
FISHGUARD REPLACEMENT LINKSPAN

ENVIRONMENTAL STATEMENT

VOLUME IV HRA

794-NI-POR-08886R
F01
Fishguard
Replacement Linkspan
May 2025

ENVIRONMENTAL STATEMENT VOLUME IV HRA

CONTENTS PAGE

Reference	Title
Chapter 1	LSE Screening
Chapter 2	RIAA
Appendix 1.A	Data Forms
Appendix 2.A	Data Forms

STENA FISHGUARD HABITATS REGULATIONS ASSESSMENT

LSE Screening and Report to Inform Appropriate Assessment

794-POR-00886R
D02
April 2025

LSE SCREENING AND RIAA

Document status

Version	Purpose of document	Authored by	Reviewed by	Approved by	Review date
D01	Draft and Review of Marine Biodiversity LSE Screening	EC	JH	JH	08 Jan. 25
D02	Draft and Review of Marine Biodiversity RIAA	EC	CC	CC	11 Apr. 25

Approval for issue

Caroline Carter

11 April 2025

The report has been prepared for the exclusive use and benefit of our client and solely for the purpose for which it is provided. Unless otherwise agreed in writing by RPS Group Plc, any of its subsidiaries, or a related entity (collectively 'RPS') no part of this report should be reproduced, distributed or communicated to any third party. RPS does not accept any liability if this report is used for an alternative purpose from which it is intended, nor to any third party in respect of this report. The report does not account for any changes relating to the subject matter of the report, or any legislative or regulatory changes that have occurred since the report was produced and that may affect the report.

The report has been prepared using the information provided to RPS by its client, or others on behalf of its client. To the fullest extent permitted by law, RPS shall not be liable for any loss or damage suffered by the client arising from fraud, misrepresentation, withholding of information material relevant to the report or required by RPS, or other default relating to such information, whether on the client's part or that of the other information sources, unless such fraud, misrepresentation, withholding or such other default is evident to RPS without further enquiry. It is expressly stated that no independent verification of any documents or information supplied by the client or others on behalf of the client has been made. The report shall be used for general information only.

Prepared by:

Tetra Tech RPS Energy

Atholl Exchange
1st Floor, 6 Canning Street
Edinburgh, EH3 8EG

Prepared for:

RPS Consulting Ireland

Elmwood House
74 Boucher Road
Belfast, Co. Antrim, BT12 6RZ

Contents

1	INTRODUCTION	1
1.1	Overview	1
1.2	Purpose of this Report	3
1.3	Relevant Consultations	4
1.4	Structure of the Report	8
2	HABITAT REGULATIONS PROCESS	9
2.1	Legislative Context	9
2.2	The Process	9
2.3	Process for Identifying European Sites and Features	10
3	PROJECT DESCRIPTION	12
3.1	The Proposed Development	12
3.2	Approach to the In-combination Assessment	13
4	ASSESSMENT METHOD	15
5	STAGE 1: SCREENING FOR LIKELY SIGNIFICANT EFFECTS	16
5.1	Identification of European Sites and Features	16
5.1.1	Sites Designated for Annex I Habitats	16
5.1.2	Sites Designated for Annex II Diadromous Fish	17
5.1.3	Sites Designated for Annex II Marine Mammal	21
5.1.4	Sites Designated for Annex II Otters	25
5.2	Determination of Likely Significant Effects	26
5.2.1	Methodology	26
5.2.2	Assessment of LSE for Annex II Diadromous Fish	26
5.2.3	Assessment of LSE for Annex II Marine Mammals	37
6	STAGE 2: INFORMATION TO INFORM THE APPROPRIATE ASSESSMENT	50
6.1	Embedded Mitigation	51
6.2	West Wales Marine/Gorllewin Cymru Forol SAC	52
6.3	Cardigan Bay/Bae Ceredigion SAC	54
6.4	Pembrokeshire Marine/Sir Benfro Forol SAC	55
6.5	River Teifi/Afon Teifi SAC	57
6.6	Lleyn Peninsula and the Sarnau/Pen Llyn a'r Sarnau SAC	59
6.7	Remaining SACs in the Marine Mammal MUs	59
7	SUMMARY	60
	GLOSSARY AND ACRONYMS	61
	Glossary	61
	Acronyms	62
	Units	62
	REFERENCES	65

Tables

Table 1.1:	Summary of key consultation issues raised during consultation activities undertaken for the Project relevant to European sites and qualifying features	5
Table 2.1:	Criteria for initial identification of relevant European sites	11
Table 5.1:	European sites designated for Annex II diadromous fish species taken forward for determination of LSE	19

Table 5.2: European sites designated for Annex II marine mammal species taken forward for determination of LSE.....	22
Table 5.3: Likely significant effects matrix for Annex II diadromous fish features of SACs (C: Construction; O: Operation)	36
Table 5.4: Acoustic thresholds for auditory injury, TTS onset and behavioural disturbance for impulsive noise for marine mammals (National Marine Fisheries Service (NMFS, 2024); Nedwell et al., 2007, Sinclair et al., 2023, Tougaard, 2021)	45
Table 5.5: Likely significant effects matrix for Annex II marine mammal features of the Welsh (and transboundary Welsh/English) SACs (C: Construction; O: Operation)	48
Table 6.1: Summary of stage 1: screening for likely significant effect	50
Table 6.2: Summary of HRA outcome for the West Wales Marine/Gorllewin Cymru Forol SAC	52
Table 6.3: Summary of HRA outcome for the Cardigan Bay/Bae Ceredigion SAC	54
Table 6.4: Summary of HRA outcome for the Pembrokeshire Marine/Sir Benfro Forol SAC	56
Table 6.5: Summary of HRA outcome for the River Teifi/Afon Teifi SAC	57

Figures

Figure 1-1: Planning Boundary of the Proposed Development	2
Figure 3-1: In-combination long list of plans and projects in proximity to the Planning Boundary	14
Figure 5-1: Location of European sites designated for Annex II diadromous fish and shellfish species taken forward for determination of LSE	20
Figure 5-2: Location of European sites designated for Annex II marine mammal species taken forward for determination of LS	24
Figure 5-3 In Combination Longlist.....	35
Figure 5-4 In Combination	48

Appendices

Appendix A - Standard Data Forms

1 INTRODUCTION

1.1 Overview

Fishguard Ferry Port is located in Fishguard, Pembrokeshire, South-West Wales. The Ferry Port was created in the 1910s by reclaiming land at the base of the Pen Anglas headland. The reclamation was achieved by blasting cliff rock and building out. The breakwaters were also constructed around this time. The current operation includes a twice daily ferry service to Rosslare, covering public ferry passengers and accompanied and unaccompanied freight. The berth is also infrequently used by cruise vessels and historic steamboats.

Stena Line Ltd, owner and operator of the Ferry Port, proposes to replace the existing temporary arrangement of a linkspan and jack-up barge within Fishguard Harbour, Pembrokeshire, Wales. The Proposed Development, providing a replacement pontoon, will allow safe berthing of the ferry, and provide an improved facility for passenger and vehicular access to vessels within the Port. The Planning Boundary of the Proposed Development is encompassed by Fishguard Harbour, within Fishguard Bay (Figure 1-1).

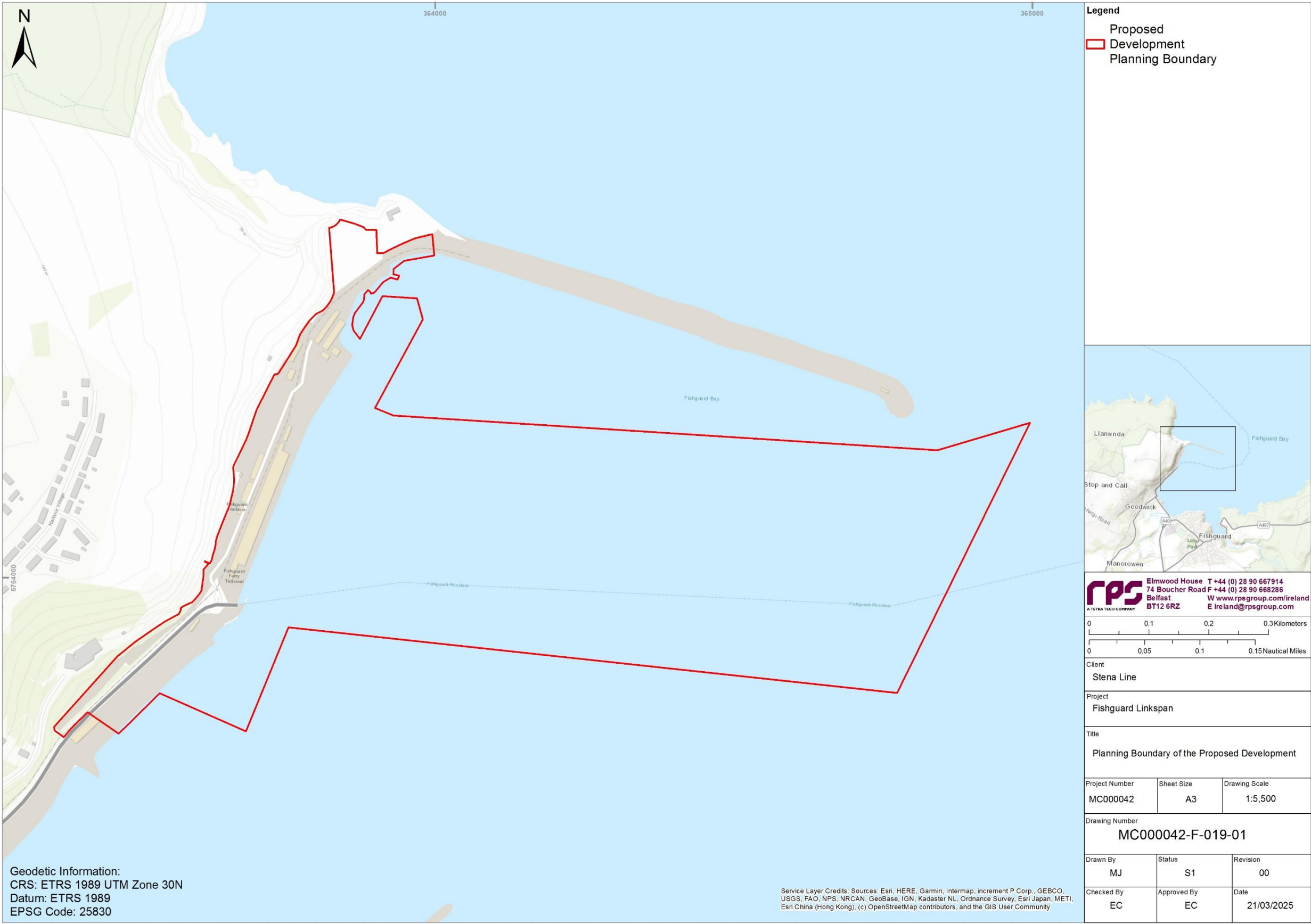


Figure 1-1: Planning Boundary of the Proposed Development

1.2 Purpose of this Report

This report has been produced to inform the Habitats Regulations Assessment (HRA) process to support the planning application and Marine Licence for the Proposed Development. It comprises the Stage 1: screening and Stage 2: appropriate assessment. This report, therefore, provides information to enable the screening of the Proposed Development with respect to its potential to have a Likely Significant Effects (LSE) on any European sites. LSE is deemed as any effect anticipated as a consequence of a project that may potentially affect the conservation objectives of the features for which the European site was designated, excluding effects which are trivial. It is important to note that this is different from a significant effect used in the context of the Environmental Impact Assessment (EIA) Directive and related EIA Regulations.

The requirement and process for the consideration of potential impacts of plans and projects on European sites have followed the European Union's (EU) Habitats Directive. In Welsh territorial waters, the Habitats Directive was initially translated into specific legal obligations by The Conservation of Habitats and Species Regulations 2017 (within 12 nautical miles (nm) of the coast), and after the United Kingdom's (UK) exit from the EU on 31 December 2020 (EU-Exit), through the Conservation of Habitats and Species Amendment (EU Exit) Regulations 2019 (the 'EU Exit Regulations'). The Conservation of Offshore Marine Habitats and Species Regulations 2017 are also relevant in Welsh waters more than 12 nm from land. This report refers to the 'Habitats Regulations' as including any changes enacted by the EU Exit Regulations.

The Habitats Regulations require that an HRA must be carried out on all plans and projects that are likely to have significant effects on European sites, including Special Areas of Conservation (SACs), candidate SACs, Special Protection Areas (SPAs), proposed SACs, potential SPAs and Ramsar Sites (listed under the Ramsar Convention on Wetlands of International Importance).

As the Proposed Development is within the boundaries of the West Wales Marine SAC and in proximity to other marine SACs, an HRA of the implications of the Proposed Development on European sites is required. The screening assessment and Report to Inform the Appropriate Assessment (RIAA) presented in this report are based on the current understanding of the baseline environment and proposed activities associated with the Proposed Development, and on the Proposed Development and site-specific information currently available.

In summary, the purpose of this report is to:

- identify the relevant European sites which are designated for features which may be sensitive or vulnerable to potential impacts arising from the construction, operation and maintenance, and decommissioning of the Proposed Development;
- examine the features of the relevant European sites and determine which are not considered likely to be at risk of significant effects arising from the Proposed Development, either alone or in combination with other plans or projects, so that they can be eliminated from further consideration within the HRA process;
- examine the features of the relevant European sites and determine which are considered likely to be at risk of significant effects arising from the Proposed Development, or where the risk of significant effects

cannot be ruled out, either alone or in combination with other plans or projects, so that they can be taken forward for appropriate assessment; and

- examine which of the potential impacts arising from the Proposed Development are considered likely to result in LSEs to features of European sites and which impacts can be eliminated from consideration in further stages of the HRA; and
- undertake an appropriate assessment for each qualifying feature of European sites taken forward for Stage 2: RIAA.

1.3 Relevant Consultations

A summary of consultation responses from the EIA Scoping Opinion (NRW, 2025a), which could influence the HRA, or relating to European sites, is provided in below.

LSE SCREENING AND RIAA

Table 1.1: Summary of key consultation issues raised during consultation activities undertaken for the Project relevant to European sites and qualifying features

Date	Consultee and type of response	Issues raised	Response to issue raised and/or where considered in this chapter
Overarching			
31 January 2025	Natural Resources Wales Advisory (NRW(A)) Comments	NRW(A) generally agree with the topics that the report has scoped into the Environmental Impact Assessment (EIA). NRW have provided specific comment below.	This response was noted, and all relevant consultation from NRW has therefore been addressed and incorporated into the HRA documentation.
Annex II Diadromous Fish and Shellfish			
16 January 2025	NRW(A) Comments	NRW(A) agree with the sites and potential impacts scoping assessment for fish and shellfish ecology. We welcome the inclusion of nearby designated sites (Cardigan Bay Special Area of Conservation (SAC), Afon Teifi SAC, Cleddau Rivers SAC, Pembrokeshire Marine SAC and Carmarthen Bay and Estuaries SAC) in view of the migratory species features.	These designated sites are discussed during Stage 1: Screening for Likely Significant Effects (section 5).
31 January 2025	NRW PS Scoping Opinion	NRW PS agrees with the sites included and potential impacts scoped into the assessment for fish and shellfish ecology. NRW(A) welcomes the inclusion of nearby designated sites (Cardigan Bay SAC, Afon Teifi SAC, Cleddau Rivers SAC, Pembrokeshire Marine SAC and Carmarthen Bay and Estuaries SAC) in view of the migratory species features.	These designated sites are discussed during Stage 1: Screening for Likely Significant Effects (section 5).
16 January 2025	NRW(A) Comments	NRW(A) agree with the underwater noise scoping assessment. The preliminary mitigation measures proposed for noise are standard measures and likely to be sufficient given the amount of piling proposed, however, the Applicant will need to consider the appropriateness of measures designed to reduce noise impact for mammals on fish species. However, section 10.4 in the EIA scoping report mentions that the assessment will also account for fleeing animals. It is not clear if this statement only relates to marine mammals or applies to fish as well. NRW(A) advise that assessments for fish focus on fish as a stationary receptor, as this will cover the worst case scenario and there is limited consistent information on fish utilising directional avoidant fleeing behaviour in response to noise impacts	This response is noted. The determination of LSE for fish in section 5.2.2.2 has been undertaken on stationary fish as a worst case scenario, based on the underwater noise modelling (see associated ES Chapter 14: Underwater Acoustics). Appropriate mitigation measures for qualifying fish features are discussed in section 6.1.
31 January 2025	NRW PS Scoping Opinion	NRW PS agrees that underwater noise from piling during construction is scoped into the EIA and agrees with the preliminary mitigation measures proposed. NRW(A) advises that these standard mitigation measures are likely to be sufficient; however, stresses that measures designed to reduce noise impact for mammals are not always appropriate on fish species. NRW PS would encourage you to engage with	

LSE SCREENING AND RIAA

Date	Consultee and type of response	Issues raised	Response to issue raised and/or where considered in this chapter
		NRW(A) as you carry out your assessment and consider appropriate mitigation measures.	
Annex II Marine Mammals			
16 January 2025	NRW(A) Comments	NRW(A) note that North Anglesey Marine SAC has been omitted from scoping. The activity is located within the Celtic and Irish Seas Management Unit (MU) for harbour porpoise <i>Phocoena phocoena</i> , so animals from the SAC population could feasibly be found within the survey area and could potentially therefore be impacted. Due to the mobile nature of all Annex II marine mammal features of SACs, it is accepted that they do not stay within site boundaries. We generally consider that the appropriate scale at which to consider offsite impacts for marine mammals is the relevant species specific MU. We consider SACs within an MU to be 'functionally linked' to the surrounding sea because evidence demonstrates a degree of connectivity between SACs and the wider area, and because SACs represent special areas of sea within the MU. We recommend that North Anglesey Marine SAC is scoped in for harbour porpoise.	The North Anglesey Marine SAC has been included in sections 5.1.3.
16 January 2025	NRW(A) Comments	For most impact pathways, particularly those associated with potential removals or injury, NRW(A) consider MUs as the most appropriate spatial scale for assessment of the Test of Likely Significant Effect (screening).	SACs for harbour porpoise and bottlenose dolphin within the relevant Management Units (MUs) have been considered during the identification of European sites (section 5.1.3).
16 January 2025	NRW(A) Comments	NRW(A) would like to highlight the preferred use of Oslo Paris Convention (OSPAR) Region III as a spatial area for the assessment of grey seal <i>Halichoerus grypus</i> , rather than seal MUs. However, as all three Welsh sites for grey seal have been scoped in here, no changes are required.	For completeness, SACs designated for grey seals within the OSPAR Region III have been considered during the identification of European sites (section 5.1.3).
16 January 2025	NRW(A) Comments	The justification for scoping out "accidental pollution to the surrounding environment" impact pathway relies on the need for mitigation measures, which suggests that this has the potential to create an adverse effect. Therefore, NRW(A) recommends the impact pathway "Accidental pollution to the surrounding environment" should be scoped into EIA for further assessment.	This impact remains scoped out of HRA based on the following justification. The risk of accidental pollution will be mitigated by the implementation of measures set out in standard post-consent plans, such as an Environmental Management Plan (EMP), which will include a Marine Pollution Contingency Plan (MPCP). These plans will include planning for accidental spills, address all potential contaminants that could be released, and include key emergency contact details. They will also set out good industry practice and relevant guidelines for preventing pollution at sea (such as those from the Oslo Paris Convention (OSPAR), International Maritime Organisation (IMO), and the International Convention for the Prevention of Pollution from Ships (MARPOL)). Thus, it is unlikely that accidental pollution

LSE SCREENING AND RIAA

Date	Consultee and type of response	Issues raised	Response to issue raised and/or where considered in this chapter
			will occur and in the unlikely event that it did, it will be minimised through measures outlined in the MPCP. The approach to scope out potential LSE from accidental pollution using the justification provided here is standard practice across HRAs from a range of sectors and aligns with the proportionate approach.
16 January 2025	NRW(A) Comments	NRW(A) welcomes the use of the data sources and literature listed within the EIA Scoping Report but would like to highlight the following relevant guidance on underwater noise to be considered when undertaking the EIA: NRW's Position on Assessing Behavioural Disturbance of Harbour Porpoise from underwater noise (NRW, 2023a); and NRW's Position on Assessing the effects of hearing injury from underwater noise for environmental assessments (NRW, 2023b).	These guidance documents have been considered as part of the determination of LSE for Annex II marine mammals (section 5.2.3.2).
31 January 2025	NRW PS Scoping Opinion	NRW PS will expect that the assessment is carried out in line with NRW's position statements (NRW, 2023a, NRW, 2023b)	These guidance documents have been considered as part of the determination of LSE for Annex II marine mammals (section 5.2.3.2).

1.4 Structure of the Report

This report is set out in the following stages:

- section 2 – Habitat Regulations Process: a summary of the HRA process and legislative context including implications of the UK's departure from the EU;
- section 3 – Project Description: a description of the key elements of the Proposed Development;
- section 4 – Assessment Methodology: the initial identification of sites and features which may potentially be affected by the Proposed Development;
- section 5 – Stage 1: Screening for Likely Significant Effects: LSE screening tables and the determination of the potential for LSEs to arise with regard to the designated features of the European sites under consideration;
- section 6 – Stage 2: Report to inform the Appropriate Assessment: an assessment for European sites that have been screened in from Stage 1; and
- section 7 – Summary: a summary of those European sites (and qualifying features) which have been identified and assessed.

2 HABITAT REGULATIONS PROCESS

2.1 Legislative Context

The ‘Habitats Directive’ (Council Directive 92/43/EEC), on the conservation of natural habitats and wild fauna and flora, protects habitats and species of European nature conservation importance. Along with the Council Directive (2009/147/EC) on the conservation of wild birds (the ‘Birds Directive’), the Habitats Directive establishes a network of internationally important sites, designated for their ecological status.

Following the UK departure from the EU on 31 December 2020, the Habitats Directive (and transposing Habitats Regulations) continue to apply in the UK through the EU Exit Regulations. The HRA process implemented under the Habitats Regulations stays valid (subject to minor amendments as a result of the EU Exit Regulations) and the UK is bound by HRA judgments handed down by The Court of Justice of the European Union before 31 December 2020. This document, therefore, assumes that all relevant HRA-related legislation remains in place and in accordance with Habitats Regulations that transposed the European requirements for HRA into UK law and as effected by the EU Exit Regulations (2019). The objective of the Habitats Regulations is to conserve, at a favourable conservation status, those habitats and species listed in Annexes I and II of the Habitats Directive. Post-EU-Exit, the Habitats Regulations continue to refer to Annexes I and II of the Habitats Directive and as such, reference is made to the annexes of the Habitats Directives in this report.

The Habitats Directive established the Europe-wide network of nature conservation areas that are the subject to the HRA process. These are internationally important sites, designated for their ecological status. SACs are designated under the Habitats Directive and endorse the protection of flora, fauna and habitats. European sites located within an EU Member State combine to create a Europe-wide network of European sites (the Natura 2000 network) and may be referred to as Natura 2000 Sites. In Wales, Ramsar Sites (identified under the Ramsar Convention) are also afforded the same level of protection as fully designated Natura 2000 sites.

As a consequence of the EU-Exit, European sites located within the UK are no longer part of the Natura 2000 network (nor Natura Sites). These now form the UK’s ‘National Site Network’ and therefore, hereafter, sites within the UK and the EU are both referred to as European sites. The National Site Network constitute European sites in the UK that were established under the Nature Directives prior to 31 December 2020 (or proposed to the European Commission before that date) and any new sites designated under the Habitats Regulations under an amended designation process.

2.2 The Process

Following the exit from the EU, the UK no longer has any obligations under the Habitats Directives. However, the wording of Articles 6(3) and 6(4) of the Habitats Directive rules the sequential decision-making tests applied under the HRA process to plans or projects likely to affect European sites.

Regulation 63(1) of The Conservation of Habitats and Species Regulations 2017 requires that, wherever a plan or project that is not directly connected to, or necessary for, the management of a European site, is likely to have a significant effect on the conservation objectives of the site (either alone or in-combination with other

plans or projects), the competent authority must undertake an ‘appropriate assessment’ of the implications for the site in view of the site’s conservation objectives before consent or authorisation can be given for the plan or project.

Regulation 63(1) of The Conservation of Habitats and Species Regulations 2017 states that the competent authority may agree to the plan or project only after it has determined that it will not adversely affect the integrity of the European site. If an appropriate assessment concludes that the development will adversely affect the integrity of the site, Regulation 64(1) of The Conservation of Habitats and Species Regulations 2017 makes clear that consent/authorisation can only then be given if there are no alternative solutions and that the project must be carried out for Imperative Reasons of Overriding Public Interest (IROPI). Regulation 63(2) stipulates that where the site supports priority natural habitats or priority species, the IROPI must be in relation to reasons: i) relating to human health, public safety or beneficial consequences of primary importance to the environment, or ii) other reasons which in the opinion of the European Commission are IROPI. An agreement under these circumstances must be accompanied by the securing of necessary compensatory measures to ensure that the overall coherence of the network of European sites is protected.

Regulation 63(2) of The Conservation of Habitats and Species Regulations 2017 makes it clear that the person applying for the consent of the plan or project must provide such information as the competent authority may reasonably be required for the assessment. It is intended that this report provides this information.

To determine whether an appropriate assessment is required it must first be ascertained whether or not the plan/project is necessary to, or of value to, or inevitable as part of, management of the site for its qualifying interests. As this is not the case for the Proposed Development, it must therefore be determined whether the plan or project, either alone or in-combination with other plans and projects, is likely to have a significant effect on the European site. This constitutes the LSE screening stage, which removes from the assessment process plans or projects that have no connectivity to a site’s qualifying interests or those where it is very obvious that the conservation objectives for the site’s qualifying interests will not be undermined despite a connection. All other plans or projects, including those where there is reasonable doubt as to the magnitude and nature of their impact, are passed through to the next stage (appropriate assessment).

The Habitats Regulations set out a step-by-step sequence of statutory procedures to be followed that are designed to test the potential effects of plans and projects on European sites. It must be followed in the correct and particular sequence to comply with the requirements of the Habitats Directive. The guidance on conducting HRAs in Wales (Welsh Government, 2021) outlines three stages that assessments of the effects of plans or projects on European sites must follow. These stages are:

- Stage 1: screening
- Stage 2: appropriate assessment; and
- Stage 3: derogation.

2.3 Process for Identifying European Sites and Features

The criteria adopted for the initial identification of European sites are outlined in Table 2.1. This approach takes account of the location of the European sites in relation to the Proposed Development, the anticipated Zone

LSE SCREENING AND RIAA

of Influence (Zol) of potential impacts associated with the Proposed Development, and the ecology and distribution of qualifying features (section 5.1).

Table 2.1 outlines the order of consideration given to the criteria used for the identification of the list of sites to be taken forward for the determination of LSE. The initial consideration is given to whether there is a physical overlap between the Proposed Development and any European sites; all sites with an overlapping boundary are screened in to be taken forward for determination of LSE. Criterion 2 next identifies any European sites, not already screened using criterion 1, where there is an overlap between the Proposed Development and the range of any qualifying mobile species of the site. Criterion 3 identifies any European sites, not already screened in by criterion 1 or 2, where the potential Zol of the Proposed Development overlaps with a European site and/or qualifying interests of the site.

Table 2.1: Criteria for initial identification of relevant European sites

Order of Consideration	Criteria Used for Initial Identification of Relevant European Sites
1	The site boundaries of the Proposed Development overlap with one or more European sites.
2	European or Ramsar site with qualifying mobile features/species (e.g. ornithological qualifying features, Annex II marine mammals, migratory fish) whose range (e.g. foraging, migratory, overwintering, breeding or natural habitat range) overlaps with the Proposed Development.
3	European sites and/or qualifying features located within the potential Zol of impacts associated with the Proposed Development (e.g. habitat disturbance, noise and disturbance/displacement).

3 PROJECT DESCRIPTION

3.1 The Proposed Development

The Proposed Development consists of the removal of the existing linkspan and jack-up barge and associated infrastructure, and then installation of a floating linkspan pontoon and associated civil works. Stena Line Ltd own a floating pontoon, which they wish to relocate to Fishguard. Civil works will be required to enable access and utilisation of the pontoon for the ferry traffic. Landside works will be required to adjust traffic and pedestrian routes to service the new floating linkspan pontoon. Dredging works are also proposed.

The Proposed Development involves several key activities aimed at enhancing the infrastructure and operational capabilities of the harbour. Firstly, the construction of a new reclamation area will be undertaken. This area will be formed with imported crushed rock fill material protected by a rock armour revetment and surfaced with an asphalt road surface. To facilitate the construction of this reclaimed land, dredging of soft material behind the new berth will be necessary. Additionally, dredging to a depth of -9 m Chart Datum (mCD) beneath the pontoon will be carried out to ensure sufficient depth for operations. Capital dredging of the harbour will also be conducted to a range of depths between -7.3 mCD and -6.8 mCD in the berth and channel and -5.5 mCD to the north of the harbour. No maintenance dredging is included in this licence application.

A reinforced concrete bank seat structure will be constructed to support the linkspan pontoon at the edge of the reclamation. This structure is expected to be a piled bank seat, with steel tubular piles filled with concrete, and installed using vibro, impact driving and rotary boring techniques. The installation of the linkspan pontoon and its supporting guide pile will follow. The guide pile will be installed using a combination of vibro and rotary boring techniques and will be filled with reinforced concrete. The installation of the guide pile will require four steel piles to be installed temporarily as a piling gate. These will be approximately 1.22 m in diameter. Discrete scour protection will be installed along sections of the existing quay wall as well as along the southern face of the dredged pocket and to the northern face of the dredged slope behind the linkspan pontoon. This scour protection will be either rock /grout filled bags or gabion mattresses placed on the seabed.

The Proposed Development will also involve the removal of the existing temporary jack-up barge, which will be floated away for disposal/re-use without the need for demolition. One of the existing 'buffer dolphin' tower structures will be demolished, along with the removal of the steel access bridge and the demolition of the existing suspended concrete deck structure. This is not a piled structure; the columns are placed directly on the seabed (rock). The existing disused Royal National Lifeboat Institution (RNLI) jetty will be demolished to enable the reclamation works. The area beneath existing RNLI slipway will be enveloped into the reclamation. The landside in this area around the slipway consists of concrete or block retaining walls, rock rubble revetment or exposed bedrock.

In terms of services, the linkspan pontoon will be equipped with electricity. The refuelling lines will be relocated to service ships following the change of berthing direction for the new linkspan. Drainage provision will be made for the new surfacing, and ducting will be installed for communications and future provisions.

More detailed information on the scheme can be found in Chapter 2 Project Description of the Environmental Statement (ES).

3.2 Approach to the In-combination Assessment

The Habitats Regulations require the consideration of the potential effects of the Proposed Development on European sites both alone and in-combination with other plans or projects.

The plans and projects relevant to the in-combination assessment were based upon the results of a screening exercise to produce a long list. For Annex I habitats and Annex II diadromous fish a screening buffer based on tidal ellipses within Fishguard Harbour and the adjacent coastline extended out to approximately 7 km from the Planning Boundary, which accounts for one tidal excursion and the limited ZOI for underwater noise effects on diadromous fish. While it is acknowledged that NRW would use prefer plans and projects within the relevant species-specific Management Units (MUs) for Annex II marine mammals to be considered, a screening buffer of 100 km was considered adequately precautionary based on the highly limited spatial and temporal scale of the Proposed Development and the limited ZOI for underwater noise effects on marine mammals. Therefore, plans and projects within 100 km of the Proposed Development

LSE SCREENING AND RIAA

formed the long list (

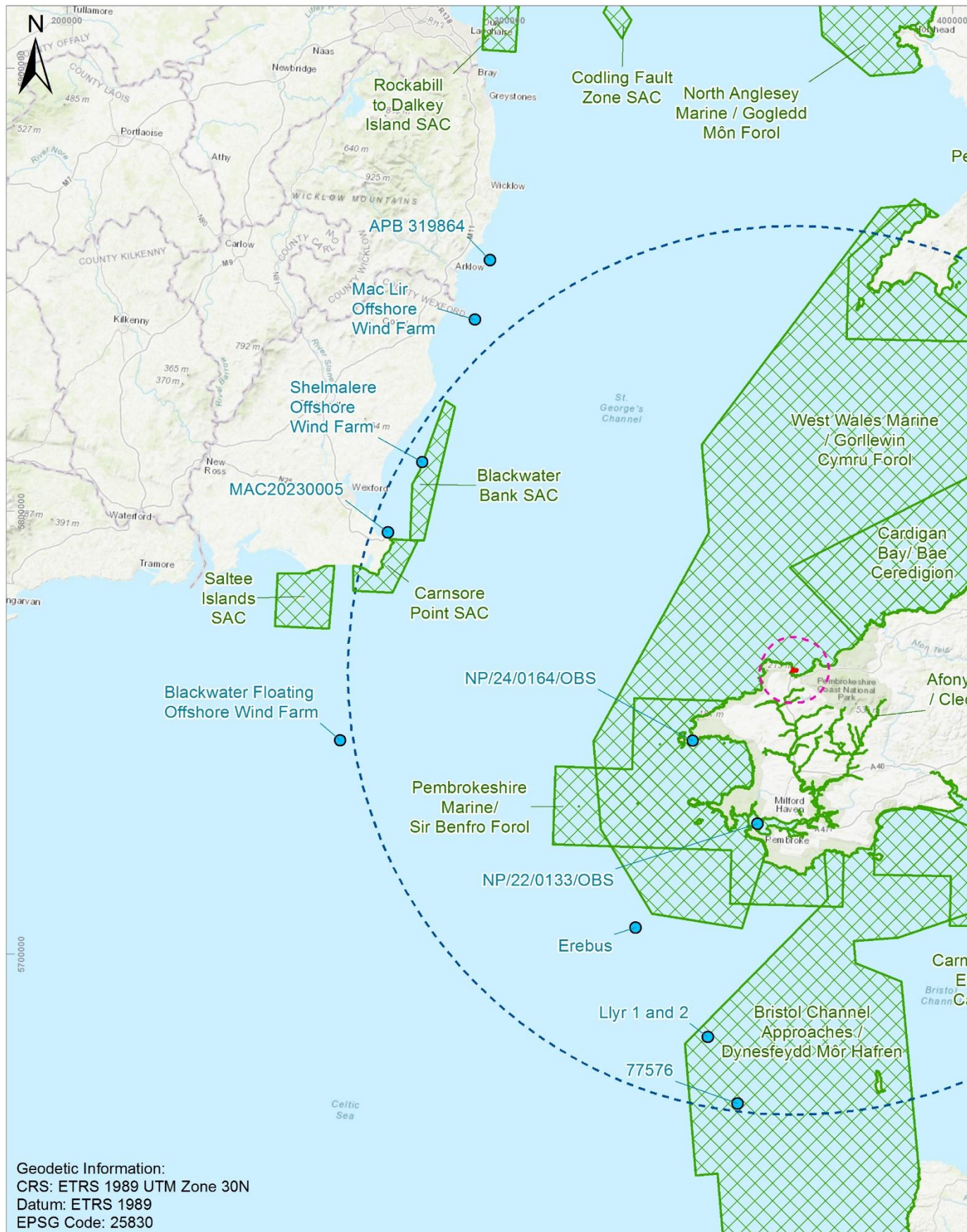


Figure 3-1).

There are no proposed projects currently likely to cause in-combination effects with the Proposed Development, as there was either no spatial overlap with the screening buffers defined for the qualifying features, and/or no temporal overlap with activities associated with the Proposed Development.

