptor?	Risk issue(s) for impact assessment
Hydromorphology	No	-
Biology: habitats	No	-
Biology: fish	No	-
Water quality	No	-
Protected areas	Yes	Kinloch and Kyleakin Hills SAC, Loch Duich, Long and Alsh Reefs SAC and Inner Hebrides and the Minches SAC. Assessment of potential effects on nature conservation designations is provided in Section 7.6 and Appendix B of the MEA. The WFD compliance assessments defers to these sections on matters of risk to nature conservation designations.
Invasive non-native species	No	-



APPENDIX B

REPORT TO INFORM APPROPRIATE ASSESSMENT



B.1 INTRODUCTION

This Report to Inform Appropriate Assessment (RIAA) is provided in support of a Marine Licence Application (MLA) to the Marine Directorate Licensing Operations Team (MD-LOT), by Scottish and Southern Electricity Networks Transmission (SSENT, 'The Applicant'). SSENT is the trading name for Scottish Hydro Electric Transmission plc, part of the SSE Group. This RIAA is for the construction of a temporary slipway: part of the wider scheme to replace the existing electricity transmission power line that runs from Fort Augustus to Ardmore in the north of Skye, Scotland.

The temporary slipway will be required to allow access by landing craft for the transport of construction plant and materials. The proposed temporary slipway will have an operational life of approximately 6 years.

The intention is for the proposed temporary slipway to be removed once it is no longer required as part of the overhead line (OHL) construction. Hence, the presence of the slipway has been referred to as 'temporary'.

The planned replacement of the OHL is essential to maintain security of supply to homes and businesses along its route, as well as to the Western Isles, which are supplied by two subsea cables from Ardmore point.

This Appendix comprises the RIAA. In the Marine Environmental Assessment (MEA) which accompanies the Marine Licence Application (MLA), pressure pathways that could not be determined as not resulting in Likely Significant Effects (LSE) were identified for three Special Areas of Conservation (SACs):

- Lochs Duich, Alsh and Long SAC;
- Inner Hebrides and Minches SAC;
- Kinloch and Kyleakin Hills SAC.

Project design, location, and HRA Stage 1 Screening for LSE determinations are presented within the MEA.

B1.1 OVERVIEW OF THE HABITATS REGULATIONS APPRAISAL PROCESS

Habitats Regulations Assessment/Appraisal Process and the United Kingdom's Exit from the European Union

The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended¹⁵), The Conservation of Habitats and Species Regulations 2017 (as amended)¹⁶, and The Conservation of Offshore Marine Habitats and Species Regulations 2017¹⁷ (as amended), transpose the EU Habitats Directive (Council Directive 92/43/EEC)¹⁸ and certain elements of the Wild Birds Directive

¹⁵ <https://www.legislation.gov.uk/ukxi/1994/2716/contents/made>

¹⁶ <https://www.legislation.gov.uk/ukxi/2017/1012/contents/made>

¹⁷ <https://www.legislation.gov.uk/ukxi/2017/1013/contents/made>

¹⁸ Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A31992L0043>



(Directive 2009/147/EC)¹⁹ (known together as the Nature Directives), into UK and Scottish law.

Following the United Kingdom's exit from the European Union (EU), and the end of the transition period on 31 December 2020, legislation has been passed to transfer functions from the European Commission to the appropriate authorities in the UK²⁰ and Scotland²¹.

While references in an EU context throughout the legislation have been re-defined to a UK-only context, overall, the legislative changes do not result in material changes in how HRAs are undertaken in the UK. Habitat and species protection and standards will be implemented in the same or an equivalent way, maintaining existing protections for habitats and species. The environmental assessment regimes that inform planning decisions, including HRA, continue to apply post-EU exit.

HABITATS DIRECTIVE SITE DESIGNATIONS

All European protected sites and species retain the same level of protection now that the UK has left the European Union. However, The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 now provide for the creation of a 'national site network' within the UK territory. This is comprised of the European Protected Sites (which consist of Special Areas of Conservation and Special Protection Areas) already designated under the Nature Directives (Natura 2000 Network), and any further sites designated under these Regulations. Appropriate management objectives will be established for the national site network (the 'network objectives').

STAGE 1 – SCREENING AND DETERMINATION OF LIKELY SIGNIFICANT EFFECT

The screening stage examines the likely effects of a project either alone, or in combination with other projects and plans on a European site and seeks to answer the question "*can it be concluded that no likely significant effect will occur?*". The screening stage will therefore conclude one of the outcomes listed below:

- No likely significant effect;
- A likely significant effect will occur;
- It cannot be concluded that there will be no LSE.

Where the assessment concludes the second or third outcome, then the need for an Appropriate Assessment (AA) is triggered²², where the aim is to determine if the effects of a project will have an adverse effect on European sites. A Report to Inform AA (RIAA) should provide and analyse sufficient information to allow the Competent Authority (MD-LOT in the case of an MLA) to make this determination.

¹⁹ Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32009L0147>

²⁰ <https://www.legislation.gov.uk/ukxi/2019/579/contents/made>

²¹ <https://www.legislation.gov.uk/ssi/2019/113/contents/made>

²² In the case of the third outcome, European guidance (Assessment of Plans and Projects Significantly affecting Natura 2000 sites (2001)) advises that sufficient uncertainty remains to indicate that an appropriate assessment should be carried out.



The AA should exclusively focus on the qualifying features of the European site and consider any effects on the conservation objectives of those qualifying interests. It should also be based on, and supported by, evidence that stands up to scientific scrutiny. EC guidance states that without proper reasoning the assessment does not fulfil its purpose and cannot be considered “appropriate” and, therefore, the relevant plan or project cannot be consented on the basis of an insufficient AA. In terms of what is reasonable, guidance states “to identify the potential risks, so far as they may be reasonably foreseeable in the light of such information as can be reasonably obtained” (European Communities, 2000).

The AA contains two stages as listed below:

- A scientific evaluation of all the likely significant effects of a project alone, or in combination with other projects, on the relevant qualifying interests of a European site;
- A conclusion, based on outcomes of the scientific evaluation, as to whether the integrity of a European site will be compromised.

The emphasis for AA is to prove that no adverse effects due to a project will occur which would undermine a European site’s conservation integrity. Site integrity can be defined as “the coherence of its structure and function across its whole area that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified” (EC, 2000).

The AA also needs to consider any measures which will be implemented to avoid or reduce the level of impact from a project. The competent authority may also consider the use of conditions or restrictions to help avoid adverse effects on site integrity.

B.2 LOCHS DUICH, LONG AND ALSH SPECIAL AREA OF CONSERVATION

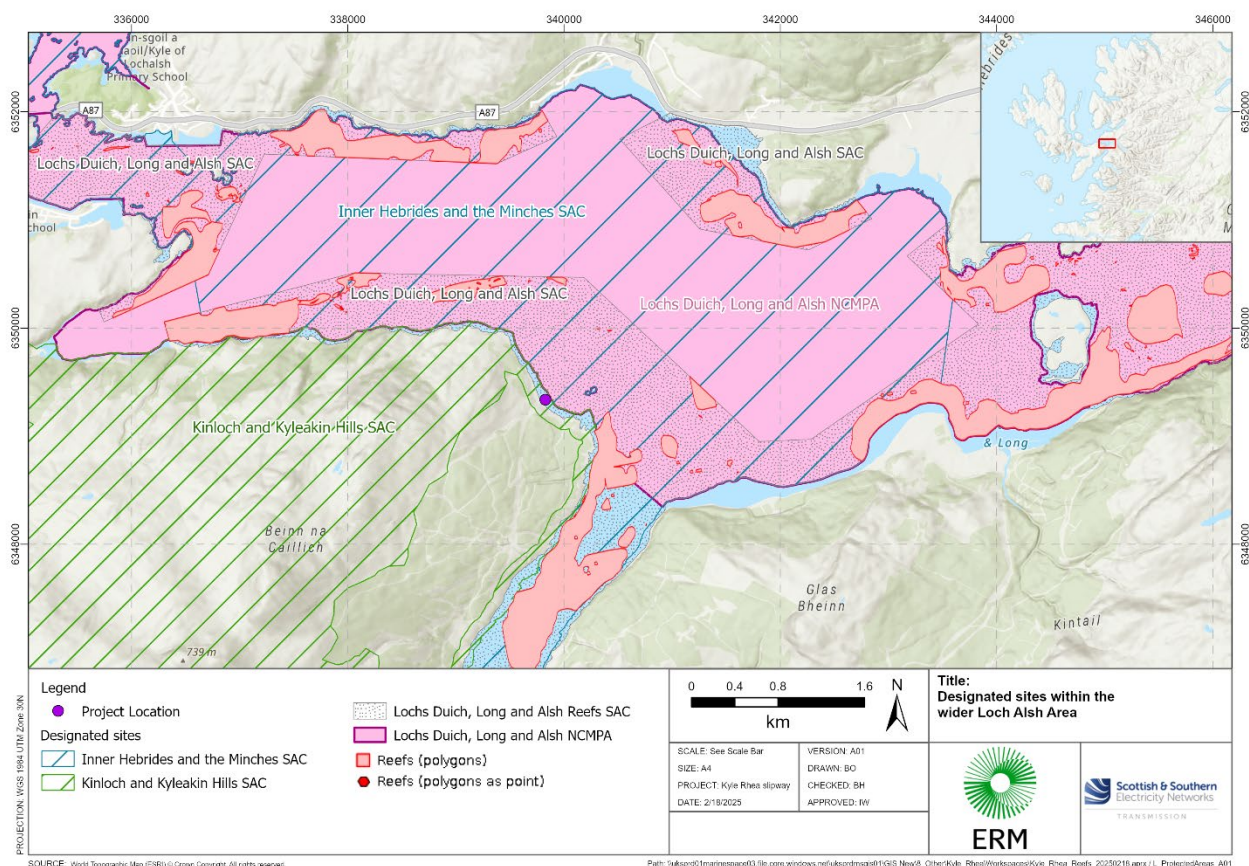
INTEREST FEATURES SUMMARY

Lochs Duich, Long and Alsh SAC was designated in 2005 for Annex I H1170 Reefs. The SAC consists of an extensive area of extremely sheltered (low energy) reefs within the system of fjordic sea lochs, Loch Duich, Loch Long and Loch Alsh located in northwest Scotland (Figure). JNCC (2024) states:

“There is considerable diversity within the site, with areas of sheltered sublittoral rock supporting unusual assemblages of encrusting sponges and solitary ascidians, and, on shallower reefs, tide-swept kelp forests influenced by brackish water...”

The reefs in Kyle Rhea are subject to some of the strongest tidal streams in the UK, and the bedrock supports rich communities typically dominated by the hydroids *Tubularia indivisa* and *Sertularia argentea*, the barnacle *Balanus crenatus*, anemones, sponges and ascidians (JNCC, 2024). Loch Alsh also hosts dense beds of the brittlestar *Ophiopholis aculeata*, an uncommon feature within the UK (JNCC, 2024).

FIGURE B.1: LOCHS DUICH, LONG AND ALSH SPECIAL AREA OF CONSERVATION



The current condition of the SAC (NatureScot, 2024) is set out in Table B..

TABLE B.1: PROTECTED FEATURES AND CONDITION FOR THE LOCHS DUICH, LONG AND ALSH SPECIAL AREA OF CONSERVATION

Qualifying Feature	Feature Condition	Assessment Date	UK Conservation Status
Reefs (H1110)	Unfavourable	2004	Unfavourable – inadequate (Article 17 2019 report)

The reefs feature of the site is composed of two habitats (NatureScot, 2024):

- Rocky reefs (bedrock, stones, boulders);
- Horse mussel beds.

Whilst the Feature Activity Sensitivity Tool (FeAST) does not include reef as a feature, a number of different benthic habitats that include hard bottomed habitats are listed for consideration under the activity of 'infrastructure – the installation, operation and maintenance of coastal infrastructure such as ports, marinas and leisure facilities'. These are most likely to overlap in sensitivities with the biotopes of reef, particularly stony reefs. The FeAST features therefore used here for impact assessment are:



- Kelp and seaweed communities on sublittoral sediment;
- Tide-swept algal communities.