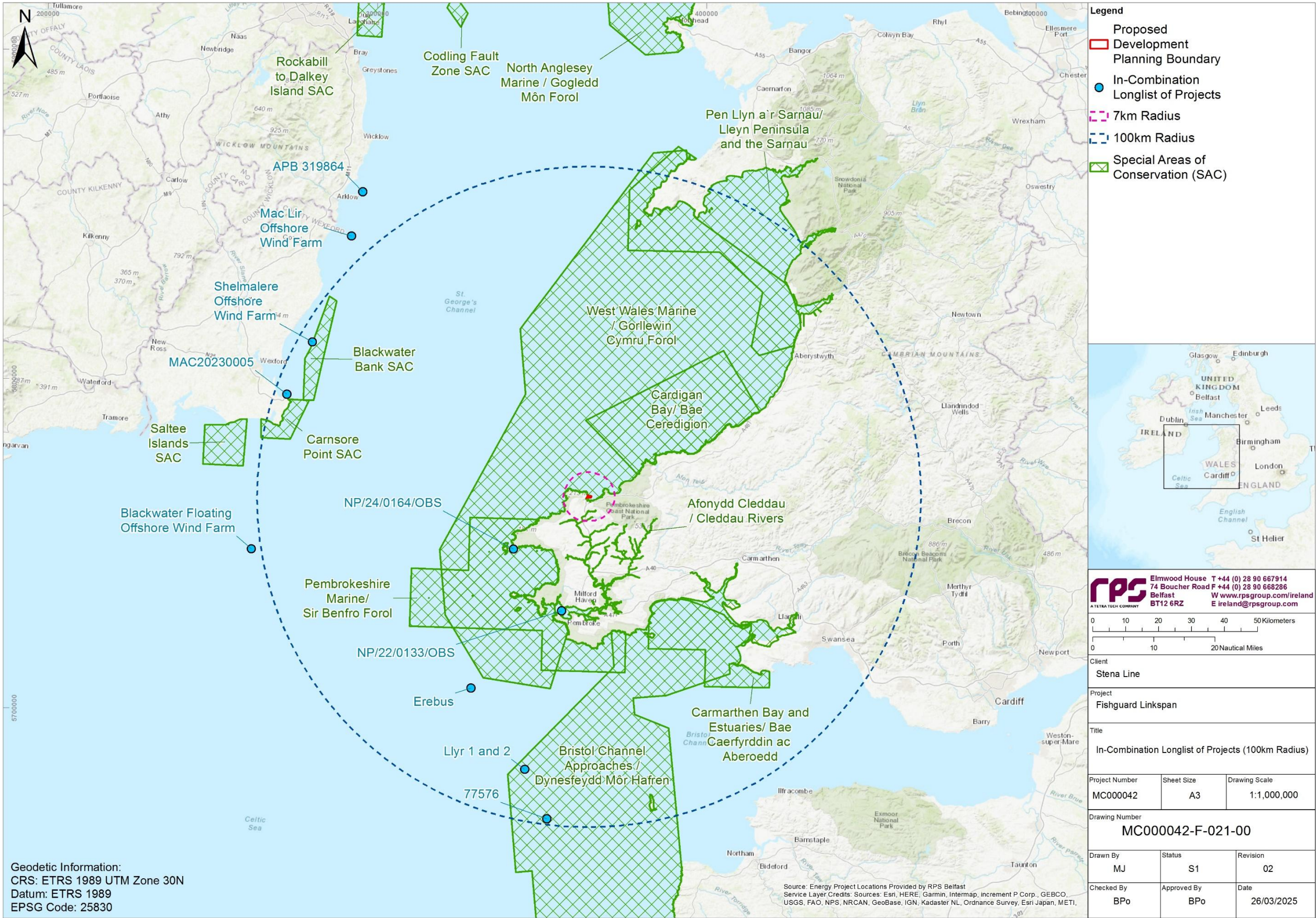


Figure 3-1: In-combination long list of plans and projects in proximity to the Planning Boundary

4 ASSESSMENT METHOD

As described in section 2.2, there are three main stages to the HRA process. These are described in more detail below:

- Stage 1: Screening
 - Identify the European sites and features that have the potential for LSEs from the Proposed Development alone or in-combination with other plans and projects and provide information on identified European sites and their conservation objectives; and
 - Identify project activities that have the potential for LSE on identified European sites and their features.
- Stage 2: Appropriate Assessment
 - Where LSEs on a European site have been identified in Stage 1, consider whether those effects will adversely affect the integrity of the European site in light of its conservation objectives; and
 - For identified adverse effects on the integrity of the site provide suitable mitigation that will ensure that no adverse effect to site integrity can be concluded.

If Stage 2 concludes that the Proposed Development will have an adverse effect on the integrity of the European site(s), or is inconclusive, then Stages 3 of the HRA process (derogation) is triggered; which includes three tests to be followed in order: consider alternative solutions; consider IROPI; and secure compensatory measures. Each test must be passed in sequence for a derogation to be granted.

5 STAGE 1: SCREENING FOR LIKELY SIGNIFICANT EFFECTS

5.1 Identification of European Sites and Features

This section provides a list of European sites, and their features, for which there is the potential for connectivity with the Proposed Development, using the criteria outlined in Table 2.1, and therefore those which should be taken forward for consideration of LSE in section 5.2.

The receptors that could potentially be affected by the Proposed Development and could be the designating features of protected sites are considered in turn:

- Annex I habitats (subtidal and coastal up to mean high water springs (MHWS)) - section 5.1.1;
- Annex II diadromous fish species - section 5.1.2;
- Annex II marine mammals – section 5.1.3; and.
- Annex II otters – section 5.1.4.

There are no terrestrial SACs with designated features other than otter, considered to be within the ZoI of the construction or operational phases of the Proposed Development (ES Chapter 9 Terrestrial Ecology). Therefore, only SACs designated for otters are taken forward for assessment of LSE.

There are SPAs designated for ornithological qualifying features that may have connectivity with the Proposed Development, however most of the bird species will generally avoid foraging in areas with high anthropogenic activity. As discussed in the HRA of the replacement linkspan application (RPS, 2018a), Fishguard Harbour is within the foraging range of gannets *Morus bassanus* from Grassholm SPA (43.3 km southwest). However, this species generally avoids foraging within busy coastal areas directly next to the foreshore, and is therefore unlikely to be recorded near to the proposed works. The harbour is also within the foraging range of seabirds from the Skomer, Skokholm and the Seas off Pembrokeshire SPA (32.2 km southwest). However, Manx shearwater *Puffinus puffinus*, Atlantic puffin *Fratercula arctica* and European storm petrel *Hydrobates pelagicus* also all generally avoid foraging within coastal areas directly next to foreshores that have very high levels of anthropogenic activity. These species are therefore unlikely to be recorded near to the proposed works. Lesser black-backed gull *Larus fuscus* nesting on Skomer or Skokholm would be expected to forage in closer proximity to these islands (RPS, 2018a). SPAs have therefore not been considered any further within this screening report.

5.1.1 Sites Designated for Annex I Habitats

The following section details the results of the stepwise process to identify the European sites with relevant Annex I habitats to be taken forward for detailed determination of LSE based on the methodology and criteria outlined in section 2.3 and Table 2.1.

5.1.1.1 Initial Identification of Sites

- Criterion 1 for the identification of European sites to be taken forward for consideration of LSE considers those sites which overlap with the boundaries of the Proposed Development. As there are no European sites with relevant qualifying Annex I habitats, which overlap with the Proposed Development, no sites are considered further on the basis of this criterion.
- Criterion 2 considers European sites with qualifying mobile features/species whose range (e.g. foraging, migratory, overwintering, breeding or natural habitat range) overlaps with the Proposed Development. This criterion is not relevant for Annex I benthic habitats, therefore, no sites are considered further on this basis.
- Criterion 3 considers European sites and/or qualifying features which are located within the potential Zol of impacts associated with the Proposed Development. There is the potential for indirect effects on sites designated for Annex I habitats as a result of impacts associated with increased suspended sediment concentrations (SSC) arising from dredging activities or changes to the hydrodynamic regime as a result of the presence of linkspan pontoon infrastructure associated with the Proposed Development. As such, the extent of these impacts is considered likely to extend beyond the Planning Boundary of the Proposed Development. For LSE screening, a precautionary approach has been adopted and a buffer of 10 km has been used based on professional judgement. This buffer is considered to be sufficiently precautionary to capture all sites likely to be in the Zol from indirect effects associated with Proposed Development activities. The closest designated site with benthic qualifying features is the Cardigan Bay/Bae Ceredigion SAC, which sits 14.9 km from the Planning Boundary. Therefore, as there are no European sites with relevant qualifying Annex I habitats, which overlap with the 10 km buffer, no sites are considered further on the basis of this criterion.

The initial screening process has not identified any sites designated for Annex I habitat features to be taken forward for the determination of LSE in this report.

5.1.2 Sites Designated for Annex II Diadromous Fish

The following section details the results of the stepwise process to identify the European sites with relevant Annex II diadromous fish species to be taken forward for detailed determination of LSE based on the methodology and criteria outlined in section 2.3 and Table 2.1.

Based on the Marine Biodiversity chapter of the associated EIA Scoping Report, relevant consultation from NRW (Table 1.1) and the ES Chapter 8: Marine Biodiversity, the Annex II diadromous fish species feature with a marine component and with potential to occur in the vicinity of the Proposed Development include:

- sea lamprey *Petromyzon marinus*;
- river lamprey *Lampetra fluviatilis*;
- allis shad *Alosa alosa*;
- twaite shad *Alosa fallax*; and

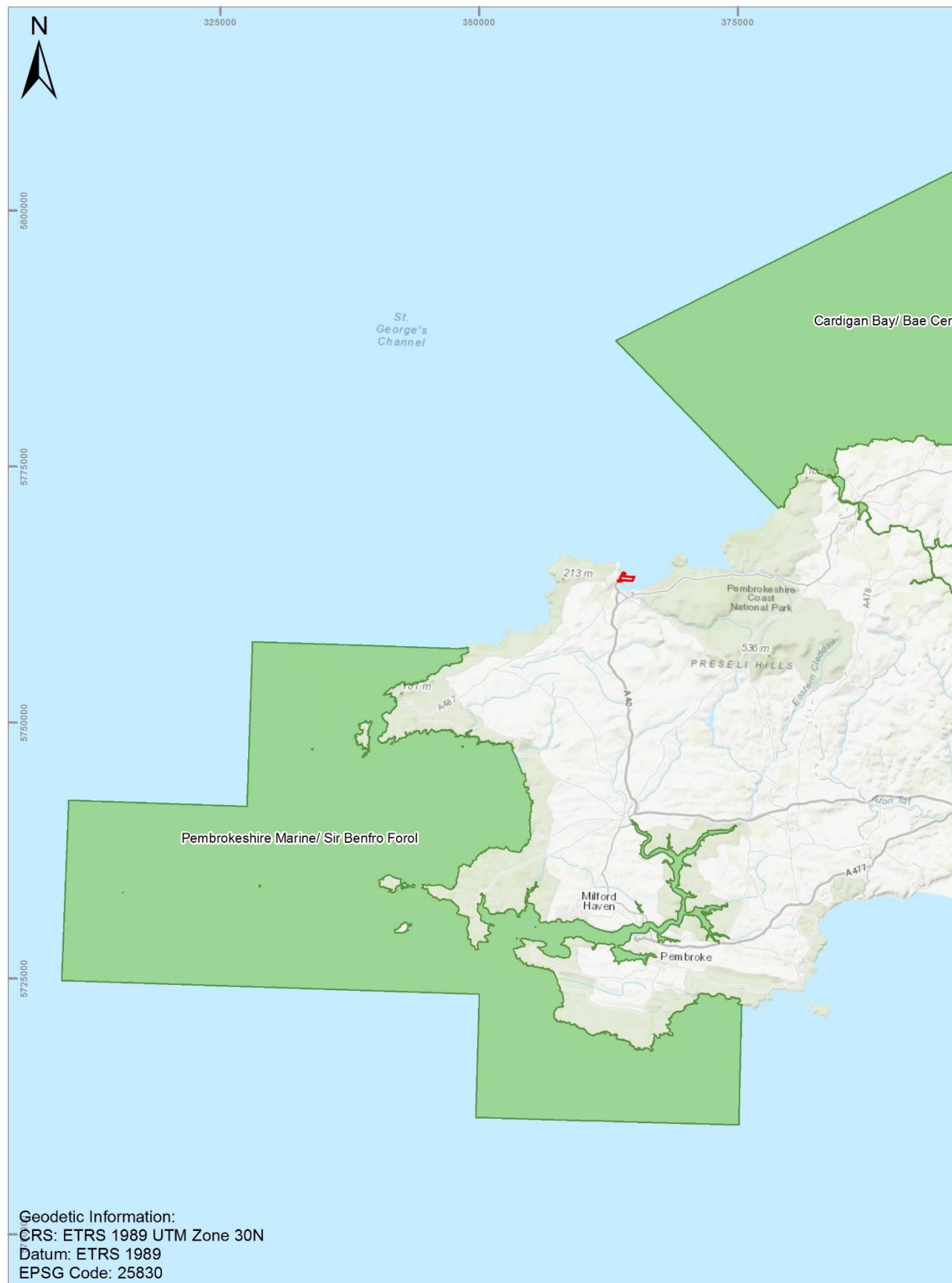
- Atlantic salmon *Salmo salar*.

5.1.2.1 Initial Identification of Sites

- Criterion 1 considers European sites which overlap with the boundaries of the Proposed Development. As there are no European sites with Annex II diadromous fish species as qualifying features which overlap with the Proposed Development, no sites are screened for further consideration for diadromous fish on the basis of this criterion.

Criterion 2 considers European sites with qualifying mobile features/species whose range (e.g. foraging, migratory, overwintering, breeding or natural habitat range) overlaps with the Proposed Development. Annex II diadromous fish species are mobile and utilise both freshwater and marine environments throughout their life cycles. Therefore, there is the potential for activities associated with the construction and operation of the Proposed Development to result in impacts on these qualifying features at a distance from the European sites. A precautionary approach to the identification of relevant sites has been adopted in order to capture all sites with the potential for connectivity with the Proposed Development. On this basis, it has been considered that sites with Annex II diadromous fish as qualifying features that are located within a 50 km buffer of the Proposed Development could potentially be affected and must, therefore, be considered. This has been based on professional judgement. Three European sites have

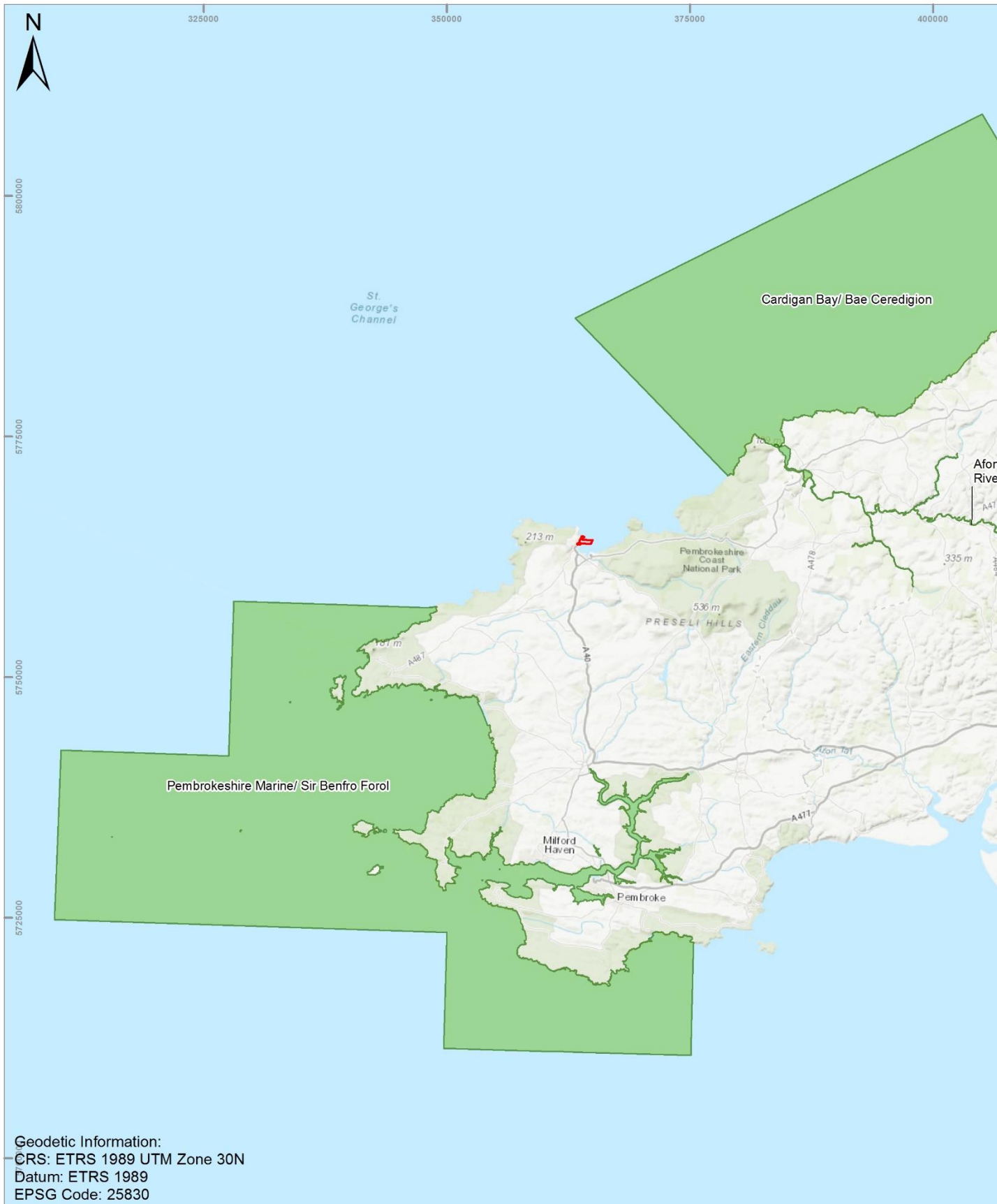
been identified using this criterion (



- Figure 5-1) and screened in for determination of LSE in section 5.2 of this report. These are:
 - Cardigan Bay SAC;
 - Pembrokeshire Marine SAC; and
 - River Teifi SAC.
- Criterion 3 considers European sites and/or qualifying features that are located within the potential ZoI of impacts associated with the Proposed Development. Given the large buffer proposed for criterion 2 above (50 km), the ZoI for key impacts to migratory fish species (i.e. underwater noise) are anticipated to be well within this range. No additional European sites with Annex II diadromous fish as qualifying features are therefore considered further on the basis of criterion 3. While it is acknowledged that the lamprey qualifying features of the Cardigan Bay and Pembrokeshire Marine SACs are part of a larger population covering the Bristol channel and wider area, and therefore may be linked to the river and sea lamprey populations of the River Wye, River Usk, River Tywi, River Teifi, Severn Estuary, Cleddau Rivers, Carmarthen Bay and Estuaries SACs, there is uncertainty around whether lampreys present have been or are yet associated with these SAC populations as lampreys do not home to their natal river (Natural Resources Wales (NRW), 2018a,b). The closest of these SACs to the Proposed Development are the Cleddau Rivers SAC, with its estuary 94 km south via sea and the Carmarthen Bay and Estuaries SAC 95 km southeast round the South Wales coast. As none of these SACs overlap with the Proposed Development and due to the already precautionary potential ZoI of impacts being considered, those SACs outside this 50 km buffer were not considered.

The initial screening process has identified three European sites with Annex II diadromous fish as qualifying features to be taken forward for detailed determination of LSE in section 5.2.2 of this report. The sites are listed in Table 5.1 and shown

in



LSE SCREENING AND RIAA

Figure 5-1. The standard data forms for all these European sites are provided in Appendix A.

Table 5.1: European sites designated for Annex II diadromous fish species taken forward for determination of LSE

Site Name	Site Code	Relevant Qualifying feature	Minimum Distance from Planning Boundary (km)
Cardigan Bay/Bae Ceredigion SAC	UK0012712	Sea lamprey River lamprey	14.9
Pembrokeshire Marine/Sir Benfro Forol SAC	UK0013116	Sea lamprey River lamprey Allis shad Twaite shad	21.5
River Teifi/Afon Teifi SAC	UK0012670	River lamprey Atlantic salmon Sea lamprey	22.8

Note: All distances are measured as the marine route to the site (i.e. not the distance as the crow flies).

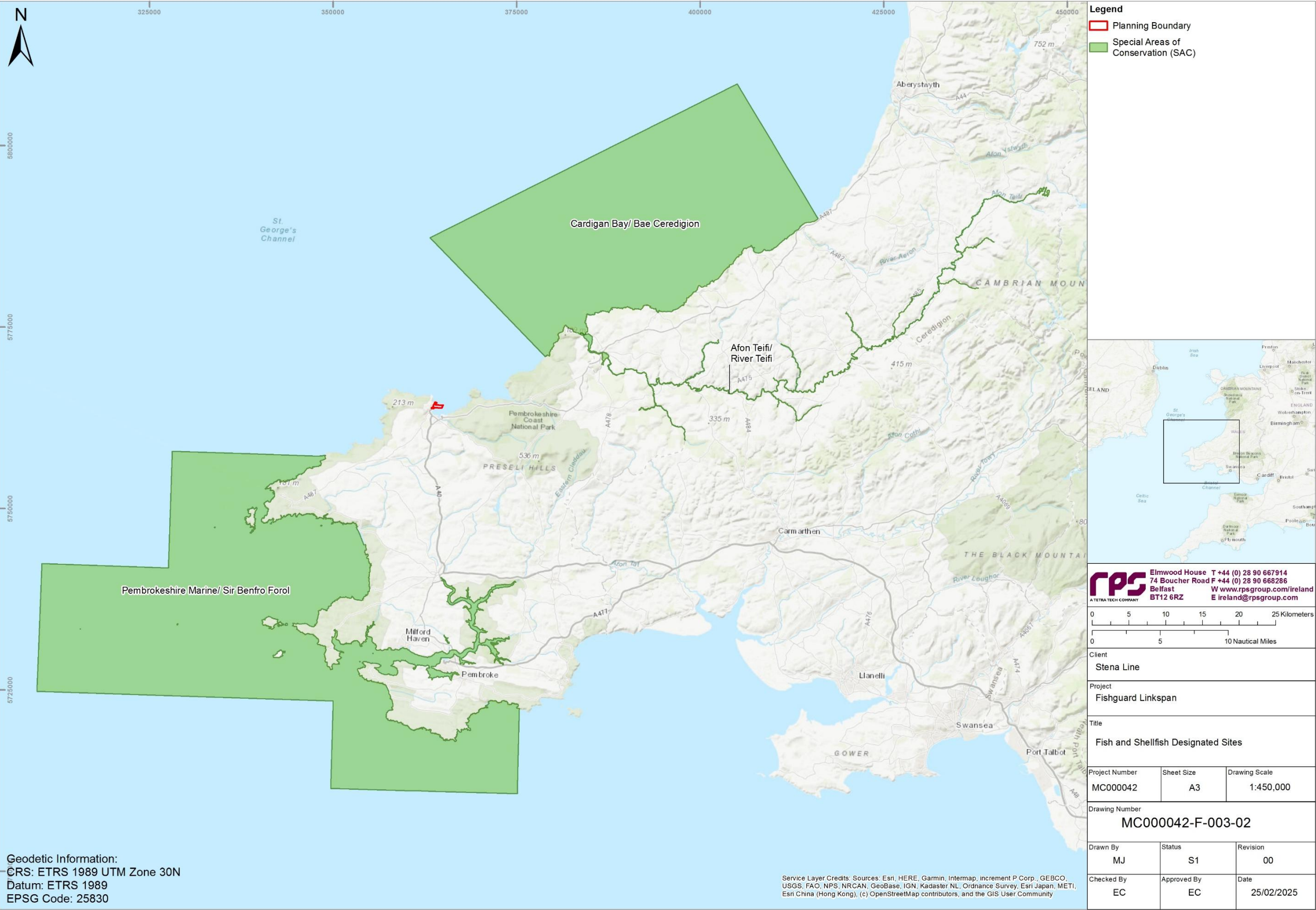


Figure 5-1: Location of European sites designated for Annex II diadromous fish and shellfish species taken forward for determination of LSE

5.1.3 Sites Designated for Annex II Marine Mammal

The following section details the results of the stepwise process to identify the European sites with relevant Annex II marine mammals to be taken forward for detailed determination of LSE based on the methodology and criteria outlined in section 2.3 and Table 2.1.

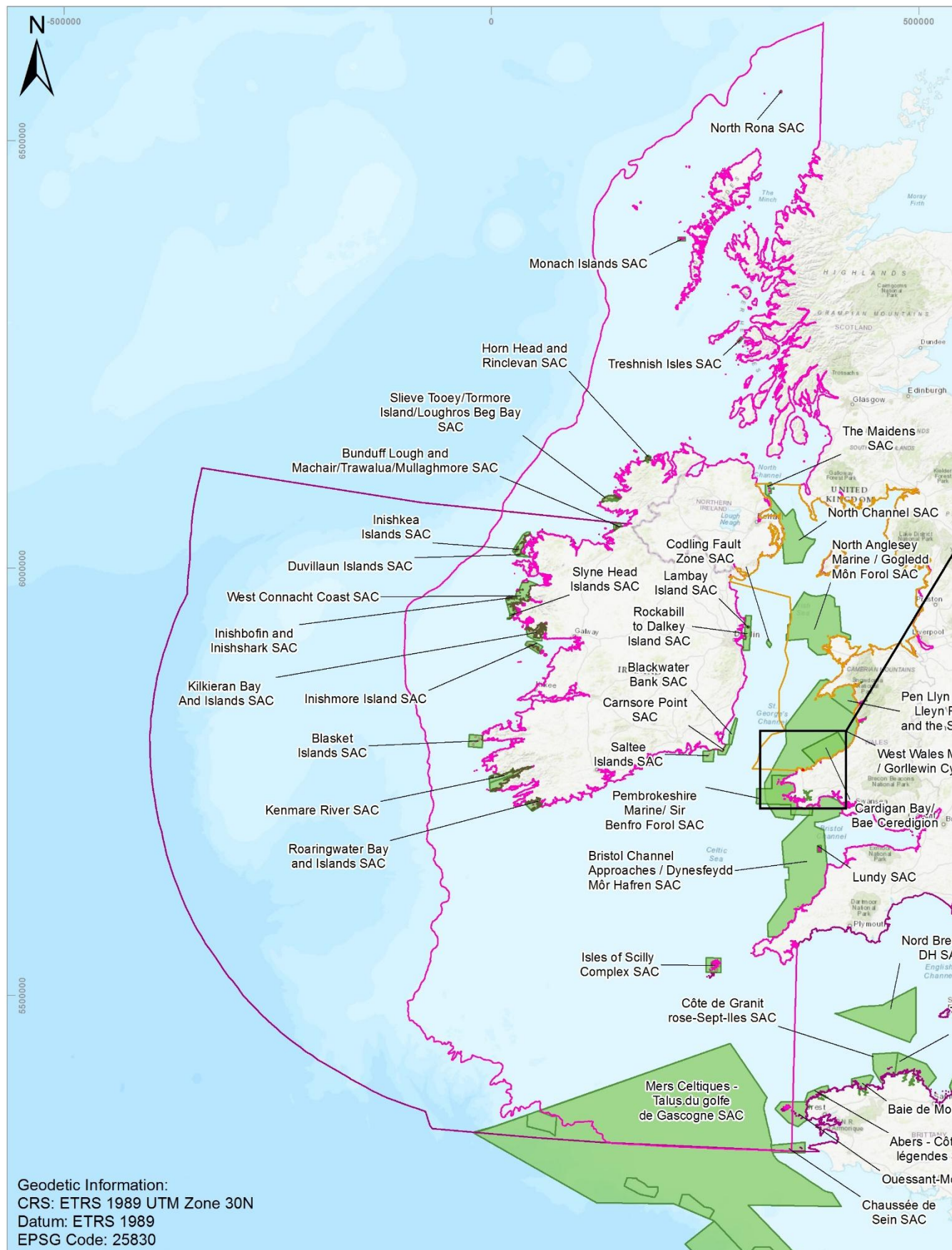
Based on the Marine Biodiversity chapter of the associated EIA Scoping Report, relevant consultation from NRW (Table 1.1) and the ES Chapter 8: Marine Biodiversity, the Annex II marine mammal species likely to occur in the vicinity of the Proposed Development include:

- harbour porpoise *Phocoena phocoena*;
- bottlenose dolphin *Tursiops truncatus*; and
- grey seal *Halichoerus grypus*.

5.1.3.1 Initial Identification of Sites

LSE SCREENING AND RIAA

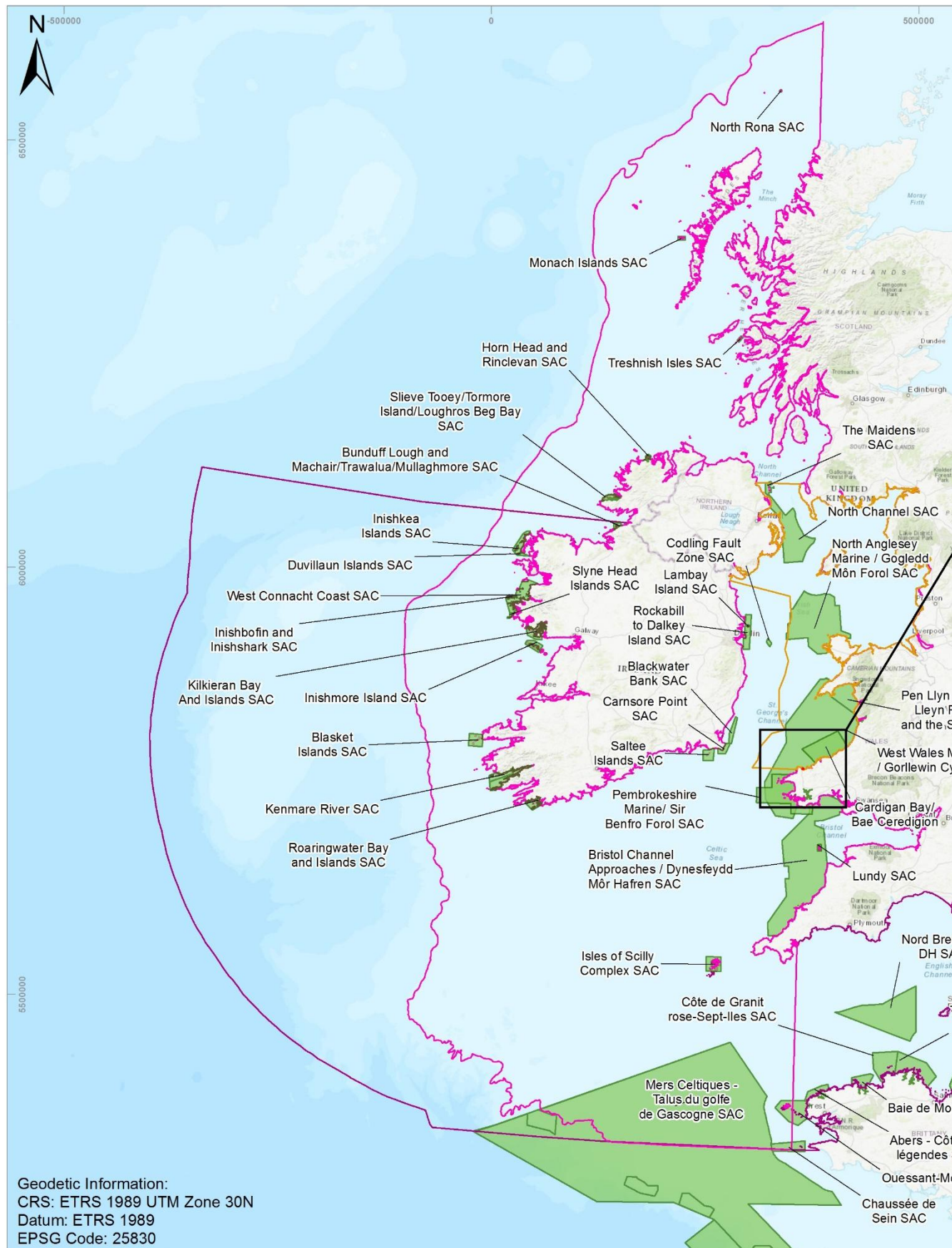
- Criterion 1 considers European sites which overlap with the boundaries of the Proposed Development. On the basis of this criterion, a single site, West Wales Marine SAC, is identified (



- Figure 5-2) and screened in for determination of LSE in section 5.2 of this report.
- Criterion 2 considers European sites with qualifying mobile species whose range (e.g. foraging, migratory, overwintering, breeding or natural habitat range) overlaps with the Proposed Development. Annex II marine mammal species are highly mobile and forage over wide areas. Therefore, there is the potential for activities associated with the construction and operation of the Proposed Development to result in impacts on these qualifying features at a distance from the European sites. A precautionary approach to the identification of relevant sites, according to NRW's position (NRW, 2025b) and advice received during EIA Scoping consultation, has been adopted in order to capture all sites with the potential for connectivity with the Proposed Development. On this basis, it has been considered that sites with Annex II marine mammals as qualifying features, which are located within the same species-specific MUs as the Proposed Development could potentially be affected and must, therefore, be considered. For cetaceans, species-specific MUs are defined by the Inter-Agency Marine Mammal Working Group (IAMMWG, 2023) and include the Celtic and Irish Seas MU for harbour porpoise and the Irish Sea MU for bottlenose dolphin, while the OSPAR Region III interim MU was used for grey seals as advised by NRW (NRW, 2025b). A total of 41 European sites have been identified using this

criterion

(



- Figure 5-2) and screened in for determination of LSE in section 5.2 of this report. These are detailed in Table 5.2.

Criterion 3 considers European sites and/or qualifying features which are located within the potential ZoI of impacts associated with the Proposed Development (e.g. noise disturbance). Given the large area of search proposed above for both cetaceans and pinnipeds in criterion 2, and that the ZoI for key impacts to marine mammals (i.e. underwater noise) were anticipated to be well within this area, no additional European sites with Annex II marine mammal species as qualifying features, beyond those already identified for criterion 2 are therefore considered further on the basis of this criterion.

The initial screening process has identified 41 European sites with Annex II marine mammals as qualifying features to be taken forward for detailed determination of LSE in section 5.2.3 of this report. The sites are

LSE SCREENING AND RIAA

listed in Table 5.2 and shown in

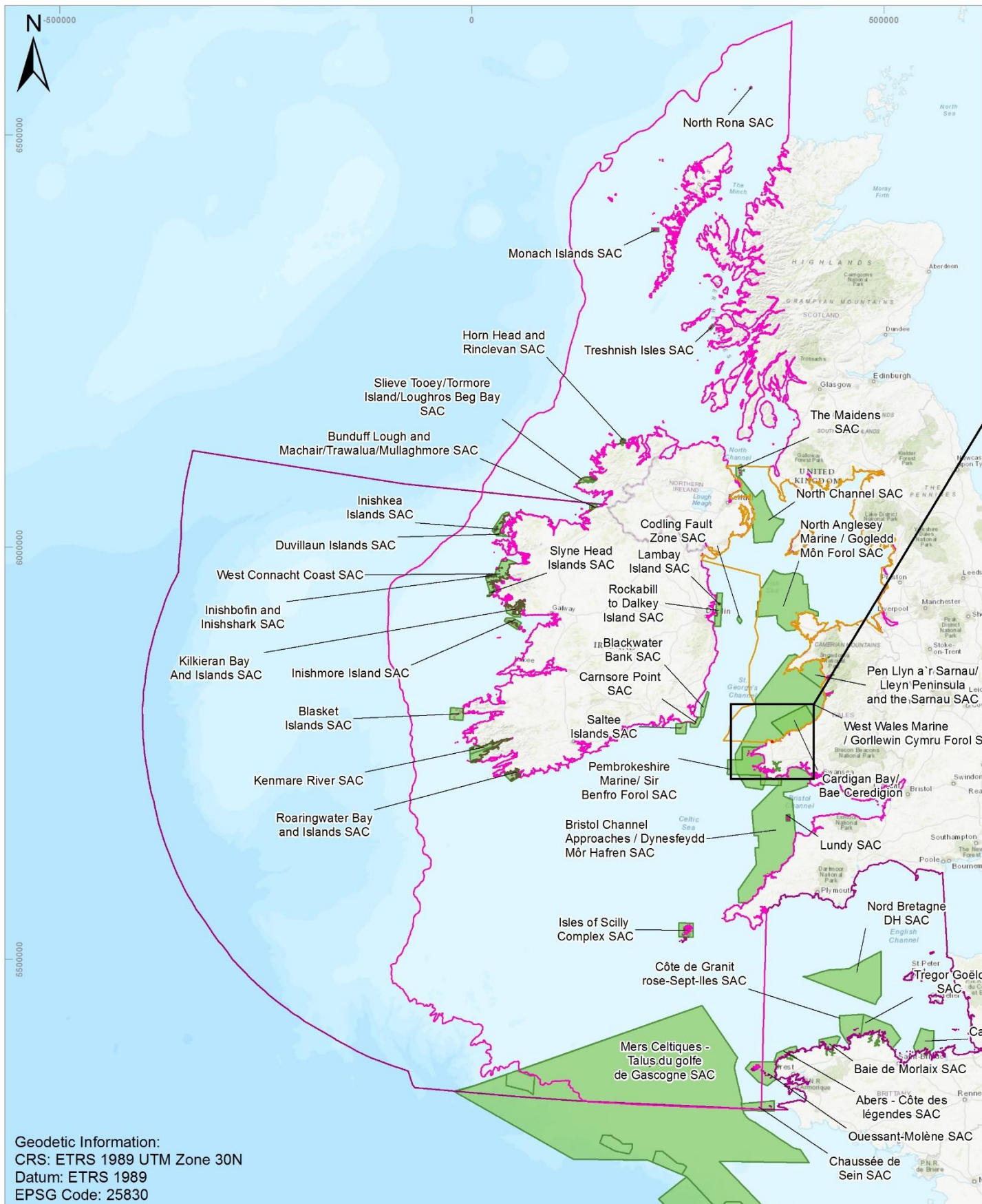


Figure 5-2.

Table 5.2: European sites designated for Annex II marine mammal species taken forward for determination of LSE

Site Name	Site Code	Relevant Qualifying feature	Minimum Distance from Planning Boundary (km)
UK sites			
West Wales Marine/Gorllewin Cymru Forol SAC	UK0030397	Harbour porpoise	Overlaps
Cardigan Bay/Bae Ceredigion SAC	UK0012712	Bottlenose dolphin Grey seal	14.9
Pembrokeshire Marine/Sir Benfro Forol SAC	UK0013116	Grey seal	20.2
Lleyn Peninsula and the Sarnau/Pen Llŷn a'r Sarnau SAC	UK0013117	Bottlenose dolphin Grey seal	66.5
Bristol Channel Approaches/Dynesfeydd Môr Hafren SAC	UK0030396	Harbour porpoise	82.4
Lundy SAC	UK0013114	Grey seal	118.3
North Anglesey Marine/Gogledd Môn Forol SAC	UK0030398	Harbour porpoise	134.8
North Channel SAC	UK0030399	Harbour porpoise	241.4
Isles of Scilly Complex SAC	UK0013694	Grey seal	250.6
The Maidens SAC	UK0030384	Grey seal	323.8
Treshnish Isles SAC	UK0030289	Grey seal	516.5
Monach Islands	UK0012694	Grey seal	649.8
North Rona	UK0012696	Grey seal	826.5
Irish sites			

LSE SCREENING AND RIAA

Site Name	Site Code	Relevant Qualifying feature	Minimum Distance from Planning Boundary (km)
Blackwater Bank SAC	IE0002953	Harbour porpoise	88.8
Carnsore Point SAC	IE0002269	Harbour porpoise	90.0
Saltee Islands SAC	IE0000707	Grey seal	105.9
Codling Fault Zone SAC	IE0003015	Harbour porpoise	147.4
Rockabill to Dalkey Island SAC	IE0003000	Harbour porpoise	152.6
Lamby Island SAC	IE0000204	Grey seal	177.2
Roaringwater Bay and Islands SAC	IE0000101	Harbour porpoise Grey seal	311.4
Kenmare River SAC	IE0002158	Harbour porpoise	371.0
Blasket Islands SAC	IE0002172	Harbour porpoise	428.5
Horn Head and Rinclevan SAC	IE0000147	Grey seal	493.8
Slieve Tooley/Tormore Island/Loughros Beg Bay SAC	IE0000190	Grey seal	567.1
Inishmore Island SAC	IE0000213	Harbour porpoise	570.0
Kilkieran Bay and Islands SAC	IE0002111	Harbour porpoise	579.6
Slyne Head Islands SAC	IE0000328	Grey seal	589.9
West Connacht Coast SAC	IE0002998	Harbour porpoise	595.8
Inishbofin and Inishshark SAC	IE0000278	Grey seal	610.5
Bunduff Lough and Machair/Trawalua/Mullaghmore SAC	IE0000625	Harbour porpoise	611.1
Duvillaun Islands SAC	IE0000495	Grey seal	664.4
Inishkea Islands SAC	IE0000507	Grey seal	666.3
French sites			
Mers Celtiques - Talus du golfe de Gascogne SAC	FR5302015	Harbour porpoise	344.2
Nord Bretagne DH SAC	FR2502022	Harbour porpoise	355.8
Abers - Côte des legends SAC	FR5300017	Harbour porpoise	411.6
Ouessant-Molène SAC	FR5300018	Harbour porpoise Grey seal	412.7
Côte de Granit rose-Sept-Iles SAC	FR5300009	Harbour porpoise	419.6
Baie de Morlaix SAC	FR5300015	Harbour porpoise	423.9
Tregor Goëlo SAC	FR5300010	Harbour porpoise	442.5
Chaussée de Sein SAC	FR5302007	Harbour porpoise Grey seal	461.3
Cap d'Erquy-Cap Fréhel SAC	FR5300011	Harbour porpoise	510.4

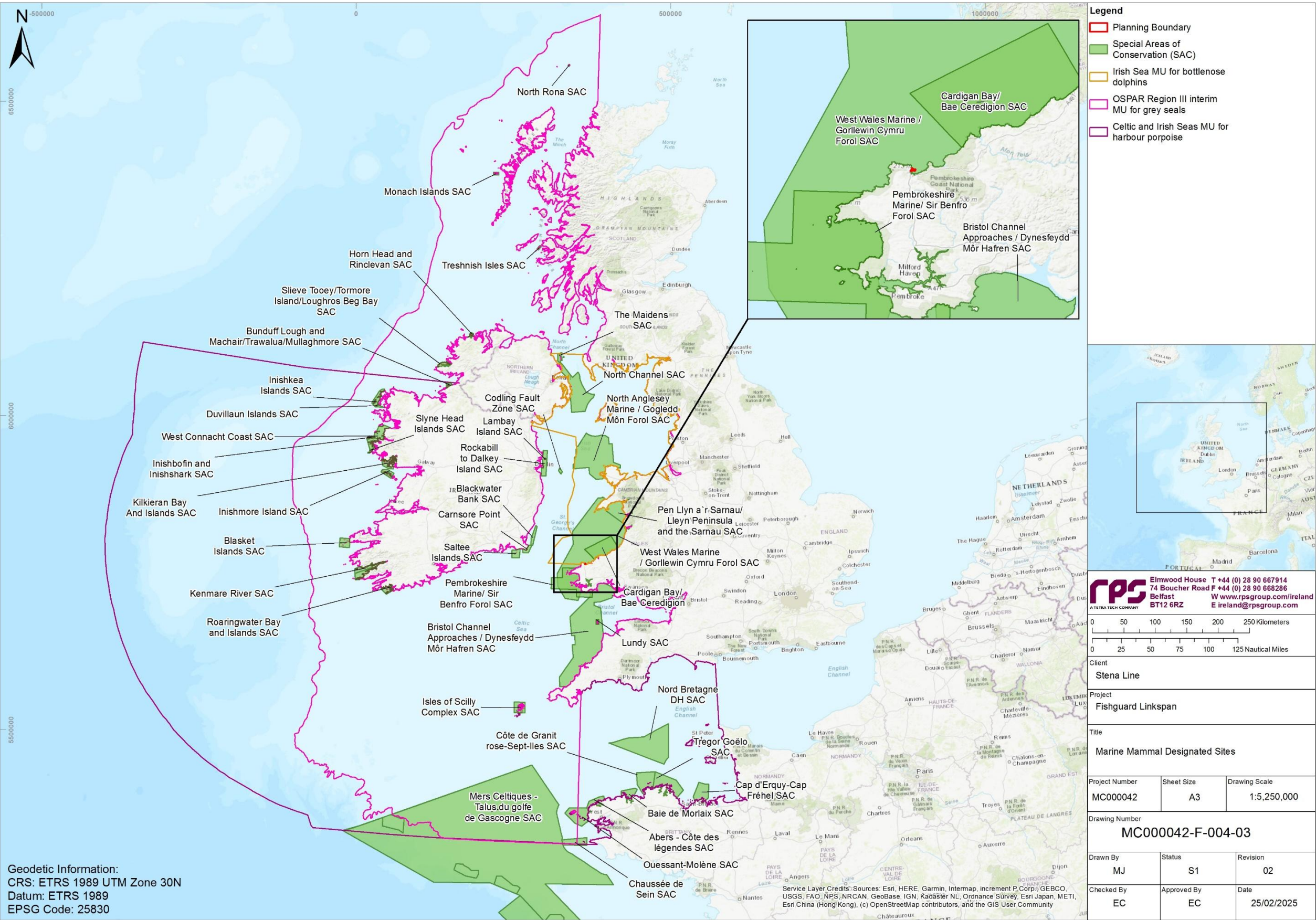


Figure 5-2: Location of European sites designated for Annex II marine mammal species taken forward for determination of LS

5.1.4 Sites Designated for Annex II Otters

The following section details the results of the stepwise process to identify the European sites with relevant Annex II otters to be taken forward for detailed determination of LSE based on the methodology and criteria outlined in section 2.3 and Table 2.1.

Based on the Terrestrial Ecology chapter of the associated EIA Scoping Report and the ES Chapter 9: Terrestrial Ecology, Annex II otter have the potential to occur in the vicinity of the Proposed Development, although on the landside of the Planning Boundary habitat was assessed as having very low potential of use by otter.

5.1.4.1 Initial Identification of Sites

- Criterion 1 considers European sites which overlap with the boundaries of the Proposed Development. As there are no European sites with Annex II otter as qualifying features which overlap with the Proposed Development, no sites are screened for further consideration for otter on the basis of this criterion.
- Criterion 2 considers European sites with qualifying mobile features/species whose range (e.g. foraging, migratory, overwintering, breeding or natural habitat range) overlaps with the Proposed Development. Annex II otters are mobile and forage over certain areas away from the coast. Therefore, there is the potential for activities associated with the construction and operation of the Proposed Development to result in impacts on these qualifying features at a distance from the European sites. The size of an otter's home range depends on the quality of the habitat and food supply (Kruuk, 1995) but males can range linearly along rivers for 35 km (UK Government, 2022). A precautionary approach to the identification of relevant sites has been adopted in order to capture all sites with the potential for connectivity with the Proposed Development. On this basis, it has been considered that sites with Annex II otters as qualifying features that are located within a 10 km buffer of the Proposed Development could potentially be affected. This precautionary 10 km buffer was adopted as the otters present in Fishguard Harbour are likely to be predominantly riverine and associated with the Goodwick Brook and the River Gwaun but using the harbour to forage due to abundant prey species (ES Chapter 9: Terrestrial Ecology), so 10 km would capture the transitory nature of these otters. Otters tend to be very territorial (Scottish Government, 2018), and while otters use coastal waters for foraging, they are more likely to use good quality riverine habitat for foraging if available. One SAC, the Cleddau Rivers SAC, has been identified using this criterion (3.9 km distant), however, the connectivity between this SAC and Fishguard Harbour, and thus the Proposed Development, is considered limited. The Cleddau Rivers SAC is considered to be one of the best areas for otters in the UK (JNCC, 2017), therefore, the otters associated with this SAC are more likely to stay within the Cleddau Rivers system and not regularly use the River Gwaun. If otters associated with the Cleddau Rivers SAC use marine habitats, it is more likely to be at the estuary, which is over 94 km along the coast from Fishguard. Therefore, based on professional judgment, no sites are screened in for further consideration for otter on the basis of this criterion.
- Criterion 3 considers European sites and/or qualifying features which are located within the potential Zol of impacts associated with the Proposed Development (e.g. habitat loss/disturbance). Given the large

buffer proposed for criterion 2 above (20 km), the ZoI for key impacts to mobile otters (i.e. temporary disturbance) are anticipated to be well within this range. No additional European sites with Annex II otters as qualifying features, are therefore considered further on the basis of criterion 3.

The initial screening process has not identified any European sites with Annex II otter as a qualifying feature to be taken forward for the determination of LSE in this report.

5.2 Determination of Likely Significant Effects

The initial screening process documented in section 5.1 generated a list of European Sites and qualifying features (Table 5.1 and Table 5.2) for further determination of LSE as a result of the Proposed Development. This section of the LSE screening process therefore documents the determination of LSE for those European sites which have been screened in for further consideration.

5.2.1 Methodology

The assessment of LSE in the following sections is presented as a series of matrices setting out whether no LSE can be concluded for the relevant features of the European sites identified in section 5.1.

The approach adopted for this LSE screening report focusses on the qualifying features for which there is considered to be a potential for impact as a result of the Proposed Development. Whilst only these qualifying features have been screened in for further consideration, it is acknowledged that the competent authority must undertake the LSE screening, and any subsequent appropriate assessment, at the site level and not for individual qualifying features.

The following matrix key is applicable to the matrices presented in the subsequent sections:

✓ - Potential for an LSE/ LSE cannot be ruled out

× – No potential for an LSE

C = Construction

O = Operation and maintenance

Given that no sites were identified in the initial screening process (section 5.1) to be taken forward for determination of LSE for Annex I habitats or Annex II otter, the sections below refer only to Annex II diadromous fish (section 5.1.2) and marine mammals (section 5.1.3).

5.2.2 Assessment of LSE for Annex II Diadromous Fish

A description of those European sites with Annex II diadromous fish qualifying features identified in section 5.1.2 with the potential to interact with the Proposed Development is provided in the following sections. These comprise:

- Cardigan Bay SAC;
- Pembrokeshire Marine SAC; and
- River Teifi SAC.

5.2.2.1 Site Overview

The following sections provide a brief overview of each of the European sites brought forward for consideration of LSE and a summary of their designated features. The standard data forms for these European sites are provided in Appendix A for all sites.

Cardigan Bay SAC

The Cardigan Bay SAC is a multiple interest site, located approximately 15 km from the Proposed Development boundary. The Bay is one of the largest bays in the UK, stretching over 100 km between the Llyn Peninsula to St. David's Head at its westernmost extent. The SAC supports a wide range of different marine habitats and wildlife, some of which are unique in Wales, across an area of approximately 959 km² (NRW, 2018a). The site is designated for river and sea lamprey as a qualifying feature, but not a primary reason for site selection, as are grey seals. The primary reason for site selection is the bottlenose dolphin, which is discussed, with grey seals, in section 5.2.3.

The SAC is considered to be one of the best areas in the UK to support a significant presence of river and sea lampreys (NRW, 2018a). During their marine phase, lampreys are predominantly coastal, with the river lamprey considered an estuarine and inshore species, although the sea lamprey is more oceanic (NRW, 2018a). There is little information on the spatial distribution of river and sea lampreys out with rivers and estuaries, and the population status of the river lamprey is inferred from the condition monitoring of the River Teifi SAC (NRW, 2018a). However, the Cardigan Bay SAC is considered an access corridor between the open sea (feeding) and riverine (breeding) habitats, with presence thought to be highly seasonal (NRW, 2018a).

Conservation Objectives

The conservation objectives of the SAC seek to maintain (or restore) the habitat and species features, as a whole, at (or to) favourable conservation status within the site (NRW, 2018a). The following conservation objectives relate to river and sea lamprey:

1. The species population is maintaining itself on a long-term basis as a viable component of its natural habitat. Important elements include; population size; structure, production and condition of the species.
2. The species population within the site is such that the natural range of the population is not being reduced or likely to be reduced for the foreseeable future.
3. The presence, abundance, condition and diversity of habitats and species required to support this species is such that the distribution, abundance and populations dynamics of the species within the site and population beyond the site is stable or increasing. Important considerations include; distribution; extent; structure; function and quality of habitat; prey availability and quality. As part of this objective, it should be noted that;
 - a. The abundance of prey species subject to existing commercial fisheries needs to be equal to or greater than that required to achieve maximum sustainable yield and secure in the long term.
 - b. The management and control of activities or operations likely to adversely affect the species feature is appropriate for maintaining it in favourable condition and is secure in the long term.

- c. Contamination of potential prey species should be below concentrations potentially harmful to their physiological health.
- d. Disturbance by human activity is below levels that suppress reproductive success, physiological health or long-term behaviour.

Pembrokeshire Marine SAC

Pembrokeshire Marine SAC is a multiple interest site, located approximately 22 km from the Proposed Development boundary. The site has high habitat and biological diversity, covering an area of approximately 1,380 km², and supports a significant presence of allis and twaite shad, and river and sea lamprey (NRW, 2018b). These diadromous fish species are a qualifying feature, but not a primary reason for site selection. The primary reason for site selection is the grey seal, which is discussed in section 5.2.3.

Shad spend most of their adult lives at sea but spawn in rivers (or, occasionally, in the upper reaches of estuaries) in early summer. The most important breeding populations occur in the Rivers Tywi, Usk, Wye and Severn (NRW, 2018b). Juvenile shad predominantly inhabit estuarine and inshore waters, while adults are typically found in shoals in deeper water and are capable of migrating in excess of 1,000 km. The SAC is used as an access corridor between open sea (feeding) and riverine (breeding) habitats. Their distributions, proportions of the population, as well as the age and sex of the shad, within the site are considered to be dynamic and highly seasonal but are unknown (NRW, 2018b).

As described for Cardigan Bay SAC, it is assumed the SAC is used as an access corridor, but little is known about the population status of river and sea lamprey within the Pembrokeshire Marine SAC. The river lamprey population status for this SAC is inferred from the condition monitoring of the Cleddau Rivers SAC; it is assumed that juveniles are present across the site throughout the year as river lampreys feed and grow in estuaries and inshore waters (NRW, 2018b). Peak migration of adult sea lampreys through the site to spawning rivers usually coincides with temperatures that remain above 10°C and continues until temperatures reach 18°C (March-June). Juvenile sea lampreys, like river lampreys, feed in estuaries and inshore waters, migrating downstream from rivers between December and June. Therefore, it can be assumed that various stages of sea lamprey will be present in the SAC year round (NRW, 2018b).

Conservation Objectives

The conservation objectives of the SAC seek to achieve favourable conservation status of qualifying diadromous fish, by maintaining (or restoring) all the following, subject to natural processes (NRW, 2018b):

1. The species population is maintaining itself on a long-term basis as a viable component of its natural habitat. Important elements include; population size; structure, production and condition of the species.
2. The species population within the site is such that the natural range of the population is not being reduced or likely to be reduced for the foreseeable future.
3. The presence, abundance, condition and diversity of habitats and species required to support this species is such that the distribution, abundance and populations dynamics of the species within the site and population beyond the site is stable or increasing. Important considerations include; distribution; extent;

structure; function and quality of habitat; prey availability and quality. As part of this objective, it should be noted that;

- a. The abundance of prey species subject to existing commercial fisheries needs to be equal to or greater than that required to achieve maximum sustainable yield and secure in the long term.
- b. The management and control of activities or operations likely to adversely affect the species feature is appropriate for maintaining it in favourable condition and is secure in the long term.
- c. Contamination of potential prey species should be below concentrations potentially harmful to their physiological health.
- d. Disturbance by human activity is below levels that suppress reproductive success, physiological health or long-term behaviour.

River Teifi SAC

The River Teifi SAC is a multiple interest site, located approximately 23 km from the Proposed Development boundary. The site includes ten of the river's tributaries, and at 122 km is one of the longest rivers in Wales. Its source is Llyn Teifi in the Cambrian Mountains, with its estuary in Cardigan, leading to the Cardigan Bay SAC. Overall, the SAC covers an area of approximately 7 km². It includes river lamprey and Atlantic salmon as a primary reason for site selection, and sea lamprey as a qualifying feature, but not a primary reason (Garrett, 2016; NRW, 2022).

Adult lampreys and salmon migrate upstream to suitable spawning grounds, and juveniles of all species migrate downstream to estuarine and marine habitats for feeding and growth. Atlantic salmon is present throughout the river apart from around the source, while distributions of the lamprey are poorly understood. It is thought that sea lamprey remains in the lower river, while river lamprey has a patchy distribution across the river catchment (NRW, 2022).

Conservations objectives

The conservation objectives of the SAC seek to achieve favourable conservation status of qualifying diadromous fish, by satisfying the following conditions (NRW, 2022):

1. The population of the feature in the SAC is stable or increasing over the long term.
2. The natural range of the feature in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future. The natural range is taken to mean those reaches where predominantly suitable habitat for each life stage exists over the long term. Suitable habitat is defined in terms of near-natural hydrological and geomorphological processes and forms e.g. suitable flows to allow upstream migration, depth of water and substrate type at spawning sites, and ecosystem structure and functions e.g. food supply. Suitable habitat need not be present throughout the SAC but where present must be secured for the foreseeable future. Natural factors such as waterfalls may limit the natural range of individual species. Existing artificial influences on natural range that cause an adverse effect on site integrity, such as physical barriers to migration, will be assessed.

3. There is, and will continue to be, a sufficiently large habitat to maintain the feature's population in the SAC on a long-term basis.

5.2.2.2 Determination of LSE

This section provides an assessment undertaken to conclude whether it can be determined that there will be no LSE as a result of the Proposed Development on relevant diadromous fish qualifying features of the following SACs:

- Cardigan Bay SAC;
- Pembrokeshire Marine SAC; and
- River Teifi SAC

Temporary loss and/or disturbance of seabed habitats

Temporary habitat loss and/or disturbance may occur during dredging activities in the construction phase. The footprint of this impact (17,500 m², 3.5% of the Planning Boundary), however, would only constitute a very small fraction of the known ranges of local fish populations. Given that the works will be undertaken within an existing ferry terminal in Fishguard Harbour, the area does not represent pristine habitat, and any fish populations within the harbour are likely to be habituated to this. The Fishguard Harbour is not considered to represent an important habitat for fish species, in the context of the wider Pembrokeshire coast and there is no spatial overlap between the Proposed Development and any European Sites designated for Annex II diadromous fish species. On this basis, there is no potential for direct impacts to supporting habitats for Annex II diadromous fish species within any European site. Therefore, there is no potential for LSE to Annex II diadromous fish features as a result of the Proposed Development footprint during the construction or operation phase, and this impact is **screened out** from further assessment for all SACs.

Long term loss and/or disturbance of seabed habitats

Long term habitat loss and/or disturbance may occur in the construction phase, and will persist into the operational phase, due to the construction of the new reclamation area. The footprint of infrastructure associated with the Proposed Development will, however, cover a localised area (up to 1.1% of the Planning Boundary) that would only constitute a very small fraction of the known ranges of local fish populations. Given that the works will be undertaken within an existing ferry terminal within a harbour, the area does not represent pristine habitat, and any fish populations within the harbour are likely to be habituated to this. The Fishguard Harbour is not considered to represent an important habitat (feeding, nursery or spawning) for fish species, in the context of the wider Pembrokeshire coast, and there is no spatial overlap between the Proposed Development and any European Sites designated for Annex II diadromous fish species. On this basis, there is no potential for direct impacts to supporting habitats for Annex II diadromous fish species within any European site. Therefore, there is no potential for LSE to Annex II diadromous fish features at any of the identified SACs as a result of the Proposed Development footprint during the construction or operation phase and this impact is **screened out** from further assessment for all SACs.

Increased Suspended Sediment Concentrations (SSCs) and associated deposition

There will be dredging undertaken in the construction phase, which could result in increased SSCs and deposition. Fish species may be vulnerable to this impact, through decreased visibility due to increased turbidity, and smothering from increased SSCs and associated deposition and siltation rate changes, which may impede foraging ability. There is no spatial overlap between the Proposed Development and any European Sites designated for Annex II diadromous fish species. While there is potential for juvenile or migrating adult diadromous fish to be within the ZoI for increased SSCs and associated deposition, given the wide alternate sea area available, it is unlikely this will cause significant effects on the species or create a barrier to migration. Capital dredging will remove up to 50,000 m³ of sediment within the Planning Boundary. However, physical processes modelling suggest that elevated SSCs, sediment plumes, and associated deposition will be localised within the vicinity of the dredge footprint of the different dredge areas, and be diminished quickly to below background concentrations of 5 mg/L (see ES Chapter: 10 Coastal Processes for full details). As such, the variation in SSC is not considered to be significant when compared with the natural range likely to be encountered within Fishguard Harbour. No significant effects on the conservation objectives of relevant European sites from increased SSCs and associated deposition are anticipated. Therefore, there is no potential for LSE to Annex II diadromous fish features at any of the identified SACs during dredging activities, and this impact has been **screened out** from further assessment for all SACs.

Changes in water quality (including release of sediment bound contaminants)

Dredging associated with construction activities will be undertaken within the Planning Boundary. This could result in changes in water quality, such as organic enrichment and oxygen depletion and the release of sediment bound contaminants. Previous chemical sediment analysis undertaken for the installation of the replacement linkspan suggested an overall low level of contamination in Fishguard Harbour (RPS, 2018b), so exposure to potential contaminants is assessed as low. There is no spatial overlap between the Proposed Development and any European Sites designated for Annex II diadromous fish species, and so, while there is potential for juvenile or migrating adult diadromous fish to be within the ZoI for this impact, it is unlikely this will cause significant effects on the species or create a barrier to migration. No significant effects on the conservation objectives of relevant European sites from changes in water quality are anticipated. Therefore, there is no potential for LSE to Annex II diadromous fish features at any of the identified SACs due to changes in water quality during dredging activities, and this impact has been **screened out** from further assessment for all SACs.

Accidental pollution to the surrounding environment

There is a risk of accidental pollution from vessels and equipment, during the construction and operation phases. Pollution events are considered unlikely, and given the volumes, should an event occur, effects will be temporary, reversible and limited in spatial extent (e.g. due to the expected low volumes of pollutants associated with vessels and equipment). In addition, it is anticipated that the risk of accidental pollution events will be further reduced and managed by the implementation of measures set out in standard post-consent plans,) such as an Environmental Management Plan (EMP), which will include a Marine Pollution Contingency Plan (MPCP). These plans are considered to be tertiary mitigation (standard sectoral practice as per Institute

of Environmental Management and Assessment (IEMA) guidance on mitigation (IEMA, 2024)) and will include planning for accidental spills, address all potential contaminants that could be released, and include key emergency contact details. They will also set out good industry practice and relevant guidelines for preventing pollution at sea (such as those from OSPAR, IMO, and MARPOL).

In the unlikely event of an accidental pollution event occurring, based on the above, any indirect effects on Annex II diadromous fish species from the accidental release of pollutants are not anticipated to lead to a significant effect on the conservation objectives of relevant European sites. Therefore, there is no potential for LSE to Annex II diadromous fish features at any of the identified SACs as a result of accidental pollution during the Proposed Development and this impact is **screened out** from further assessment for all SACs.

Increased risk of introduction and spread of Invasive Non-Native Species (INNS)

There is potential for the increased risk of introduction and spread of INNS associated with the Proposed Development. This is due to vessel movement, which may act as vectors facilitating the spread of INNS: up to seven vessels may be present during the construction phase, which will not be on site for an extended period of time. In addition, the installation of artificial hard structures (such as the linkspan pontoon and rock armour revetment) may represent increased available habitat for INNS to colonise throughout the operation phase. Given the wider ranging nature and habitat use of Annex II diadromous fish species, this impact is not likely to represent a significant impact to their ecology. It is anticipated that the risk of introduction and spread of INNS will be minimised and managed by the implementation of an INNS Management Plan, which is considered tertiary mitigation (standard sectoral practice) as per the updated IEMA guidance on mitigation (IEMA, 2024). No significant effects on the conservation objectives of relevant European sites are anticipated. Therefore, there is no potential for LSE to Annex II diadromous fish features at any of the identified SACs as a result of the increased risk of introduction and spread of INNS associated with the Proposed Development and this impact is **screened out** from further assessment for all SACs.

Underwater noise from construction noise

There is potential for diadromous fish to be present within or transiting through the Proposed Development boundary and potential ZoI during the “noisy” construction activities. Various piling activities, alongside other noise sources, such as dredging and demolition activities, will occur as part of the construction phase of the Proposed Development, with most proposed piling activities considered to be non-impulsive noise sources, such as the vibro piling and rotary boring techniques to install the linkspan pontoon’s main piles. Impact piling (i.e. an impulsive noise source) will only take place in connection with the installation of four support piles. The impulsive impact piling has the largest source levels: 209 dB Exposure Level (SEL) or 245 dB maximal instantaneous Sound Pressure Level (SPL) (L_p). Therefore, the impact piling of the support piles has the greatest potential to cause auditory injury or Temporary Threshold Shift (TTS) and/or behavioural disturbance to diadromous fish species, according to the underwater noise modelling in the ES Chapter 14: Underwater Acoustics, and as such, is presented here as the worst-case scenario for underwater noise from construction noise for diadromous fish. Further details on the background of underwater noise and its impact on diadromous fish can be found in ES Chapter 8: Marine Biodiversity.

LSE SCREENING AND RIAA

In ES Chapter 14: Underwater Acoustics, the injury and disturbance criteria (Popper *et al.*, 2024; Washington State Department of Transport, 2020; Worcester, 2006) used for impulsive noise for fish was:

- for auditory injury 203 dB SEL and 207 dB L_P;
- for TTS 186 dB SEL and 193 dB L_P; and
- for behavioural disturbance 150 dB SPL and 160 dB L_P.

The auditory injury thresholds for stationary¹ diadromous fish were exceeded out to 670 m from the source of impact piling, while the auditory injury peak pressure exceeded the threshold 10 m from the source. The TTS threshold was exceeded at peak pressure out to 70 m from source of impact piling, while the behavioural disturbance range was 4,900 m. Behavioural disturbance is limited to line of sight by the enclosure of Fishguard Bay, with the northern breakwater of the Harbour and the headland to the east (Ynys Dinas/Dinas Island). While impact piling presents the worst-case scenario from underwater noise during construction, construction noise with a maximum disturbance range of 4.9 km, will last, in some form, for up to 9 months. However, this will be in the context of a relatively noisy background environment dominated by the ferry service from/to Rosslare, Ireland within Fishguard Harbour (see ES Chapter 14: Underwater Acoustics for further details).

Therefore, the potential for LSE on the relevant Annex II diadromous fish features of the identified European sites as a result of underwater noise arising from construction activities cannot be discounted. Due to this potential pathway, there is potential for LSE on Annex II diadromous fish features as a result of underwater noise from piling, and therefore this impact has been **screened in** for further assessment for all SACs.

Underwater noise from vessels

The construction activities will require approximately seven vessels (including Trailer Suction Hopper Dredger and/or Backhoe Dredger, and a jack-up or spud leg barge), although there is only likely to be two vessels onsite at any one time due to phased construction. This represents a small change from the baseline vessel traffic conditions in the already busy harbour where fish are likely to be habituated to vessel noise should they enter the harbour. The construction phase will last approximately 9 months, so additional vessels will be present over a relatively short term, and will include a three month shut down of the ferry terminal, which will temporarily reduce the number of vessels present within Fishguard Harbour. Therefore, there is no potential for LSE to Annex II diadromous fish features at any of the identified SACs as a result of underwater noise from vessels during the Proposed Development and this impact is **screened out** from further assessment for all SACs.

¹ Underwater noise modelling assumes fish receivers are stationary as a precautionary approach.

In-combination effects

There are no other projects or plans currently considered in development within the 7 km screening buffer for Annex II diadromous fish features (**Figure 5-3 In Combination Longlist**). Therefore, there are no other projects or plans that have the potential to result in LSE to Annex II diadromous fish features as a result of in-combination effects during the construction and operation phases of the Proposed Development. Therefore, in-combination effects have been *screened out* from further assessment.

Summary

Table 5.3 provides a summary of the assessment, indicating whether the likely significant effects on the identified SAC features were screened in or out.

LSE SCREENING AND RIAA

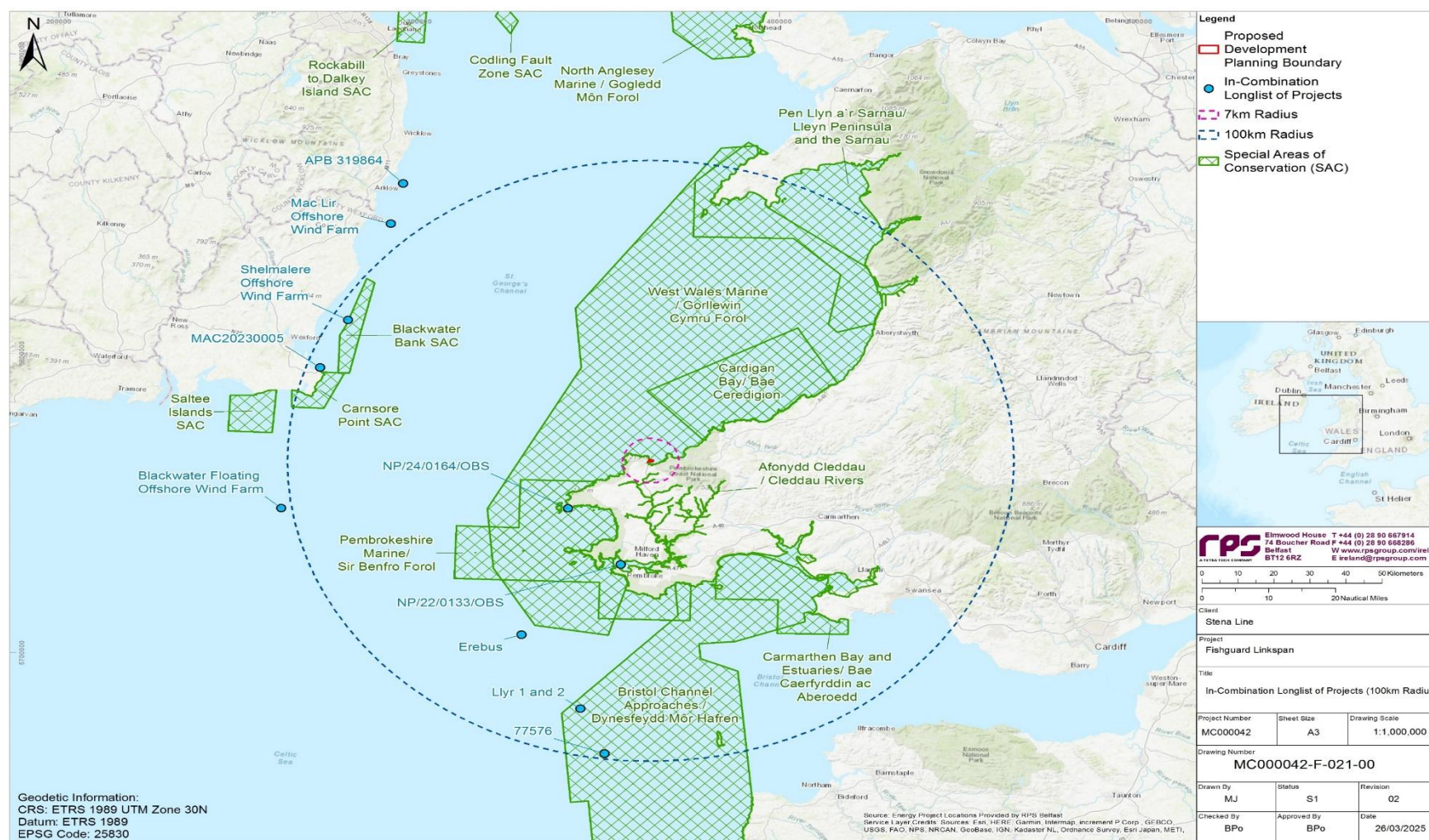


Figure 5-3 In Combination Longlist

LSE SCREENING AND RIAA

Table 5.3: Likely significant effects matrix for Annex II diadromous fish features of SACs (C: Construction; O: Operation)

Impact	Phase	Cardigan Bay/Bae Ceredigion SAC		Pembrokeshire Marine/Sir Benfro Forol SAC		River Teifi/Afon Teifi SAC				
		Sea lamprey	River lamprey	Sea lamprey	River lamprey	Allis shad	Twaite shad	River lamprey	Atlantic Salmon	Sea lamprey
Temporary loss and/or disturbance of seabed habitats	C	x	x	x	x	x	x	x	x	x
	O	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Long term loss and/or disturbance of seabed habitats	C	x	x	x	x	x	x	x	x	x
	O	x	x	x	x	x	x	x	x	x
Increased SSCs and associated deposition	C	x	x	x	x	x	x	x	x	x
	O	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Changes in water quality (including release of sediment bound contaminants)	C	x	x	x	x	x	x	x	x	x
	O	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Accidental pollution to the surrounding environment	C	x	x	x	x	x	x	x	x	x
	O	x	x	x	x	x	x	x	x	x
Increased risk of introduction and spread of INNS	C	x	x	x	x	x	x	x	x	x
	O	x	x	x	x	x	x	x	x	x
Underwater noise from construction activities	C	✓	✓	✓	✓	✓	✓	✓	✓	✓
	O	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Underwater noise from vessels	C	x	x	x	x	x	x	x	x	x
	O	x	x	x	x	x	x	x	x	x
In-combination effects	C	x	x	x	x	x	x	x	x	x
	O	x	x	x	x	x	x	x	x	x

x - Screened Out

✓ - Screened In

5.2.3 Assessment of LSE for Annex II Marine Mammals

A description of those European sites with Annex II marine mammal qualifying features identified in section 5.1.3 with the potential to interact with the Proposed Development is provided in the following sections.

While there are Northern Irish, Scottish, Irish and French European sites within the species-specific MUs for harbour porpoise and grey seal (Table 5.2), the Proposed Development is a small-scale project with effects over a restricted geographical area (constrained Zols of impacts). As such, a sequential approach to screening in SACs closest to the source of impact has been undertaken for determination of LSE according to NRW's HRA position statement (NRW, 2025). Therefore, site overviews are only provided for the Welsh European sites and the nearby transboundary European site for harbour porpoise in section 5.2.3.1. These comprise:

- West Wales Marine SAC;
- Cardigan Bay SAC;
- Pembrokeshire Marine SAC;
- Lleyn Peninsula and the Sarnau SAC;
- Bristol Channel Approaches SAC; and
- North Anglesey SAC.

5.2.3.1 Site Overview

The following sections provide a brief overview of six relevant UK European sites brought forward for consideration of LSE and a summary of their designated features. The standard data forms for these European sites are provided in Appendix A.

West Wales Marine SAC

The West Wales Marine SAC is a large (7,376 km²) site, located off the coast of Wales, stretching from the Lleyn peninsula in the north, to Pembrokeshire in the south-west. This SAC overlaps with the Proposed Development boundary, as well as other SACs including parts of the Pembrokeshire Marine and Lleyn Peninsula and the Sarnau SACs, and encompasses Cardigan Bay SAC. The harbour porpoise is the sole reason for site selection, with the SAC designated for its protection, as it is estimated the site supports 5.4% of the UK Celtic and Irish Seas Management Unit (MU) harbour porpoise population (NRW, 2023a). The SAC supports long-term and relatively high densities of harbour porpoise, although use of the site varies between seasons (NRW and Joint Nature Conservation Committee (JNCC), 2019). The site has been identified as important summer habitat for harbour porpoise, with a smaller area around Cardigan Bay identified as winter habitat (NRW, 2023a). This implies within the SAC there is good foraging habitat with good feeding opportunities (NRW and JNCC, 2019).