These communities assessed together are used for the impact assessment here. The FeAST community 'Horse mussel beds', was not used here given the considerable distance (approximately 3.5 km) between the operations and the horse mussel beds within the site.

For reefs, the high level Conservation Objectives are:

1. To ensure that the qualifying features of Lochs Duich, Long and Alsh Reefs SAC are in favourable condition and make an appropriate contribution to achieving Favourable Conservation Status;
2. To ensure that the integrity of Lochs Duich, Long and Alsh Reefs SAC is maintained in the context of environmental changes by meeting objectives 2a, 2b and 2c:
 - 2a. Extent and distribution of reefs within the site;
 - 2b. Structure and function of reefs and the supporting environment on which it relies;
 - 2c. Distribution and viability of typical species of reefs.

To assess whether the integrity of the site is maintained through the operations proposed, the following pressures are considered:

- Introduction or spread of non-indigenous species & translocations (competition);
- Physical loss (to land or freshwater habitat);
- Physical removal (extraction of substratum);
- Removal of non-target species (including lethal);
- Removal of target species (including lethal);
- Siltation rate changes (light);
- Surface abrasion;
- Sub-surface abrasion/penetration.

All kelp habitats have medium sensitivity to 'Removal of target species (including lethal)' and 'non-target species (including lethal)'. However, these were not deemed appropriate pressures for a temporary slipway installation, operation and decommissioning given that the pressure definition relates mainly to damage or loss of species from fisheries.

Kelp habitats are considered of medium sensitivity to 'Introduction or spread of non-indigenous species and translocations (competition)'. Again, this is not deemed an appropriate pressure for the proposed type of operation given the length of the operations and the short distances of ship travel to construct the slipway.

As such, these pressures are not considered further in this assessment, and the assessment focusses on:

- Physical loss (to land or freshwater habitat);
- Physical removal (extraction of substratum);



- Siltation rate changes (light);
- Surface abrasion;
- Sub-surface abrasion/penetration.

Assessment of adverse effect

The assessment of site integrity is presented in Table B.2.

Following the assessment of potential effects on reefs within the Lochs Duich, Long and Alsh SAC, **no Adverse Effect on Site Integrity is concluded** from slipway construction and operation.



TABLE B.2: ADVERSE EFFECT ON SITE INTEGRITY CONCLUSIONS

Qualifying Features	Conservation Objective	Commentary	Adverse Effect Conclusion	Adverse Effect Conclusion Post-mitigation
Extent and distribution of reefs within the site				
Reefs (rocky reefs)	Maintain the current extent and distribution of rocky reefs in the reef	<p>Screening determined that there is unlikely to be a direct impact to SAC features from loss of extent and distribution of habitat. The nearest known rocky reef feature is approximately 0.6 km from the slipway operations. Distribution evidence for this rocky reef feature is sourced from the Geodatabase of Marine features adjacent to Scotland (GeMS), currently GEMS v10 (i26). This was originally published on 14 March 2023, and most recently updated on 31 January 2025.</p> <p>GeMS does not provide an understanding of the full coverage of the reef feature of the site. There may be other areas of reef, including areas of stony reef, that are not represented in this layer. This unmapped rocky reef could experience direct impact from the operations. If the footprint of the slipway was assumed to represent unmapped rocky reef (971 m²), this would represent a loss of extent of 0.006% of the site feature as currently mapped/known (site data form notes reef cover of 1542.46 ha²³).</p> <p>This level of unmapped direct impact is not expected to form an adverse effect in terms of hindering maintenance of extent and distribution of the feature given the footprint of the operations and the extent and distribution of even the known reefs throughout the site.</p>	No adverse effect	Mitigation not required No adverse effect

²³ <https://jncc.gov.uk/jncc-assets/SAC-N2K/UK0017077.pdf>



Qualifying Features	Conservation Objective	Commentary	Adverse Effect Conclusion	Adverse Effect Conclusion Post-mitigation
		<p>While there may remain some uncertainty regarding the full extent and distribution of rocky reef (which includes stony reef as per the Conservation and Management Advice (CMA) for the site), indirect adverse effect to mapped or unmapped SAC feature extent is not expected. The total volume of sediment disturbed (slipway area plus sediment removal pocket) would be approximately 235 m³ through the period of construction. This translates into a thickness of 0.65 mm of deposition across an area of 0.36 km² ²⁴.</p> <p>It is considered that this level of sedimentation is not likely to adversely affect the extent and distribution of any currently mapped or unmapped rocky reef feature.</p>		
Reefs (horse mussel reefs)	Maintain the extent and distribution of horse mussel beds where environmental conditions allow	<p>Screening determined there is no direct impact to this SAC feature given that the nearest known horse mussel reef feature from the operations is approximately 3.5 km from the slipway.</p> <p>The total volume of sediment disturbed (slipway area plus sediment removal pocket) is 235 m³ through the period of construction. It is not considered that sedimentation could adversely affect the extent and distribution of any horse mussel bed, so indirect impact to this feature's extent and distribution is also not expected.</p>	No adverse effect	<p>Mitigation not required</p> <p>No adverse effect</p>

²⁴ An area of 0.36 km² was chosen as a representative area across which sediment could spread from the operations. The nearest known reef feature is 600 m away from the operations. To ensure precaution, this calculation assumes that all sediment is deposited from one event, rather than deposition over the whole length of the construction phase. It is also assumed that there is an even distribution of sediment across this area.



Qualifying Features	Conservation Objective	Commentary	Adverse Effect Conclusion	Adverse Effect Conclusion Post-mitigation
Structure and function of reefs and the supporting environment on which it relies				
Reefs (rocky reefs)	Maintain the three-dimensional structure created by fauna and flora (e.g. kelp, sponges) that are associated with this habitat.	<p>Screening determined that there is no direct likely significant effect to SAC features in terms of maintenance of the three-dimensional structure created by the reef topography and the associated fauna and flora, given that the nearest known reef feature from the operations is approximately 0.6 km from the slipway.</p> <p>It is noted that there may be other areas of reef, including areas of stony reef, that are not represented in the NMPi reefs layer. This unmapped rocky reef could undergo direct impact from the operations. If the footprint of the slipway was assumed to represent unmapped rocky reef (971 m²), this would represent a loss of extent of 0.006% of the site feature (site data form notes reef cover of 1542.46 ha²⁵).</p> <p>Even this level of unmapped direct pressure (impact) is not expected to form an adverse effect in terms of hindering maintenance of three dimensionality.</p> <p>While there remains uncertainty regarding the full extent and distribution of rocky reef (which includes stony reef as per the CMA for the site), indirect adverse effect to three dimensional structure of mapped or unmapped reef is not expected.</p> <p>The total volume of sediment disturbed (slipway area plus sediment removal pocket) would be approximately 235 m³ through the period of construction. This translates into a thickness of 0.65mm of deposition across an area of 0.36 km².</p>	No adverse effect	<p>Mitigation not required</p> <p>No adverse effect</p>

²⁵ <https://jncc.gov.uk/jncc-assets/SAC-N2K/UK0017077.pdf>



Qualifying Features	Conservation Objective	Commentary	Adverse Effect Conclusion	Adverse Effect Conclusion Post-mitigation
		It is not considered that this level of sedimentation could adversely affect structure of any currently mapped or unmapped rocky reef feature.		
Reefs (horse mussel reefs)	Maintain the three dimensional structure created by fauna and flora (e.g. kelp, sponges) that are associated with this habitat.	<p>In terms of maintenance of the three dimensional structure created by the reef topography and the associated fauna and flora, screening determined that there is no direct pressure (impact) to SAC features given that the nearest known reef feature from the operations is approximately 0.6 km from the slipway.</p> <p>Indirect adverse effect to three dimensional structure of mapped or unmapped reef is not expected. The total volume of sediment disturbed (slipway area plus sediment removal pocket) is 235 m³ through the period of construction. This level of sedimentation is unlikely to adversely affect structure of any currently mapped or unmapped rocky reef feature.</p>	No adverse effect	<p>Mitigation not required</p> <p>No adverse effect</p>
Reefs (rocky reefs)	Maintain the environmental conditions (processes) required to support a healthy functioning rocky reef.	<p>Environmental conditions, water movement patterns, water quality and water clarity are important in maintaining the variety and condition of the rocky reefs. The tides entering and leaving the lochs interact with the varied seabed and narrows such as Kyle Rhea, creating areas of differing water flow. Areas of shallower depths and clear waters allow for adequate light penetration to sustain kelp forests.</p> <p>The proposed operations are not expected to have any adverse effect on depth and depth contours within any of the narrows within the site, nor within an area of shallow water outwith the direct footprint of the works.</p> <p>The total volume of sediment disturbed (slipway area plus sediment removal pocket) would be approximately 235 m³</p>	No adverse effect	<p>Mitigation not required</p> <p>No adverse effect</p>



Qualifying Features	Conservation Objective	Commentary	Adverse Effect Conclusion	Adverse Effect Conclusion Post-mitigation
		<p>through the period of construction. This translates into a thickness of 0.65 mm of deposition across an area of 0.36 km².</p> <p>As such, it is not considered that this level of sedimentation could adversely affect the environmental conditions of any currently mapped or unmapped rocky reef feature.</p>		
Reefs (horse mussel reefs)	Maintain the density of live individuals of horse mussels, and associated proportions of dead shell material and fine sediments.	Given the distance between the slipway and the known horse mussel beds (approximately 3.5 km), the operations are not considered to directly or indirectly affect density of live individuals by either abrasion, increase in suspended sediment concentrations or physical loss.	No adverse effect	<p>Mitigation not required</p> <p>No adverse effect</p>
Reefs (horse mussel reefs)	Maintain the environmental conditions (processes) required to support a healthy functioning horse mussel bed.	<p>Maintaining the horse mussel beds relies on adequate supply of larval recruits and food (plankton), the presence of suitable habitat (existing beds) to act as a settlement site for larvae, and suitable environmental conditions for growth.</p> <p>The operations are unlikely to adversely affect water movement patterns and water quality given that the operations are a considerable distance from the tidal inflow nearest to the horse mussel beds.</p>	No adverse effect	<p>Mitigation not required</p> <p>No adverse effect</p>
Reefs (rocky reefs)	Maintain functions provided by rocky reef to the wider ecosystem	Given the commentary above on rocky reef extent and structure, it is also not expected that the operations would have any adverse effect on the maintenance of rocky reef functions.	No adverse effect	<p>Mitigation not required</p> <p>No adverse effect</p>
Reefs (horse mussel reefs)	Maintain functions provided by horse mussels [sic] to the wider ecosystem.	Given the commentary above on horse mussel reef extent and structure, it is also not expected that the operations would have any adverse effect on the maintenance of horse mussel reef habitat formation and filtration functions.	No adverse effect	<p>Mitigation not required</p> <p>No adverse effect</p>