Conservation objectives

The conservation objectives for the SAC are to ensure that the integrity of the site is maintained and that it makes the best possible contribution to maintaining favourable conservation status for harbour porpoise in UK waters (NRW and JNCC, 2019). In the context of natural change, this will be achieved by ensuring that:

1. Harbour porpoise are a viable component of the site.
2. There is no significant disturbance of the species.
3. The condition of supporting habitats and processes, and the availability of prey is maintained.

Cardigan Bay SAC

As discussed in section 5.2.2, the Cardigan Bay SAC is a multi-feature site approximately 15 km from the Proposed Development boundary. The SAC is considered one of the best areas in the UK for bottlenose dolphin, which is the primary reason for site selection, and to support a significant presence of grey seal, a qualifying feature, but not a primary reason for site selection (NRW, 2018a).

Bottlenose dolphins are seen year round in Cardigan Bay, with the population estimated are around 125 individuals. These individuals are considered part of the Irish Sea MU (IAMMWG, 2023), and although individuals may have preference for particular coastal areas, they range widely in the winter (NRW, 2018c). The inshore waters are used for both feeding and reproduction, and in the summer months calves and juveniles are often observed with adult individuals or groups, with group size peaking in September and October (NRW, 2018a). While dolphins are reported less frequently in winter months, this could be an artefact of poorer weather conditions and fewer observers, but may also be due to a preference for the offshore areas of the bay during winter (NRW, 2018a).

Grey seals range through Cardigan Bay and the seals present within the SAC are not a discrete population limited to the SAC. The SAC itself is located in the Wales seal MU, however, as seals travel beyond the site, they may be part of the South-west (SW) England or Wales seal MUs (NRW, 2018a), as well as the OSPAR Region III interim MU (NRW, 2025b). Grey seals are distributed widely within the SAC with moulting and resting haul-out sites scattered along the site, although none are used by large numbers (NRW, 2018a). Pupping takes places throughout the site on open coast in suitable habitat and is greatest towards the south-western end of the SAC. This pup production is a small proportion of the south-west Wales production and the use of sea-caves by seals within the SAC is considered an unusual variation in breeding behaviour (NRW, 2018a).

Conservation Objectives

The conservation objectives of the SAC seek to maintain (or restore) the habitat and species features, as a whole, at (or to) favourable conservation status within the site (NRW, 2018a). The following conservation objectives relate to bottlenose dolphin and grey seal:

1. The species population is maintaining itself on a long-term basis as a viable component of its natural habitat. Important elements include; population size; structure, production and condition of the species. As part of this objective, it should be noted that;

- a. Contaminant burdens derived from human activity are below levels that may cause physiological damage, or immune or reproductive suppression for bottlenose dolphins and grey seals.
 - b. For grey seal, populations should not be reduced as a consequence of human activity.
2. The species population within the site is such that the natural range of the population is not being reduced or likely to be reduced for the foreseeable future. As part of this objective, it should be noted that for bottlenose dolphin and grey seal:
 - a. Their range within the SAC and adjacent inter-connected areas is not constrained or hindered.
 - b. There are appropriate and sufficient food resources within the SAC and beyond.
 - c. The sites and amount of supporting habitat used by these species are accessible and their extent and quality is stable or increasing.
3. The presence, abundance, condition and diversity of habitats and species required to support this species is such that the distribution, abundance and populations dynamics of the species within the site and population beyond the site is stable or increasing. Important considerations include; distribution; extent; structure; function and quality of habitat; prey availability and quality. It should be noted that for the bottlenose dolphin populations should be increasing. As part of this objective, it should also be noted that;
 - a. The abundance of prey species subject to existing commercial fisheries needs to be equal to or greater than that required to achieve maximum sustainable yield and secure in the long term.
 - b. The management and control of activities or operations likely to adversely affect the species feature is appropriate for maintaining it in favourable condition and is secure in the long term.
 - c. Contamination of potential prey species should be below concentrations potentially harmful to their physiological health.
 - d. Disturbance by human activity is below levels that suppress reproductive success, physiological health or long-term behaviour.

Pembrokeshire Marine SAC

As discussed in section 5.2.2, the Pembrokeshire Marine SAC is a multi-feature site approximately 20 km from the Proposed Development boundary. The primary reason for site selection is the grey seal, as the Pembrokeshire coast hosts the main colony in Wales (NRW, 2018b).

The grey seals present within the SAC are not a discrete population limited to the SAC, and as per Cardigan Bay SAC, are part of the Wales seal MU, although they may be part of either the SW England or Wales seal MUs (NRW, 2018b), as well as the OSPAR Region III interim MU (NRW, 2025b), as they have large ranges and are widely distributed. The south-west Wales population is estimated at approximately 5000 individuals, with pup count data collected from small parts of the Pembrokeshire Marine SAC (Skomer Island and Marloes Peninsula) consisting of most of the long-term survey data from which the population data is inferred (NRW, 2018b). Pupping takes place throughout the site on open coast in suitable habitat, with secluded coves and caves preferred by the south-west Wales population (as within Cardigan Bay SAC) (NRW, 2018b). Grey seals

are distributed widely within the SAC with moulting and resting haul-out sites scattered along the site, although none are used by large numbers. Offshore islands and remote, undisturbed and inaccessible rocky shores and beaches are the known winter moulting haul-outs and non-moulting/resting haul-outs (NRW, 2018b).

Conservation Objectives

The conservation objectives of the SAC seek to achieve favourable conservation status of grey seal by maintaining (or restoring) all the following, subject to natural processes (NRW, 2018b):

1. The species population is maintaining itself on a long-term basis as a viable component of its natural habitat. Important elements include; population size; structure, production and condition of the species. As part of this objective, it should be noted that for grey seal;
 - a. Contaminant burdens derived from human activity are below levels that may cause physiological damage, or immune or reproductive suppression.
 - b. Populations should not be reduced as a consequence of human activity.
2. The species population within the site is such that the natural range of the population is not being reduced or likely to be reduced for the foreseeable future. As part of this objective, it should be noted that for grey seal:
 - a. Their range within the SAC and adjacent inter-connected areas is not constrained or hindered.
 - b. There are appropriate and sufficient food resources within the SAC and beyond.
 - c. The sites and amount of supporting habitat used by these species are accessible and their extent and quality is stable or increasing.
3. The presence, abundance, condition and diversity of habitats and species required to support this species is such that the distribution, abundance and populations dynamics of the species within the site and population beyond the site is stable or increasing. Important considerations include; distribution; extent; structure; function and quality of habitat; prey availability and quality. As part of this objective, it should be noted that;
 - a. The abundance of prey species subject to existing commercial fisheries needs to be equal to or greater than that required to achieve maximum sustainable yield and secure in the long term.
 - b. The management and control of activities or operations likely to adversely affect the species feature is appropriate for maintaining it in favourable condition and is secure in the long term.
 - c. Contamination of potential prey species should be below concentrations potentially harmful to their physiological health.
 - d. Disturbance by human activity is below levels that suppress reproductive success, physiological health or long-term behaviour.

Lleyn Peninsula and the Sarnau SAC

The Lleyn Peninsula and the Sarnau SAC is a multiple interest site of approximately 1,460 km², located in north-west Wales, approximately 67 km from the Proposed Development boundary. The site encompasses a wide diversity of marine habitats, for which various Annex I habitats it is primarily designated. The grey seal and bottlenose dolphin are qualifying features, but not primary reason for site selection, although the site supports a significant presence of both species (NRW, 2018c).

As with Cardigan Bay and Pembrokeshire Marine SACs, there is not a discrete population of grey seals within the Lleyn Peninsula and the Sarnau SAC; rather they are considered part of the SW England and Wales MUs (NRW, 2018c). It is difficult to estimate the number of seals in the SAC with confidence as grey seals are wide ranging. They are most commonly observed within the SAC around the Lleyn Peninsula, Bardsey Island and the islands along the south Lleyn coast, with variation in counts throughout the year. Non-pupping seals are present year round at the moulting and resting haul-out sites distributed throughout the SAC, usually either singularly or in small numbers, with use of Bardsey Island peaking in summer months (NRW, 2018c). There are large breeding colonies on the Lleyn Peninsula and Bardsey Island, with a high proportion using sea caves in the SAC for pupping. Use of sea caves is similar to the grey seals in the south-west Wales population but unusual compared to breeding behaviour compared to elsewhere in the UK (NRW, 2018c). The North Wales area as a whole is considered important for female seals year round and within SAC males rarely comprise more than 25% of any assembly (NRW, 2018c).

The bottlenose dolphins in the Lleyn Peninsula and the Sarnau SAC also do not form a discrete site-based population and are considered part of the Irish Sea MU, which also includes the Cardigan Bay SAC dolphins. Dolphins associated with Cardigan Bay group move into and through the Lleyn Peninsula and the Sarnau SAC and also interact with dolphins from the SAC (NRW, 2018c). The bottlenose dolphins of the Lleyn Peninsula and the Sarnau SAC are likely wide ranging and interact with other individuals from more distant MUs, including those from the Offshore Channel and SW England MU. The SAC contains important feeding areas for bottlenose dolphins and it is probable that females nurse their young within the site (NRW, 2018c).

Conservation Objectives

The conservation objectives of the SAC seek to maintain (or restore) the habitat and species features, as a whole, at (or to) favourable conservation status within the site (NRW, 2018c). The following conservation objectives relate to bottlenose dolphin and grey seal:

4. The species population is maintaining itself on a long-term basis as a viable component of its natural habitat. Important elements include; population size; structure, production and condition of the species. As part of this objective, it should be noted that;
 - a. Contaminant burdens derived from human activity are below levels that may cause physiological damage, or immune or reproductive suppression for bottlenose dolphins and grey seals.
 - b. For grey seal, populations should not be reduced as a consequence of human activity.

5. The species population within the site is such that the natural range of the population is not being reduced or likely to be reduced for the foreseeable future. As part of this objective, it should be noted that for bottlenose dolphin and grey seal:
 - a. Their range within the SAC and adjacent inter-connected areas is not constrained or hindered.
 - b. There are appropriate and sufficient food resources within the SAC and beyond.
 - c. The sites and amount of supporting habitat used by these species are accessible and their extent and quality is stable or increasing.
6. The presence, abundance, condition and diversity of habitats and species required to support this species is such that the distribution, abundance and populations dynamics of the species within the site and population beyond the site is stable or increasing. Important considerations include; distribution; extent; structure; function and quality of habitat; prey availability and quality. It should be noted that for the bottlenose dolphin populations should be increasing. As part of this objective, it should also be noted that;
 - a. The abundance of prey species subject to existing commercial fisheries needs to be equal to or greater than that required to achieve maximum sustainable yield and secure in the long term.
 - b. The management and control of activities or operations likely to adversely affect the species feature is appropriate for maintaining it in favourable condition and is secure in the long term.
 - c. Contamination of potential prey species should be below concentrations potentially harmful to their physiological health.
 - d. Disturbance by human activity is below levels that suppress reproductive success, physiological health or long-term behaviour.

Bristol Channel Approaches SAC

The Bristol Channel Approaches SAC is a relatively large (5,850 km²) site, lying along the south-west coasts of Wales and England; it straddles the Bristol Channel from Carmarthen Bay in the north to the northern coasts of Devon and Cornwall in the south. The SAC is approximately 82 km from the Proposed Development boundary, and is designated solely for the harbour porpoise. This site supports a diversity of habitat types, from reefs to mudflats, which in turn supports an estimated 4.7% of the UK Celtic and Irish Sea MU population (NRW, 2023b). Harbour porpoise presence varies seasonally within the SAC, but is recognised as important for porpoises particularly during the winter when high densities persistently occur (NRW, 2023b).

Conservation Objectives

The conservation objectives for the SAC are to ensure that the integrity of the site is maintained and that it makes the best possible contribution to maintaining favourable conservation status for harbour porpoise in UK waters (NRW, 2023b). In the context of natural change, this will be achieved by ensuring that:

1. Harbour porpoise is a viable component of the site.
2. There is no significant disturbance of the species.

3. The condition of supporting habitats and processes, and the availability of prey is maintained.

North Anglesey SAC

The North Anglesey Marine SAC is located off north-west Wales and extends from the northern coast of the Isle of Anglesey into the Irish Sea, encompassing an area of 3,249 km². The SAC is approximately 135 km from the Proposed Development boundary, and is designated solely for the harbour porpoise. The site is an area of importance for harbour porpoise, persistently containing densities with the top 10% of those recorded for the UK Celtic and Irish Seas MU population (NRW, 2023c).

Conservation Objectives

The conservation objectives for the SAC are to ensure that the integrity of the site is maintained and that it makes the best possible contribution to maintaining favourable conservation status for harbour porpoise in UK waters (NRW, 2023c). In the context of natural change, this will be achieved by ensuring that:

1. Harbour porpoise is a viable component of the site.
2. There is no significant disturbance of the species.
3. The condition of supporting habitats and processes, and the availability of prey is maintained.

5.2.3.2 Determination of LSE

This section provides an assessment undertaken to conclude whether it can be determined that there will be no LSE as a result of the Proposed Development on relevant marine mammal qualifying features of the 41 SACs listed in Table 5.2.

Temporary and long term loss and/or disturbance of seabed habitats

Temporary and long term seabed habitat loss and/or disturbance associated with the Proposed Development could result in a loss of Annex II marine mammal foraging habitat. However, this loss and/or disturbance will only represent a very small fraction of the known foraging ranges of these highly mobile species. The impact will be very localised (see ES Chapter 8: Marine Biodiversity and Chapter 10: Coastal Processes), particularly in the context of the wider available habitat. In addition, as the works associated with the Proposed Development will take place within an active harbour, it is unlikely that this area represented regular foraging habitat for the marine mammal baseline. Therefore, there is no potential for LSE to Annex II marine mammal features at any of the identified SACs as a result of the Proposed Development footprint during the construction or operation phase, and this impact is **screened out** from further assessment for all SACs.

Increased SSCs and associated deposition

Increases in SSCs and associated deposition as a result of dredging activities during the construction phase could have both direct and indirect impacts on marine mammals. Direct impacts could result in impaired visibility and therefore foraging ability, which might potentially reduce foraging success, while indirect impacts would include effects on prey species. However, marine mammals are well known to forage in tidal areas where water conditions are turbid and visibility conditions poor. The qualifying Annex II marine mammal

features (bottlenose dolphin, harbour porpoise, grey seal) commonly frequent coastal areas, so would likely be tolerant of turbid and silty water. However, it is unlikely that Fishguard Harbour is prime foraging habitat due to the extremely weak tidal currents within the Harbour. Although increased SSCs may arise during activities within the Proposed Development Planning Boundary, the variation in SSC is not considered to be significant when compared with the natural range likely to be encountered within Fishguard Harbour. Significant plumes of increased SSC are not anticipated; the maximum impact range is expected to be highly localised, and sediments will rapidly dissipate to below background concentrations over one tidal excursion (see ES Chapter: 10 Coastal Processes for full details). Therefore, there is no potential for LSE to Annex II marine mammal features at any of the identified SACs as a result of the Proposed Development's dredging activities, and this impact is **screened out** from further assessment for all SACs.

Changes in water quality (including release of sediment bound contaminants)

Changes in water quality could arise from dredging activities during the construction phase; this includes the potential for the release of sediment bound contaminants. The extent of sediment dispersal is not expected to cause significant elevations in water column contamination, as chemical sediment analysis undertaken for the installation of the replacement linkspan previously suggested an overall low level of contamination in Fishguard Harbour (RPS, 2018b). In addition, the temporary and localised changes in water column contamination levels are considered unlikely to produce lethal and sub-lethal effects in the highly mobile Annex II marine mammal species (the concentrations required to produce these effects are generally acquired through long-term, chronic exposure to prey species in which contaminants have bioaccumulated). Therefore, there is no potential for LSE to Annex II marine mammal features at any of the identified SACs due to changes in water quality during construction, and this impact is **screened out** from further assessment for all SACs

Accidental pollution to the surrounding environment

There is a risk of accidental pollution from vessels and equipment during the construction and operation phases. However, as discussed in section 5.2.2.2, pollution events are considered unlikely. In addition, it is anticipated that the risk of accidental pollution will be further reduced due by the implementation of tertiary mitigation (standard sectoral practice (IEMA, 2024)), such as an EMP, which will include a MPCP, and include planning for accidental spills, address all potential contaminants that could be released, and include key emergency contact details. The plans will also set out good industry practice and relevant guidelines for preventing pollution at sea as discussed in section 5.2.2.2. Therefore, similarly to Annex II diadromous fish, in the unlikely event of an accidental pollution event occurring, any indirect effects on Annex II marine mammals from the accidental release of pollutants are not anticipated to lead to a significant effect on the conservation objectives of relevant European sites. Therefore, there is no potential for LSE to Annex II marine mammal features at any of the identified SACs as a result of accidental pollution during the Proposed Development and this impact is **screened out** from further assessment for all SACs.

Underwater noise from construction noise

Similarly to diadromous fish (section 5.2.2.2), impact piling of steel piles during the construction phase has the greatest potential to cause auditory injury or TTS and/or behavioural disturbance (including barrier effects) in

LSE SCREENING AND RIAA

marine mammals. There is potential for harbour porpoises, bottlenose dolphins and/or grey seals to be present within or transiting through the Proposed Development boundary and potential ZoI during the piling.

The relevant thresholds for the onset of effects for marine mammals used in the underwater noise modelling in the ES Chapter 14: Underwater Acoustics for impulsive noise are presented in Table 5.4. Further commentary on the background of underwater noise and its impact on marine mammals is presented in ES Chapter 8: Marine Biodiversity.

Table 5.4: Acoustic thresholds for auditory injury, TTS onset and behavioural disturbance for impulsive noise for marine mammals² (National Marine Fisheries Service (NMFS, 2024); Nedwell et al., 2007, Sinclair et al., 2023, Tougaard, 2021)

Hearing group	Parameter	Auditory injury (dB)	TTS (dB)	Behavioural disturbance
High Frequency cetaceans (bottlenose dolphin)	L _P , (unweighted)	230	224	160 dB L _P
	SEL, (weighted)	193	178	
Very High Frequency cetaceans (harbour porpoise)	L _P , (unweighted)	202	196	
	SEL, (weighted)	159	144	
Phocid Carnivores in Water (grey seal)	L _P , (unweighted)	223	217	
	SEL, (weighted)	183	168	

While it is acknowledged that NRW prefer the use of 143 dB SEL_{ss} over the 160 dB L_P threshold, the use of the 160 dB L_P is considered pragmatic in relation to the scale of the impact piling activity (four support piles piled intermittently over four days).

As assessed in the ES Chapter 14: Underwater Acoustics, auditory injury from impact piling was modelled out to 40 m for bottlenose dolphin, to 880 m for harbour porpoise and to 720 m for grey seal. The peak pressure is likely to exceed the TTS onset threshold of harbour porpoise out to 50 m, with only 10 m modelled for the bottlenose dolphin and grey seal, with sound exposure exceeding the TTS onset threshold out to a maximum 2,500 m, 4,300 m and 4,400 m for bottlenose dolphin, harbour porpoise and grey seal, respectively. The behaviour disturbance threshold was exceeded up to 4,900 m for all three species, however this is limited to line of sight by the enclosure of Fishguard Bay.

Subsequently, while underwater noise from impact piling would most strongly affect harbour porpoise, it would have the potential to cause LSE to all three marine mammal qualifying features, causing acute effects (Erbe et al., 2018). Other “noisy” activities (non-impulsive piling, demolition activities and dredging) may contribute to the cumulative effect of behavioural disturbance from underwater noise over the nine month construction period. Noise from dredging may exceed the non-impulsive behavioural disturbance threshold for bottlenose dolphin (92 dB SPL), harbour porpoise (95 dB SPL) and grey seal (108 dB SPL) for up to 5,600 m, although there is considerable variation in the extent of the noise from the dredging depending on the location of the dredging vessel (see ES Chapter 8: Marine Biodiversity and ES Chapter 14: Underwater Acoustics).

² NMFS thresholds (2024) were chosen over Southall et al., (2019) because these thresholds represent the most up-to-date assessment of auditory sensitivity for marine mammals.

Therefore, the potential for LSE on any Annex II features of European sites as a result of underwater noise arising from construction activities cannot be discounted. Due to this potential pathway and the connectivity of marine mammal populations throughout the MUs, there is potential for LSE on Annex II marine mammal features at any of the identified SACs as a result of underwater noise from piling. Therefore this impact has been **screened in** for further assessment for West Wales Marine SAC for harbour porpoise, Cardigan Bay SAC for bottlenose dolphin and grey seal, and Llyn Peninsula and the Sarnau SAC for bottlenose dolphin, with a sequential approach to be undertaken with regard to AA for the remaining 39 SACs listed in Table 5.2 should an adverse effect on site integrity (AEOSI) not be ruled out for West Wales Marine SAC and Cardigan Bay SAC in section 6.

Underwater noise from vessels

As discussed in section 5.2.2.2, there is the potential for two additional construction vessels onsite at any one time over the approximately 12 month construction phase. This will not represent a significant change from the baseline vessel traffic conditions in the already busy Fishguard Harbour, and marine mammals, particularly harbour porpoise, will generally avoid areas of high anthropogenic activities. Therefore, there is no potential for LSE to Annex II marine mammal features at any of the identified SACs with these qualifying features as a result of underwater noise from vessels during the Proposed Development and this impact is **screened out** from further assessment for all SACs.

Increased risk of collision with vessels

Vessels associated with construction activities are unlikely to represent additional disturbance that is discernible above the already high levels of anthropogenic activity in Fishguard Harbour. Given the nature of harbours, vessels will also mainly be stationary or travelling at low speeds making the risk of collision very low. Furthermore, through regular exposure to vessel movements, marine mammals utilising Fishguard Harbour are also expected to be habituated to high levels of vessel presence. Therefore, there is no potential for LSE to Annex II marine mammal features at any of the identified SACs as a result of vessel movements during construction, and this impact is **screened out** from further assessment for all SACs.

In-combination effects

While there are seven other projects or plans currently considered in development within the 100 km screening buffer for Annex II marine mammal features (**Figure 5-4 In Combination**), there is either no temporal overlap of these projects or plans with the Proposed Development or there is no spatial overlap of the published maximum disturbance ranges from underwater noise. Therefore, there are no other project or plans that are likely to have the potential to result in LSE to Annex II marine mammals features as a result of in-combination effects during the construction and operation phases of the Proposed Development. Therefore, this in-combination effects have been screened out from further assessment for all SACs.

LSE SCREENING AND RIAA

Summary

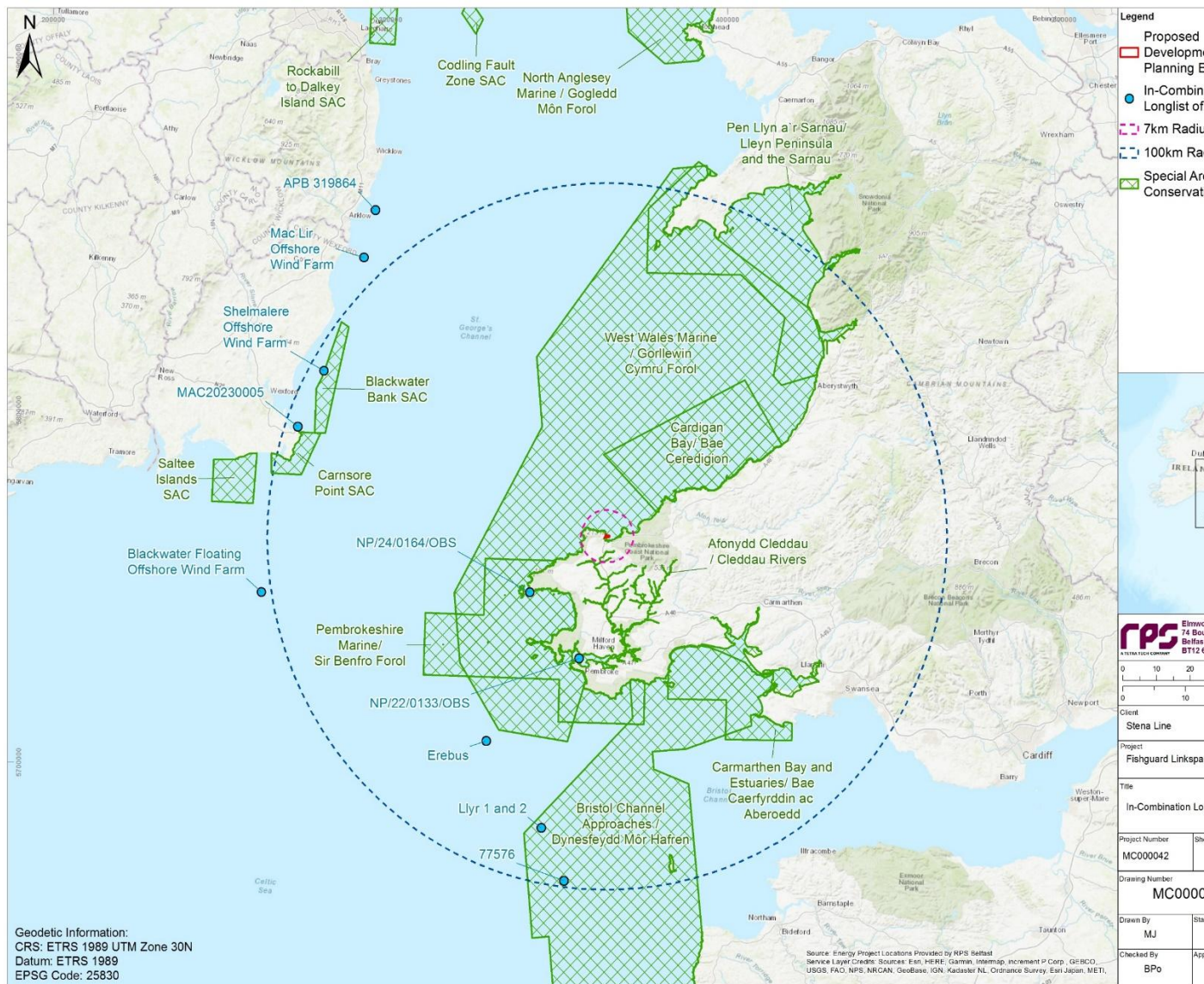


Figure 5-4 In Combination

Table 5.5 provides a summary of the assessment on the five Welsh sites, and one relevant transboundary Welsh/English harbour porpoise site, indicating whether the LSEs on the identified SAC features were screened in or out. Potential LSEs due to underwater noise from construction activities will be assessed for

further afield European sites within the MUs if AEOSI cannot be ruled out at the six SACs listed in

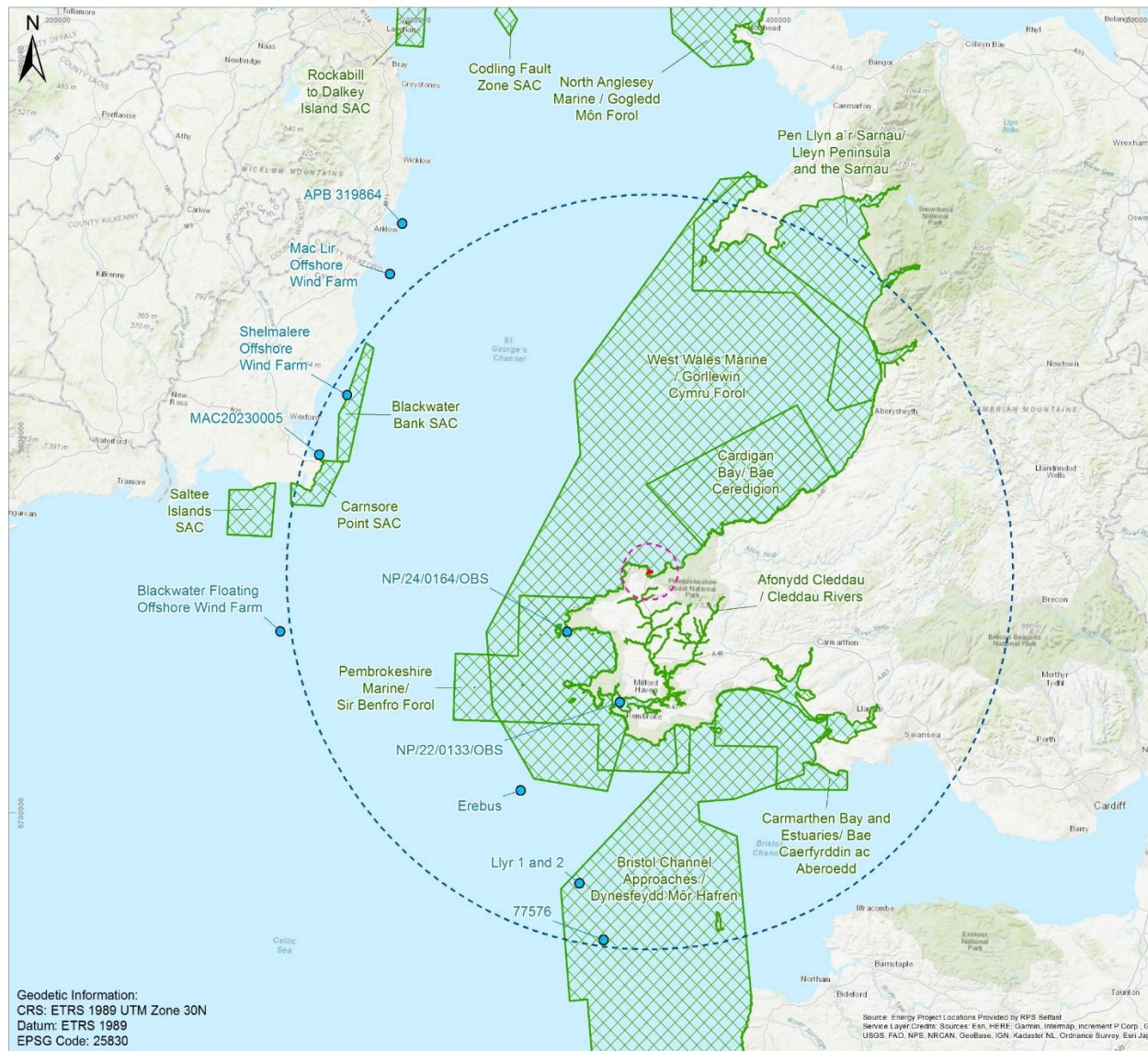


Figure 5-4 In Combination

Table 5.5.

LSE SCREENING AND RIAA

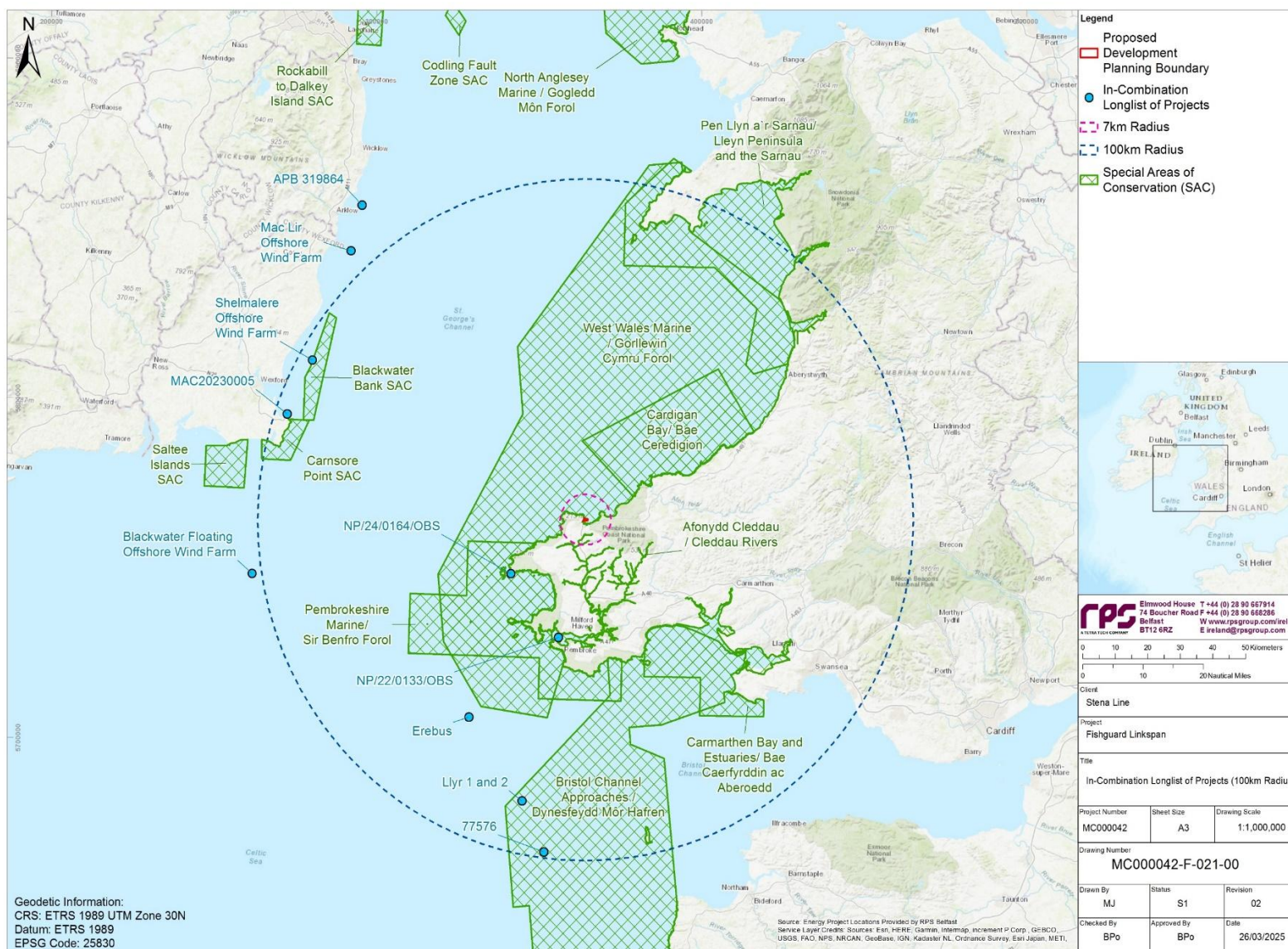


Figure 5-4 In Combination

LSE SCREENING AND RIAA

Table 5.5: Likely significant effects matrix for Annex II marine mammal features of the Welsh (and transboundary Welsh/English) SACs (C: Construction; O: Operation)

Impact		Phase	West Wales Marine / Gorllewin Cymru Forol SAC	Cardigan Bay / Bae Ceredigion SAC	Pembrokes hire Marine / Sir Benfro Forol SAC	Lleyn Peninsula and the Sarnau / Pen Llŷn a'r Sarnau SAC	Bristol Channel Approaches / Dynesfeydd Môr Hafren SAC	North Anglesey Marine / Gogledd Môn Forol SAC		
Qualifying feature			Harbour porpoise	Bottlenose dolphin	Grey seal	Grey seal	Bottlenose dolphin	Grey seal	Harbour porpoise	Harbour porpoise
Temporary and long term loss and/or disturbance of seabed habitats	C	×	×	×	×	×	×	×	×	×
	O	×	×	×	×	×	×	×	×	×
Increased SSCs and associated deposition	C	×	×	×	×	×	×	×	×	×
	O	×	×	×	×	×	×	×	×	×
Changes in water quality (including release of sediment bound contaminants)	C	×	×	×	×	×	×	×	×	×
	O	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Accidental pollution to the surrounding environment	C	×	×	×	×	×	×	×	×	×
	O	×	×	×	×	×	×	×	×	×
Underwater noise from construction activities	C	✓	✓	✓	✓	✓	✓	✓	✓	✓
	O	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Underwater noise from vessels	C	×	×	×	×	×	×	×	×	×
	O	×	×	×	×	×	×	×	×	×
In-combination effects	C	×	×	×	×	×	×	×	×	×
	O	×	×	×	×	×	×	×	×	×
×										
✓										

6 STAGE 2: INFORMATION TO INFORM THE APPROPRIATE ASSESSMENT

The LSE Screening assessment identified that there is the potential for LSE on identified features within the Cardigan Bay SAC, Pembrokeshire Marine SAC, River Teifi SAC, West Wales Marine SAC, Llyn Peninsula and the Sarnau SAC and Bristol Channel Approaches SAC during the construction and operational phases of the Proposed Development, which will be taken forward for appropriate assessment. A summary of these potential LSEs is provided in Table 6.1, with the impact pathway from underwater noise during piling. All other remaining potential effects on features of identified European Sites have been screened out in section 5 above and will therefore not be taken forward for appropriate assessment.

Appropriate assessment has been provided for the closest European site for each relevant qualifying feature. Based on NRW guidance for marine mammals (NRW, 2025b), an iterative process that assesses, in the first instance, the impacts on the European site within the relevant MU for each qualifying feature, which is closest to the Proposed Development. The conclusion from the site closest to the Proposed Development is then applied to the remaining sites. If it can be concluded that there is no AEOSI for the closest site, then any impact on European sites located at a greater distance from the Proposed Development would be of a lower magnitude and therefore an AEOSI can also be ruled out on those European sites.

It has not been the purpose of the section to repeat information provided in the ES, rather, a summary assessment has been provided with a cross-reference to the detailed information provided in the ES Chapter 8: Marine Biodiversity.

Table 6.1: Summary of stage 1: screening for likely significant effect

European site	Relevant qualifying features	Project phase	Impact
Cardigan Bay/Bae Ceredigion SAC	Sea lamprey River lamprey Bottlenose dolphin Grey seal	Construction	Underwater noise from piling
Pembrokeshire Marine/Sir Benfro Forol SAC	Sea lamprey River lamprey Allis shad Twaite shad Grey seal	Construction	Underwater noise from piling
River Teifi/Afon Teifi SAC	River lamprey Atlantic salmon Sea lamprey	Construction	Underwater noise from piling
West Wales Marine/Gorllewin Cymru Forol SAC	Harbour porpoise	Construction	Underwater noise from piling
Llyn Peninsula and the Sarnau/Pen Llyn a'r Sarnau SAC	Bottlenose dolphin Grey seal	Construction	Underwater noise from piling
Bristol Channel Approaches/Dynesfeydd Môr Hafren SAC	Harbour porpoise	Construction	Underwater noise from piling

North Anglesey Marine/
Gogledd Môn Forol SAC

Harbour porpoise

Construction

Underwater noise from piling

6.1 Embedded Mitigation

As part of the Proposed Development design, various plans will be developed according to published guidelines and best working practices for the prevention of pollution events and spread of INNS. These include the:

- development of and adherence to a Vessel Management Plan (VMP) and Navigation Safety Plan (NSP);
- development of, and adherence to a Construction Method Statement (CMS) along with a Code of Construction Practice (CoCP); and
- development of and adherence to an EMP, which will include a MPCP and an INNS Management Plan.

The MPCP will include best practice measures to prevent accidental spillage of chemicals during construction activities. An EMP will also be developed for the operational phase and manage the risks of all operational activities, including best practice measures to control pollution. Biosecurity control measures during operation will be included within the INNS Management Plan. All relevant Health and Safety Executive procedures will be followed during the construction and operational phases of the Proposed Development.

There are also a range of mitigation measures associated with underwater noise during the construction phase of the Proposed Development, which will include a 20-minute soft start and adoption of the JNCC guidelines for minimising the risk of injury to marine mammals from piling (JNCC, 2010). This will involve a 30-minute pre-piling visual watch for absence of marine mammals with a mitigation zone by a qualified Marine Mammal Observer. Although soft starts are more appropriate mitigation for marine mammals compared to fish, the 20-minute soft start may also act as a deterrent for qualifying fish features.

6.2 West Wales Marine/Gorllewin Cymru Forol SAC

Summary information has been provided below in Table 6.2 assessing the potential implications of the Proposed Development on the site's conservation objectives. The only qualifying feature of the West Wales Marine SAC site screened in for appropriate assessment is harbour porpoise (based on the screening assessment undertaken in section 5.1.3). The assessment has been conducted based on the likely occurrence of harbour porpoise as described in section 5.2.3.

Table 6.2: Summary of HRA outcome for the West Wales Marine/Gorllewin Cymru Forol SAC

Conservation objective	Summary of HRA findings	Reference to evidence in ES
To ensure harbour porpoise is a viable component of the site.	Adverse effects alone Impacts identified from the Proposed Development on harbour porpoise include effects of underwater noise arising from construction activities, including impact piling, which is considered the worst-case scenario. Construction activities are predicted to be highly localised in spatial extent and of short-term duration, with a total maximal duration of two hours of impact piling spread over up to four days, and other "noisy" construction activities occurring intermittently for up to nine months. Any auditory injury and/or TTS impacts from underwater noise due to impact piling will be of local spatial extent and intermittent, with limited risk of injury (within 880 m). In addition, the implementation of a soft-start and pre-piling survey, as well as the MMMP, as an embedded mitigation measures will further reduce the distance in which individuals may be injured and the number of individuals injured further as they will be deterred beyond the predicted injury ranges. Behavioural disturbance due to construction activities will also be of local spatial extent, intermittent and reversible. Behavioural disturbance is estimated to a maximum of 5.6 km from the source location and although the Proposed Development and thus the area of disturbance is within the SAC, it is only a very small proportion of the total site. The area of disturbance is 98.5 km (estimated as the area of a circle, $A = \pi r^2$, where r equals 5.6 km), which represents just over 1% of the total SAC area. This method of estimating area of disturbance is based on using the maximum behavioural disturbance as the radius of the area and so provides a precautionary overestimate of the area within in which behavioural disturbance will occur, as the morphology of the coast (much of the disturbed 'circle' will be on land) and enclosed nature of Fishguard Bay will further reduce this area. The Planning Boundary is also an area that is likely to be avoided by harbour porpoise due to the high level of anthropogenic activity (a working harbour) and high background noise levels dominated by the vessel activity at the ferry terminal. As the area is not key habitat for harbour porpoise within the SAC, it is also unlikely that the noise contours would cause barrier effects. Therefore, effects from underwater noise associated with the Proposed Development would not be expected to affect the harbour porpoise feature of the SAC or have population level effects, with less than 0.1% of the Celtic and Irish Seas MU population potentially disturbed. As such, underwater noise from construction activities is not	- ES Chapter 8: Marine Biodiversity section 8.9.3 marine mammal impact assessment: - Underwater noise from piling and other activities - ES Chapter 14: Underwater Acoustics and associated appendices

LSE SCREENING AND RIAA

Conservation objective	Summary of HRA findings	Reference to evidence in ES
	predicted to impact the population from being able to maintain itself as a viable component of its natural habitat over the long term and the Proposed Development would not restrict this conservation objective from being achieved.	
To ensure there is no significant disturbance of harbour porpoise.	Adverse effects alone As described in the row above, disturbance effects associated constructions activities, including dredging as the worst-case scenario, are predicted to be of local spatial extent, short-term duration, intermittent and reversible. As discussed in ES Chapter 8: Marine Biodiversity and ES Chapter 14: Underwater Acoustics, although behavioural disturbance thresholds exceedances occur to 5.6 km, only 0.1% of the Celtic and Irish Seas MU population would be potentially disturbed. While behavioural disturbance area overlaps with 1% of the SAC, it is a very small proportion of the whole area available to harbour porpoise, within in an area (Fishguard Harbour) that is already likely to be avoided due to the high levels of anthropogenic activity and high background noise levels dominated by the vessel activity at the ferry terminal. The conservative estimate of 1% of the total SAC area is lower than the daily spatial and temporal threshold of '20% of the relevant area of the site in any given day' and therefore cannot be considered as significant disturbance. As discussed in ES Chapter 14: Underwater Acoustics, the behavioural disturbance ranges will also be limited to line of sight due to the enclosure of Fishguard Harbour by the northern breakwater of Fishguard Harbour to the North and the headland to the east, which minimise the volume of water for the noise to travel through. Once out of Fishguard Harbour, general shipping vessel noise (or general wind and wave noise) from the Irish Sea will also likely drown out the noise associated with dredging or other "noisy" activities at the Proposed Development. Therefore, no significant disturbance from underwater noise due to construction activities is predicted in the long term and it can be concluded that the Proposed Development will not prevent this conservation objective from being maintained.	• ES Chapter 8: Marine Biodiversity section 8.9.3 marine mammal impact assessment: – Underwater noise from piling and other activities • ES Chapter 14: Underwater Acoustics and associated appendices
To ensure the condition of supporting habitats and processes, and the availability of prey is maintained.	Adverse effects alone There is no pathway for impact between underwater noise generated during construction activities and the habitats and supporting processes for harbour porpoise. With respect to the availability of prey (fish and shellfish), long term effects from piling or other "noisy" activities were not predicted (see the ES Chapter 8: Marine Biodiversity), therefore prey species populations are expected to be maintained in the long term. Therefore, the Proposed Development will not adversely affect the condition of habitats and species required to support harbour porpoise, and will not prevent this conservation objective from being maintained.	• ES Chapter 8: Marine Biodiversity section 8.9.2: fish and shellfish ecology impact assessment: – Underwater noise from piling and other activities • ES Chapter 14: Underwater Acoustics and associated appendices

Based on the information presented above in Table 6.2, it is concluded that the Proposed Development will not adversely affect the integrity of the West Wales Marine SAC, alone or in combination with other plans or projects. There are no AEOSI on the West Wales Marine SAC.

6.3 Cardigan Bay/Bae Ceredigion SAC

Summary information has been provided below in Table 6.3 assessing the potential implications of the Proposed Development on the site's conservation objectives. The qualifying feature of the Cardigan Bay SAC site screened in for appropriate assessment are sea lamprey, river lamprey, bottlenose dolphin and grey seal (based on the screening assessment undertaken in sections 5.1.2 and 5.1.3). The assessment has been conducted based on the likely occurrence of sea lamprey, river lamprey, bottlenose dolphin and grey seal as described in sections 5.1.2 and 5.1.3.

Table 6.3: Summary of HRA outcome for the Cardigan Bay/Bae Ceredigion SAC

Conservation objective	Summary of HRA findings	Reference to evidence in ES
To ensure the population of the species is maintained on a long-term basis as a viable component of its natural habitat.	Adverse effects alone As per the assessment provided above for harbour porpoise, there is limited risk of injury to the bottlenose dolphin and grey seal features of the Cardigan Bay SAC from underwater noise (within 40 m for bottlenose dolphin and 720 m for grey seal). Low levels of disturbance in the form of behavioural response to underwater noise is predicted over the short term within 5.6 km of the dredging activities. As the SAC is located 14.9 km from the Proposed Development Planning Boundary, it is unlikely that there will be overlap between the SAC and the (overestimated) area of behavioural disturbance due to construction activities. Fishguard Harbour is not anticipated to be a key habitat for grey seal or bottlenose dolphin, and so no significant disturbance is predicted. Therefore, the grey seal population as a viable component of the site will continue to be maintained in the long-term. Similarly to marine mammals, the risk of auditory injury to diadromous fish is limited (to within 670 m) from the piling activity so it is highly unlikely fish populations will be significantly affected given the localised nature of the impact. Behavioural disturbance to diadromous fish may also occur within 5 km of piling activities predicted over the short term, and so is unlikely to cause significant disturbance to the qualifying diadromous fish features of the SAC. Therefore, the sea lamprey and river lamprey populations as a viable components of the site will continue to be maintained in the long-term. Therefore, effects from underwater noise associated with the Proposed Development would not be expected to affect the sea lamprey, river lamprey, bottlenose dolphin or grey seal features of the SAC or have population level effects. As such, underwater noise from construction activities is not predicted to impact the species' populations from being able to maintain themselves as a viable component of its natural habitat over the long term and the Proposed Development would not restrict this conservation objective from being achieved.	- ES Chapter 8: Marine Biodiversity: - section 8.9.2 fish and shellfish ecology impact assessment: underwater noise from piling and other activities; - section 8.9.3 marine mammal impact assessment: underwater noise from piling and other activities - ES Chapter 14: Underwater Acoustics and associated appendices
To ensure the species population within the site is such that the natural range of the population is not being reduced or likely to be reduced for the foreseeable future.	Adverse effects alone There may be some low level of disturbance to sea lamprey, river lamprey, bottlenose dolphin and grey seal within the vicinity of the Proposed Development construction activities, resulting in potential highly localised avoidance behaviour. However,	- ES Chapter 8: Marine Biodiversity: - section 8.9.2 fish and shellfish ecology impact assessment:

LSE SCREENING AND RIAA

Conservation objective	Summary of HRA findings	Reference to evidence in ES
	Fishguard Harbour is not anticipated to be a key habitat for any of the marine mammal or diadromous fish features due, in part, to high levels of anthropogenic activity, and so no significant reduction in their natural range is predicted due to noise contours causing barrier effects. Therefore, effects from underwater noise associated with the Proposed Development would not be expected to affect the sea lamprey, river lamprey, bottlenose dolphin or grey seal features of the SAC or have population level effects. As such, underwater noise from construction activities is not predicted to reduce, either now or in the foreseeable future, the natural range of the species' populations over the long term and the Proposed Development would not restrict this conservation objective from being achieved.	underwater noise from piling and other activities; – section 8.9.3 marine mammal impact assessment: Underwater noise from piling and other activities • ES Chapter 14: Underwater Acoustics and associated appendices
To ensure that the presence, abundance, condition and diversity of habitats and species required to support species is such that the distribution, abundance and populations dynamics of the species within the site and population beyond the site is stable or increasing.	Adverse effects alone There is no pathway for impact between underwater noise generated during construction activities and the habitats required to support the sea lamprey, river lamprey, bottlenose dolphin or grey seal features of the SAC. With respect to the availability of prey for both marine mammals and diadromous fish (fish and shellfish), long term effects from piling or other “noisy” construction activities were not predicted (see rows above and the ES Chapter 8: Marine Biodiversity), therefore prey species populations are expected to be maintained in the long term. As such, the presence, abundance, condition and diversity of species required to support the marine mammal and diadromous fish features will be maintained. Therefore, the construction activities of the Proposed Development will not impact on the presence, abundance, condition and diversity of habitats and species supporting the species in the long term, and will not prevent the distribution, abundance and populations dynamics of the qualifying features within the site and population beyond the site from remaining stable or increasing. And so, the Proposed Development will not prevent this conservation objective from being maintained.	• ES Chapter 8: Marine Biodiversity section 8.9.2: fish and shellfish ecology impact assessment: – Underwater noise from piling • ES Chapter 14: Underwater Acoustics and associated appendices

Based on the information presented above in Table 6.3, it is concluded that the project will not adversely affect the integrity of the Cardigan Bay SAC, alone or in combination with other plans or projects. There are no AEOSI on the Cardigan Bay SAC.

6.4 Pembrokeshire Marine/Sir Benfro Forol SAC

Summary information has been provided below in Table 6.4 assessing the potential implications of the Proposed Development on the site's conservation objectives. The qualifying feature of the Pembrokeshire Marine SAC site screened in for appropriate assessment are sea lamprey, river lamprey, allis shad and twaite shad (based on the screening assessment undertaken in sections 5.1.2 and 5.1.3). As there was no AEOSI for the Cardigan Bay SAC for grey seal (Table 6.3), it is assumed there is no AEOSI with regard to conservation objectives for grey seal associated with the Pembrokeshire Marine SAC as it is an additional

LSE SCREENING AND RIAA

5.3 km from the Proposed Development Planning Boundary. The assessment has been conducted based on the likely occurrence of sea lamprey, river lamprey, allis shad, and twaite shad as described in sections 5.1.2 and 5.1.3.

Table 6.4: Summary of HRA outcome for the Pembrokeshire Marine/Sir Benfro Forol SAC

Conservation objective	Summary of HRA findings	Reference to evidence in ES
To ensure the population of the species is maintained on a long-term basis as a viable component of its natural habitat.	Adverse effects alone The risk of auditory injury to diadromous fish is limited (to within 700 m) from the piling activity so it is highly unlikely fish populations will be significantly affected given the localised nature of the impact. Behavioural disturbance to diadromous fish (sea lamprey, river lamprey, allis shad and twaite shad) may also occur within 5 km of piling activities predicted over the short term. However, as the SAC is located 20.2 km from the Proposed Development Planning Boundary, it is unlikely that there will be overlap between the SAC and the area of behavioural disturbance due to piling and so is unlikely to cause significant disturbance to the qualifying diadromous fish features of the SAC. Therefore, the sea lamprey, river lamprey, allis shad and twaite shad populations as a viable components of the site will continue to be maintained in the long-term. Therefore, effects from underwater noise associated with the Proposed Development (using piling as the worst-case scenario for diadromous fish) would not be expected to affect the sea lamprey, river lamprey, allis shad or twaite shad features of the SAC or have population level effects. As such, underwater noise from construction activities is not predicted to impact the species' populations from being able to maintain themselves as a viable component of its natural habitat over the long term and the Proposed Development would not restrict this conservation objective from being achieved.	- ES Chapter 8: Marine Biodiversity: - section 8.9.2 fish and shellfish ecology impact assessment: underwater noise from piling and other activities - ES Chapter 14: Underwater Acoustics and associated appendices
To ensure the species population within the site is such that the natural range of the population is not being reduced or likely to be reduced for the foreseeable future.	Adverse effects alone There may be some low level of disturbance to sea lamprey, river lamprey, allis shad and twaite shad within the vicinity of the Proposed Development piling activities, resulting in potential highly localised avoidance behaviour. However, Fishguard Harbour is not anticipated to be a key habitat for any of the diadromous fish features, and so no significant reduction in their natural range is predicted due to noise contours causing barrier effects. Therefore, effects from underwater noise associated with the Proposed Development (using piling as the worst-case scenario) would not be expected to affect the sea lamprey, river lamprey, allis shad and twaite shad associated with the SAC or have population level effects. As such, underwater noise from construction activities is not predicted to reduce, either now or in the foreseeable future, the natural range of the species' populations over the long term and the Proposed Development would not restrict this conservation objective from being achieved.	- ES Chapter 8: Marine Biodiversity: - section 8.9.2 fish and shellfish ecology impact assessment: underwater noise from piling and other activities - ES Chapter 14: Underwater Acoustics and associated appendices
To ensure that the presence, abundance, condition and diversity of habitats and species required to support species is such that the	Adverse effects alone There is no pathway for impact between underwater noise generated during construction activities and the habitats required to support the diadromous fish features	ES Chapter 8: Marine Biodiversity section 8.9.2: fish and shellfish ecology impact assessment:

LSE SCREENING AND RIAA

Conservation objective	Summary of HRA findings	Reference to evidence in ES
distribution, abundance and populations dynamics of the species within the site and population beyond the site is stable or increasing.	of the SAC. With respect to the availability of prey for diadromous fish (fish and shellfish), long term effects from piling or other “noisy” construction activities were not predicted (see rows above and the ES Chapter 8: Marine Biodiversity), therefore prey species populations are expected to be maintained in the long term. As such, the presence, abundance, condition and diversity of species required to support the diadromous fish features will be maintained. Therefore, the construction activities of the Proposed Development will not impact on the presence, abundance, condition and diversity of habitats and species supporting the species in the long term, and will not prevent the distribution, abundance and populations dynamics of the qualifying features within the site and population beyond the site from remaining stable or increasing. And so, the Proposed Development will not prevent this conservation objective from being maintained.	– underwater noise from piling and other activities • ES Chapter 14: Underwater Acoustics and associated appendices

Based on the information presented above in Table 6.4, it is concluded that the project will not adversely affect the integrity of the Pembrokeshire Marine SAC, alone or in combination with other plans or projects. There are no AEOSI on the Pembrokeshire Marine SAC.

6.5 River Teifi/Afon Teifi SAC

Summary information has been provided below in Table 6.5 assessing the potential implications of the Proposed Development on the site’s conservation objectives. The qualifying feature of the River Teifi SAC site screened in for appropriate assessment are sea lamprey, river lamprey and Atlantic salmon (based on the screening assessment undertaken in section 5.1.2). The assessment has been conducted based on the likely occurrence of sea lamprey, river lamprey and Atlantic salmon as described in section 5.1.2.

Table 6.5: Summary of HRA outcome for the River Teifi/Afon Teifi SAC

Conservation objective	Summary of HRA findings	Reference to evidence in ES
To ensure the population of the species in the SAC is stable or increasing over the long term.	Adverse effects alone The risk of auditory injury to diadromous fish is limited (to within 700 m) from the piling activity so it is highly unlikely fish populations will be significantly affected given the localised nature of the impact. Behavioural disturbance to diadromous fish (sea lamprey, river lamprey and Atlantic salmon) may also occur within 5 km of piling activities predicted over the short term. However, as the SAC is located 21.5 km from the Proposed Development Planning Boundary, it is unlikely that there will be overlap between the SAC and the area of behavioural disturbance due to piling and so is unlikely to cause significant disturbance to the qualifying diadromous fish features of the SAC. Therefore, effects from underwater noise associated with the Proposed Development (using piling as the worst-case scenario for diadromous fish) would not be expected to	• ES Chapter 8: Marine Biodiversity section 8.9.2: fish and shellfish ecology impact assessment: – underwater noise from piling and other activities • ES Chapter 14: Underwater Acoustics and associated appendices

LSE SCREENING AND RIAA

Conservation objective	Summary of HRA findings	Reference to evidence in ES
	affect the sea lamprey, river lamprey or Atlantic salmon features of the SAC or have population level effects. As such, underwater noise from construction activities will not prevent the diadromous fish populations from remaining stable or increasing over the long term and the Proposed Development would not restrict this conservation objective from being achieved.	
To ensure the distribution of the species population is maintained.	Adverse effects alone There may be some low level of disturbance to sea lamprey, river lamprey, allis shad and twaite shad within the vicinity of the Proposed Development piling activities, resulting in potential highly localised avoidance behaviour. However, Fishguard Harbour is not anticipated to be a key habitat for any of the diadromous fish features, and so no significant reduction in their natural range is predicted due to noise contours causing barrier effects. Therefore, effects from underwater noise associated with the Proposed Development (using piling as the worst-case scenario) would not be expected to reduce the distribution of the sea lamprey, river lamprey or Atlantic salmon associated with the SAC. As such, the Proposed Development would not restrict this conservation objective from being maintained.	• ES Chapter 8: Marine Biodiversity section 8.9.2: fish and shellfish ecology impact assessment: – underwater noise from piling and other activities • ES Chapter 14: Underwater Acoustics and associated appendices
To ensure there is sufficient habitat, of sufficient quality, to support the species population in the long term.	Adverse effects alone There is no pathway for impact between underwater noise generated during construction activities and the habitats required to support the diadromous fish features of the SAC. Therefore, the Proposed Development will not prevent this conservation objective from being maintained.	• ES Chapter 8: Marine Biodiversity

Based on the information presented above in Table 6.5, it is concluded that the project will not adversely affect the integrity of the River Teifi SAC, alone or in combination with other plans or projects. There are no AEOSI on the River Teifi SAC.

6.6 Lleyn Peninsula and the Sarnau/Pen Llyn a`r Sarnau SAC

The qualifying feature of the Lleyn Peninsula and the Sarnau SAC site screened in for appropriate assessment is bottlenose dolphin and grey seal (based on the screening assessment undertaken in section 5.1.3). As there was no AEOSI due to underwater noise associated with the Proposed Development for Cardigan Bay SAC for grey seal (Table 6.3), it is assumed there is no AEOSI with regard to conservation objectives for grey seal associated with the Lleyn Peninsula and the Sarnau SAC as it is an additional 51.6 km from the Proposed Development Planning Boundary. It also follows that the conclusion of no AEOSI for Cardigan Bay SAC (Table 6.3) will be upheld for the bottlenose dolphin feature of the Lleyn Peninsula and the Sarnau SAC, as there is strong evidence that a single population of bottlenose dolphins use both SACs (NRW, 2025b).

It can be concluded that there is no risk of an adverse effect on the integrity of the Lleyn Peninsula and the Sarnau SAC as a result of underwater noise from construction activities, alone or in combination with other plans or projects.

6.7 Remaining SACs in the Marine Mammal MUs

In line with NRW guidance (NRW, 2025b) for harbour porpoise and grey seals, as AEOSI has been ruled out for the closest Welsh sites designated for harbour porpoise and grey seal, it follows that AEOSI would be ruled out at the remaining Welsh, English, Scottish, Irish and French sites within the respective Celtic and Irish Seas MU and the OSPAR Region III interim MU.

7 SUMMARY

Having regard to the relevant legislation and the methodology outlined in section 2, Stage 1: Screening for LSE was undertaken to ascertain whether or not the Proposed Development is likely to have a significant effect on any European site.

The potential for LSE could not be excluded at the screening stage for seven European sites, without further evaluation, or the application of mitigation measures intended to reduce effects of the Proposed Development on the European sites concerned.

A subsequent assessment to inform Stage 2: Appropriate Assessment of the implications of the Proposed Development on European sites allowed the introduction of measures intended to avoid or reduce the potential adverse effects of the Proposed Development on European sites. These measures ensure that the Proposed Development will not undermine the conservation objectives of the sites concerned, and as such will not adversely affect the integrity of any European site.

The Stage 2: Appropriate Assessment concluded that there is no risk of AOESI as a result of underwater noise associated with the Proposed Development, alone or in combination with other plans or projects, for any of the SACs within the Celtic and Irish Seas MU for harbour porpoise, the Irish Sea MU for bottlenose dolphins and the OSPAR Region III interim MU for grey seals.

GLOSSARY AND ACRONYMS

Glossary

Term	Meaning
Appropriate Assessment	An assessment to determine the implications of a plan or project on a European site in view of that site's conservation objectives. An Appropriate Assessment forms part of the Habitats Regulations Appraisal (HRA) and is required when a plan or project (either alone or in combination with other plans or projects) is likely to have a significant effect on a European site.
Annex I Habitat	A natural habitat type of community interest, defined in Annex I of the Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (Habitats Directive). The designation of Special Areas of Conservation (SAC) is required in the UK to ensure the conservation of these habitats. The protection afforded to sites designated prior to EU Exit persists in UK law.
Annex II Species	Animal or plant species of community interest, defined in Annex II of the Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (Habitats Directive). The designation of Special Areas of Conservation (SAC) is required in the UK to ensure the conservation of these species. The protection afforded to sites designated prior to EU Exit persists in UK law.
Competent Authority	The term derives from the Habitats Regulations and relates to the duties which the Regulations impose on public bodies and individuals. Regulation 7(1) defines competent authorities as '(a) any Minister of the Crown (as defined in the Ministers of the Crown Act 1975), government department, statutory undertaker, public body of any description or person holding a public office; (b) the Welsh Ministers; and (c) any person exercising any function of a person mentioned in sub-paragraph (a) or (b)'. In the context of a plan or project, the competent authority is the public body with the power to give a licence, permit, consent or other permission for work to proceed (Welsh Government, 2021).
Diadromous fish	Diadromous fishes have evolved mechanisms to transition between seawater and freshwater environments.
EU-Exit	The withdrawal of the United Kingdom from the European Union.
European site	A Special Area of Conservation (SAC), candidate SAC, a Special Protection Area (SPA), proposed SAC, potential SPA or Ramsar sites and are protected under the relevant statutory regimes.
Habitats Regulations	The Conservation of Habitats and Species Regulations 2017, The Conservation of Offshore Marine Habitats and Species 2017 and The Conservation of Habitats and Species Amendment (EU Exit) Regulations 2019.
Habitat Regulations Appraisal	A process required by the Habitats Regulations of identifying likely significant effects of a plan or project on a European site and (where Likely Significant Effects are predicted or cannot be discounted) carrying out an appropriate assessment to ascertain whether the plan or project will adversely affect the integrity of the European site. If adverse effects on integrity cannot be ruled out, the latter stages of the process require consideration of the derogation provisions in the Habitats Regulations.
Likely Significant Effect	Any effect that may reasonably be predicted as a consequence of a plan or project that may affect the conservation objectives of the features for which the European site was designated, but excluding trivial or inconsequential effects. A likely effect is one that cannot be ruled out on the basis of objective information. A 'significant' effect is a test of whether a plan or project could affect the site's conservation objectives (Welsh Government, 2021).
National Site Network	The National Site Network comprises Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) designated (or proposed) on EU-Exit day and which formerly formed part of the Natura 2000 network, as well as any new sites designated under the Habitats Regulations under an amended designation process.
Natura 2000 network	A coherent European ecological network of Special Areas of Conservation and Special Protection Areas comprising sites located within European Union Member States.
Planning Boundary	The area of Fishguard Harbour within which the Proposed Development infrastructure will be placed.
Proposed Development	All infrastructure of the Stena Line Fishguard Ferry Port Project.
Ramsar Site	Wetlands of international importance, designated under the Ramsar Convention.

LSE SCREENING AND RIAA

Special Area of Conservation (SAC)	Special Areas of Conservation (SACs) are areas designated for the conservation of certain plant and animal species listed in the Directive.
Zone of Influence (Zol)	The geographical extent over which impacts on a receptor may occur.

Acronyms

Acronym	Meaning
CD	Chart Datum
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
ES	Environmental Statement
EU	European Union
HRA	Habitat Regulations Assessment
IAMMWG	Inter-Agency Marine Mammal Working Group
IEMA	Institute of Environmental Management and Assessment
IMO	International Maritime Organisation
INNS	Invasive Non-Native Species
IROPI	Imperative Reasons of Overriding Public Interest
JNCC	Joint Nature Conservation Committee
LSE	Likely Significant Effect
L _p	maximal instantaneous Sound Pressure Level
MARPOL	International Convention for the Prevention of Pollution from Ships
MHWS	Mean High Water Springs
MPCP	Marine Pollution Contingency Plan
MU	Management Unit
NMFS	National Marine Fisheries Service
NRW	Natural Resources Wales
OSPAR	Oslo Paris Convention
PTS	Permanent Threshold Shift
RIAA	Report to Inform Appropriate Assessment
RNLI	Royal National Lifeboat Institution
SAC	Special Area of Conservation
SEL	Sound Exposure Level
SPA	Special Protection Area
SPL	Sound Pressure Level
SSC	Suspended Sediment Concentrations
SW	South-west
TTS	Temporary Threshold Shift
UK	United Kingdom
WSDOT	Washington State Department of Transport
Zol	Zone of Influence

Units

Unit	Description
dB	decibel

LSE SCREENING AND RIAA

km	Kilometre
km ²	Square kilometre
m	Metre
nm	Nautical mile

Appendix A - Standard Data Forms

REFERENCES

- Garrett, H.M. (2016). *Afon Teifi SAC population attribute condition assessment for brook, river and sea lamprey population 2014*. NRW Evidence Report No. 106. 28 pp. NRW. Bangor.
- IAMMWG (2023). *Review of Management Unit boundaries for cetaceans in UK waters*. JNCC. Peterborough, UK pp.23.
- IEMA (2024). *Institute of Environmental Management and Assessment (IEMA) Impact Assessment Guidelines: Implementing the Mitigation Hierarchy from Concept to Construction*. August 2024.
- Kruuk, H. (1995). *Wild otters: predation and populations*. Oxford, Oxford University Press.
- JNCC (2017). *NATURA 2000 - STANDARD DATA FORM UK0030074 Afonydd Cleddau/ Cleddau Rivers*.
- Nedwell, J., Turnpenny, A., Lovell, J., Parvin, S., Workman, R., Spinks, J. and Howell, D. (2007). *A validation of the dBht as a measure of the behavioural and auditory effects of underwater noise*. Subacoustech Report Reference: 534R1231. Department for Business, Enterprise and Regulatory Reform.
- NMFS (2024). *Update to: Technical Guidance for Assessing the Effects of of Anthropogenic Sound on Marine Mammal Hearing (v3): Underwater and In-Air Criteria for Onset of Auditory Injury and Temporary Threshold Shifts*. NOAA. US Department of Commer. NMFS-OPR-71. pp.182.
- NRW (2018a). *Cardigan Bay / Bae Ceredigion Special Area of Conservation*. Advice provided by Natural Resources Wales in fulfilment of Regulation 37 of the Conservation of Habitats and Species Regulations 2017. March 2018.
- NRW (2018b). *Pembrokeshire Marine / Sir Benfro Forol Special Area of Conservation*. Advice provided by Natural Resources Wales in fulfilment of Regulation 37 of the Conservation of Habitats and Species Regulations 2017. March 2018.
- NRW (2018c). *Pen Llŷn a'r Sarnau / Llyn Peninsula and the Sarnau Special Area of Conservation*. Advice provided by Natural Resources Wales in fulfilment of Regulation 37 of the Conservation of Habitats and Species Regulations 2017. March 2018.
- NRW (2022). *CORE MANAGEMENT PLAN INCLUDING CONSERVATION OBJECTIVES FOR Afon Teifi / River Teifi SAC*. Version 4.
- NRW (2023a). *West Wales Marine / Gorllewin Cymru Forol MPA* [Online]. Available at: <https://jncc.gov.uk/our-work/west-wales-marine-mpa/>. Accessed on 26 Nov. 24.
- NRW (2023b). *Bristol Channel Approaches / Dynesfeydd Môr Hafren MPA* [Online]. Available at <https://jncc.gov.uk/our-work/bristol-channel-approaches-mpa/>. Accessed on 26 Nov. 24.
- NRW (2023c). *North Anglesey Marine MPA* [Online]. Available at: <https://jncc.gov.uk/our-work/north-anglesey-marine-mpa/>. Accessed on 07 Feb. 25.
- NRW (2025a). *SCREENING AND SCOPING OPINION UNDER THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2007 (as amended)*. FISHGUARD REPLACEMENT LINKSPAN. Ref: SC2402.

NRW (2025). *Habitats Regulations Assessments for Special Areas of Conservation with marine mammal features*. Position Statement: PS006.

NRW and JNCC (2019). *Harbour Porpoise (Phocoena phocoena) Special Area of Conservation: West Wales Marine / Gorllewin Cymru Forol Conservation Objectives and Advice on Operations*. March 2019.

Popper

RPS (2018a). *Appendix 7.2 Habitat Regulations Assessment. Fishguard Port Replacement Linkspan Environmental Impact Assessment*. Stena Line.

RPS (2018b). *7.0 Marine Biodiversity. Fishguard Port Replacement Linkspan Environmental Impact Assessment*. Stena Line.

Scottish Government (2018). *Sectoral Marine Plan for Offshore Wind Energy (encompassing Deep Water Plan Options). Strategic Habitat Regulations Appraisal: Pre-Screening Report*. June 2018coa

Sinclair, R.R., Kazer, S., Ryder, M., New, P. and Verfuss, U.K. (2023). *Review and recommendations on assessment of noise disturbance for marine mammals*. Natural Resources Wales.

Southall, B.L., Finneran, J.J., Reichmuth, C., Nachtigall, P.E., Ketten, D.R., Bowles, A.E., Ellison, W.T., Nowacek, D.P. and Tyack, P.L. (2019). *Marine Mammal Noise Exposure Criteria: Updated Scientific Recommendations for Residual Hearing Effects*. *Aquatic Mammals*, 45 (2), pp.125-232. DOI:10.1578/am.45.2.2019.125.

Tougaard, J. (2021). *Thresholds for behavioural responses to noise in marine mammals. Background note to revision of guidelines from the Danish Energy Agency*. DCE – Danish Centre for Environment and Energy. 225. pp.31.

UK Government (2022). *Otters: advice for making planning decisions*. January 2022 [Online]. Available at: <https://www.gov.uk/guidance/otters-advice-for-making-planning-decisions>. Accessed on 19 Dec. 24.

UK Wild Otter Trust (no date). *Eurasian Otter 101* [Online]. Available at: <https://ukwildottertrust.org/otters-101/>. Accessed 20 Dec. 24.

Washington State Department of Transport (2020). *Biological Assessment Preparation Manual. Chapter 7 Construction Noise Impact Assessment*. Washington State Department of Transport. Chapter Updated August 2020. pp.95.

Welsh Government (2021). *Habitats regulations assessments: protecting a European site*. March 2021 [Online]. Available at: <https://www.gov.wales/habitats-regulations-assessments-protecting-european-site.html>. Accessed on 13 Nov. 24.

Worcester, T. (2006). *Effects of Seismic Energy on Fish; A Literature Review*. Department of Fisheries and Oceans, Bedford Institute of Oceanography. Dartmouth, Canada pp.72.

STENA FISHGUARD HABITATS REGULATIONS ASSESSMENT

LSE Screening Report

POR-00886R
D01
January 2025

LSE SCREENING REPORT

Document status

Version	Purpose of document	Authored by	Reviewed by	Approved by	Review date
D01	Internal Review of Marine Biodiversity LSE Screening	EC	JH	JH	08 Jan. 25

Approval for issue

Jillian Hobbs

8 January 2025

The report has been prepared for the exclusive use and benefit of our client and solely for the purpose for which it is provided. Unless otherwise agreed in writing by RPS Group Plc, any of its subsidiaries, or a related entity (collectively 'RPS') no part of this report should be reproduced, distributed or communicated to any third party. RPS does not accept any liability if this report is used for an alternative purpose from which it is intended, nor to any third party in respect of this report. The report does not account for any changes relating to the subject matter of the report, or any legislative or regulatory changes that have occurred since the report was produced and that may affect the report.

The report has been prepared using the information provided to RPS by its client, or others on behalf of its client. To the fullest extent permitted by law, RPS shall not be liable for any loss or damage suffered by the client arising from fraud, misrepresentation, withholding of information material relevant to the report or required by RPS, or other default relating to such information, whether on the client's part or that of the other information sources, unless such fraud, misrepresentation, withholding or such other default is evident to RPS without further enquiry. It is expressly stated that no independent verification of any documents or information supplied by the client or others on behalf of the client has been made. The report shall be used for general information only.