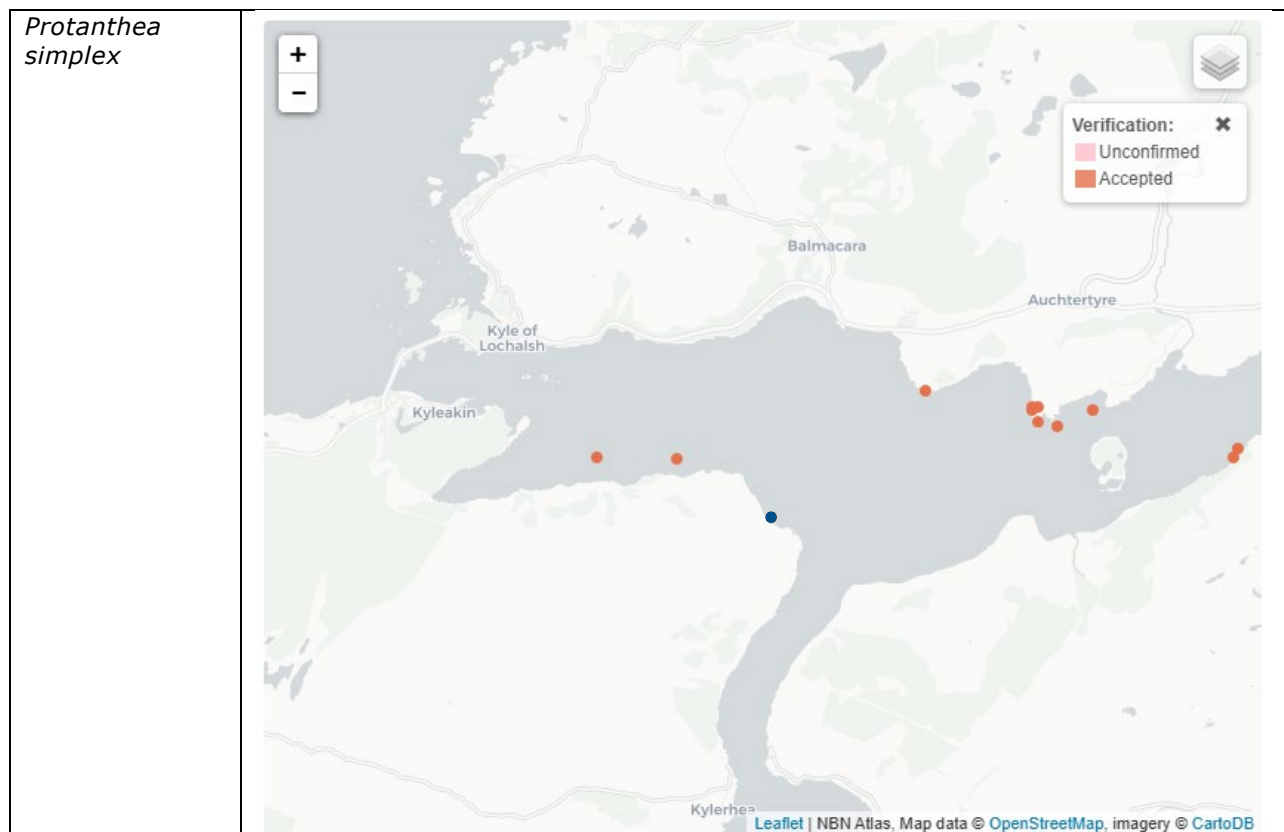


Qualifying Features	Conservation Objective	Commentary	Adverse Effect Conclusion	Adverse Effect Conclusion Post-mitigation
Distribution and viability of typical species of the habitat				
Reefs (rocky reefs)	Maintain the diversity, abundance and distribution of typical species associated with the reef including <i>Protanthea simplex</i> , <i>Sabella pavonina</i> , <i>Neocrania anomala</i> , <i>Terebratulina retusa</i> and <i>Ophiopholis aculeate</i> [sic].	<p>Typical reef species are not known to be present in the area being directly or indirectly affected by the slipway (Figure B.2) (NBN Atlas, 2024):</p> <ul style="list-style-type: none">• <i>Protanthea simplex</i>;• <i>Sabella pavonina</i>;• <i>Novocrania (Neocrania) anomala</i>;• <i>Terebratulina retusa</i>;• <i>Ophiopholis aculeata</i>. <p>Using data from NBN Atlas to provide the most up-to-date presence and distribution of species shows that typical reef species highlighted in the CMA have not been found within a kilometer of the slipway operations. While this is not evidence that reef fauna and flora are not present in the area of impact from the operations, alongside the lack of rocky reefs present in GeMS, this suggests that adverse effects are unlikely to occur to typical reef species from the operations.</p>	No adverse effect	Mitigation not required No adverse effect
Reefs (horse mussel reefs)	Maintain the diversity, abundance and distribution of typical species associated with horse mussel beds including <i>Modiolus modiolus</i> and brittlestars.	<p>Horse mussel species are not known to be present in the area being directly or indirectly affected by the slipway (Figure B.3) (NBN Atlas, 2024):</p> <ul style="list-style-type: none">• <i>Modiolus modiolus</i>.	No adverse effect	Mitigation not required No adverse effect



Qualifying Features	Conservation Objective	Commentary	Adverse Effect Conclusion	Adverse Effect Conclusion Post-mitigation
		Using data from NBN Atlas to provide the most up-to-date presence and distribution of species shows that typical horse mussel reef species highlighted in the CMA have not been found near the slipway operations, including brittlestars. While this is not evidence that <i>Modiolus modiolus</i> individuals or beds are not present in the area of impact from the operations, alongside the lack of horse mussel reefs present in GeMS, this suggests that no adverse effect would occur to typical species from the operations.		