Prepared by:

Tetra Tech RPS Energy

Atholl Exchange
1st Floor, 6 Canning Street
Edinburgh, EH3 8EG

Prepared for:

RPS Consulting Ireland

Elmwood House
74 Boucher Road
Belfast, Co. Antrim, BT12 6RZ

Contents

1	INTRODUCTION	4
1.1	Overview	4
1.2	Purpose of this Report	4
1.3	Structure of the LSE Screening Report.....	6
2	HABITAT REGULATIONS PROCESS.....	7
2.1	Legislative Context.....	7
2.2	The Process	7
2.3	Process for Identifying European Sites and Features.....	8
3	PROJECT DESCRIPTION	10
3.1	The Proposed Development	10
3.2	Approach to the In-combination Assessment	10
4	ASSESSMENT METHOD	12
5	STAGE 1: SCREENING FOR LIKELY SIGNIFICANT EFFECTS	13
5.1	Identification of European Sites and Features	13
5.1.1	Sites Designated for Annex I Habitats	13
5.1.2	Sites Designated for Annex II Diadromous Fish.....	14
5.1.3	Sites Designated for Annex II Marine Mammal	17
5.1.4	Sites Designated for Annex II Otters	19
5.2	Determination of Likely Significant Effects	20
5.2.1	Methodology	20
5.2.2	Assessment of LSE for Annex II Diadromous Fish.....	20
5.2.3	Assessment of LSE for Annex II Marine Mammals	29
6	SUMMARY	39
7	REFERENCES	40
8	GLOSSARY AND ACRONYMS	42
	Glossary	42
	Acronyms	43
	Units	43

Tables

Table 2.1: Criteria for initial identification of relevant European sites	9
Table 5.1: European sites designated for Annex II diadromous fish species taken forward for determination of LSE.....	16
Table 5.2: European sites designated for Annex II marine mammal species taken forward for determination of LSE.....	18
Table 5.3: Likely significant effects matrix for Annex II diadromous fish features of SACs (C: Construction; O: Operation)	28
Table 5.4: Likely significant effects matrix for Annex II marine mammal features of SACs (C: Construction; O: Operation)	38
Table 6.1: Summary of stage 1: screening for likely significant effect	39

Figures

Figure 1.1: Proposed Development.....	4
---------------------------------------	---

Figure 5.1: Location of European sites designated for Annex II diadromous species taken forward for determination of LSE.....16

Figure 5.2: Location of European sites designated for Annex II marine mammal species taken forward for determination of LSE18

Appendices

Appendix A - Standard Data Forms

1 INTRODUCTION

1.1 Overview

Fishguard Ferry Port is located in Fishguard, Pembrokeshire, South-West Wales. The Ferry Port was created in the 1910s by reclaiming land at the base of the Pen Anglas headland. The reclamation was achieved by blasting cliff rock and building out. The breakwaters were also constructed around this time. The current operation includes a twice daily ferry service to Rosslare, covering public ferry passengers and accompanied and unaccompanied freight. The berth is also infrequently used by cruise vessels and historic steamboats.

Stena Line Ltd, owner and operator of the Ferry Port, proposes to replace the existing temporary arrangement of a linkspan and jack-up barge within Fishguard Harbour, Pembrokeshire, Wales. The Proposed Development, providing a replacement pontoon, will allow safe berthing of the ferry, and provide an improved facility for passenger and vehicular access to vessels within the Port. The Planning Boundary of the Proposed Development is encompassed by Fishguard Harbour, within Fishguard Bay (Figure 1.1).

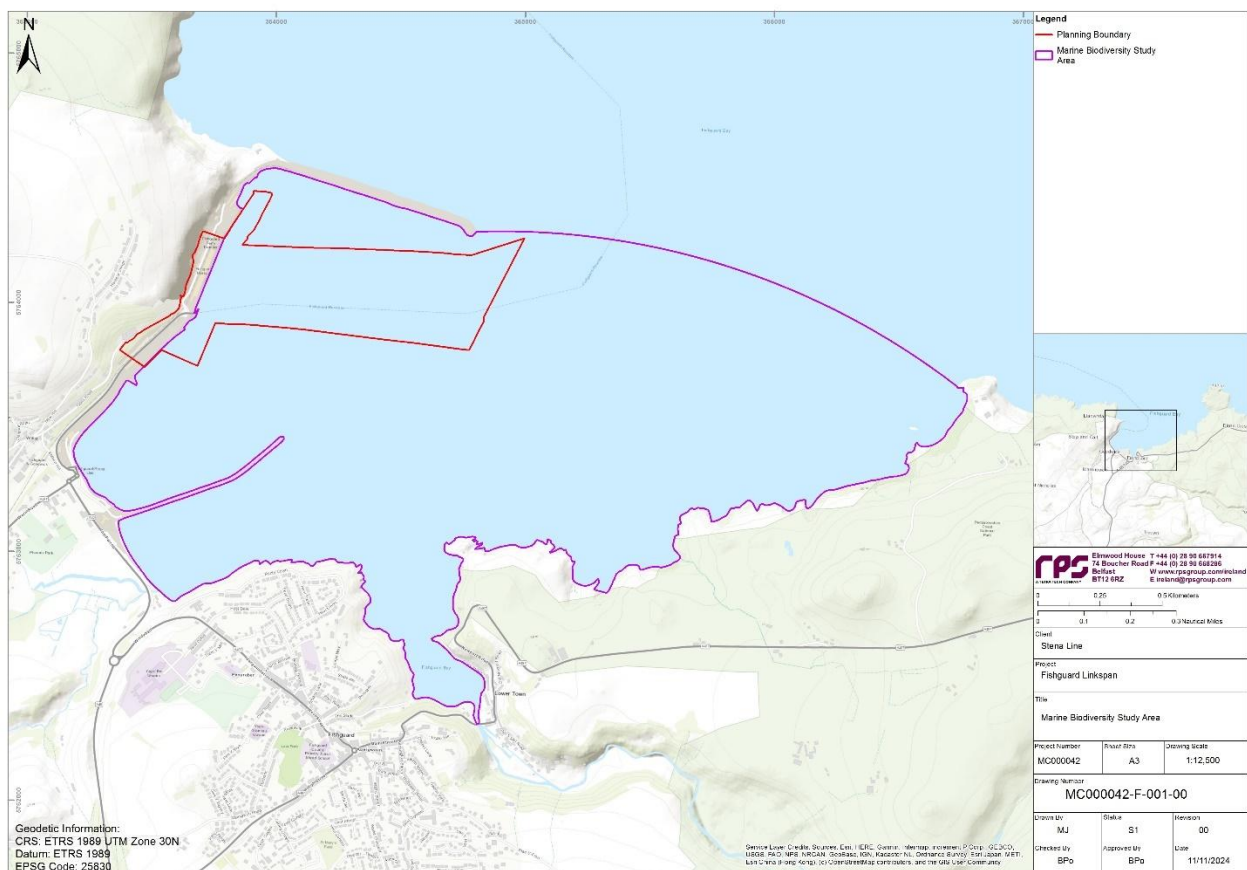


Figure 1.1: Proposed Development

1.2 Purpose of this Report

This report has been produced to inform the Habitats Regulations Assessment (HRA) process to support the planning application and Marine Licence for the Proposed Development. This report comprises the Stage 1:

screening stage and therefore, provides information to enable the screening of the Proposed Development with respect to its potential to have a Likely Significant Effects (LSE) on any European sites. LSE is deemed as any effect anticipated as a consequence of a project that may potentially affect the conservation objectives of the features for which the European site was designated, excluding effects which are trivial. It is important to note that this is different from a significant effect used in the context of the Environmental Impact Assessment (EIA) Directive and related EIA Regulations.

The requirement and process for the consideration of potential impacts of plans and projects on European sites have followed the European Union's (EU) Habitats Directive. In Welsh territorial waters, the Habitats Directive was initially translated into specific legal obligations by The Conservation of Habitats and Species Regulations 2017 (within 12 nautical miles (nm) of the coast), and after the United Kingdom's (UK) exit from the EU on 31 December 2020 (EU-Exit), through the Conservation of Habitats and Species Amendment (EU Exit) Regulations 2019 (the 'EU Exit Regulations'). The Conservation of Offshore Marine Habitats and Species Regulations 2017 are also relevant in Welsh waters more than 12 nm from land. This report refers to the 'Habitats Regulations' as including any changes enacted by the EU Exit Regulations.

The Habitats Regulations require that an HRA must be carried out on all plans and projects that are likely to have significant effects on European sites, including Special Areas of Conservation (SACs), candidate SACs, Special Protection Areas (SPAs), proposed SACs, potential SPAs and Ramsar Sites (listed under the Ramsar Convention on Wetlands of International Importance).

As the Proposed Development is within the boundaries of the West Wales Marine SAC and in proximity to other marine SACs, an HRA of the implications of the Proposed Development on European sites is required. The screening assessment presented in this report is based on the current understanding of the baseline environment and proposed activities associated with the Proposed Development and is based on the Proposed Development and site-specific information currently available. Any changes that may arise as a result of EIA assessment work, consultee responses to this document and/or refinements to the design of the Proposed Development will be reflected in Stage 2: Report to Inform the Appropriate Assessment (RIAA).

In summary, the purpose of this report is to:

- identify the relevant European sites which are designated for features which may be sensitive or vulnerable to potential impacts arising from the construction, operation and maintenance, and decommissioning of the Proposed Development;
- examine the features of the relevant European sites and determine which are not considered likely to be at risk of significant effects arising from the Proposed Development, either alone or in combination with other plans or projects, so that they can be eliminated from further consideration within the HRA process;
- examine the features of the relevant European sites and determine which are considered likely to be at risk of significant effects arising from the Proposed Development, or where the risk of significant effects cannot be ruled out, either alone or in combination with other plans or projects, so that they can be taken forward for appropriate assessment; and

- examine which of the potential impacts arising from the Proposed Development are considered likely to result in LSEs to features of European sites and which impacts can be eliminated from consideration in further stages of the HRA.

1.3 Structure of the LSE Screening Report

This report is set out in the following stages:

- section 2 – Habitat Regulations Process: a summary of the HRA process and legislative context including implications of the UK's departure from the EU;
- section 3 – Project Description: a description of the key elements of the Proposed Development;
- section 4 – Assessment Methodology: the initial identification of sites and features which may potentially be affected by the Proposed Development;
- section 5 – Stage 1: Screening for Likely Significant Effects: LSE screening tables and the determination of the potential for LSEs to arise with regard to the designated features of the European sites under consideration; and
- section 6 – Summary: a summary of those European sites (and qualifying interest features) which have been identified with potential for LSEs.

2 HABITAT REGULATIONS PROCESS

2.1 Legislative Context

The ‘Habitats Directive’ (Council Directive 92/43/EEC), on the conservation of natural habitats and wild fauna and flora, protects habitats and species of European nature conservation importance. Along with the Council Directive (2009/147/EC) on the conservation of wild birds (the ‘Birds Directive’), the Habitats Directive establishes a network of internationally important sites, designated for their ecological status.

Following the UK departure from the EU on 31 December 2020, the Habitats Directive (and transposing Habitats Regulations) continue to apply in the UK through the EU Exit Regulations. The HRA process implemented under the Habitats Regulations stays valid (subject to minor amendments as a result of the EU Exit Regulations) and the UK is bound by HRA judgments handed down by The Court of Justice of the European Union before 31 December 2020. This document, therefore, assumes that all relevant HRA-related legislation remains in place and in accordance with Habitats Regulations that transposed the European requirements for HRA into UK law and as effected by the EU Exit Regulations (2019). The objective of the Habitats Regulations is to conserve, at a favourable conservation status, those habitats and species listed in Annexes I and II of the Habitats Directive. Post-EU-Exit, the Habitats Regulations continue to refer to Annexes I and II of the Habitats Directive and as such, reference is made to the annexes of the Habitats Directives in this report.

The Habitats Directive established the Europe-wide network of nature conservation areas that are the subject to the HRA process. These are internationally important sites, designated for their ecological status. SACs are designated under the Habitats Directive and endorse the protection of flora, fauna and habitats. European sites located within an EU Member State combine to create a Europe-wide network of European sites (the Natura 2000 network) and may be referred to as Natura 2000 Sites. In Wales, Ramsar Sites (identified under the Ramsar Convention) are also afforded the same level of protection as fully designated Natura 2000 sites.

As a consequence of the EU-Exit, European sites located within the UK are no longer part of the Natura 2000 network (nor Natura Sites). These now form the UK’s ‘National Site Network’ and therefore, hereafter, sites within the UK and the EU are both referred to as European sites. The National Site Network constitute European sites in the UK that were established under the Nature Directives prior to 31 December 2020 (or proposed to the European Commission before that date) and any new sites designated under the Habitats Regulations under an amended designation process.

2.2 The Process

Following the exit from the EU, the UK no longer has any obligations under the Habitats Directives. However, the wording of Articles 6(3) and 6(4) of the Habitats Directive rules the sequential decision-making tests applied under the HRA process to plans or projects likely to affect European sites.

Regulation 63(1) of The Conservation of Habitats and Species Regulations 2017 requires that, wherever a plan or project that is not directly connected to, or necessary for, the management of a European site, is likely to have a significant effect on the conservation objectives of the site (either alone or in-combination with other

plans or projects), the competent authority must undertake an ‘appropriate assessment’ of the implications for the site in view of the site’s conservation objectives before consent or authorisation can be given for the plan or project.

Regulation 63(1) of The Conservation of Habitats and Species Regulations 2017 states that the competent authority may agree to the plan or project only after it has determined that it will not adversely affect the integrity of the European site. If an appropriate assessment concludes that the development will adversely affect the integrity of the site, Regulation 64(1) of The Conservation of Habitats and Species Regulations 2017 makes clear that consent/authorisation can only then be given if there are no alternative solutions and that the project must be carried out for Imperative Reasons of Overriding Public Interest (IROPI). Regulation 63(2) stipulates that where the site supports priority natural habitats or priority species, the IROPI must be in relation to reasons: i) relating to human health, public safety or beneficial consequences of primary importance to the environment, or ii) other reasons which in the opinion of the European Commission are IROPI. An agreement under these circumstances must be accompanied by the securing of necessary compensatory measures to ensure that the overall coherence of the network of European sites is protected.

Regulation 63(2) of The Conservation of Habitats and Species Regulations 2017 makes it clear that the person applying for the consent of the plan or project must provide such information as the competent authority may reasonably be required for the assessment. It is intended that this report provides this information.

To determine whether an appropriate assessment is required it must first be ascertained whether or not the plan/project is necessary to, or of value to, or inevitable as part of, management of the site for its qualifying interests. As this is not the case for the Proposed Development, it must therefore be determined whether the plan or project, either alone or in-combination with other plans and projects, is likely to have a significant effect on the European site. This constitutes the LSE screening stage, which removes from the assessment process plans or projects that have no connectivity to a site’s qualifying interests or those where it is very obvious that the conservation objectives for the site’s qualifying interests will not be undermined despite a connection. All other plans or projects, including those where there is reasonable doubt as to the magnitude and nature of their impact, are passed through to the next stage (appropriate assessment).

The Habitats Regulations set out a step-by-step sequence of statutory procedures to be followed that are designed to test the potential effects of plans and projects on European sites. It must be followed in the correct and particular sequence to comply with the requirements of the Habitats Directive. The guidance on conducting HRAs in Wales (Welsh Government, 2021) outlines three stages that assessments of the effects of plans or projects on European sites must follow. These stages are:

- Stage 1: screening
- Stage 2: appropriate assessment; and
- Stage 3: derogation.

2.3 Process for Identifying European Sites and Features

The criteria adopted for the initial identification of European sites are outlined in Table 2.1. This approach takes account of the location of the European sites in relation to the Proposed Development, the anticipated Zone

LSE SCREENING REPORT

of Influence (Zol) of potential impacts associated with the Proposed Development, and the ecology and distribution of qualifying interest features (section 5.1).

Table 2.1 outlines the order of consideration given to the criteria used for the identification of the list of sites to be taken forward for the determination of LSE. The initial consideration is given to whether there is a physical overlap between the Proposed Development and any European sites; all sites with an overlapping boundary are screened in to be taken forward for determination of LSE. Criterion 2 next identifies any European sites, not already screened using criterion 1, where there is an overlap between the Proposed Development and the range of any qualifying mobile species of the site. Criterion 3 identifies any European sites, not already screened in by criterion 1 or 2, where the potential Zol of the Proposed Development overlaps with a European site and/or qualifying interests of the site.

Table 2.1: Criteria for initial identification of relevant European sites

Order of Consideration	Criteria Used for Initial Identification of Relevant European Sites
1	The site boundaries of the Proposed Development overlap with one or more European sites.
2	European or Ramsar site with qualifying mobile features/species (e.g. ornithological qualifying interest features, Annex II marine mammals, migratory fish) whose range (e.g. foraging, migratory, overwintering, breeding or natural habitat range) overlaps with the Proposed Development.
3	European sites and/or qualifying interest features located within the potential Zol of impacts associated with the Proposed Development (e.g. habitat disturbance, noise and disturbance/displacement).

3 PROJECT DESCRIPTION

3.1 The Proposed Development

The Proposed Development consists of the removal of the existing linkspan and jack-up barge and associated infrastructure, and then installation of a floating pontoon and associated civil works. Stena Line Ltd own a floating pontoon which they wish to relocate to Fishguard. Civil works will be required to enable access and utilisation of the pontoon for the ferry traffic. Landside works will be required to adjust traffic and pedestrian routes to service the new floating pontoon. Dredging works are also proposed, these cover maintenance dredging of the berth, capital dredge beneath the pontoon to allow sufficient depth and soft material removal to allow construction of the reclamation area.

The Proposed Development involves several key activities aimed at enhancing the infrastructure and operational capabilities of the harbour. Firstly, the construction of a new run-up area will be undertaken. This area will feature an asphalt surface and will be built on reclaimed land, which will be retained using a rock armour revetment. To facilitate the construction of this reclaimed land, dredging of soft material behind the new berth will be necessary. Additionally, dredging to a depth of -9 mCD beneath the pontoon will be carried out to ensure sufficient depth for operations. Maintenance dredging of the harbour will also be conducted to maintain depths of -7.3 mCD and -5.5 mCD.

A reinforced concrete bank seat structure will be constructed to support the pontoon at the edge of the reclamation. This structure is expected to be a piled bank seat, likely using rotary installed steel tubular piles filled with concrete. The installation of the pontoon and its supporting guide pile will follow, with the pile being rotary bored and partially filled with concrete.

The Proposed Development will also involve the removal of the existing temporary jack-up barge, which will be floated away without the need for demolition. One of the existing 'buffer dolphin' tower structures and the operations room will be demolished, along with the removal of the steel access bridge and the demolition of the existing suspended concrete deck structure. This is not a piled structure; the columns are placed directly on the seabed (rock). The existing disused Royal National Lifeboat Institution (RNLI) jetty will be demolished to enable the reclamation works. The existing slipway will be enveloped into the reclamation.

In terms of services, the pontoon will be equipped with electricity. The refuelling lines will be relocated to service ships following the change of berthing direction for the new linkspan. Drainage provision will be made for the new surfacing, and ducting will be installed for communications and future provisions.

More detailed information on the scheme can be found in Chapter 2 of the associated EIA Scoping Report.

3.2 Approach to the In-combination Assessment

The Habitats Regulations require the consideration of the potential effects of the Proposed Development on European sites both alone and in-combination with other plans or projects.

There is one proposal that overlaps with the Proposed Development Planning Boundary, the development of Fishguard Marina. This would consist of the construction of a reclamation platform, breakwaters and revetments, dredged marina basin and channel, public slipway, boat hoist/jetty and service quay, and floating

LSE SCREENING REPORT

pontoons, along with a commercial marina, residential apartments, ancillary retail/commercial facilities, together with land reclamation (including the provision of a development platform), infrastructure (including accesses) and landscaping. However, this development has not been enacted and permission for the approved scheme has since lapsed. Therefore, there are no proposed projects currently likely to cause in-combination effects with the Proposed Development.

4 ASSESSMENT METHOD

As described in section 2.2, there are three main stages to the HRA process. These are described in more detail below:

- Stage 1: Screening
 - Identify the European sites and features that have the potential for LSEs from the Proposed Development alone or in-combination with other plans and projects and provide information on identified European sites and their conservation objectives; and
 - Identify project activities that have the potential for LSE on identified European sites and their features.
- Stage 2: Appropriate Assessment
 - Where LSE on a European site have been identified in Stage 1, consider whether those effects will adversely affect the integrity of the European site in light of its conservation objectives; and
 - For identified adverse effects on the integrity of the site provide suitable mitigation that will ensure that no adverse effect to site integrity can be concluded.

If Stage 2 concludes that the Proposed Development will have an adverse effect on the integrity of the European site(s), or is inconclusive, then Stages 3 of the HRA process (derogation) is triggered; which includes three tests to be followed in order: consider alternative solutions; consider IROPI; and secure compensatory measures. Each test must be passed in sequence for a derogation to be granted.

5 STAGE 1: SCREENING FOR LIKELY SIGNIFICANT EFFECTS

5.1 Identification of European Sites and Features

This section provides a list of European sites, and their features, for which there is the potential for connectivity with the Proposed Development, using the criteria outlined in Table 2.1, and therefore those which should be taken forward for consideration of LSE in section 5.2.

The receptors which could potentially be affected by the Proposed Development and could be the designating interest features of protected sites are considered in turn:

- Annex I habitats (subtidal and coastal up to mean high water springs (MHWS)) - section 5.1.1;
- Annex II diadromous fish species - section 5.1.2;
- Annex II marine mammals – section 5.1.3; and.
- Annex II otters – section 5.1.4.

There are no terrestrial SACs within a 5 km radius of the Proposed Development with terrestrial qualifying interest features, other than a SAC designated for otter. Therefore, only SACs designated for otters are taken forward for assessment of LSE.

There are SPAs designated for ornithological qualifying interest features within 50 km of the Proposed Development, however most of the bird species will generally avoid foraging in areas with high anthropogenic activity. As discussed in the HRA of the replacement linkspan application (RPS, 2018a), Fishguard Harbour is within the foraging range of gannets *Morus bassanus* from Grassholm SPA (43.3 km southwest). However, this species generally avoids foraging within busy coastal areas directly next to the foreshore, and is therefore unlikely to be recorded near to the proposed works. The harbour is also within the foraging range of seabirds from the Skomer, Skokholm and the Seas off Pembrokeshire SPA (32.2 km southwest). However, Manx shearwater *Puffinus puffinus*, Atlantic puffin *Fratercula arctica* and European storm petrel *Hydrobates pelagicus* also all generally avoid foraging within coastal areas directly next to foreshores that have very high levels of anthropogenic activity. These species are therefore unlikely to be recorded near to the proposed works. Lesser black-backed gull *Larus fuscus* nesting on Skomer or Skokholm would be expected to forage in closer proximity to these islands (RSP, 2018). SPAs have therefore not been considered any further within this screening report.

5.1.1 Sites Designated for Annex I Habitats

The following section details the results of the stepwise process to identify the European sites with relevant Annex I habitats to be taken forward for detailed determination of LSE based on the methodology and criteria outlined in section 2.3 and Table 2.1.

5.1.1.1 Initial Identification of Sites

- Criterion 1 for the identification of European sites to be taken forward for consideration of LSE considers those sites which overlap with the boundaries of the Proposed Development. As there are no European sites with relevant qualifying Annex I habitats, which overlap with the Proposed Development, no sites are considered further on the basis of this criterion.
- Criterion 2 considers European sites with qualifying mobile features/species whose range (e.g. foraging, migratory, overwintering, breeding or natural habitat range) overlaps with the Proposed Development. This criterion is not relevant for Annex I benthic habitats, therefore, no sites are considered further on this basis.
- Criterion 3 considers European sites and/or qualifying interest features which are located within the potential ZoI of impacts associated with the Proposed Development. There is the potential for indirect effects on sites designated for Annex I habitats as a result of impacts associated with increased suspended sediment concentrations (SSC) arising from dredging activities or changes to the hydrodynamic regime as a result of the presence of pontoon infrastructure associated with the Proposed Development. As such, the extent of these impacts is considered likely to extend beyond the Planning Boundary of the Proposed Development. For LSE screening, a precautionary approach has been adopted and a buffer of 10 km has been used based on professional judgement. This buffer is considered to be sufficiently precautionary to capture all sites likely to be in the ZoI from indirect effects associated with Proposed Development activities. The closest designated site with benthic qualifying interest features is the Cardigan Bay/Bae Ceredigion SAC, which sits 14.9 km from the Planning Boundary. Therefore, as there are no European sites with relevant qualifying Annex I habitats, which overlap with the 10 km buffer, no sites are considered further on the basis of this criterion.

The initial screening process has not identified any sites designated for Annex I habitat features to be taken forward for the determination of LSE in this report.

5.1.2 Sites Designated for Annex II Diadromous Fish

The following section details the results of the stepwise process to identify the European sites with relevant Annex II diadromous fish species to be taken forward for detailed determination of LSE based on the methodology and criteria outlined in section 2.3 and Table 2.1.

Based on the Marine Biodiversity chapter of the associated EIA Scoping Report, the Annex II diadromous fish species feature with a marine component and with potential to occur in the vicinity of the Proposed Development include:

- sea lamprey *Petromyzon marinus*;
- river lamprey *Lampetra fluviatilis*;
- allis shad *Alosa alosa*;
- twaite shad *Alosa fallax*; and

- Atlantic salmon *Salmo salar*.

5.1.2.1 Initial Identification of Sites

- Criterion 1 considers European sites which overlap with the boundaries of the Proposed Development. As there are no European sites with Annex II diadromous fish species as qualifying interest features which overlap with the Proposed Development, no sites are screened for further consideration for diadromous fish on the basis of this criterion.
- Criterion 2 considers European sites with qualifying mobile features/species whose range (e.g. foraging, migratory, overwintering, breeding or natural habitat range) overlaps with the Proposed Development. Annex II diadromous fish species are mobile and utilise both freshwater and marine environments throughout their life cycles. Therefore, there is the potential for activities associated with the construction and operation of the Proposed Development to result in impacts on these qualifying interest features at a distance from the European sites. A precautionary approach to the identification of relevant sites has been adopted in order to capture all sites with the potential for connectivity with the Proposed Development. On this basis, it has been considered that sites with Annex II diadromous fish as qualifying interest features that are located within a 50 km buffer of the Proposed Development could potentially be affected and must, therefore, be considered. This has been based on professional judgement. Three European sites have been identified using this criterion (Figure 5.1) and screened in for determination of LSE in section 5.2 of this report. These are:
 - Cardigan Bay SAC;
 - Pembrokeshire Marine SAC; and
 - River Teifi SAC.
- Criterion 3 considers European sites and/or qualifying interest features that are located within the potential Zol of impacts associated with the Proposed Development. Given the large buffer proposed for criterion 2 above (50 km), the Zol for key impacts to migratory fish species (i.e. underwater noise) are anticipated to be well within this range. No additional European sites with Annex II diadromous fish as qualifying interest features are therefore considered further on the basis of criterion 3. While it is acknowledged that the lamprey qualifying interest features of the Cardigan Bay and Pembrokeshire Marine SACs are part of a larger population covering the Bristol channel and wider area, and therefore may be linked to the river and sea lamprey populations of the River Wye, River Usk, River Tywi, River Teifi, Severn Estuary, Cleddau Rivers, Carmarthen Bay and Estuaries SACs, there is uncertainty around whether lampreys present have been or are yet associated with these SAC populations as lampreys do not home to their natal river (Natural Resources Wales (NRW), 2018a,b). The closest of these SACs to the Proposed Development are the Cleddau Rivers SAC, with its estuary 94 km south via sea and the Carmarthen Bay and Estuaries SAC 95 km southeast round the South Wales coast. As none of these SACs overlap with the Proposed Development and due to the already precautionary potential Zol of impacts being considered, those SACs outside this 50 km buffer were not considered.

LSE SCREENING REPORT

The initial screening process has identified three European sites with Annex II diadromous fish as qualifying interest features to be taken forward for detailed determination of LSE in section 5.2.2 of this report. The sites are listed in Table 5.1 and shown in Figure 5.1. The standard data forms for all these European sites are provided in Appendix A.

Table 5.1: European sites designated for Annex II diadromous fish species taken forward for determination of LSE

Site Name	Site Code	Relevant Qualifying Feature	Minimum Distance from Planning Boundary (km)
Cardigan Bay/Bae Ceredigion SAC	UK0012712	Sea lamprey River lamprey	14.9
Pembrokeshire Marine/Sir Benfro Forol SAC	UK0013116	Sea lamprey River lamprey Allis shad Twaite shad	21.5
River Teifi/Afon Teifi SAC	UK0012670	River lamprey Atlantic salmon Sea lamprey	22.8

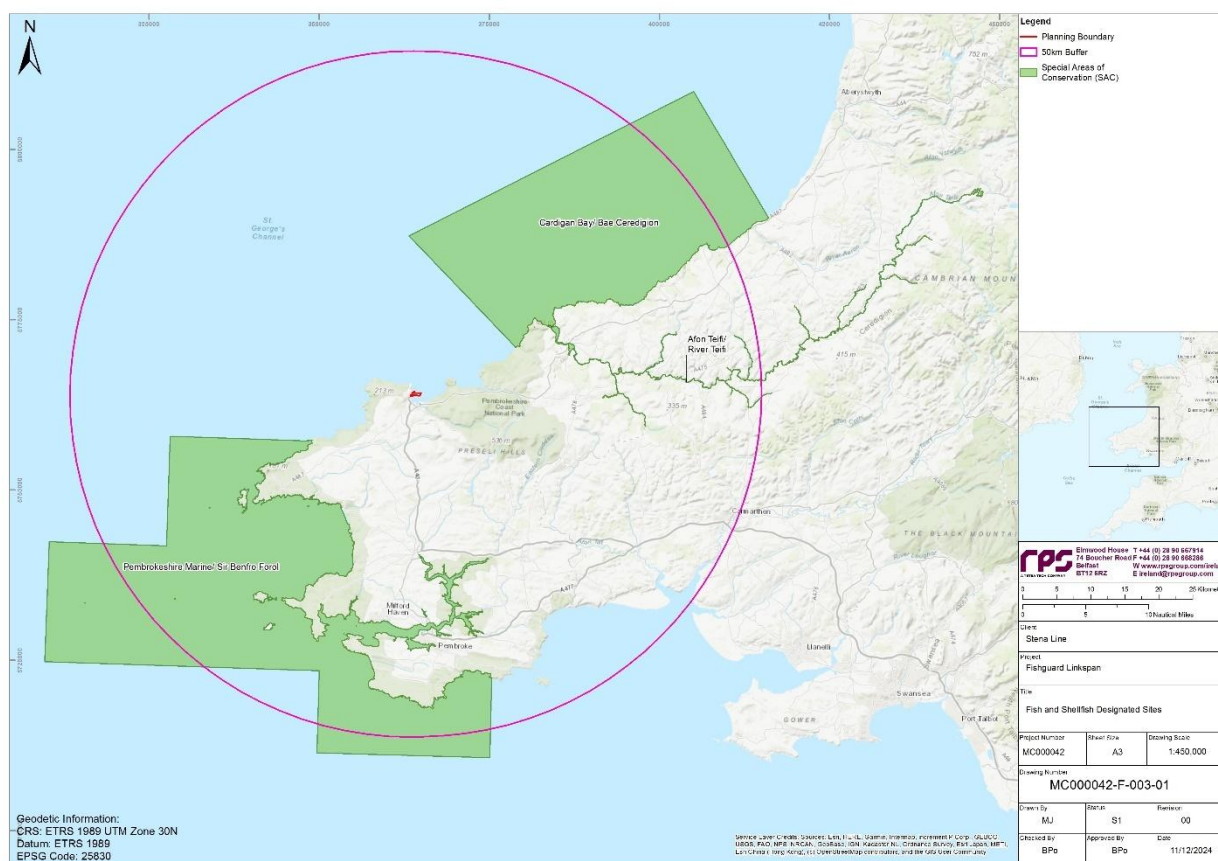


Figure 5.1: Location of European sites designated for Annex II diadromous species taken forward for determination of LSE

5.1.3 Sites Designated for Annex II Marine Mammal

The following section details the results of the stepwise process to identify the European sites with relevant Annex II marine mammals to be taken forward for detailed determination of LSE based on the methodology and criteria outlined in section 2.3 and Table 2.1.

Based on the Marine Biodiversity chapter of the associated EIA Scoping Report, the Annex II marine mammal species likely to occur in the vicinity of the Proposed Development include:

- harbour porpoise *Phocoena phocoena*;
- bottlenose dolphin *Tursiops truncatus*; and
- grey seal *Halichoerus grypus*.

5.1.3.1 Initial Identification of Sites

- Criterion 1 considers European sites which overlap with the boundaries of the Proposed Development. On the basis of this criterion, a single site, West Wales Marine SAC, is identified (Figure 5.2) and screened in for determination of LSE in section 5.2 of this report.
- Criterion 2 considers European sites with qualifying mobile species whose range (e.g. foraging, migratory, overwintering, breeding or natural habitat range) overlaps with the Proposed Development. Annex II marine mammal species are highly mobile and forage over wide areas. Therefore, there is the potential for activities associated with the construction and operation of the Proposed Development to result in impacts on these qualifying interest features at a distance from the European sites. A precautionary approach to the identification of relevant sites has been adopted in order to capture all sites with the potential for connectivity with the Proposed Development. On this basis, it has been considered that sites with Annex II marine mammals as qualifying interest features, which are located within a 100 km buffer of the Proposed Development could potentially be affected and must, therefore, be considered. A total of four European sites have been identified using this criterion (Figure 5.2) and screened in for determination of LSE in section 5.2 of this report. These are:
 - Cardigan Bay SAC;
 - Pembrokeshire Marine SAC;
 - Llyn Peninsula and the Sarnau SAC; and
 - Bristol Channel Approaches SAC.
- Criterion 3 considers European sites and/or qualifying interest features which are located within the potential Zol of impacts associated with the Proposed Development (e.g. noise disturbance). Given the large buffers proposed above for both cetaceans and pinnipeds in criterion 2, the Zol for key impacts to marine mammals (i.e. underwater noise) are anticipated to be well within this area. No additional European sites with Annex II marine mammal species as qualifying interest features, beyond those already identified for criterion 2 are therefore considered further on the basis of this criterion.

LSE SCREENING REPORT

The initial screening process has identified five European sites with Annex II marine mammals as qualifying interest features to be taken forward for detailed determination of LSE in section 5.2.3 of this report. The sites are listed in Table 5.2 and shown in Figure 5.2. The standard data forms for all these European sites are provided in Appendix A.

Table 5.2: European sites designated for Annex II marine mammal species taken forward for determination of LSE

Site Name	Site Code	Relevant Qualifying Feature	Minimum Distance from Planning Boundary (km)
West Wales Marine/Gorllewin Cymru Forol SAC	UK0030397	Harbour porpoise	Overlaps
Cardigan Bay/Bae Ceredigion SAC	UK0012712	Bottlenose dolphin Grey seal	14.9
Pembrokeshire Marine/Sir Benfro Forol SAC	UK0013116	Grey seal	21.5
Llyn Peninsula and the Sarnau/ Pen Llŷn a'r Sarnau SAC	UK0013117	Bottlenose dolphin Grey seal	66.5
Bristol Channel Approaches/Dynesfeydd Môr Hafren SAC	UK0030396	Harbour porpoise	85.3

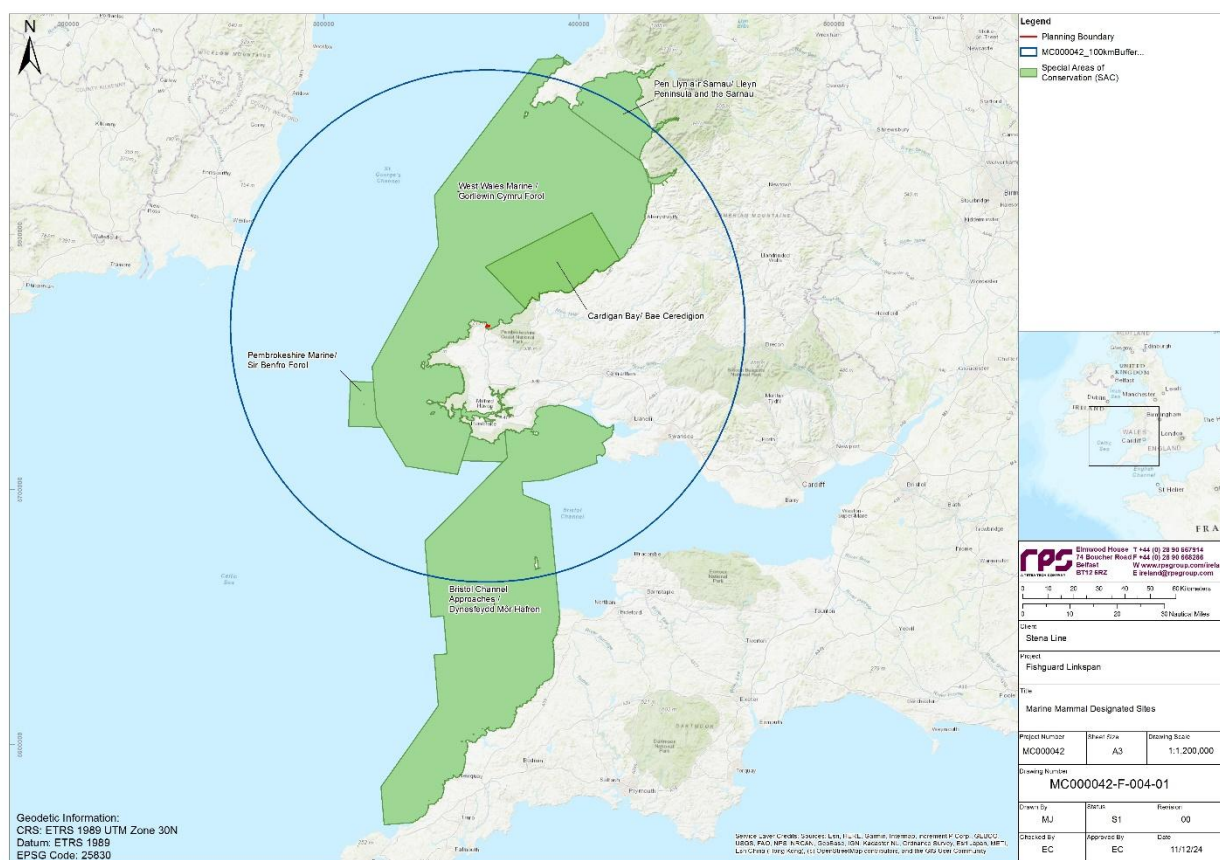


Figure 5.2: Location of European sites designated for Annex II marine mammal species taken forward for determination of LSE

5.1.4 Sites Designated for Annex II Otters

The following section details the results of the stepwise process to identify the European sites with relevant Annex II otters to be taken forward for detailed determination of LSE based on the methodology and criteria outlined in section 2.3 and Table 2.1.

Based on the Terrestrial Ecology chapter of the associated EIA Scoping Report, Annex II otter have the potential to occur in the vicinity of the Proposed Development.

5.1.4.1 Initial Identification of Sites

- Criterion 1 considers European sites which overlap with the boundaries of the Proposed Development. As there are no European sites with Annex II otter as qualifying interest features which overlap with the Proposed Development, no sites are screened for further consideration for otter on the basis of this criterion.
- Criterion 2 considers European sites with qualifying mobile features/species whose range (e.g. foraging, migratory, overwintering, breeding or natural habitat range) overlaps with the Proposed Development. Annex II otters are mobile and forage over certain areas away from the coast. Therefore, there is the potential for activities associated with the construction and operation of the Proposed Development to result in impacts on these qualifying interest features at a distance from the European sites. The size of an otter's home range depends on the quality of the habitat and food supply (Kruuk, 1995) but males can range linearly along rivers for 35 km (UK Government, 2022). A precautionary approach to the identification of relevant sites has been adopted in order to capture all sites with the potential for connectivity with the Proposed Development. On this basis, it has been considered that sites with Annex II otters as qualifying features which are located within a 20 km buffer of the Proposed Development could potentially be affected. This precautionary 20 km buffer was adopted as otter ranges along the coast are a lot smaller (3-4 km) than the male river range of 35 km, with distribution depending on a nearby freshwater source (UK Wild Otter Trust, no date). However, while one SAC, the Cleddau Rivers SAC, has been identified using this criterion (3.9 km distant), the connectivity between this SAC and Fishguard Harbour, and thus the Proposed Development is considered limited. Otters tend to be very territorial (Scottish Government, 2018), and while otters use coastal waters for foraging, they are more likely to use good quality riverine habitat for foraging if available. The Cleddau Rivers SAC is considered to be one of the best areas for otters in the UK (JNCC, 2017), therefore, the otters associated with this SAC are more likely to stay within the Cleddau Rivers system, and if they use marine habitats, it is more likely to be at the estuary, which is over 94 km along the coast from Fishguard. Therefore, based on professional judgment, no sites are screened in for further consideration for otter on the basis of this criterion.
- Criterion 3 considers European sites and/or qualifying interest features which are located within the potential Zol of impacts associated with the Proposed Development (e.g. habitat loss/disturbance). Given the large buffer proposed for criterion 2 above (20 km), the Zol for key impacts to mobile otters (i.e. temporary disturbance) are anticipated to be well within this range. No additional European sites with Annex II otters as qualifying features, are therefore considered further on the basis of criterion 3.

The initial screening process has not identified any European sites with Annex II otter as a qualifying interest feature to be taken forward for the determination of LSE in this report.

5.2 Determination of Likely Significant Effects

The initial screening process documented in section 5.1 generated a list of European Sites and qualifying interest features (Table 5.1 and Table 5.2) for further determination of LSE as a result of the Proposed Development. This section of the LSE screening process therefore documents the determination of LSE for those European sites which have been screened in for further consideration.

5.2.1 Methodology

The assessment of LSE in the following sections is presented as a series of matrices setting out whether no LSE can be concluded for the relevant features of the European sites identified in section 5.1.

The approach adopted for this LSE screening report focusses on the qualifying interest features for which there is considered to be a potential for impact as a result of the Proposed Development. Whilst only these qualifying interest features have been screened in for further consideration, it is acknowledged that the competent authority must undertake the LSE screening, and any subsequent appropriate assessment, at the site level and not for individual qualifying interest features.

The following matrix key is applicable to the matrices presented in the subsequent sections:

✓ - Potential for an LSE/ LSE cannot be ruled out

× – No potential for an LSE

C = Construction

O = Operation and maintenance

Given that no sites were identified in the initial screening process (section 5.1) to be taken forward for determination of LSE for Annex I habitats, the sections below refer only to Annex II diadromous fish (section 5.1.2) and marine mammals (section 5.1.3).

5.2.2 Assessment of LSE for Annex II Diadromous Fish

A description of those European sites with Annex II diadromous fish qualifying interest features identified in section 5.1.2 with the potential to interact with the Proposed Development is provided in the following sections. These comprise:

- Cardigan Bay SAC;
- Pembrokeshire Marine SAC; and
- River Teifi SAC.

5.2.2.1 Site Overview

The following sections provide a brief overview of each of the European sites brought forward for consideration of LSE and a summary of their designated features. The standard data forms for these European sites are provided in Appendix A for all sites.

Cardigan Bay SAC

The Cardigan Bay SAC is a multiple interest site, located approximately 15 km from the Proposed Development boundary. The Bay is one of the largest bays in the UK, stretching over 100 km between the Llyn Peninsula to St. David's Head at its westernmost extent. The SAC supports a wide range of different marine habitats and wildlife, some of which are unique in Wales, across an area of approximately 959 km² (NRW, 2018a). The site is designated for river and sea lamprey as a qualifying feature, but not a primary reason for site selection, as are grey seals. The primary reason for site selection is the bottlenose dolphin, which is discussed, with grey seals, in section 5.2.3.

The SAC is considered to be one of the best areas in the UK to support a significant presence of river and sea lampreys (NRW, 2018a). During their marine phase, lampreys are predominantly coastal, with the river lamprey considered an estuarine and inshore species, although the sea lamprey is more oceanic (NRW, 2018a). There is little information on the spatial distribution of river and sea lampreys out with rivers and estuaries, and the population status of the river lamprey is inferred from the condition monitoring of the River Teifi SAC (NRW, 2018a). However, the Cardigan Bay SAC is considered an access corridor between the open sea (feeding) and riverine (breeding) habitats, with presence thought to be highly seasonal (NRW, 2018a).

Conservation Objectives

The conservation objectives of the SAC seek to maintain (or restore) the habitat and species features, as a whole, at (or to) favourable conservation status within the site (NRW, 2018a). The following conservation objectives relate to river and sea lamprey:

1. The species population is maintaining itself on a long-term basis as a viable component of its natural habitat. Important elements include; population size; structure, production and condition of the species.
2. The species population within the site is such that the natural range of the population is not being reduced or likely to be reduced for the foreseeable future.
3. The presence, abundance, condition and diversity of habitats and species required to support this species is such that the distribution, abundance and populations dynamics of the species within the site and population beyond the site is stable or increasing. Important considerations include; distribution; extent; structure; function and quality of habitat; prey availability and quality. As part of this objective, it should be noted that;
 - a. The abundance of prey species subject to existing commercial fisheries needs to be equal to or greater than that required to achieve maximum sustainable yield and secure in the long term.
 - b. The management and control of activities or operations likely to adversely affect the species feature is appropriate for maintaining it in favourable condition and is secure in the long term.

- c. Contamination of potential prey species should be below concentrations potentially harmful to their physiological health.
- d. Disturbance by human activity is below levels that suppress reproductive success, physiological health or long-term behaviour.

Pembrokeshire Marine SAC

Pembrokeshire Marine SAC is a multiple interest site, located approximately 22 km from the Proposed Development boundary. The site has high habitat and biological diversity, covering an area of approximately 1,380 km², and supports a significant presence of allis and twaite shad, and river and sea lamprey (NRW, 2018b). These diadromous fish species are a qualifying feature, but not a primary reason for site selection. The primary reason for site selection is the grey seal, which is discussed in section 5.2.3.

Shad spend most of their adult lives at sea but spawn in rivers (or, occasionally, in the upper reaches of estuaries) in early summer. The most important breeding populations occur in the Rivers Tywi, Usk, Wye and Severn (NRW, 2018b). Juvenile shad predominantly inhabit estuarine and inshore waters, while adults are typically found in shoals in deeper water and are capable of migrating in excess of 1,000 km. The SAC is used as an access corridor between open sea (feeding) and riverine (breeding) habitats. Their distributions, proportions of the population, as well as the age and sex of the shad, within the site are considered to be dynamic and highly seasonal but are unknown (NRW, 2018b).

As described for Cardigan Bay SAC, it is assumed the SAC is used as an access corridor, but little is known about the population status of river and sea lamprey within the Pembrokeshire Marine SAC. The river lamprey population status for this SAC is inferred from the condition monitoring of the Cleddau Rivers SAC; it is assumed that juveniles are present across the site throughout the year as river lampreys feed and grow in estuaries and inshore waters (NRW, 2018b). Peak migration of adult sea lampreys through the site to spawning rivers usually coincides with temperatures that remain above 10°C and continues until temperatures reach 18°C (March-June). Juvenile sea lampreys, like river lampreys, feed in estuaries and inshore waters, migrating downstream from rivers between December and June. Therefore, it can be assumed that various stages of sea lamprey will be present in the SAC year round (NRW, 2018b).

Conservation Objectives

The conservation objectives of the SAC seek to achieve favourable conservation status of qualifying diadromous fish, by maintaining (or restoring) all the following, subject to natural processes (NRW, 2018b):

1. The species population is maintaining itself on a long-term basis as a viable component of its natural habitat. Important elements include; population size; structure, production and condition of the species.
2. The species population within the site is such that the natural range of the population is not being reduced or likely to be reduced for the foreseeable future.
3. The presence, abundance, condition and diversity of habitats and species required to support this species is such that the distribution, abundance and populations dynamics of the species within the site and population beyond the site is stable or increasing. Important considerations include; distribution; extent;

structure; function and quality of habitat; prey availability and quality. As part of this objective, it should be noted that;

- a. The abundance of prey species subject to existing commercial fisheries needs to be equal to or greater than that required to achieve maximum sustainable yield and secure in the long term.
- b. The management and control of activities or operations likely to adversely affect the species feature is appropriate for maintaining it in favourable condition and is secure in the long term.
- c. Contamination of potential prey species should be below concentrations potentially harmful to their physiological health.
- d. Disturbance by human activity is below levels that suppress reproductive success, physiological health or long-term behaviour.

River Teifi SAC

The River Teifi SAC is a multiple interest site, located approximately 23 km from the Proposed Development boundary. The site includes ten of the river's tributaries, and at 122 km is one of the longest rivers in Wales. Its source is Llyn Teifi in the Cambrian Mountains, with its estuary in Cardigan, leading to the Cardigan Bay SAC. Overall, the SAC covers an area of approximately 7 km². It includes river lamprey and Atlantic salmon as a primary reason for site selection, and sea lamprey as a qualifying feature, but not a primary reason (Garrett, 2016; NRW, 2022).

Adult lampreys and salmon migrate upstream to suitable spawning grounds, and juveniles of all species migrate downstream to estuarine and marine habitats for feeding and growth. Atlantic salmon is present throughout the river apart from around the source, while distributions of the lamprey are poorly understood. It is thought that sea lamprey remains in the lower river, while river lamprey has a patchy distribution across the river catchment (NRW, 2022).

Conservations objectives

The conservation objectives of the SAC seek to achieve favourable conservation status of qualifying diadromous fish, by satisfying the following conditions (NRW, 2022):

1. The population of the feature in the SAC is stable or increasing over the long term.
2. The natural range of the feature in the SAC is neither being reduced nor is likely to be reduced for the foreseeable future. The natural range is taken to mean those reaches where predominantly suitable habitat for each life stage exists over the long term. Suitable habitat is defined in terms of near-natural hydrological and geomorphological processes and forms e.g. suitable flows to allow upstream migration, depth of water and substrate type at spawning sites, and ecosystem structure and functions e.g. food supply. Suitable habitat need not be present throughout the SAC but where present must be secured for the foreseeable future. Natural factors such as waterfalls may limit the natural range of individual species. Existing artificial influences on natural range that cause an adverse effect on site integrity, such as physical barriers to migration, will be assessed.

3. There is, and will continue to be, a sufficiently large habitat to maintain the feature's population in the SAC on a long-term basis.

5.2.2.2 Determination of LSE

This section provides an assessment undertaken to conclude whether it can be determined that there will be no LSE as a result of the Proposed Development on relevant diadromous fish qualifying interest features of the following SACs:

- Cardigan Bay SAC;
- Pembrokeshire Marine SAC; and
- River Teifi SAC

Temporary loss and/or disturbance of seabed habitats

Temporary habitat loss and/or disturbance may occur during dredging activities in the construction phase and for maintenance in the operation phase. The footprint of this impact, however, would only constitute a very small fraction of the known ranges of local fish populations. Given that the works will be undertaken within an existing ferry terminal in Fishguard Harbour, the area does not represent pristine habitat, and any fish populations within the harbour are likely to be habituated to this. The Fishguard Harbour is not considered to represent an important habitat for fish species, in the context of the wider Pembrokeshire coast and there is no spatial overlap between the Proposed Development and any European Sites designated for Annex II diadromous fish species. On this basis, there is no potential for direct impacts to supporting habitats for Annex II diadromous fish species within any European site. Therefore, there is no potential for LSE to Annex II diadromous fish features as a result of the Proposed Development footprint during the construction or operation phase, and this impact is **screened out** from further assessment for all SACs.

Long term loss and/or disturbance of seabed habitats

Long term habitat loss and/or disturbance may occur due to the replacement of permanent project infrastructure (concrete bank seat structure for the floating pontoon) starting from construction (removal of existing linkspan and jack-up barge) but mainly occurring throughout the operation phase. The footprint of infrastructure associated with the Proposed Development will, however, cover a localised area that would only constitute a very small fraction of the known ranges of local fish populations. Given that the works will be undertaken within an existing ferry terminal within a harbour, the area does not represent pristine habitat, and any fish populations within the harbour are likely to be habituated to this. The Fishguard Harbour is not considered to represent an important habitat for fish species, in the context of the wider Pembrokeshire coast, and there is no spatial overlap between the Proposed Development and any European Sites designated for Annex II diadromous fish species. On this basis, there is no potential for direct impacts to supporting habitats for Annex II diadromous fish species within any European site. Therefore, there is no potential for LSE to Annex II diadromous fish features at any of the identified SACs as a result of the Proposed Development footprint during the construction or operation phase and this impact is **screened out** from further assessment for all SACs.

Increased Suspended Sediment Concentrations (SSCs) and associated deposition

There will be dredging undertaken in the construction phase and for maintenance in the operation phase, which could result in increased SSCs and deposition. Fish species may be vulnerable to this impact, through decreased visibility due to increased turbidity, and smothering from increased SSCs and associated deposition and siltation rate changes, which may impede foraging ability. There is no spatial overlap between the Proposed Development and any European Sites designated for Annex II diadromous fish species. While there is potential for juvenile or migrating adult diadromous fish to be within the ZoI for increased SSCs and associated deposition, given the wide alternate sea area available, it is unlikely this will cause significant effects on the species or create a barrier to migration. No significant effects on the conservation objectives of relevant European sites from increased SSCs and associated deposition are anticipated. Therefore, there is no potential for LSE to Annex II diadromous fish features at any of the identified SACs during dredging activities, and this impact has been **screened out** from further assessment for all SACs.

Changes in water quality (including release of sediment bound contaminants)

Dredging associated with construction activities and for maintenance will be undertaken within the Planning Boundary. This could result in changes in water quality, such as the release of sediment bound contaminants. There is no spatial overlap between the Proposed Development and any European Sites designated for Annex II diadromous fish species, and so, while there is potential for juvenile or migrating adult diadromous fish to be within the ZoI for this impact, it is unlikely this will cause significant effects on the species or create a barrier to migration. No significant effects on the conservation objectives of relevant European sites from changes in water quality are anticipated. Therefore, there is no potential for LSE to Annex II diadromous fish features at any of the identified SACs due to changes in water quality during dredging activities, and this impact has been **screened out** from further assessment for all SACs.

Accidental pollution to the surrounding environment

There is a risk of accidental pollution from vessels and equipment, during the construction and operation phases. Pollution events are considered unlikely, and given the volumes, should an event occur, effects will be temporary, reversible and limited in spatial extent (e.g. due to the expected low volumes of pollutants associated with vessels and equipment). In addition, it is anticipated that the risk of accidental pollution events will be further reduced and managed by the implementation of measures set out in standard post-consent plans,) such as an Environmental Management Plan (EMP), which will include a Marine Pollution Contingency Plan (MPCP). These plans are considered to be tertiary mitigation (standard sectoral practice as per Institute of Environmental Management and Assessment (IEMA) 2024 guidance on mitigation) and will include planning for accidental spills, address all potential contaminants that could be released, and include key emergency contact details. They will also set out good industry practice and relevant guidelines for preventing pollution at sea (such as those from the Oslo Paris Convention (OSPAR), International Maritime Organisation (IMO), and the International Convention for the Prevention of Pollution from Ships (MARPOL)).

In the unlikely event of an accidental pollution event occurring, based on the above, any indirect effects on Annex II diadromous fish species from the accidental release of pollutants are not anticipated to lead to a significant effect on the conservation objectives of relevant European sites. Therefore, there is no potential for

LSE to Annex II diadromous fish features at any of the identified SACs as a result of accidental pollution during the Proposed Development and this impact is **screened out** from further assessment for all SACs.

Increased risk of introduction and spread of Invasive Non-Native Species (INNS)

There is potential for the increased risk of introduction and spread of INNS associated with the Proposed Development. This is due to vessel movement, which may act as vectors facilitating the spread of INNS. In addition, the installation of artificial hard structures (such as a pontoon and/or decking) may represent increased available habitat for INNS to colonise throughout the operation phase. Given the wider ranging nature and habitat use of Annex II diadromous fish species, this impact is not likely to represent a significant impact to their ecology. It is anticipated that the risk of introduction and spread of INNS will be minimised and managed by the implementation of an INNS Management Plan, which is considered tertiary mitigation (standard sectoral practice) as per the updated IEMA guidance on mitigation (2024). No significant effects on the conservation objectives of relevant European sites are anticipated. Therefore, there is no potential for LSE to Annex II diadromous fish features at any of the identified SACs as a result of the increased risk of introduction and spread of INNS associated with the Proposed Development and this impact is **screened out** from further assessment for all SACs.

Underwater noise from piling

The piling of steel piles, during construction, has the greatest potential to cause auditory injury (Permanent Threshold Shift (PTS) or Temporary Threshold Shift (TTS)) and/or behavioural disturbance to diadromous fish species. There is potential for diadromous fish to be present within or transiting through the Proposed Development boundary and potential ZoI during the piling, and therefore at this stage, the potential for LSE on the relevant Annex II diadromous fish features of the identified European sites as a result of underwater noise arising from construction activities cannot be discounted. Due to this potential pathway, there is potential for LSE on Annex II diadromous fish features as a result of underwater noise from piling, and therefore this impact has been **screened in** for further assessment for all SACs.

Underwater noise from vessels

The construction activities will require approximately six vessels (including Trailer Suction Hopper Dredger and/or Backhoe Dredger, and a jack-up or spud leg barge), although there is only likely to be two vessels onsite at any one time due to phased construction. Maintenance dredging will not change the existing maintenance dredging regime for the ferry berth. This represents a small change from the baseline vessel traffic conditions in the already busy harbour where fish are likely to be habituated to vessel noise should they enter the harbour. The construction phase will last approximately 9 months, so additional vessels will be present over a relatively short term. Therefore, there is no potential for LSE to Annex II diadromous fish features at any of the identified SACs as a result of underwater noise from vessels during the Proposed Development and this impact is **screened out** from further assessment for all SACs.

In-combination effects

There are no other projects or plans currently considered in development that have the potential to result in LSE to Annex II diadromous fish features as a result of in-combination effects during the construction and operation phases of the Proposed Development. Therefore, in-combination effects have been **screened out** from further assessment.

Table 5.3 provides a summary of the assessment, indicating whether the likely significant effects on the identified SAC features were screened in or out.

LSE SCREENING REPORT

Table 5.3: Likely significant effects matrix for Annex II diadromous fish features of SACs (C: Construction; O: Operation)

Impact	Phase	Cardigan Bay/Bae Ceredigion SAC		Pembrokeshire Marine/Sir Benfro Forol SAC		River Teifi/Afon Teifi SAC				
		Sea lamprey	River lamprey	Sea lamprey	River lamprey	Allis shad	Twaite shad	River lamprey	Atlantic Salmon	Sea lamprey
Temporary loss and/or disturbance of seabed habitats	C	x	x	x	x	x	x	x	x	x
	O	x	x	x	x	x	x	x	x	x
Long term loss and/or disturbance of seabed habitats	C	x	x	x	x	x	x	x	x	x
	O	x	x	x	✓	x	x	x	x	x
Increased SSCs and associated deposition	C	x	x	x	x	x	x	x	x	x
	O	x	x	x	x	x	x	x	x	x
Changes in water quality (including release of sediment bound contaminants)	C	x	x	x	x	x	x	x	x	x
	O	x	x	x	x	x	x	x	x	x
Accidental pollution to the surrounding environment	C	x	x	x	x	x	x	x	x	x
	O	x	x	x	x	x	x	x	x	x
Increased risk of introduction and spread of INNS	C	x	x	x	x	x	x	x	x	x
	O	x	x	x	x	x	x	x	x	x
Underwater noise from piling	C	✓	✓	✓	✓	✓	✓	✓	✓	✓
	O	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Underwater noise from vessels	C	x	x	x	x	x	x	x	x	x
	O	x	x	x	x	x	x	x	x	x
In-combination effects	C	x	x	x	x	x	x	x	x	x
	O	x	x	x	x	x	x	x	x	x

x - Screened Out

✓ - Screened In

5.2.3 Assessment of LSE for Annex II Marine Mammals

A description of those European sites with Annex II marine mammal qualifying interest features identified in section 5.1.3 with the potential to interact with the Proposed Development is provided in the following sections. These comprise:

- West Wales Marine SAC;
- Cardigan Bay SAC;
- Pembrokeshire Marine SAC;
- Llyn Peninsula and the Sarnau SAC; and
- Bristol Channel Approaches SAC.

5.2.3.1 Site Overview

The following sections provide a brief overview of each of the European sites brought forward for consideration of LSE and a summary of their designated features. The standard data forms for these European sites are provided in Appendix A.

West Wales Marine SAC

The West Wales Marine SAC is a large (7,376 km²) site, located off the coast of Wales, stretching from the Llyn peninsula in the north, to Pembrokeshire in the south-west. This SAC overlaps with the Proposed Development boundary, as well as other SACs including parts of the Pembrokeshire Marine and Llyn Peninsula and the Sarnau SACs, and encompasses Cardigan Bay SAC. The harbour porpoise is the sole reason for site selection, with the SAC designated for its protection, as it is estimated the site supports 5.4% of the UK Celtic and Irish Seas Management Unit (MU) harbour porpoise population (NRW, 2023a). The SAC supports long-term and relatively high densities of harbour porpoise, although use of the site varies between seasons (NRW and Joint Nature Conservation Committee (JNCC), 2019). The site has been identified as important summer habitat for harbour porpoise, with a smaller area around Cardigan Bay identified as winter habitat (NRW, 2023a). This implies within the SAC there is good foraging habitat with good feeding opportunities (NRW and JNCC, 2019).

Conservation objectives

The conservation objectives for the SAC are to ensure that the integrity of the site is maintained and that it makes the best possible contribution to maintaining favourable conservation status for harbour porpoise in UK waters (NRW and JNCC, 2019). In the context of natural change, this will be achieved by ensuring that:

1. Harbour porpoise are a viable component of the site.
2. There is no significant disturbance of the species.
3. The condition of supporting habitats and processes, and the availability of prey is maintained.

Cardigan Bay SAC

As discussed in section 5.2.2, the Cardigan Bay SAC is a multi-feature site approximately 15 km from the Proposed Development boundary. The SAC is considered one of the best areas in the UK for bottlenose dolphin, which is the primary reason for site selection, and to support a significant presence of grey sea, a qualifying feature, but not a primary reason for site selection (NRW, 2018a).

Bottlenose dolphins are seen year round in Cardigan Bay, with the population estimated are around 125 individuals. These individuals are considered part of the Irish Sea MU (Interagency Marine Mammal Working Group (IAMMWG), 2023), and although individuals may have preference for particular coastal areas, they range widely in the winter (NRW, 2018c). The inshore waters are used for both feeding and reproduction, and in the summer months calves and juveniles are often observed with adult individuals or groups, with group size peaking in September and October (NRW, 2018a). While dolphins are reported less frequently in winter months, this could be an artefact of poorer weather conditions and fewer observers, but may also be due to a preference for the offshore areas of the bay during winter (NRW, 2018a).

Grey seals range through Cardigan Bay with the seals present within the SAC at any one time not a discrete population. The SAC itself is located in the Wales seal MU, however, as seals travel beyond the site, they may be part of the South-west (SW) England or Wales seal MUs (NRW, 2018a). Grey seals are distributed widely within the SAC with moulting and resting haul-out sites scattered along the site, although none are used by large numbers (NRW, 2018a). Pupping takes places throughout the site on open coast in suitable habitat and is greatest towards the south-western end of the SAC. This pup production is a small proportion of the south-west Wales production and the use of sea-caves by seals within the SAC is considered an unusual variation in breeding behaviour (NRW, 2018a).

Conservation Objectives

The conservation objectives of the SAC seek to maintain (or restore) the habitat and species features, as a whole, at (or to) favourable conservation status within the site (NRW, 2018a). The following conservation objectives relate to bottlenose dolphin and grey seal:

1. The species population is maintaining itself on a long-term basis as a viable component of its natural habitat. Important elements include; population size; structure, production and condition of the species. As part of this objective, it should be noted that;
 - a. Contaminant burdens derived from human activity are below levels that may cause physiological damage, or immune or reproductive suppression for bottlenose dolphins and grey seals.
 - b. For grey seal, populations should not be reduced as a consequence of human activity.
2. The species population within the site is such that the natural range of the population is not being reduced or likely to be reduced for the foreseeable future. As part of this objective, it should be noted that for bottlenose dolphin and grey seal:
 - a. Their range within the SAC and adjacent inter-connected areas is not constrained or hindered.
 - b. There are appropriate and sufficient food resources within the SAC and beyond.

- c. The sites and amount of supporting habitat used by these species are accessible and their extent and quality is stable or increasing.
3. The presence, abundance, condition and diversity of habitats and species required to support this species is such that the distribution, abundance and populations dynamics of the species within the site and population beyond the site is stable or increasing. Important considerations include; distribution; extent; structure; function and quality of habitat; prey availability and quality. It should be noted that for the bottlenose dolphin populations should be increasing. As part of this objective, it should also be noted that;
 - a. The abundance of prey species subject to existing commercial fisheries needs to be equal to or greater than that required to achieve maximum sustainable yield and secure in the long term.
 - b. The management and control of activities or operations likely to adversely affect the species feature is appropriate for maintaining it in favourable condition and is secure in the long term.
 - c. Contamination of potential prey species should be below concentrations potentially harmful to their physiological health.
 - d. Disturbance by human activity is below levels that suppress reproductive success, physiological health or long-term behaviour.

Pembrokeshire Marine SAC

As discussed in section 5.2.2, the Pembrokeshire Marine SAC is a multi-feature site approximately 22 km from the Proposed Development boundary. The primary reason for site selection is the grey seal, as the Pembrokeshire coast hosts the main colony in Wales (NRW, 2018b).

The grey seals present within the SAC at any one time not a discrete population, and as per Cardigan Bay SAC, are part of the Wales seal MU, although they may be part of either the SW England or Wales seal MUs (NRW, 2018b) as they have large ranges and are widely distributed. The south-west Wales population is estimated at approximately 5000 individuals, with pup count data collected from small parts of the Pembrokeshire Marine SAC (Skomer Island and Marloes Peninsula) consisting of most of the long-term survey data from which the population data is inferred (NRW, 2018b). Pupping takes place throughout the site on open coast in suitable habitat, with secluded coves and caves preferred by the south-west Wales population (as within Cardigan Bay SAC) (NRW, 2018b). Grey seals are distributed widely within the SAC with moulting and resting haul-out sites scattered along the site, although none are used by large numbers. Offshore islands and remote, undisturbed and inaccessible rocky shores and beaches are the known winter moulting haul-outs and non-moulting/resting haul-outs (NRW, 2018b).

Conservation Objectives

The conservation objectives of the SAC seek to achieve favourable conservation status of grey seal by maintaining (or restoring) all the following, subject to natural processes (NRW, 2018b):

1. The species population is maintaining itself on a long-term basis as a viable component of its natural habitat. Important elements include; population size; structure, production and condition of the species. As part of this objective, it should be noted that for grey seal;

- a. Contaminant burdens derived from human activity are below levels that may cause physiological damage, or immune or reproductive suppression.
 - b. Populations should not be reduced as a consequence of human activity.
2. The species population within the site is such that the natural range of the population is not being reduced or likely to be reduced for the foreseeable future. As part of this objective, it should be noted that for grey seal:
 - a. Their range within the SAC and adjacent inter-connected areas is not constrained or hindered.
 - b. There are appropriate and sufficient food resources within the SAC and beyond.
 - c. The sites and amount of supporting habitat used by these species are accessible and their extent and quality is stable or increasing.
3. The presence, abundance, condition and diversity of habitats and species required to support this species is such that the distribution, abundance and populations dynamics of the species within the site and population beyond the site is stable or increasing. Important considerations include; distribution; extent; structure; function and quality of habitat; prey availability and quality. As part of this objective, it should be noted that;
 - a. The abundance of prey species subject to existing commercial fisheries needs to be equal to or greater than that required to achieve maximum sustainable yield and secure in the long term.
 - b. The management and control of activities or operations likely to adversely affect the species feature is appropriate for maintaining it in favourable condition and is secure in the long term.
 - c. Contamination of potential prey species should be below concentrations potentially harmful to their physiological health.
 - d. Disturbance by human activity is below levels that suppress reproductive success, physiological health or long-term behaviour.

Lleyn Peninsula and the Sarnau SAC

The Lleyn Peninsula and the Sarnau SAC is a multiple interest site of approximately 1,460 km², located in north-west Wales, approximately 67 km from the Proposed Development boundary. The site encompasses a wide diversity of marine habitats, for which various Annex I habitats it is primarily designated. The grey seal and bottlenose dolphin are qualifying interest features, but not primary reason for site selection, although the site supports a significant presence of both species (NRW, 2018c).

As with Cardigan Bay and Pembrokeshire Marine SACs, there is not a discrete population of grey seals within the Lleyn Peninsula and the Sarnau SAC at any one time; rather they are considered part of the SW England and Wales MUs (NRW, 2018c). It is difficult to estimate the number of seals in the SAC with confidence as grey seals are wide ranging and thought to inter-mix. They are most commonly observed within the SAC around the Lleyn Peninsula, Bardsey Island and the islands along the south Lleyn coast, with variation in counts throughout the year. Non-pupping seals are present year round at the moulting and resting haul-out

sites distributed throughout the SAC, usually either singularly or in small numbers, with use of Bardsey Island peaking in summer months (NRW, 2018c). There are large breeding colonies on the Lley Peninsula and Bardsey Island, with a high proportion using sea caves in the SAC for pupping, similar to the grey seals in the south-west Wales population but unusual compared to breeding behaviour compared to elsewhere in the UK (NRW, 2018c). The North Wales area as a whole is considered important for female seals year round and within SAC males rarely comprise more than 25% of any assembly (NRW, 2018c).

The bottlenose dolphins in the Lley Peninsula and the Sarnau SAC also do not form a discrete site-based population and are considered part of the Irish Sea MU, which also includes the Cardigan Bay SAC dolphins. Dolphins associated with Cardigan Bay group move into and through the Lley Peninsula and the Sarnau SAC and also interact with dolphins from the SAC (NRW, 2018c). The bottlenose dolphins of the Lley Peninsula and the Sarnau SAC are likely wide ranging and exchanging with more distant populations including those from the Offshore Channel and SW England MU. The SAC contains important feeding areas for bottlenose dolphins and it is probable that females nurse their young within the site (NRW, 2018c).

Conservation Objectives

The conservation objectives of the SAC seek to maintain (or restore) the habitat and species features, as a whole, at (or to) favourable conservation status within the site (NRW, 2018c). The following conservation objectives relate to bottlenose dolphin and grey seal:

4. The species population is maintaining itself on a long-term basis as a viable component of its natural habitat. Important elements include; population size; structure, production and condition of the species. As part of this objective, it should be noted that;
 - a. Contaminant burdens derived from human activity are below levels that may cause physiological damage, or immune or reproductive suppression for bottlenose dolphins and grey seals.
 - b. For grey seal, populations should not be reduced as a consequence of human activity.
5. The species population within the site is such that the natural range of the population is not being reduced or likely to be reduced for the foreseeable future. As part of this objective, it should be noted that for bottlenose dolphin and grey seal:
 - a. Their range within the SAC and adjacent inter-connected areas is not constrained or hindered.
 - b. There are appropriate and sufficient food resources within the SAC and beyond.
 - c. The sites and amount of supporting habitat used by these species are accessible and their extent and quality is stable or increasing.
6. The presence, abundance, condition and diversity of habitats and species required to support this species is such that the distribution, abundance and populations dynamics of the species within the site and population beyond the site is stable or increasing. Important considerations include; distribution; extent; structure; function and quality of habitat; prey availability and quality. It should be noted that for the bottlenose dolphin populations should be increasing. As part of this objective, it should also be noted that;

- a. The abundance of prey species subject to existing commercial fisheries needs to be equal to or greater than that required to achieve maximum sustainable yield and secure in the long term.
- b. The management and control of activities or operations likely to adversely affect the species feature is appropriate for maintaining it in favourable condition and is secure in the long term.
- c. Contamination of potential prey species should be below concentrations potentially harmful to their physiological health.
- d. Disturbance by human activity is below levels that suppress reproductive success, physiological health or long-term behaviour.

Bristol Channel Approaches SAC

The Bristol Channel Approaches SAC is a relatively large (5,850 km²) site, lying along the south-west coasts of Wales and England; it straddles the Bristol Channel from Carmarthen Bay in the north to the northern coasts of Devon and Cornwall in the south. The SAC is approximately 85 km from the Proposed Development boundary, and is designated solely for the harbour porpoise. This site supports a diversity of habitat types, from reefs to mudflats, which in turn supports an estimated 4.7% of the UK Celtic and Irish Sea MU population (NRW, 2023b). Harbour porpoise presence varies seasonally within the SAC, but is recognised as important for porpoises particularly during the winter when high densities persistently occur (NRW, 2023b).

Conservation Objectives

The conservation objectives for the SAC are to ensure that the integrity of the site is maintained and that it makes the best possible contribution to maintaining favourable conservation status for harbour porpoise in UK waters (NRW, 2023b). In the context of natural change, this will be achieved by ensuring that:

1. Harbour porpoise is a viable component of the site.
2. There is no significant disturbance of the species.
3. The condition of supporting habitats and processes, and the availability of prey is maintained.

5.2.3.2 Determination of LSE

This section provides an assessment undertaken to conclude whether it can be determined that there will be no LSE as a result of the Proposed Development on relevant marine mammal qualifying interest features of the following SACs:

- West Wales Marine SAC;
- Cardigan Bay SAC;
- Pembrokeshire Marine SAC;
- Llyn Peninsula and the Sarnau SAC; and
- Bristol Channel Approaches SAC.

Temporary and long term loss and/or disturbance of seabed habitats

Temporary and long term seabed habitat loss and/or disturbance associated with the Proposed Development could result in a loss of Annex II marine mammal foraging habitat. However, this loss and/or disturbance will only represent a very small fraction of the known foraging ranges of these highly mobile species. In addition, as the works associated with the Proposed Development will take place within an active harbour, it is unlikely that this area represented regular foraging habitat for the marine mammal baseline. Therefore, there is no potential for LSE to Annex II marine mammal features at any of the identified SACs as a result of the Proposed Development footprint during the construction or operation phase, and this impact is **screened out** from further assessment for all SACs.

Increased SSCs and associated deposition

Increases in SSCs and associated deposition as a result of dredging activities during the construction phase and for maintenance in the operation phase could have both direct and indirect impacts on marine mammals. Direct impacts could result in impaired visibility and therefore foraging ability, which might potentially reduce foraging success, while indirect impacts would include effects on prey species. However, marine mammals are well known to forage in tidal areas where water conditions are turbid and visibility conditions poor. The qualifying Annex II marine mammal features (bottlenose dolphin, harbour porpoise, grey seal) commonly frequent coastal areas, so would likely be tolerant of turbid and silty water. Although increased SSCs may arise during activities within the Proposed Development Planning Boundary, the maximum impact range is expected to be highly localised, and sediments will rapidly dissipate over one tidal excursion. It is anticipated that maintenance dredging would cause an even smaller increase in SSCs and thus was not considered applicable. Therefore, there is no potential for LSE to Annex II marine mammal features at any of the identified SACs as a result of the Proposed Development's dredging activities, and this impact is **screened out** from further assessment for all SACs.