FIGURE B.2: TYPICAL REEF SPECIES RECORDED DISTRIBUTIONS (NBN ATLAS, 2024)²⁶

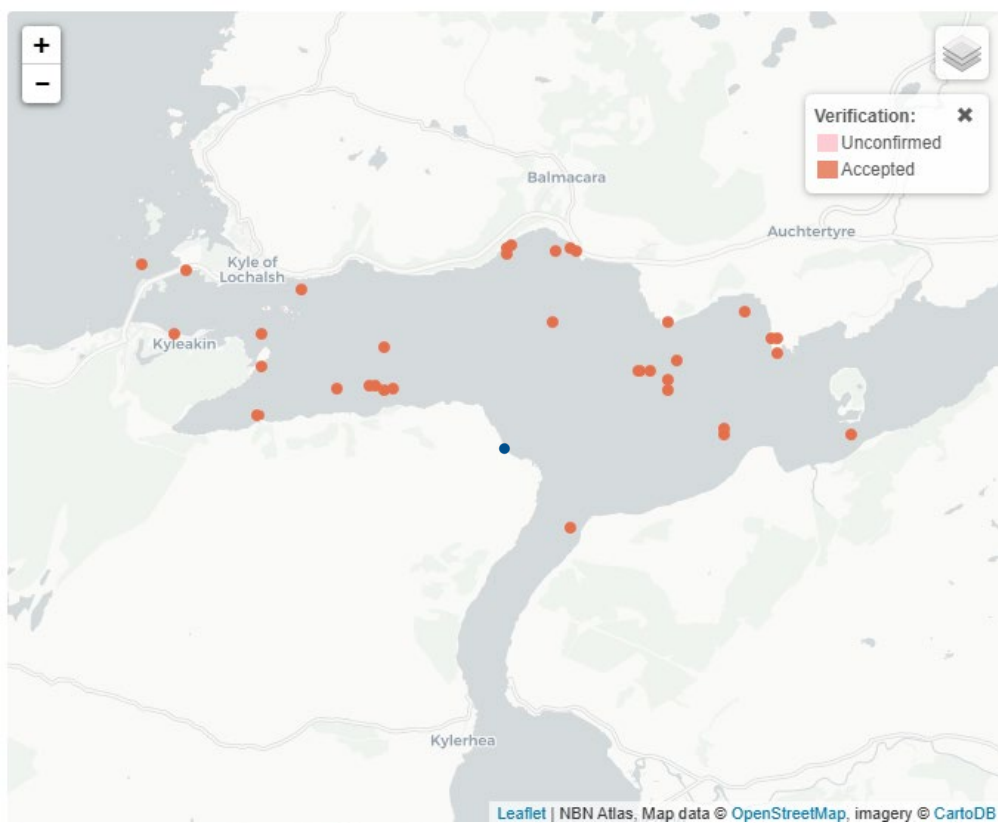


²⁶ Blue dot indicates location of the slipway

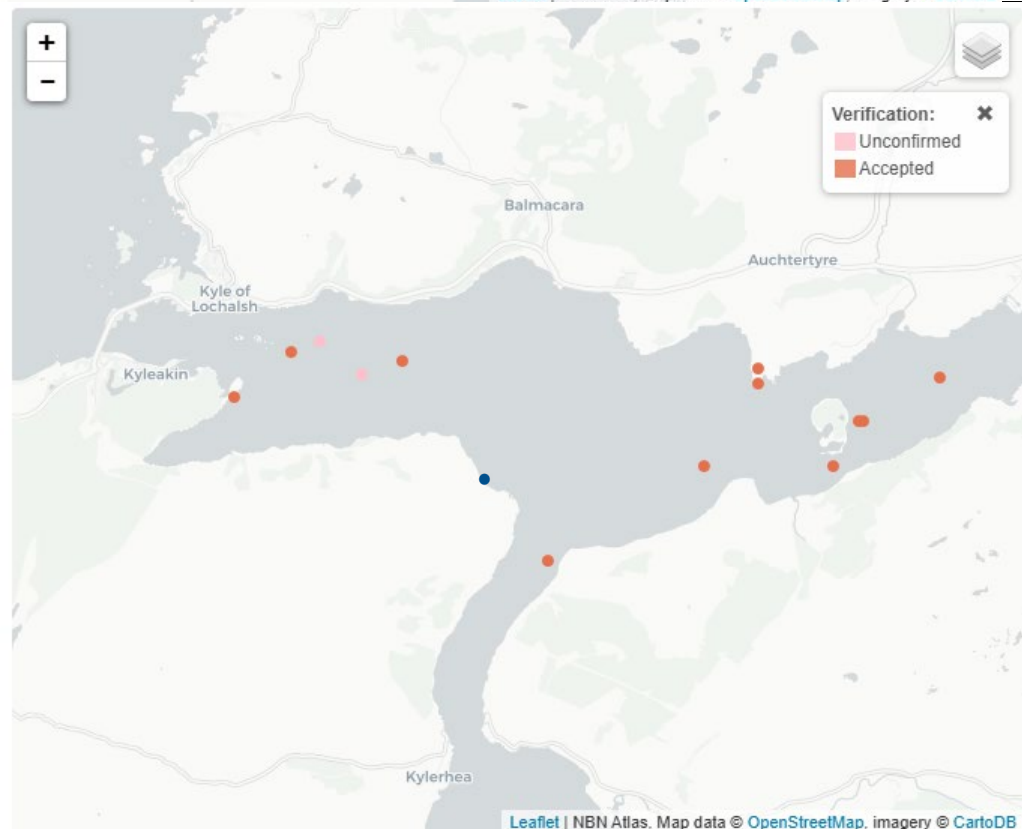


ERM

Sabella pavanina



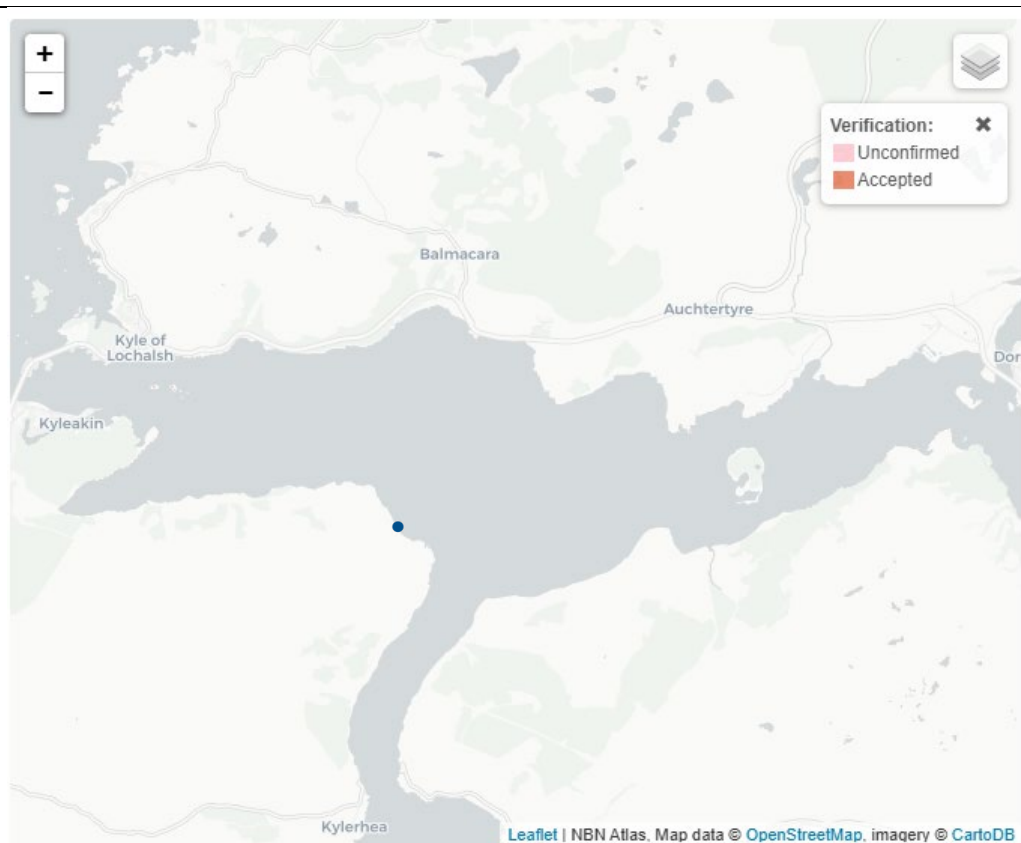
Novocrania anomala





ERM

*Terebratulina
retusa*



*Ophiopholis
aculeata*

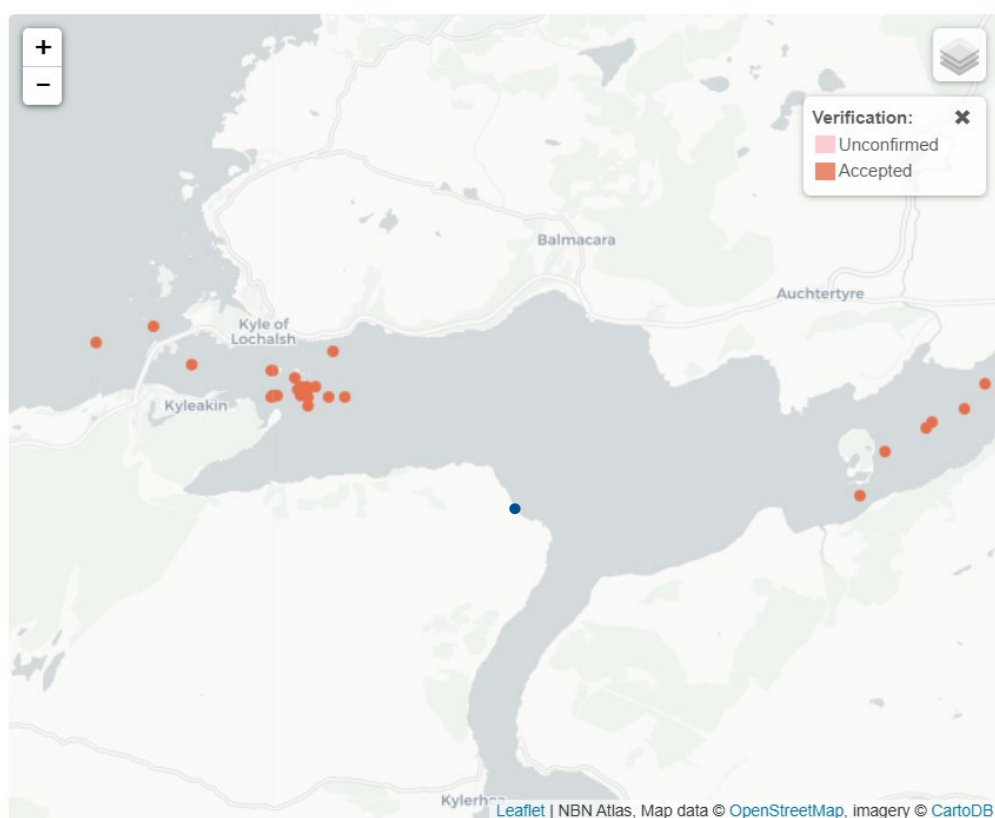
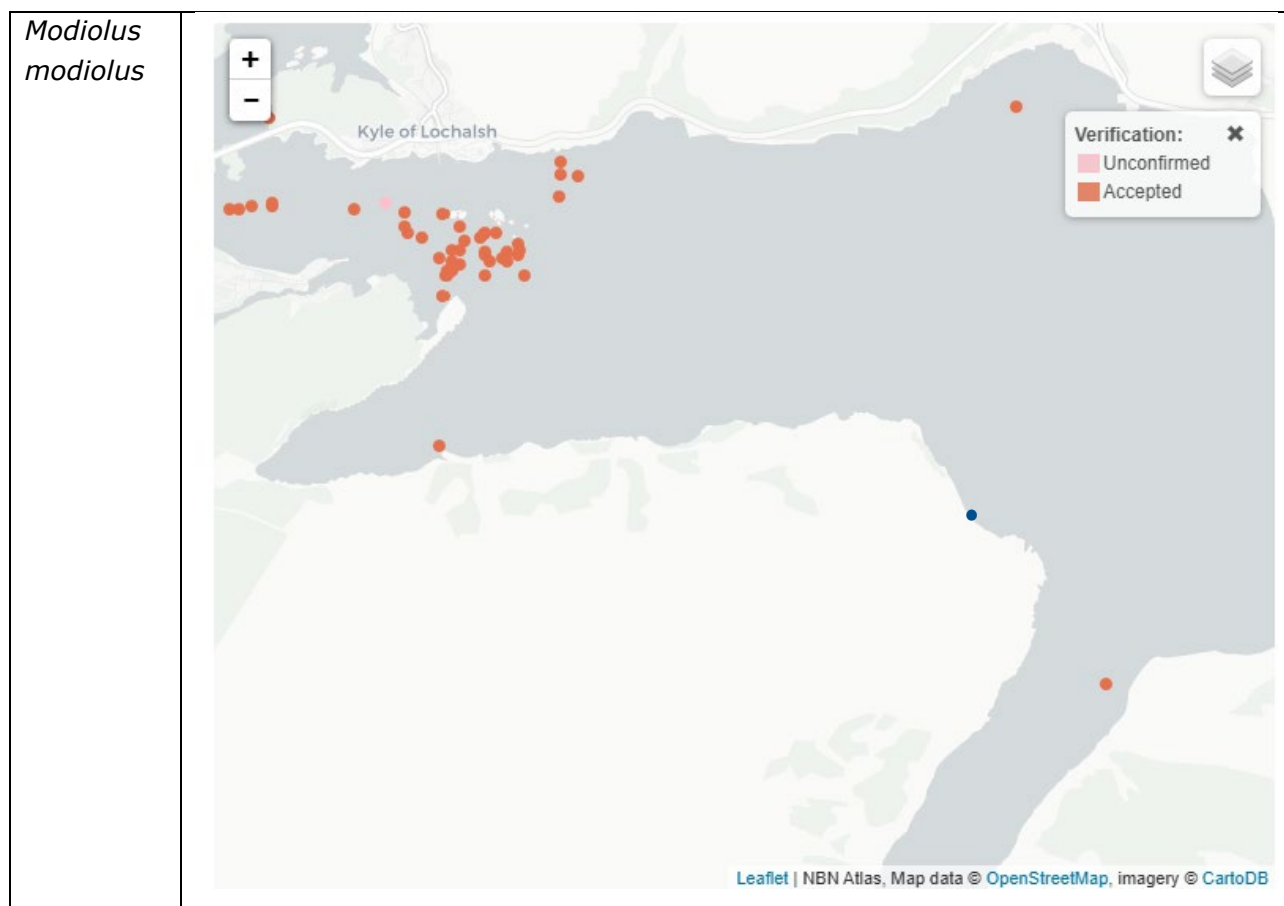


FIGURE B.3: HORSE MUSSEL SPECIES RECORDED DISTRIBUTIONS (NBN ATLAS, 2024)²⁷



²⁷ Blue dot indicates location of the slipway

B.3 INNER HEBRIDES AND THE MINCHES SPECIAL AREA OF CONSERVATION

INTEREST FEATURES SUMMARY

The Inner Hebrides and Minches SAC on the west coast of Scotland is designated to protect harbour porpoise, *Phocoena phocoena*. The site also supports a variety of other marine mammal species, including minke whale *Balaenoptera acutorostrata*, and Risso's dolphin *Grampus griseus*.

The protected features and current condition for the site are displayed in Table B.3.

TABLE B.3: PROTECTED FEATURES AND CONDITION FOR THE INNER HEBRIDES AND MINCHES SPECIAL AREA OF CONSERVATION

Qualifying Feature	Feature Condition	Assessment Date	UK Conservation Status
Harbour porpoise <i>Phocoena phocoena</i> (1351)	Favourable	2018	Favourable

Harbour porpoise are present in Scottish inshore and offshore waters year-round, with peak sightings of small groups recorded in summer months (Evans *et al.*, 2011; Hague *et al.*, 2020). Harbour porpoise are exposed to a range of anthropogenic pressures, including bycatch (Kindt-Larsen *et al.*, 2016; Nabe-Nielsen *et al.*, 2014), vessel noise (Dyndo *et al.*, 2015), ship strikes (Schoeman *et al.*, 2020), seismic surveys (Pirotta *et al.*, 2014), contaminants (Pierce *et al.*, 2008), and offshore renewables (Teilmann and Carstensen, 2012; Brandt *et al.*, 2018).

Harbour porpoise are listed as having favourable conservation status within the Inner Hebrides and the Minches SAC, therefore the Conservation Objectives of the site seek to *maintain*, rather than *restore*, this condition.

The listed Conservation Objectives of the Inner Hebrides and Minches SAC are:

1. To ensure that the Inner Hebrides and the Minches SAC continues to make an appropriate contribution to harbour porpoise remaining at favourable conservation status;
2. To ensure for harbour porpoise within the context of environmental changes, that the integrity of the Inner Hebrides and the Minches SAC is maintained through 2a, 2b and 2c:
 - 2a. Harbour porpoise within the Inner Hebrides and the Minches are not at significant risk from injury or killing;
 - 2b. The distribution of harbour porpoise throughout the site is maintained by avoiding significant disturbance;
 - 2c. The condition of supporting habitats and the availability of prey for harbour porpoise are maintained.



The potential for significant effects on the maintenance of these objectives will be assessed for all elements of the proposed project.

To ensure that the integrity of the site is maintained through the operations proposed, the following pressures are used for assessment:

- Removal of non-target and target species;
- Underwater noise;
- Death or injury by collision.

To ensure site integrity is maintained throughout the proposed construction and operation of the temporary slipway, the site integrity assessment is based on the known sensitivities of harbour porpoise in relation to the following Conservation Objectives:

- Risk of injury or killing as a result of collisions with vessels [Objective 2a];
- Disturbance as a result of the presence of vessels and increased levels of underwater noise related to construction activities and vessel presence [Objective 2b];
- Alterations to habitat and change in the availability of prey species [Objective 2c].

Assessments of sensitivity of harbour porpoise in relation to the Conservation Objectives and associated pressures are presented below.

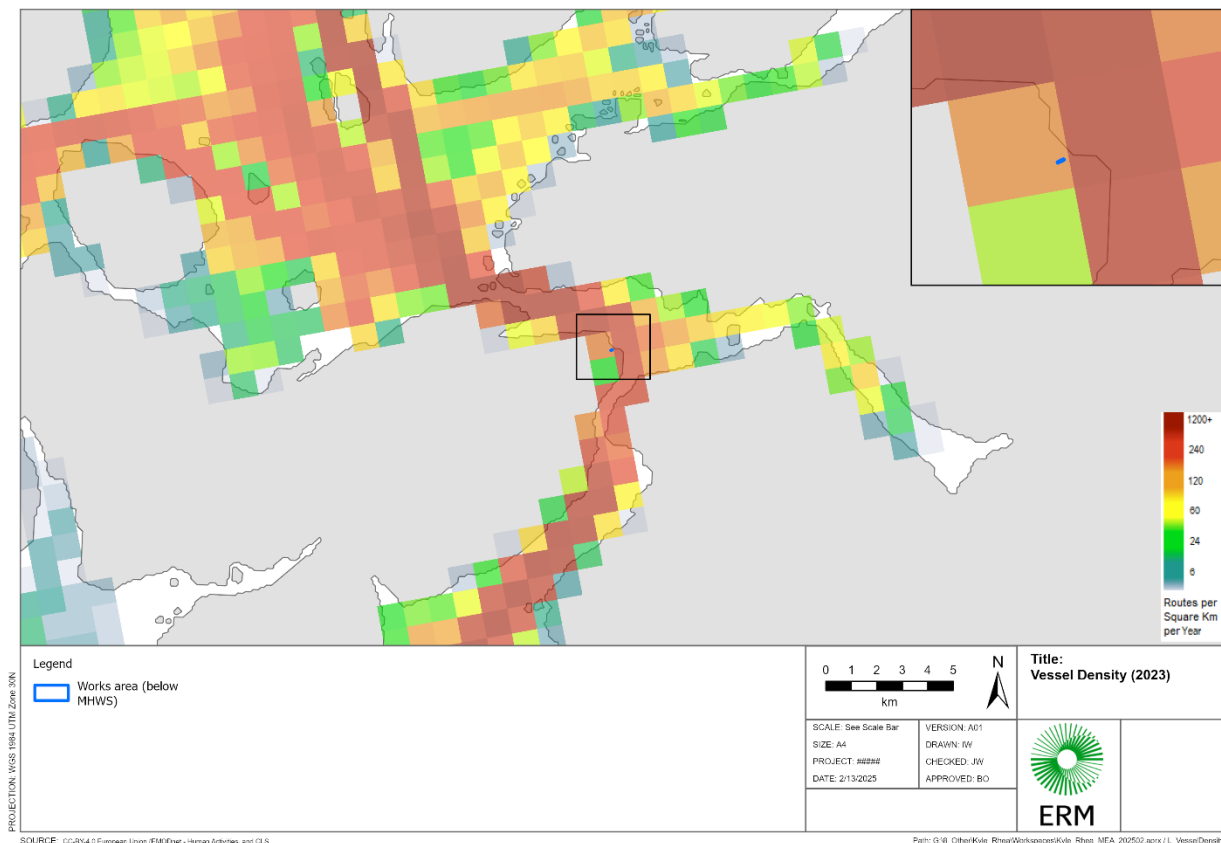
Risk of injury or killing as a result of collisions with vessels e.g. 'death or injury by collision' pressure

Vessels within the marine environment have the potential to collide with harbour porpoise, resulting in injury or mortality (Van Waerebeek *et al.*, 2007; Fenton *et al.*, 2017). However, risk for these relatively small and agile cetaceans is lower than that of large species (Schoeman *et al.*, 2020). Research indicates that harbour porpoise are able to detect and avoid vessels (Oakley *et al.*, 2017), with reports of avoidance behaviour at several hundred metres (Evans *et al.*, 1994) and potentially surpassing 1 km (Dyndo *et al.*, 2015).

Vessel traffic within the SAC is high, as shown in Figure B.4. Within the wider area there is a large volume of shipping, ferry, and small vessels transiting through the region. Therefore, the addition of a likely maximum of 13 vessels per week does not represent a substantial increase above the baseline. Harbour porpoise are likely to be familiar with presence of vessels and likely to exhibit avoidance.

Harbour porpoise are therefore assessed as having a **low sensitivity** to vessel collision.

FIGURE B.4: VESSEL DENSITY IN THE VICINITY OF THE PROPOSED TEMPORARY SLIPWAY



Disturbance as a result of the presence of vessels and increased levels of underwater noise related to construction activities and vessel presence e.g. 'underwater noise' pressure

Marine mammals whose hearing ranges overlap with sound produced by vessel traffic or construction activities may experience negative disturbance responses (Erbe *et al.*, 2019). For example, vessel noise has been shown to elicit complex behavioural responses in harbour porpoise (Dyndo *et al.*, 2015; Frankish *et al.*, 2023). However, recovery from discrete events may be rapid (Wisniewska *et al.*, 2018). Individuals experiencing disturbance may recover within several hours, and disturbance may not equate to utilisation of lower-quality habitats (Thompson *et al.*, 2013). In some cases, vessel displacement may even reduce impacts of other, more damaging, anthropogenic underwater sound (Benhemma-Le Gall *et al.*, 2023).

Underwater sound generated by ship traffic is primarily low-frequency in nature (10-100Hz) (Sinclair *et al.*, 2021). Noise generated from rock placement is not well documented, however one study focused on rock placement related to offshore wind farms suggested that noise levels were low-frequency and tonal in character, and not significantly higher than background noise levels (Nedwell & Howell, 2004). It is likely that noise produced during placement of slabs for slipway construction will be lower intensity than that for rock placement related to wind farm works. Furthermore, much of the slipway construction is occurring above water, and



will have no impact on harbour porpoise. Hearing for harbour porpoise below 1kHz is relatively poor, and both of these sources fall below the frequency of peak sensitivity (~105kHz) for harbour porpoise (Southall *et al.*, 2019).

As such, harbour porpoise are assessed as having a **low sensitivity** to vessel presence and increased levels of underwater noise related to construction activities.

Alterations to habitat and change in the availability of prey species e.g. 'removal of non-target and target species' pressure

Harbour porpoise are generalist feeders and not reliant on a single prey species (Santos *et al.*, 2004). Furthermore, due to their vast foraging ranges, they are considered to be resilient to habitat disturbance and disruption of prey availability (Booth, 2020).

Harbour porpoise have therefore been assessed as having a **low sensitivity** to alterations to habitat and change in the availability of prey species.

Assessment of adverse effect

The assessment of site integrity is presented in Table B.4.

Following the assessment of potential effects on harbour porpoise within the Inner Hebrides and Minches SAC, **no Adverse Effect on Site Integrity is concluded** is concluded from slipway construction and operation.



TABLE B.4: ASSESSMENT OF ADVERSE EFFECT ON SITE INTEGRITY OF QUALIFYING FEATURES OF THE INNER HEBRIDES AND MINCHES SPECIAL AREA OF CONSERVATION

Qualifying Features	Conservation Objective	Commentary	Adverse Effect Conclusion	Adverse Effect Conclusion Post-mitigation
Risk of injury or killing as a result of collisions with vessels e.g. 'death or injury by collision'				
Harbour porpoise <i>Phocoena phocoena</i>	Harbour porpoise within the Inner Hebrides and the Minches SAC are not at significant risk from injury or killing.	<p>Vessel movements for the planned operations include:</p> <ul style="list-style-type: none"> A construction period when two vessels will be present. This will last eight weeks; A likely maximum of 13 vessel movements per week over the six-year operation phase of the slipway. <p>There is a potential risk of injury or killing as a result of collisions with vessels related to the works; however, harbour porpoise are small, agile marine mammals that are known to avoid vessels (Oakley <i>et al.</i>, 2017). They are considered low risk in terms of collisions and there is little evidence from marine mammal strandings in the UK that injury from vessel collisions is an important source of mortality for harbour porpoise. It is not considered a population level risk (IAMMWG, 2015).</p> <p>Vessel collision risk varies with vessel size, speed, and time required to alter course should a marine mammal be identified. Vessels that are >80 m in length or travelling >14 knots are considered most likely to cause severe or lethal injuries (Laist <i>et al.</i>, 2001). All vessels used during the operations will be smaller than 80 m and travelling at slow speeds. They will adhere to the Scottish Marine Wildlife Watching Code (SMWWC) and to a vessel management plan that defines, for example, speed limits and planned routes. This would reduce the risk of injury or killing from collisions, and ensure that, as per Regulation 39 of the</p>	No adverse effect	<p>Mitigation not required</p> <p>No adverse effect</p>



Qualifying Features	Conservation Objective	Commentary	Adverse Effect Conclusion	Adverse Effect Conclusion Post-mitigation
		Conservation (Natural Habitats, &c.) Regulations 1994 (as amended), there would be no deliberate or reckless injury or killing of harbour porpoise.		
Disturbance as a result of the presence of vessels and increased levels of underwater noise related to construction activities and vessel presence e.g. 'underwater noise'				
Harbour porpoise <i>Phocoena phocoena</i>	The distribution of harbour porpoise throughout the site is maintained by avoiding significant disturbance.	<p>Slipway construction is detailed within Section 4.3 of the MEA document. It is anticipated that construction will last eight weeks and involve one safety and one construction vessel. The slipway will be constructed by placing premade slabs in position; there will be no pile driving and thus no high intensity noise source. Operations are planned for a period of six years; the number of planned vessel movements per week varies between 0 and 13.</p> <p>The physical presence of vessels and production of underwater noise have the potential to disturb harbour porpoise; however, all vessels related to the project will adhere to the SMWWC and a vessel management plan. These will minimise potential disturbance and ensure that as per Regulation 39 of the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended), there will be no deliberate or reckless disturbance of harbour porpoise.</p> <p>Noise produced by vessels is predominantly low frequency and low intensity (OSPAR Commission, 2009) It is below the threshold for Permanent Threshold Shift (PTS) and Temporary Threshold Shift (TTS) so there is minimal risk of auditory damage. It is also below the peak hearing range of harbour porpoise (100-140 kHz; Kastelein <i>et al.</i>, 2002) so there is minimal risk of masking, and vessel noise will not interfere with echolocation or the ability of harbour porpoise to communicate and locate prey. Less is known about noise produced during slipway construction, particularly the controlled placement of pre-cast concrete units; however, given</p>	No adverse effect	<p>Mitigation not required</p> <p>No adverse effect</p>



Qualifying Features	Conservation Objective	Commentary	Adverse Effect Conclusion	Adverse Effect Conclusion Post-mitigation
		<p>that noise produced during rock placement for cable protection, which is less controlled and likely louder, is thought to be low frequency and not significantly above baseline, there is also minimal risk of PTS, TTS, or masking from construction activities (Nedwell and Howell, 2004).</p> <p>Behavioural impacts are more complex and harder to discern. Avoidance is recorded commonly for harbour porpoise in response to vessels, though it is generally localised to within a few kilometers of the vessel itself, and recovery can occur within a few hours (Thompson <i>et al.</i>, 2013; Wisniewska <i>et al.</i>, 2018; Benhemma-Le Gall <i>et al.</i>, 2021). While there are hotspots within the SAC that experience high densities of harbour porpoise, they utilise the entirety of the SAC as well as surrounding lochs, bays, and sounds. There are a diverse range of habitats present and productive foraging areas are available throughout the region (NatureScot, 2024). Therefore, any harbour porpoise disturbed by a vessel transiting through the site will have access to other foraging areas nearby and they will be able to return to the area once the vessel has transited away.</p> <p>In the context of the conservation and management advice, this level of disturbance is not significant, given that there will be minimal alterations to distribution and recovery is likely to occur within a short time frame; a significant disturbance is defined as a disturbance that affects the integrity of the site through alteration of the distribution of harbour porpoise within the SAC such that recovery cannot be expected, or effects can be considered long term (NatureScot, 2024). For harbour porpoise, disturbance that lasts >8 years is considered a higher population level risk given that this is above the average generation time of the species (NatureScot, 2024). Construction is expected to last eight weeks, which is minor in terms of timescale. For operations, the timescale</p>		



Qualifying Features	Conservation Objective	Commentary	Adverse Effect Conclusion	Adverse Effect Conclusion Post-mitigation
		<p>is six years, though disturbance from vessels would be intermittent and there is high probability, given known recovery rates, that harbour porpoise would recover from one vessel transit before another occurs.</p> <p>In addition, it is worth noting that vessel traffic within the SAC is high, as shown in Figure B.4. There is likely to be a degree of habituation to vessel presence and noise and the addition of up to 13 vessels per week does not represent a significant increase above the baseline.</p>		
Alterations to habitat and change in the availability of prey species e.g. 'removal of non-target and target species'				
Harbour porpoise <i>Phocoena phocoena</i>	The condition of supporting habitats and the availability of prey for harbour porpoise are maintained.	<p>The proposed works involve the disturbance and removal of seabed sediments during construction and decommissioning of the slipway, thereby resulting in temporary disturbance to benthic habitats and species. Any disturbance is, however, small scale and represents a minor proportion of the SAC and habitat available for foraging.</p> <p>Potential disturbance from slipway construction:</p> <ul style="list-style-type: none"> • Total area of seabed disturbance from construction = 971 m² (0.00094 km²); • The total volume of sediment disturbed (slipway area plus sediment removal pocket) is 235 m³. <p>The condition of supporting habitats in the context of harbour porpoise is related to the ability of the environment to support prey species, including sandeel and herring. The proposed slipway is being constructed in waters 0-4 m deep, and the predominant seabed sediment is classified as gravelly Sand and sandy Gravel, under the Folk (1954) classification scheme (BGS, 2024b). This is not key habitat for either prey species; sandeel preferentially</p>	No adverse effect	<p>Mitigation not required</p> <p>No adverse effect</p>



Qualifying Features	Conservation Objective	Commentary	Adverse Effect Conclusion	Adverse Effect Conclusion Post-mitigation
		<p>inhabit areas 20-60 m deep with coarse sand and herring are demersal spawners (NatureScot, 2024). Therefore, any disturbance because of slipway construction is unlikely to impact key prey species or the ability of supporting habitats to maintain healthy prey populations. It is also worth noting that harbour porpoise are generalist feeders that take a wide variety of prey, thus they are not reliant on these species alone and will adapt their prey choice based on availability.</p> <p>Furthermore, the distribution and condition of prey species varies continually with natural fluctuations in the environment and with anthropogenic influences both within and outside of the SAC (NatureScot, 2024). Thus, slipway construction cannot be considered alone; external influences such as fishing and activities within spawning grounds will have a greater impact on prey populations.</p>		

B.4 KINLOCH AND KYLEAKIN HILLS SPECIAL AREA OF CONSERVATION

INTEREST FEATURES SUMMARY

The Kinloch and Kyleakin Hills SAC was designated in 2005 to protect the following Annex I habitats and Annex II species:

Annex I habitat

- Old sessile oak woods with Ilex and Blechnum in the British Isles (primary reason) (91A0);
- Northern Atlantic wet heaths with Erica tetralix (4010);
- European dry heaths (4030);
- Alpine and Boreal heaths (4060);
- Blanket bogs (* if active bog) (7130);
- Tilio-Acerion forests of slopes, screes, and ravines (9180).

Annex II species

- [Redacted] (1355).

The RIAA covers the area associated with activities related to construction and operation of the slipway below Mean High Water Springs (MHWS).

The designated Annex I habitats of Kinloch and Kyleakin Hills SAC are located above MHWS. Consent for the onshore part of the slipway is being addressed separately. Therefore, Annex I habitats have been screened out and are not considered further within this assessment.

[Redacted] forage within the coastal zone below MHWS and are at potential risk from pressures associated with slipway construction and operation. [Redacted] are screened into AA. The current condition for the site and UK conservation status of [Redacted] are displayed in Table B.5.

TABLE B.5: PROTECTED FEATURES ASSESSED AS PART OF THIS REPORT TO INFORM APPROPRIATE ASSESSMENT AND THEIR CONDITION FOR THE KINLOCH AND KYLEAKIN SPECIAL AREA OF CONSERVATION

Qualifying Feature	Feature Condition	Assessment Date	UK Conservation Status
[Redacted] (1355)	Favourable Maintained	2011	Favourable

[Redacted] are members of the weasel family with a widespread distribution in Scotland. They are largely solitary, semi-aquatic, and obtain most of their food from rivers or the sea. Within the Kinloch and Kyleakin SAC, they are coastal dwelling. Results of two [Redacted] surveys, covering the shoreline and area 200 m around the works area (above MHWS), were conducted by a licensed ecologist in March 2025 (McLeod, 2025). Within the area surveyed,



[Redacted] activity appears mainly focused along the shoreline and in adjacent areas of vegetation, which are characterised by conifer plantation woodland, acid grassland, dense bracken, and scattered to dense scrub.

The listed Conservation Objectives of the Kinloch and Kyleakin Hills SAC ²⁸ (presented here to include numbering for consistency and ease of reference) are:

1. To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features;
2. To ensure for the qualifying species that the following are maintained in the long term:
 - 2a. Population of the species as a viable component of the site;
 - 2b. Distribution of the species within site;
 - 2c. Distribution and extent of habitats supporting the species;
 - 2d. Structure, function and supporting processes of habitats supporting the species;
 - 2e. No significant disturbance of the species.

The potential for significant effects on the maintenance of these Objectives for [Redacted] will be assessed for all elements of the Project.

To ensure that the integrity of the site is maintained through the operations proposed, the following pressures related to works below MHWS are used for assessment:

- Death or injury by collision;
- Death of injury as a result of pollution;
- Visual disturbance;
- Above water noise;
- Physical loss (to land or freshwater habitat);
- Removal of non-target species;
- Underwater noise changes;
- Introduction of light.

Additional pressures related to onshore works and storage of excavated material above MHWS are addressed separately as part of the onshore works assessment.

²⁸ Conservation Objectives have been amended to include numerals for consistency with Conservation Objectives for Lochs Duich, Long and Alsh SAC and Inner Hebrides and the Minches SAC, and for ease of reference throughout the text.



[Redacted] **Surveys**

Two dedicated [Redacted] surveys have been undertaken by licensed ecologists (McLeod, 2025) to determine [Redacted] presence within a minimum of 200 m radius from the slipway works area (below MHWS).

McLeod (2025) presents the findings from the surveys. Two [Redacted] were identified during the surveys, one 320 m from the works area (below MHWS) and the other 550 m away. Clear evidence of activity was found at both [Redacted] but given that they are more than 200 m away from the works area (below MHWS), additional surveying was not carried out to determine presence or absence of breeding activity. A [Redacted] or [Redacted] was identified 90 m from the works area (below MHWS). The full extent of the cavity was visible, and no breeding activity is anticipated, though cameras have been set up under licence (McLeod, 2025) to monitor the [Redacted] and confirm extent of use.

Locations of [Redacted] and non-breeding [Redacted] in relation to the works area (below MHWS) are displayed in Figure B.5. Exclusion zones of 200 m around [Redacted] and 30 m around non-breeding [Redacted] are also shown.

FIGURE B.5: [Redacted], **NON-BREEDING** [Redacted], **AND EXCLUSION ZONES IN RELATION TO THE SLIPWAY WORKS AREA (BELOW MEAN HIGH WATER SPRINGS).**

[Redacted]



Mitigation measures

According to the survey report produced by McLeod (2025), following [Redacted] surveys in February and March 2025, all identified [Redacted] and non-breeding [Redacted] are located outside of the range within which adverse effects are considered likely. At present there is no requirement for a licence from NatureScot; exclusion zones of 200 m would be in place for [Redacted] and of 30 m for non-breeding [Redacted].

SSENT's [Redacted] species protection plan would be in place for all elements of the Project, including the implementation of mitigation measures detailed within the species protected plan (SSENT, 2022). This has been developed in consultation with NatureScot and is considered appropriate given current knowledge of [Redacted] in the area and the location of known [Redacted] and non-breeding [Redacted].

To ensure mitigation measures are satisfactory at the start of construction, further surveys will be completed prior to works beginning; these would take place within 3 months of the start date.

If changes in [Redacted] activity are identified during these surveys, for example if previously unknown [Redacted] are found or breeding activity is discovered, works would not begin until a suitably qualified and experienced ecologist has assessed the situation and appropriate mitigation is in place. This would include obtaining licences for disturbance, if required.

To ensure site integrity is maintained throughout the proposed construction and operation of the temporary slipway, the site integrity assessment is based on the known sensitivities of [Redacted] in relation to the following Conservation Objectives:

- Risk of injury or killing as a result of collisions with vessels [Objective 2a];
- Risk of injury or killing as a result of pollution events [Objective 2a]
- Displacement as a result of presence of activity within visual range [Objective 2b];
- Displacement as a result of airborne noise related to construction activities and operation of the slipway [Objective 2b];
- Physical loss of habitat as a result of slipway construction [Objective 2c];
- Change in the availability of prey species [Objective 2d];
- Disturbance as a result of the presence of vessels and increased levels of underwater noise related to construction activities and vessel presence [Objective 2e];
- Disturbance as a result of introduction of light during construction and operation of the slipway [Objective 2e].

Assessment of adverse effect

The assessment of site integrity is presented in Table B.6. The assessment has been produced on the basis that [Redacted] presence and activity in the area is as reported by McLeod (2025) following [Redacted] surveys in February and March 2025.



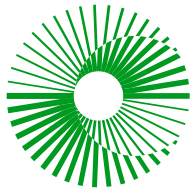
If any changes to [Redacted] activity in the area become apparent as a result of further surveys or monitoring, a new assessment will be conducted based on up to date information.

Following the assessment of potential effects on [Redacted] within the Kinloch and Kyleakin Hills SAC **no Adverse Effect on Site Integrity is concluded** from slipway construction and operation.



TABLE B.6: ASSESSMENT OF ADVERSE EFFECT ON SITE INTEGRITY OF QUALIFYING FEATURES OF THE KINLOCH AND KYLEAKIN HILLS SPECIAL AREA OF CONSERVATION

Qualifying Features	Conservation Objective	Commentary	Adverse Effect conclusion	Adverse Effect conclusion post-mitigation
Risk of injury or killing as a result of collisions with vessels e.g. 'death or injury by collision'				
[Redacted]	[Redacted] are not at significant risk from injury or killing.	<p>Vessel movements for the planned operations include:</p> <ul style="list-style-type: none"> A construction period when two vessels will be present. This is anticipated to last eight weeks; A likely maximum of 13 vessel movements per week over the six-year operation phase of the slipway. <p>There is a potential risk of injury or killing as a result of collisions with vessels related to construction and operation of the slipway; however, [Redacted] are mobile semi-aquatic mammals that are able to detect and subsequently avoid vessels.</p> <p>For marine mammals generally, vessel collision risk varies with vessel size, speed, and time required to alter course should a marine mammal be identified. Vessels that are >80 m in length or travelling >14 knots are considered most likely to cause severe or lethal injuries (Laist <i>et al.</i>, 2001). All vessels used during construction and operation of the slipway will be smaller than 80 m and travelling at slow speeds. Vessels will also adhere to the Scottish Marine Wildlife Watching Code (SMWWC) and to a vessel management plan that defines, for example, speed limits, and planned routes. This will reduce the risk of injury or killing from collisions, and ensure that, as per Regulation 39 of the Conservation (Natural Habitats, &c.) Regulations 1994 (as</p>	No adverse effect	No adverse effect



ERM

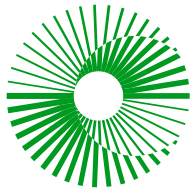
Qualifying Features	Conservation Objective	Commentary	Adverse Effect conclusion	Adverse Effect conclusion post-mitigation
		amended), there will be no deliberate or reckless injury or killing of [Redacted]		

Risk of injury or killing as a result of pollution events e.g. 'death or injury by pollution'

[Redacted]	[Redacted] are not at significant risk from injury or killing.	<p>Pollution of watercourses is one of the most substantial threats to [Redacted]. Given the use of vessels throughout slipway construction and operation, there is a risk of pollution events, such as fuel leakage, that would adversely impact [Redacted] should they occur. To minimise this risk and ensure site integrity is maintained, best practice procedures would be followed throughout all stages of the project and a series of control measures would be in place. These are all outlined within section 6.4.1 of the MEA and within the SSEN Transmission [Redacted] species protection plan, but include, for example, ensuring all pollutants are stored in locked containers away from water courses and ensuring that all vessels are equipped with waste disposal facilities.</p> <p>To minimise potential for mortality or injury to [Redacted] in proximity to the works site (below MHWS), all works would follow best practice procedures, such as capping pipe systems, providing exit ramps from exposed trenches or holes, and ensuring there is no equipment or waste left exposed or in a condition in which [Redacted] may become injured, entangled, or trapped.</p>	No adverse effect	No adverse effect
------------	--	---	-------------------	-------------------

Displacement as a result of presence of activity within visual range e.g. 'visual disturbance'

[Redacted]	The distribution of [Redacted] throughout the site is maintained	Construction activities along with the increased presence of equipment and people have the potential to disturb [Redacted] potentially resulting in displacement from habitats.	No adverse effect	No adverse effect
------------	--	---	-------------------	-------------------

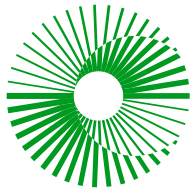


ERM

Qualifying Features	Conservation Objective	Commentary	Adverse Effect conclusion	Adverse Effect conclusion post-mitigation
		<p>The likelihood for displacement or disturbance is dependent on location of works in relation to [Redacted] and foraging grounds, with no adverse impacts expected beyond 200-250 m. While [Redacted] are active throughout the area, [Redacted] 320 m and 550 m away from the works area (below MHWS). A [Redacted] is located 90 m away; however, it is a [Redacted] and not a location that will be used for breeding given that the full extent of the [Redacted] appears visible. This means that [Redacted] using the shelter are more exposed to the elements and predators than when in [Redacted] thus it is not an optimal location for breeding. All [Redacted] [Redacted] outside of the exclusion zones of 30 m or 200 m if breeding is apparent. Therefore, the risk of disturbance of [Redacted] is considered minimal.</p> <p>The Isle of Skye is a popular tourist destination, with a [Redacted] hide present for wildlife watching in the area attracting tourists to the coastal areas and [Redacted] habitat; vessel traffic is also high within the region.</p> <p>The combination of mitigation measures, best practice procedures, and the implementation of exclusion zones around [Redacted] [Redacted] will ensure that there is no adverse effect on [Redacted] from visual disturbance.</p>		

Displacement as a result of airborne noise related to construction activities

[Redacted]	The distribution of [Redacted] throughout the site is maintained.	Slipway construction methodology is detailed within Section 4.3 of the MEA document. It is anticipated that construction will last 8 weeks and involve one safety and one construction vessel. The slipway will be constructed by placing premade slabs in position; there will be no pile driving and thus no high intensity noise or	No adverse effect	No adverse effect
------------	---	--	-------------------	-------------------

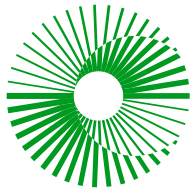


ERM

Qualifying Features	Conservation Objective	Commentary	Adverse Effect conclusion	Adverse Effect conclusion post-mitigation
		<p>vibration source. Some re-profiling of the seabed will be carried out to prepare the site and geotextile sheets will be laid prior to concrete slabs. Operation is planned for a period of 6 years. Decommissioning of the slipway will follow construction methodology, just in reverse. Therefore, noise impacts as a result of decommissioning will be comparable to construction.</p> <p>Limited information exists on the sensitivity of [Redacted] to above water noise. Vocalisations are used for communication, particularly between mothers and cubs, when threatened, or during aggressive interactions (Mason and MacDonald, 1986; Hung and Law, 2014). All works activity would be confined to the works area (below MHWS), which is over 250 m from known [Redacted] and 90 m from a [Redacted] not used for breeding purposes. If further [Redacted] are found or evidence of breeding is discovered during pre-construction surveys, works will cease until the situation has been reassessed by a licenced [Redacted] ecologist. Furthermore, the highest noise levels will most likely be during the construction phase, which is short term, and works are being carried out during day light only, with no work taking place 2 hours before sunrise or sunset.</p> <p>The distance to [Redacted] combined with the low impact noise source, short-term construction phase, and embedded mitigation measures means there is minimal risk of adverse effects on [Redacted] as a result of airborne noise.</p>		
Alterations to habitat as a result of slipway construction e.g. 'Physical loss (to land or freshwater habitat)				
[Redacted]	The distribution and extent of supporting habitats for	The proposed works involve the disturbance and removal of seabed sediments during construction and decommissioning of the slipway, thereby resulting in temporary disturbance to benthic	No adverse effect	No adverse effect



Qualifying Features	Conservation Objective	Commentary	Adverse Effect conclusion	Adverse Effect conclusion post-mitigation
	[Redacted] are maintained.	<p>habitats and species. There may also be a requirement for sediment removal in a small area at the toe of the slipway to maintain access during the lifetime of the slipway.</p> <p>Any alterations to habitats are, however, small scale and they represent a minor proportion of habitat available for [Redacted]</p> <p>Importantly, there will be no disturbance or alteration of [Redacted]; exclusion zones will be maintained as outlined within the [Redacted] species protection plan (SEN Transmission, 2022).</p> <p>Slipway plan area below MHWS:</p> <ul style="list-style-type: none">• 595 m². <p>Potential disturbance from slipway construction:</p> <ul style="list-style-type: none">• Total area of seabed disturbance from construction = 971 m² (0.00094 km²);• The total volume of sediment disturbed (slipway area plus sediment removal pocket) is 235 m³. <p>Potential disturbance from maintenance:</p> <ul style="list-style-type: none">• The total area where ongoing maintenance may be required is 160 m². <p>[Redacted] considered coastal in this region. They forage in inshore waters, out to approximately 100 m, but also require access to unpolluted freshwater and vegetation for shelter. Safe movement between all sites is important to ensure utilisation of optimal habitats (NatureScot, 2024).</p>		



ERM

Qualifying Features	Conservation Objective	Commentary	Adverse Effect conclusion	Adverse Effect conclusion post-mitigation
		<p>All works activity will be contained within the works area (below MHWS) with no work taking place or equipment present outside of this zone without authorisation. The [Redacted] surveys identified a probable [Redacted] path along the edge of the shore, where a narrow strip of short grass is sandwiched between the shore and bracken-dominated adjacent areas. Feeding signs and spraint were found along this strip which extends either side of the works site (below MHWS) (RJ McLeod, 2025). No [Redacted] were found within 200 m of the works area (below MHWS) and suitable [Redacted] habitat is more prevalent in adjacent areas with more dense vegetation. Therefore, slipway construction would not result in the removal of habitats that have strong potential for shelters in the future.</p> <p>Given the small impact area and fact that works would not extend outside of the works site (below MHWS), alterations to habitats would not present a barrier to movement; [Redacted] are highly mobile both on land and in water and will be able to move freely between all areas of their habitat.</p>		
Change in the availability of prey species e.g. 'removal of non-target and target species'				
[Redacted]	The condition of supporting habitats and the availability of prey for [Redacted] are maintained.	<p>[Redacted] require suitable habitat for foraging, breeding, and resting. They mainly forage for fish and crustaceans, though they are known to select other species such as amphibians, small mammals, and birds when preferential prey is scarce (SNH, 2017). Feeding signs identified during the surveys included shellfish and crabs (RJ McLeod, 2025).</p> <p>Construction of the slipway will result in some loss to benthic habitats and species; however, the loss is localised and small scale. Furthermore, receptor-specific environmental assessments, detailed in Sections 7.1, 7.2, and 7.3 of the MEA concluded that</p>	No adverse effect	No adverse effect



Qualifying Features	Conservation Objective	Commentary	Adverse Effect conclusion	Adverse Effect conclusion post-mitigation
		<p>effects on physical processes, water and sediment quality, and benthic ecology from slipway construction were negligible. Therefore, the potential for adverse effects on [Redacted] is low and risks will be further mitigated by following best practice procedures for pollution control, including, for example, ensuring all pollutants are stored in locked containers away from water courses and food and other waste is stored in sealed containers and disposed of regularly and responsibly.</p> <p>In terms of prey species, it is worth noting that their distribution and condition varies continually with natural fluctuations in the environment and with anthropogenic influences both within and outside of the SAC.</p>		
Disturbance as a result of the presence of vessels and increased levels of underwater noise related to construction activities and vessel presence e.g. 'underwater noise'				
	No significant disturbance of [Redacted]	<p>Slipway construction is detailed within Section 4.3 of the MEA document. It is anticipated that construction would last 8 weeks and involve one safety and one construction vessel. The slipway would be constructed by placing premade slabs in position; there would be no pile driving and thus no high intensity noise source. Operations are planned for a period of 6 years; the number of planned vessel movements per week varies between 0 and 13. All vessels related to the project will adhere to the Scottish Marine Wildlife Watching Code (SMWWC) and a vessel management plan.</p> <p>There is little research on the impacts of underwater noise and vessels on [Redacted] in the marine environment. Research conducted on sea otter suggests they are less sensitive to underwater noise than sea lions and other pinniped species (Ghoul and Reichmuth, 2014). Noise produced by vessels is</p>	No adverse effect	No adverse effect



Qualifying Features	Conservation Objective	Commentary	Adverse Effect conclusion	Adverse Effect conclusion post-mitigation
		<p>predominantly low frequency, low intensity, and generally considered to be below the onset thresholds for Permanent Threshold Shift (PTS) and Temporary Threshold Shift (TTS) for pinnipeds and cetaceans (OSPAR Commission, 2009). Consequently, there is minimal risk of auditory damage (OSPAR Commission, 2009; Erbe, 2018). Furthermore, sea otter are not thought to vocalise underwater (Zellmer <i>et al.</i>, 2021), so there is minimal risk of underwater noise masking or interfering with vocal communications.</p> <p>Vessel traffic within region is high, as shown in Figure 7-8 within the MEA. Therefore, the addition of a likely maximum of 13 vessels per week does not represent a significant increase above the baseline. [Redacted] are, therefore, likely to be familiar with presence of vessels and have habituated to vessel traffic and noise to some level. Furthermore, [Redacted] are highly mobile and the area of disturbance is small in relation to other habitat available. [Redacted] will be able to temporarily move away from any disturbance, returning once noise or disturbance has ceased.</p>		
Disturbance as a result of introduction of light during construction and operation of the slipway e.g. 'Introduction of light'				
[Redacted]	No significant disturbance of [Redacted]	<p>Artificial light has potential to disturb or deter [Redacted] from areas of their habitat, however, there is little evidence to suggest that lighting will have a significant impact, with Leblanc (2003) stating that when used in isolation, security lighting did not deter [Redacted] from approaching fish farms.</p> <p>As per the mitigation measures outlined within SSEN Transmission's [Redacted] species protection plan (SSEN Transmission, 2022), no works are anticipated over night or within</p>	No adverse effect	No adverse effect



ERM

Qualifying Features	Conservation Objective	Commentary	Adverse Effect conclusion	Adverse Effect conclusion post-mitigation
		2 hours of sunrise or sunset, so there would be minimal requirement for artificial lighting on the site. Any lighting that is required will be directed towards works and access areas only as required. Light levels would be kept to the absolute minimum possible and would be directed away from suitable [Redacted] habitat such as any areas of scrub, woodland, or watercourses. No works would occur within 200 m from [Redacted] within 30 m of non-breeding [Redacted]		



REFERENCES

- Baker JR, Jones AM, Jones TP. and Watson HC, 1981. [Redacted] . mortality and marine oil pollution. *Biological Conservation*, 20(4), 311–321.
[https://doi.org/https://doi.org/10.1016/0006-3207\(81\)90017-3](https://doi.org/https://doi.org/10.1016/0006-3207(81)90017-3).
- Benhemma-Le Gall A, Thompson P, Merchant N and Graham I, 2023. Vessel noise prior to pile driving at offshore windfarm sites deters harbour porpoises from potential injury zones. *Environmental Impact Assessment Review*, 103: 107271 p.
<https://doi.org/10.1016/j.eiar.2023.107271>.
- Booth CG, 2020. Food for thought: Harbor porpoise foraging behavior and diet inform vulnerability to disturbance. *Marine Mammal Science*, 36(1), pp.195-208.
- Brandt MJ, Dragon AC, Diederichs A, Bellmann MA, Wahl V, Piper W, Nabe-Nielsen J and Nehls G., 2018. Disturbance of harbour porpoises during construction of the first seven offshore wind farms in Germany. *Marine Ecology Progress Series*, 596, pp.213-232.
- Chadwick, E.A, 2007. Postmortem study of [Redacted] England and Wales 1992-2003. Environment Agency Science Report SCO10065/SR. Environment Agency, Bristol.
- Chanin P, 2003. Ecology of the [Redacted] . Conserving Natura 2000 Rivers Ecology Series No. 10.
- Dyndo M, Wiśniewska DM, Rojano-Doñate L and Madsen PT, 2015. Harbour porpoises react to low levels of high frequency vessel noise. *Scientific reports*, 5(1), p.11083.
- Erbe C, Dunlop R and Dolman S, 2018. Effects of noise on marine mammals. In H Slabbekoorn, RJ Dooling, AN Popper and RR Fay (Eds.), *Effects of Anthropogenic Noise on Animals* (pp. 277–309). Springer New York. https://doi.org/10.1007/978-1-4939-8574-6_10.
- Erbe C, Marley SA, Schoeman RP, Smith JN, Trigg LE and Embling CB, 2019. The effects of ship noise on marine mammals—a review. *Frontiers in Marine Science*, 6, p.606.
- Evans PGH, Baines ME and Coppock J, 2011. Abundance and behaviour of cetaceans and basking sharks in the Pentland Firth and Orkney waters. 419.
- Evans PG, Carson Q, Fisher P, Jordan W, Limer R and Rees I, 1994. A study of the reactions of harbour porpoises to various boats in the coastal waters of southeast Shetland. *European Research on Cetaceans*, 8, pp.60-64.
- Fenton H, Daoust PY, Forzán MJ, Vanderstichel RV, Ford JK, Spaven L, Lair S and Raverty S, 2017. Causes of mortality of harbor porpoises *Phocoena phocoena* along the Atlantic and Pacific coasts of Canada. *Diseases of aquatic organisms*, 122(3), pp.171-183.
- Frankish CK, von Benda-Beckmann AM, Teilmann J, Tougaard J, Dietz R, Sveegaard S, Binnerts B, de Jong CA and Nabe-Nielsen J, 2023. Ship noise causes tagged harbour porpoises to change direction or dive deeper. *Marine Pollution Bulletin*, 197, p.115755.
- Garcês A and Pires I, 2024. Biological and conservation aspects of [Redacted] mortality: a review. *Conservation*. 4(2), pp. 307-318. <https://doi.org/10.3390/conservation4020020>.



- Ghoul A and Reichmuth C, 2014. Hearing in the sea otter (*Enhydra lutris*): auditory profiles for an amphibious marine carnivore. *Journal of Comparative Physiology A*, 200(11), 967-981. <https://doi.org/10.1007/s00359-014-0943-x>.
- Hague EL, Sinclair RR and Sparling CE, 2020. Regional baselines for marine mammal knowledge across the North Sea and Atlantic areas of Scottish waters. *Scottish Marine and Freshwater Science* 11(12).
- Hung N and Law CJ, 2016. *Lutra lutra* (Carnivora: Mustelidae). *Mammalian Species*, 48(940), 109-122. <https://doi.org/10.1093/mspecies/sew011>.
- IAMMWG, Camphuysen CJ and Siemensma ML, 2015. A Conservation literature review for the harbour porpoise (*Phocoena phocoena*). JNCC Report No. 566, Peterborough. 96pp.
- JNCC, 2024. Lochs Duich, Long, and Alsh Reefs SAC. Available online at: <https://sac.jncc.gov.uk/site/UK0017077> [Accessed February 2025].
- Kastelein RA, Bunscoek P, Hagedoorn M, Au WWL and Haan D de, 2002. Audiogram of a harbor porpoise (*Phocoena phocoena*) measured with narrow-band frequency-modulated signals. *Journal of the Acoustical Society of America*, 112, 334-344.
- Kindt-Larsen L, Berg CW, Tougaard J, Sørensen TK, Geitner K, Northridge S, Sveegaard S and Larsen F, 2016. Identification of high-risk areas for harbour porpoise *Phocoena phocoena* bycatch using remote electronic monitoring and satellite telemetry data. *Marine Ecology Progress Series*, 555, pp.261-271.
- Laist, D.W., Knowlton, A.R., Mead, J.G., Collet, A.S., & Podesta, M. 2001. Collisions between ships and whales. *Marine Mammal Science*, 17(1), pp.35-75.
- Leblanc F, 2003. Protecting fish farms from predation by the [Redacted] in the Limousin Region of Central France: First Results. *IUCN* [Redacted] *Specialist Group Bulletin*, 20(1), 45.
- Mason CF and MacDonald SM, 1986. [Redacted] ecology and conservation. Cambridge University Press. 236 pp.
- Nabe-Nielsen J, Sibly RM, Tougaard J, Teilmann J and Sveegaard S, 2014. Effects of noise and by-catch on a Danish harbour porpoise population. *Ecological Modelling*, 272, pp.242-251.
- NatureScot, 2024. Conservation and Management Advice for the Inner Hebrides and Minches SAC. Available: <https://www.nature.scot/sites/default/files/special-area-conservation/10508/conservation-and-management-advice.pdf> [Accessed February 2025].
- NatureScot, 2024. Conservation and Management Advice for Yell Sound Coast SAC. Available: <https://www.nature.scot/sites/default/files/special-area-conservation/8409/conservation-and-management-advice.pdf> [Accessed March 2025].
- Nature Scot, 2024. Conservation and Management Advice Objectives and Advice to Support Management - Lochs Duich, Long and Alsh Reefs SAC and Lochs Duich, Long and Alsh MPA. Accessible at <https://www.nature.scot/sites/default/files/nature-conservation-mpa/10416/conservation-and-management-advice.pdf>. [Accessed February 2025].



NatureScot, 2025. Protected species advice for developers. Available: <https://www.nature.scot/professional-advice/planning-and-development/planning-and-development-advice/planning-and-development-protected-species> [Accessed March 2025].

Nedwell J and Howell D, 2004. A review of offshore windfarm related underwater noise sources. *Cowrie Rep*, 544, pp.1-57.

Oakley JA, Williams AT and Thomas T, 2017. Reactions of harbour porpoise (*Phocoena phocoena*) to vessel traffic in the coastal waters of South West Wales, UK. *Ocean & Coastal Management*, 138, pp.158-169.

OSPAR Commission, 2009. Overview of the impacts of anthropogenic underwater sound in the marine environment. OSPAR Commission Biodiversity Series. 134 pp.

Pierce GJ, Santos MB, Murphy S, Learmonth JA, Zuur AF, Rogan E, Bustamante P, Caurant F, Lahaye V, Ridoux V and Zegers BN, 2008. Bioaccumulation of persistent organic pollutants in female common dolphins (*Delphinus delphis*) and harbour porpoises (*Phocoena phocoena*) from western European seas: Geographical trends, causal factors and effects on reproduction and mortality. *Environmental Pollution*, 153(2), pp.401-415.

Pirotta E, Brookes KL, Graham IM and Thompson PM, 2014. Variation in harbour porpoise activity in response to seismic survey noise. *Biology letters*, 10(5), p.20131090.

RJ McLeod, 2025. Skye Reinforcement PRI Works. Kyle Rhea ^[Redacted] survey, version 1. RJ McLeod.

Santos MB, Pierce GJ, Learmonth JA, Reid RJ, Ross HM, Patterson IAP, Reid DG and Beare D, 2004. Variability in the diet of harbor porpoises (*Phocoena phocoena*) in Scottish waters 1992–2003. *Marine Mammal Science*, 20(1), pp.1-27.

Scottish and Southern Electricity Networks (SSEN) Transmission, 2022. ^[Redacted] species protection plan. TG-NET-ENV-503.

Sinclair R, Kazer S, Ryder M, New P and Verfuss U, 2021. Review and recommendations on assessment of noise disturbance for marine mammals. NRW Evidence Report No. 529.

Schoeman RP, Patterson-Abrolat C and Plön S, 2020. A global review of vessel collisions with marine animals. *Frontiers in Marine Science*, 7, p.292.

SNH, 2017. A guide to best practice for watching marine wildlife. Available: <https://www.nature.scot/doc/guide-best-practice-watching-marine-wildlife-smwwc> [Accessed March 2025].

Stepien EN, Galatius A, Hansen KA, Nabe-Nielsen J, Teilmann J and Wahlberg M, 2024. Response of ^[Redacted] to underwater acoustic harassment device sounds. *Scientific Reports*, 14(1). <https://doi.org/10.1038/s41598-024-55481-z>.

Teilmann J and Carstensen J, 2012. Negative long term effects on harbour porpoises from a large scale offshore wind farm in the Baltic—evidence of slow recovery. *Environmental Research Letters*, 7(4), p.045101.



Thompson PM, Brookes KL, Graham IM, Barton TR, Needham K, Bradbury G, and Merchant ND, 2013. Short-term disturbance by a commercial two-dimensional seismic survey does not lead to long-term displacement of harbour porpoises. *Proceedings of the Royal Society of London Series B Biological Sciences*, 280:20132001.

Van Waerebeek KOEN, Baker AN, Félix F, Gedamke J, Iñiguez M, Sanino GP, Secchi E, Sutaria D, van Helden A and Wang Y, 2007. Vessel collisions with small cetaceans worldwide and with large whales in the Southern Hemisphere, an initial assessment. *Latin American Journal of Aquatic Mammals*, pp.43-69.

Voigt MB, Hackenbroich, Krüger, H-H, Liebau A and Esser K-H. 2019. The in-air auditory thresholds of the [Redacted] 1758) as determined by auditory brainstem responses. *Hearing Research*, 381, 107774. <https://doi.org/10.1016/j.heares.2019.107774>.

Wisniewska DM, Johnson M, Teilmann J, Siebert U, Galatius A, Dietz R and Madsen PT, 2018. High rates of vessel noise disrupt foraging in wild harbour porpoises (*Phocoena phocoena*). *Proceedings of the Royal Society B: Biological Sciences*, 285(1872), p.20172314.

Wright PGR, Croose E and Macpherson JL 2022. A global review of the conservation threats and status of mustelids. *Mammal Review*, 52(3), 410-424. <https://doi.org/10.1111/mam.12288>.

Yoxon G and Pizzi R 2023. A review of 30 years of rescue and rehabilitation of [Redacted] in Scotland. *Journal of the International [Redacted] Survival Fund*, 99-117.

Zellmer NT, Timm-Davis LL and Davis RW. 2021. Sea Otter Behavior: morphologic, physiologic, and sensory adaptations. In RW Davis and AM Pagano (Eds.), *Ethology and Behavioral Ecology of Sea Otters and Polar Bears* (pp. 23-55). Springer International Publishing. https://doi.org/10.1007/978-3-030-66796-2_3.



ERM HAS OVER 160 OFFICES ACROSS THE FOLLOWING
COUNTRIES AND TERRITORIES WORLDWIDE

Argentina	The Netherlands
Australia	New Zealand
Belgium	Peru
Brazil	Poland
Canada	Portugal
China	Romania
Colombia	Senegal
France	Singapore
Germany	South Africa
Ghana	South Korea
Guyana	Spain
Hong Kong	Switzerland
India	Taiwan
Indonesia	Tanzania
Ireland	Thailand
Italy	UAE
Japan	UK
Kazakhstan	US
Kenya	Vietnam
Malaysia	
Mexico	
Mozambique	

ERM's London Office

2nd Floor, 33 St Mary Axe

London

EC3A 8AA

T: +44(0) 20 3206 5200

www.erm.com