Changes in water quality (including release of sediment bound contaminants)

Changes in water quality could arise from dredging activities during the construction phase; this includes the potential for the release of sediment bound contaminants. The extent of sediment dispersal is not expected to cause significant elevations in water column contamination, as chemical sediment analysis undertaken for the installation of the replacement linkspan previously suggested an overall low level of contamination in Fishguard Harbour (RPS, 2018b). In addition, the temporary and localised changes in water column contamination levels are considered unlikely to produce lethal and sub-lethal effects in the highly mobile Annex II marine mammal species (the concentrations required to produce these effects are generally acquired through long-term, chronic exposure to prey species in which contaminants have bioaccumulated). Therefore, there is no potential for LSE to Annex II marine mammal features at any of the identified SACs due to changes in water quality during construction, and this impact is **screened out** from further assessment for all SACs.

Accidental pollution to the surrounding environment

There is a risk of accidental pollution from vessels and equipment during the construction and operation phases. However, as discussed in section 5.2.2.2, pollution events are considered unlikely. In addition, it is

anticipated that the risk of accidental pollution will be further reduced due by the implementation of tertiary mitigation (standard sectoral practice (IEMA, 2024)), such as an EMP, which will include a MPCP, and include planning for accidental spills, address all potential contaminants that could be released, and include key emergency contact details. The plans will also set out good industry practice and relevant guidelines for preventing pollution at sea as discussed in section 5.2.2.2. Therefore, similarly to Annex II diadromous fish, in the unlikely event of an accidental pollution event occurring, any indirect effects on Annex II marine mammals from the accidental release of pollutants are not anticipated to lead to a significant effect on the conservation objectives of relevant European sites. Therefore, there is no potential for LSE to Annex II marine mammal features at any of the identified SACs as a result of accidental pollution during the Proposed Development and this impact is **screened out** from further assessment for all SACs.

Underwater noise from piling

Piling of steel piles during the construction phase has the potential to cause auditory injury (PTS or TTS) and/or behavioural disturbance (including barrier effects) in marine mammals. There is potential for harbour porpoises, bottlenose dolphins and/or grey seals to be present within or transiting through the Proposed Development boundary and potential ZOI during the piling, and therefore at this stage, the potential for LSE on any Annex II features of European sites as a result of underwater noise arising from construction activities cannot be discounted. Due to this potential pathway, there is potential for LSE on Annex II marine mammal features at any of the identified SACs as a result of underwater noise from piling, and therefore this impact has been **screened in** for further assessment for all SACs.

Underwater noise from vessels

As discussed in section 5.2.2.2, there is the potential for two additional construction vessels onsite at any one time over the approximately 12 month construction phase, while there will be no change to the existing maintenance dredging regime for the ferry berth. This will not represent a significant change from the baseline vessel traffic conditions in the already busy Fishguard Harbour, and marine mammals, particularly harbour porpoise, will generally avoid areas of high anthropogenic activities. Therefore, there is no potential for LSE to Annex II marine mammal features at any of the identified SACs with these qualifying interest features as a result of underwater noise from vessels during the Proposed Development and this impact is **screened out** from further assessment for all SACs.

Increased risk of collision with vessels

Vessels associated with construction activities and maintenance dredging are unlikely to represent additional disturbance that is discernible above the already high levels of anthropogenic activity in Fishguard Harbour. Given the nature of harbours, vessels will also mainly be stationary or travelling at low speeds making the risk of collision very low. Furthermore, through regular exposure to vessel movements, marine mammals utilising Fishguard Harbour are also expected to be habituated to high levels of vessel presence. Therefore, there is no potential for LSE to Annex II marine mammal features at any of the identified SACs as a result of vessel movements during construction, and this impact is **screened out** from further assessment for all SACs.

In-combination effects

There are no other projects or plans currently considered in development that are likely to have the potential to result in LSE to Annex II marine mammals features as a result of in-combination effects during the construction and operation phases of the Proposed Development. Therefore, this in-combination effects have been screened out from further assessment for all SACs.

Table 5.4 provides a summary of the assessment, indicating whether the likely significant effects on the identified SAC features were screened in or out.

LSE SCREENING REPORT

Table 5.4: Likely significant effects matrix for Annex II marine mammal features of SACs (C: Construction; O: Operation)

Impact	Phase	West Wales Marine/ Gorllewin Cymru Forol SAC	Cardigan Bay/Bae Ceredigion SAC		Pembroke-shire Marine / Sir Benfro Forol SAC	Lleyn Peninsula and the Sarnau/Pen Llyn a'r Sarnau SAC		Bristol Channel Approaches/ Dynesfeydd Môr Hafren SAC
Qualifying feature		Harbour porpoise	Bottlenose dolphin	Grey seal	Grey seal	Bottlenose dolphin	Grey seal	Harbour porpoise
Temporary and long term loss and/or disturbance of seabed habitats	C	x	x	x	x	x	x	x
	O	x	x	x	x	x	x	x
	O	x	x	x	x	x	x	x
Increased SSCs and associated deposition	C	x	x	x	x	x	x	x
	O	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Changes in water quality (including release of sediment bound contaminants)	C	x	x	x	x	x	x	x
	O	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Accidental pollution to the surrounding environment	C	x	x	x	x	x	x	x
	O	x	x	x	x	x	x	x
Underwater noise from piling	C	✓	✓	✓	✓	✓	✓	✓
	O	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Underwater noise from vessels	C	x	x	x	x	x	x	x
	O	x	x	x	x	x	x	x
In-combination effects	C	x	x	x	x	x	x	x
	O	x	x	x	x	x	x	x

x - Screened Out
 ✓ - Screened In

6 SUMMARY

This HRA LSE Screening Report has identified that there is the potential for LSE on identified features within the Cardigan Bay SAC, Pembrokeshire Marine SAC, River Teifi SAC, West Wales Marine SAC, Llyn Peninsula and the Sarnau SAC and Bristol Channel Approaches SAC during the construction and operational phases of the Proposed Development, which will be taken forward for appropriate assessment. A summary of these potential LSEs is provided in Table 6.1.

All other remaining potential effects on features of identified European Sites have been screened out in section 5 above and will therefore not be taken forward for appropriate assessment.

Table 6.1: Summary of stage 1: screening for likely significant effect

European site	Relevant qualifying interest features	Project phase	Impact
Cardigan Bay/Bae Ceredigion SAC	Sea lamprey River lamprey Bottlenose dolphin Grey seal	Construction	Underwater noise from piling
Pembrokeshire Marine/Sir Benfro Forol SAC	Sea lamprey River lamprey Allis shad Twaite shad Grey seal	Construction	Underwater noise from piling
River Teifi/Afon Teifi SAC	River lamprey Atlantic salmon Sea lamprey	Construction	Underwater noise from piling
West Wales Marine/Gorllewin Cymru Forol SAC	Harbour porpoise	Construction	Underwater noise from piling
Llyn Peninsula and the Sarnau/Pen Llyn a'r Sarnau SAC	Bottlenose dolphin Grey seal	Construction	Underwater noise from piling
Bristol Channel Approaches/Dynesfeydd Môr Hafren SAC	Harbour porpoise	Construction	Underwater noise from piling

7 REFERENCES

- Garrett, H.M. (2016). *Afon Teifi SAC population attribute condition assessment for brook, river and sea lamprey population 2014*. NRW Evidence Report No. 106. 28 pp. NRW. Bangor.
- IAMMWG (2023). *Review of Management Unit boundaries for cetaceans in UK waters*. JNCC. Peterborough, UK pp.23.
- IEMA (2024). Institute of Environmental Management and Assessment (IEMA) Impact Assessment Guidelines: Implementing the Mitigation Hierarchy from Concept to Construction. August 2024.
- Kruuk, H. (1995). *Wild otters: predation and populations*. Oxford, Oxford University Press.
- JNCC (2017). NATURA 2000 - STANDARD DATA FORM UK0030074 Afonydd Cleddau/ Cleddau Rivers.
- NRW (2018a). *Cardigan Bay / Bae Ceredigion Special Area of Conservation*. Advice provided by Natural Resources Wales in fulfilment of Regulation 37 of the Conservation of Habitats and Species Regulations 2017. March 2018.
- NRW (2018b). *Pembrokeshire Marine / Sir Benfro Forol Special Area of Conservation*. Advice provided by Natural Resources Wales in fulfilment of Regulation 37 of the Conservation of Habitats and Species Regulations 2017. March 2018.
- NRW (2018c). *Pen Llŷn a'r Sarnau / Llyn Peninsula and the Sarnau Special Area of Conservation*. Advice provided by Natural Resources Wales in fulfilment of Regulation 37 of the Conservation of Habitats and Species Regulations 2017. March 2018.
- NRW (2022). *CORE MANAGEMENT PLAN INCLUDING CONSERVATION OBJECTIVES FOR Afon Teifi / River Teifi SAC*. Version 4.
- NRW (2023a). *West Wales Marine / Gorllewin Cymru Forol MPA* [Online]. Available at: <https://jncc.gov.uk/our-work/west-wales-marine-mpa/>. Accessed on 26 Nov. 24.
- NRW (2023b). *Bristol Channel Approaches / Dynesfeydd Môr Hafren MPA* [Online]. Available at <https://jncc.gov.uk/our-work/bristol-channel-approaches-mpa/>. Accessed on 26 Nov. 24.
- NRW and JNCC (2019). *Harbour Porpoise (Phocoena phocoena) Special Area of Conservation: West Wales Marine / Gorllewin Cymru Forol Conservation Objectives and Advice on Operations*. March 2019.
- RPS (2018a). Appendix 7.2 Habitat Regulations Assessment. Fishguard Port Replacement Linkspan Environmental Impact Assessment. Stena Line.
- RPS (2018a). 7.0 Marine Biodiversity. Fishguard Port Replacement Linkspan Environmental Impact Assessment. Stena Line.
- Scottish Government (2018). *Sectoral Marine Plan for Offshore Wind Energy (encompassing Deep Water Plan Options). Strategic Habitat Regulations Appraisal: Pre-Screening Report*. June 2018.
- UK Government (2022). Otters: advice for making planning decisions. January 2022 [Online]. Available at: <https://www.gov.uk/guidance/otters-advice-for-making-planning-decisions>. Accessed on 19 Dec. 24.

LSE SCREENING REPORT

UK Wild Otter Trust (no date). Eurasian Otter 101 [Online]. Available at: <https://ukwildottertrust.org/otters-101/>. Accessed 20 Dec. 24.

Welsh Government (2021). *Habitats regulations assessments: protecting a European site*. March 2021 [Online]. Available at: <https://www.gov.wales/habitats-regulations-assessments-protecting-european-site-html>. Accessed on 13 Nov. 24.

8 GLOSSARY AND ACRONYMS

Glossary

Term	Meaning
Appropriate Assessment	An assessment to determine the implications of a plan or project on a European site in view of that site's conservation objectives. An Appropriate Assessment forms part of the Habitats Regulations Appraisal (HRA) and is required when a plan or project (either alone or in combination with other plans or projects) is likely to have a significant effect on a European site.
Annex I Habitat	A natural habitat type of community interest, defined in Annex I of the Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (Habitats Directive). The designation of Special Areas of Conservation (SAC) is required in the UK to ensure the conservation of these habitats. The protection afforded to sites designated prior to EU Exit persists in UK law.
Annex II Species	Animal or plant species of community interest, defined in Annex II of the Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (Habitats Directive). The designation of Special Areas of Conservation (SAC) is required in the UK to ensure the conservation of these species. The protection afforded to sites designated prior to EU Exit persists in UK law.
Competent Authority	The term derives from the Habitats Regulations and relates to the duties which the Regulations impose on public bodies and individuals. Regulation 7(1) defines competent authorities as '(a) any Minister of the Crown (as defined in the Ministers of the Crown Act 1975), government department, statutory undertaker, public body of any description or person holding a public office; (b) the Welsh Ministers; and (c) any person exercising any function of a person mentioned in sub-paragraph (a) or (b)'. In the context of a plan or project, the competent authority is the public body with the power to give a licence, permit, consent or other permission for work to proceed (Welsh Government, 2021).
Diadromous fish	Diadromous fishes have evolved mechanisms to transition between seawater and freshwater environments.
EU-Exit	The withdrawal of the United Kingdom from the European Union.
European site	A Special Area of Conservation (SAC), candidate SAC, a Special Protection Area (SPA), proposed SAC, potential SPA or Ramsar sites and are protected under the relevant statutory regimes.
Habitats Regulations	The Conservation of Habitats and Species Regulations 2017, The Conservation of Offshore Marine Habitats and Species 2017 and The Conservation of Habitats and Species Amendment (EU Exit) Regulations 2019.
Habitat Regulations Appraisal	A process required by the Habitats Regulations of identifying likely significant effects of a plan or project on a European site and (where Likely Significant Effects are predicted or cannot be discounted) carrying out an appropriate assessment to ascertain whether the plan or project will adversely affect the integrity of the European site. If adverse effects on integrity cannot be ruled out, the latter stages of the process require consideration of the derogation provisions in the Habitats Regulations.
Likely Significant Effect	Any effect that may reasonably be predicted as a consequence of a plan or project that may affect the conservation objectives of the features for which the European site was designated, but excluding trivial or inconsequential effects. A likely effect is one that cannot be ruled out on the basis of objective information. A 'significant' effect is a test of whether a plan or project could affect the site's conservation objectives (Welsh Government, 2021).
National Site Network	The National Site Network comprises Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) designated (or proposed) on EU-Exit day and which formerly formed part of the Natura 2000 network, as well as any new sites designated under the Habitats Regulations under an amended designation process.
Natura 2000 network	A coherent European ecological network of Special Areas of Conservation and Special Protection Areas comprising sites located within European Union Member States.
Planning Boundary	The area of Fishguard Harbour within which the Proposed Development infrastructure will be placed.
Proposed Development	All infrastructure of the Stena Line Fishguard Ferry Port Project.
Ramsar Site	Wetlands of international importance, designated under the Ramsar Convention.

LSE SCREENING REPORT

Special Area of Conservation (SAC)	Special Areas of Conservation (SACs) are areas designated for the conservation of certain plant and animal species listed in the Directive.
Zone of Influence (Zol)	The geographical extent over which impacts on a receptor may occur.

Acronyms

Acronym	Meaning
CD	Chart Datum
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EU	European Union
HRA	Habitat Regulations Assessment
IAMMWG	Interagency Marine Mammal Working Group
IEMA	Institute of Environmental Management and Assessment
IMO	International Maritime Organisation
INNS	Invasive Non-Native Species
IROPI	Imperative Reasons of Overriding Public Interest
JNCC	Joint Nature Conservation Committee
LSE	Likely Significant Effect
MARPOL	International Convention for the Prevention of Pollution from Ships
MHWS	Mean High Water Springs
MPCP	Marine Pollution Contingency Plan
MU	Management Unit
NRW	Natural Resources Wales
OSPAR	Oslo Paris Convention
PTS	Permanent Threshold Shift
RIAA	Report to Inform Appropriate Assessment
RNLI	Royal National Lifeboat Institution
SAC	Special Area of Conservation
SPA	Special Protection Area
SSC	Suspended Sediment Concentrations
SW	South-west
TTS	Temporary Threshold Shift
UK	United Kingdom
Zol	Zone of Influence

Units

Unit	Description
km	Kilometre
km ²	Square kilometre
m	Metre
nm	Nautical mile

Appendix A - Standard Data Forms

1.A

APPENDIX 1.A Standard Data Forms

STANDARD DATA FORM for sites within the 'UK national site network of European sites'

Special Protection Areas (SPAs) are classified and Special Areas of Conservation (SACs) are designated under:

- the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales (including the adjacent territorial sea) and to a limited extent in Scotland (reserved matters) and Northern Ireland (excepted matters);
- the Conservation (Natural Habitats &c.) Regulations 1994 (as amended) in Scotland;
- the Conservation (Natural Habitats, &c) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland; and
- the Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended) in the UK offshore area.

Each SAC or SPA (forming part of the UK national site network of European sites) has its own Standard Data Form containing site-specific information. The information provided here generally follows the same documenting format for SACs and SPAs, as set out in the [Official Journal of the European Union recording the Commission Implementing Decision of 11 July 2011 \(2011/484/EU\)](#).

Please note that these forms contain a number of codes, all of which are explained either within the data forms themselves or in the end notes.

More general information on SPAs and SACs in the UK is available from the [SPA homepage](#) and [SAC homepage](#) on the JNCC website. These webpages also provide links to Standard Data Forms for all SAC and SPA sites in the UK.

<https://jncc.gov.uk/>



NATURA 2000 - STANDARD DATA FORM

For Special Protection Areas (SPA),
Proposed Sites for Community Importance (pSCI),
Sites of Community Importance (SCI) and
for Special Areas of Conservation (SAC)

SITE UK0012712
SITENAME Cardigan Bay/ Bae Ceredigion

TABLE OF CONTENTS

- [1. SITE IDENTIFICATION](#)
- [2. SITE LOCATION](#)
- [3. ECOLOGICAL INFORMATION](#)
- [4. SITE DESCRIPTION](#)
- [5. SITE PROTECTION STATUS AND RELATION WITH CORINE BIOTOPES](#)
- [6. SITE MANAGEMENT](#)

1. SITE IDENTIFICATION

1.1 Type B	1.2 Site code UK0012712	Back to top
----------------------	-----------------------------------	-----------------------------

1.3 Site name

Cardigan Bay/ Bae Ceredigion

1.4 First Compilation date 1996-01	1.5 Update date 2015-12
--	-----------------------------------

1.6 Respondent:

Name/Organisation: Joint Nature Conservation Committee
Address: Joint Nature Conservation Committee Monkstone House City Road Peterborough PE1 1JY
Email:

Date site proposed as SCI:	1996-01
Date site confirmed as SCI:	2004-12
Date site designated as SAC:	2004-12
National legal reference of SAC designation:	Regulations 11 and 13-15 of the Conservation of Habitats and Species Regulations 2010 (http://www.legislation.gov.uk/uksi/2010/490/contents/made).

2. SITE LOCATION

[Back to top](#)

2.1 Site-centre location [decimal degrees]:

Longitude

-4.617222222

Latitude

52.24638889

2.2 Area [ha]:

95857.06

2.3 Marine area [%]

99.5

2.4 Sitelength [km]:

0.0

2.5 Administrative region code and name

NUTS level 2 code

Region Name

UKZZ	Extra-Regio
UKL1	West Wales and The Valleys

2.6 Biogeographical Region(s)

Atlantic (100.0
%)

3. ECOLOGICAL INFORMATION

[Back to top](#)

3.1 Habitat types present on the site and assessment for them

Annex I Habitat types						Site assessment			
Code	PF	NP	Cover [ha]	Cave [number]	Data quality	A B C D	A B C		
						Representativity	Relative Surface	Conservation	Global
1110B			15298.79	0	G	C	C	B	C
1140B			153.37	0	G	D			
1170B			22948.18	0	G	C	B	B	C
8330B			95.86	0	G	B	C	B	C

- **PF:** for the habitat types that can have a non-priority as well as a priority form (6210, 7130, 9430) enter "X" in the column PF to indicate the priority form.
- **NP:** in case that a habitat type no longer exists in the site enter: x (optional)
- **Cover:** decimal values can be entered
- **Caves:** for habitat types 8310, 8330 (caves) enter the number of caves if estimated surface is not available.
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation)

3.2 Species referred to in Article 4 of Directive 2009/147/EC and listed in Annex II of Directive 92/43/EEC and site evaluation for them

Species					Population in the site						Site assessment			
G	Code	Scientific Name	S	NP	T	Size		Unit	Cat.	D.qual.	A B C D	A B C		
						Min	Max				Pop.	Con.	Iso.	Glo.
F	1102	Alosa alosa			p				P	DD	D			
F	1103	Alosa fallax			p				P	DD	D			
M	1364	Halichoerus grypus			p				P	DD	C	B	C	C
F	1099	Lampetra fluviatilis			p				P	DD	C	C	C	C
F	1095	Petromyzon marinus			p				P	DD	C	C	C	C
M	1351	Phocoena phocoena			p				P	DD	D			
M	1349	Tursiops truncatus			p	101	250	i		M	A	B	C	A

- **Group:** A = Amphibians, B = Birds, F = Fish, I = Invertebrates, M = Mammals, P = Plants, R = Reptiles
- **S:** in case that the data on species are sensitive and therefore have to be blocked for any public access enter: yes
- **NP:** in case that a species is no longer present in the site enter: x (optional)
- **Type:** p = permanent, r = reproducing, c = concentration, w = wintering (for plant and non-migratory species use permanent)
- **Unit:** i = individuals, p = pairs or other units according to the Standard list of population units and codes in accordance with Article 12 and 17 reporting (see [reference portal](#))
- **Abundance categories (Cat.):** C = common, R = rare, V = very rare, P = present - to fill if data are deficient (DD) or in addition to population size information
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation); VP = 'Very poor' (use this category only, if not even a rough estimation of the population size can be made, in this case the fields for population size can remain empty, but the field "Abundance categories" has to be filled in)

4. SITE DESCRIPTION

4.1 General site character

[Back to top](#)

Habitat class	% Cover
N05	0.4
N08	0.1
N01	99.5
N06	
N04	
N16	
Total Habitat Cover	NaN

Other Site Characteristics

3 Marine: Geology: shingle,clay,sandstone/mudstone,sedimentary,mud,biogenic

reef, pebble, metamorphic, cobble, slate/shale, gravel, boulder, sand 4 Marine: Geomorphology: surge gullies, cave/tunnel, pools, intertidal sediments (including sandflat/mudflat), subtidal rock (including rocky reefs), cliffs, intertidal rock, open coast (including bay), islands, subtidal sediments (including sandbank/mudbank)

4.2 Quality and importance

Sandbanks which are slightly covered by sea water all the time for which the area is considered to support a significant presence. Reefs for which the area is considered to support a significant presence. Submerged or partially submerged sea caves for which the area is considered to support a significant presence. *Petromyzon marinus* for which the area is considered to support a significant presence. *Lampetra fluviatilis* for which the area is considered to support a significant presence. *Halichoerus grypus* for which the area is considered to support a significant presence. *Tursiops truncatus* for which this is one of only two known outstanding localities in the United Kingdom.

4.3 Threats, pressures and activities with impacts on the site

The most important impacts and activities with high effect on the site

Negative Impacts			
Rank	Threats and pressures [code]	Pollution (optional) [code]	inside/outside [i o b]
M	H05		B
M	G05		I
M	H03		B
M	F02		B
M	I01		B

Rank: H = high, M = medium, L = low

Pollution: N = Nitrogen input, P = Phosphor/Phosphate input, A = Acid input/acidification,

T = toxic inorganic chemicals, O = toxic organic chemicals, X = Mixed pollutions

i = inside, o = outside, b = both

Positive Impacts			
Rank	Activities, management [code]	Pollution (optional) [code]	inside/outside [i o b]
M	G03		I
M	G01		I

4.5 Documentation

The Natural Resources Wales weblink below provides access to information on its designated sites. Detailed information about this Natura 2000 site can be accessed via the Management Plan link provided in Section 6.2. See also the 'UK Approach' document for more information (link via the JNCC website).

Link(s): <https://naturalresources.wales/guidance-and-advice/environmental-topics/wildlife-and-biodiversity/protected-areas-of-land>

http://jncc.defra.gov.uk/pdf/Natura2000_StandardDataForm_UKApproach_Dec2015.pdf

5. SITE PROTECTION STATUS (optional)

[Back to top](#)

5.1 Designation types at national and regional level:

Code	Cover [%]	Code	Cover [%]	Code	Cover [%]
UK00	98.4	UK04	1.7		

6. SITE MANAGEMENT

[Back to top](#)

6.1 Body(ies) responsible for the site management:

Organisation:	Natural Resources Wales
---------------	-------------------------

Address: _____

Email: _____

6.2 Management Plan(s):

An actual management plan does exist:

☒

Yes

Name: CARDIGAN BAY / BAE CEREDIGION

Link: <https://www.naturalresources.wales/media/673505/Cardigan%20Bay%20R33%20Feb%202009.pdf>

☐

No, but in preparation

☐

No

EXPLANATION OF CODES USED IN THE SPECIAL AREA OF CONSERVATION (SAC) AND SPECIAL PROTECTION AREA (SPA) STANDARD DATA FORMS

The codes in the table below generally follow those explained in the [official European Union guidelines for the Standard Data Form](#) (also referencing the relevant page number).

1.1 Site type

CODE	DESCRIPTION	PAGE NO
A	SPA (classified Special Protection Area)	53
B	cSAC, SCI or SAC (candidate Special Area of Conservation, Site of Community Importance, designated Special Area of Conservation)	53
C	SPA area/boundary is the same as the cSAC/SCI/SAC i.e. a co-classified/designated site (Note: this situation only occurs in Gibraltar)	53

3.1 Habitat code

CODE	DESCRIPTION	PAGE NO
1110	Sandbanks which are slightly covered by sea water all the time	57
1130	Estuaries	57
1140	Mudflats and sandflats not covered by seawater at low tide	57
1150	Coastal lagoons	57
1160	Large shallow inlets and bays	57
1170	Reefs	57
1180	Submarine structures made by leaking gases	57
1210	Annual vegetation of drift lines	57
1220	Perennial vegetation of stony banks	57
1230	Vegetated sea cliffs of the Atlantic and Baltic Coasts	57
1310	Salicornia and other annuals colonizing mud and sand	57
1320	Spartina swards (Spartinion maritimae)	57
1330	Atlantic salt meadows (Glaucio-Puccinellietalia maritimae)	57
1340	Inland salt meadows	57
1420	Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)	57
2110	Embryonic shifting dunes	57
2120	Shifting dunes along the shoreline with Ammophila arenaria ("white dunes")	57
2130	Fixed coastal dunes with herbaceous vegetation ("grey dunes")	57
2140	Decalcified fixed dunes with Empetrum nigrum	57
2150	Atlantic decalcified fixed dunes (Calluno-Ulicetea)	57
2160	Dunes with Hippophya• rhamnoides	57
2170	Dunes with Salix repens ssp. argentea (Salicion arenariae)	57
2190	Humid dune slacks	57
21A0	Machairs (* in Ireland)	57
2250	Coastal dunes with Juniperus spp.	57
2330	Inland dunes with open Corynephorus and Agrostis grasslands	57
3110	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	57
3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea	57
3140	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	57
3150	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation	57

CODE	DESCRIPTION	PAGE NO
3160	Natural dystrophic lakes and ponds	57
3170	Mediterranean temporary ponds	57
3180	Turloughs	57
3260	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation	57
4010	Northern Atlantic wet heaths with Erica tetralix	57
4020	Temperate Atlantic wet heaths with Erica ciliaris and Erica tetralix	57
4030	European dry heaths	57
4040	Dry Atlantic coastal heaths with Erica vagans	57
4060	Alpine and Boreal heaths	57
4080	Sub-Arctic Salix spp. scrub	57
5110	Stable xerothermophilous formations with Buxus sempervirens on rock slopes (Berberidion p.p.)	57
5130	Juniperus communis formations on heaths or calcareous grasslands	57
6130	Calaminarian grasslands of the Violetalia calaminariae	57
6150	Siliceous alpine and boreal grasslands	57
6170	Alpine and subalpine calcareous grasslands	57
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	57
6230	Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	57
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	57
6430	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	57
6510	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	57
6520	Mountain hay meadows	57
7110	Active raised bogs	57
7120	Degraded raised bogs still capable of natural regeneration	57
7130	Blanket bogs (* if active bog)	57
7140	Transition mires and quaking bogs	57
7150	Depressions on peat substrates of the Rhynchosporion	57
7210	Calcareous fens with Cladium mariscus and species of the Caricion davallianae	57
7220	Petrifying springs with tufa formation (Cratoneurion)	57
7230	Alkaline fens	57
7240	Alpine pioneer formations of the Caricion bicoloris-atrofuscae	57
8110	Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	57
8120	Calcareous and calcshist scree of the montane to alpine levels (Thlaspietalia rotundifoliae)	57
8210	Calcareous rocky slopes with chasmophytic vegetation	57
8220	Siliceous rocky slopes with chasmophytic vegetation	57
8240	Limestone pavements	57
8310	Caves not open to the public	57
8330	Submerged or partially submerged sea caves	57
9120	Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robur-petraeae or Ilici-Fagenion)	57
9130	Asperulo-Fagetum beech forests	57
9160	Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli	57
9180	Tilio-Acerion forests of slopes, scree and ravines	57
9190	Old acidophilous oak woods with Quercus robur on sandy plains	57
91A0	Old sessile oak woods with Ilex and Blechnum in the British Isles	57
91C0	Caledonian forest	57
91D0	Bog woodland	57
91E0	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	57
91J0	Taxus baccata woods of the British Isles	57

3.1 Habitat representativity (abbreviated to 'Representativity' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent representativity	57
B	Good representativity	57
C	Significant representativity	57
D	Non-significant presence representativity	57

3.1 Relative surface

CODE	DESCRIPTION	PAGE NO
A	> 15%-100%	58
B	> 2%-15%	58
C	≤ 2%	58

3.1 Degree of conservation (abbreviated to 'Conservation' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	59
B	Good conservation	59
C	Average or reduced conservation	59

3.1 Global assessment (abbreviated to 'Global' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	59
B	Good value	59
C	Significant value	59

3.2 Population (abbreviated to 'Pop.' in data form)

CODE	DESCRIPTION	PAGE NO
A	> 15%-100%	62
B	> 2%-15%	62
C	≤ 2%	62
D	Non-significant population	62

3.2 Degree of conservation (abbreviated to 'Con.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	63
B	Good conservation	63
C	Average or reduced conservation	63

3.2 Isolation (abbreviated to 'Iso.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Population (almost) Isolated	63
B	Population not-isolated, but on margins of area of distribution	63
C	Population not-isolated within extended distribution range	63

3.2 Global Grade (abbreviated to 'Glo.' or 'G.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	63
B	Good value	63
C	Significant value	63

3.3 Other species – essentially covers bird assemblage types

CODE	DESCRIPTION	PAGE NO
WATR	Non-breeding waterbird assemblage	UK specific code
SBA	Breeding seabird assemblage	UK specific code

BBA	Breeding bird assemblage (applies only to sites classified pre 2000)	UK specific code
-----	--	------------------

4.1 Habitat class code

CODE	DESCRIPTION	PAGE NO
N01	Marine areas, Sea inlets	65
N02	Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins)	65
N03	Salt marshes, Salt pastures, Salt steppes	65
N04	Coastal sand dunes, Sand beaches, Machair	65
N05	Shingle, Sea cliffs, Islets	65
N06	Inland water bodies (Standing water, Running water)	65
N07	Bogs, Marshes, Water fringed vegetation, Fens	65
N08	Heath, Scrub, Maquis and Garrigue, Phygrana	65
N09	Dry grassland, Steppes	65
N10	Humid grassland, Mesophile grassland	65
N11	Alpine and sub-Alpine grassland	65
N14	Improved grassland	65
N15	Other arable land	65
N16	Broad-leaved deciduous woodland	65
N17	Coniferous woodland	65
N19	Mixed woodland	65
N21	Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas)	65
N22	Inland rocks, Screes, Sands, Permanent Snow and ice	65
N23	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	65
N25	Grassland and scrub habitats (general)	65
N26	Woodland habitats (general)	65

4.3 Threats code

CODE	DESCRIPTION	PAGE NO
A01	Cultivation	65
A02	Modification of cultivation practices	65
A03	Mowing / cutting of grassland	65
A04	Grazing	65
A05	Livestock farming and animal breeding (without grazing)	65
A06	Annual and perennial non-timber crops	65
A07	Use of biocides, hormones and chemicals	65
A08	Fertilisation	65
A10	Restructuring agricultural land holding	65
A11	Agriculture activities not referred to above	65
B01	Forest planting on open ground	65
B02	Forest and Plantation management & use	65
B03	Forest exploitation without replanting or natural regrowth	65
B04	Use of biocides, hormones and chemicals (forestry)	65
B06	Grazing in forests/ woodland	65
B07	Forestry activities not referred to above	65
C01	Mining and quarrying	65
C02	Exploration and extraction of oil or gas	65
C03	Renewable abiotic energy use	65
D01	Roads, paths and railroads	65
D02	Utility and service lines	65
D03	Shipping lanes, ports, marine constructions	65
D04	Airports, flightpaths	65
D05	Improved access to site	65
E01	Urbanised areas, human habitation	65
E02	Industrial or commercial areas	65

CODE	DESCRIPTION	PAGE NO
E03	Discharges	65
E04	Structures, buildings in the landscape	65
E06	Other urbanisation, industrial and similar activities	65
F01	Marine and Freshwater Aquaculture	65
F02	Fishing and harvesting aquatic resources	65
F03	Hunting and collection of wild animals (terrestrial), including damage caused by game (excessive density), and taking/removal of terrestrial animals (including collection of insects, reptiles, amphibians, birds of prey, etc., trapping, poisoning, poaching, predator control, accidental capture (e.g. due to fishing gear), etc.)	65
F04	Taking / Removal of terrestrial plants, general	65
F05	Illegal taking/ removal of marine fauna	65
F06	Hunting, fishing or collecting activities not referred to above	65
G01	Outdoor sports and leisure activities, recreational activities	65
G02	Sport and leisure structures	65
G03	Interpretative centres	65
G04	Military use and civil unrest	65
G05	Other human intrusions and disturbances	65
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)	65
H02	Pollution to groundwater (point sources and diffuse sources)	65
H03	Marine water pollution	65
H04	Air pollution, air-borne pollutants	65
H05	Soil pollution and solid waste (excluding discharges)	65
H06	Excess energy	65
H07	Other forms of pollution	65
I01	Invasive non-native species	65
I02	Problematic native species	65
I03	Introduced genetic material, GMO	65
J01	Fire and fire suppression	65
J02	Human induced changes in hydraulic conditions	65
J03	Other ecosystem modifications	65
K01	Abiotic (slow) natural processes	65
K02	Biocenotic evolution, succession	65
K03	Interspecific faunal relations	65
K04	Interspecific floral relations	65
K05	Reduced fecundity/ genetic depression	65
L05	Collapse of terrain, landslide	65
L07	Storm, cyclone	65
L08	Inundation (natural processes)	65
L10	Other natural catastrophes	65
M01	Changes in abiotic conditions	65
M02	Changes in biotic conditions	65
U	Unknown threat or pressure	65
XO	Threats and pressures from outside the Member State	65

5.1 Designation type codes

CODE	DESCRIPTION	PAGE NO
UK00	No Protection Status	67
UK01	National Nature Reserve	67
UK04	Site of Special Scientific Interest (GB)	67
UK05	Marine Conservation Zone	67
UK06	Nature Conservation Marine Protected Area	67
UK86	Special Area (Channel Islands)	67
UK98	Area of Special Scientific Interest (NI)	67
IN00	Ramsar Convention site	67
IN08	Special Protection Area	67
IN09	Special Area of Conservation	67

STANDARD DATA FORM for sites within the 'UK national site network of European sites'

Special Protection Areas (SPAs) are classified and Special Areas of Conservation (SACs) are designated under:

- the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales (including the adjacent territorial sea) and to a limited extent in Scotland (reserved matters) and Northern Ireland (excepted matters);
- the Conservation (Natural Habitats &c.) Regulations 1994 (as amended) in Scotland;
- the Conservation (Natural Habitats, &c) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland; and
- the Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended) in the UK offshore area.

Each SAC or SPA (forming part of the UK national site network of European sites) has its own Standard Data Form containing site-specific information. The information provided here generally follows the same documenting format for SACs and SPAs, as set out in the [Official Journal of the European Union recording the Commission Implementing Decision of 11 July 2011 \(2011/484/EU\)](#).

Please note that these forms contain a number of codes, all of which are explained either within the data forms themselves or in the end notes.

More general information on SPAs and SACs in the UK is available from the [SPA homepage](#) and [SAC homepage](#) on the JNCC website. These webpages also provide links to Standard Data Forms for all SAC and SPA sites in the UK.

<https://jncc.gov.uk/>



NATURA 2000 - STANDARD DATA FORM

For Special Protection Areas (SPA),
Proposed Sites for Community Importance (pSCI),
Sites of Community Importance (SCI) and
for Special Areas of Conservation (SAC)

SITE UK0013116
SITENAME Pembrokeshire Marine/ Sir Benfro Forol

TABLE OF CONTENTS

- [1. SITE IDENTIFICATION](#)
- [2. SITE LOCATION](#)
- [3. ECOLOGICAL INFORMATION](#)
- [4. SITE DESCRIPTION](#)
- [5. SITE PROTECTION STATUS AND RELATION WITH CORINE BIOTOPES](#)
- [6. SITE MANAGEMENT](#)

1. SITE IDENTIFICATION

1.1 Type B	1.2 Site code UK0013116	Back to top
----------------------	-----------------------------------	-----------------------------

1.3 Site name

Pembrokeshire Marine/ Sir Benfro Forol

1.4 First Compilation date 1997-10	1.5 Update date 2015-12
--	-----------------------------------

1.6 Respondent:

Name/Organisation: Joint Nature Conservation Committee

Address: Joint Nature Conservation Committee Monkstone House City Road Peterborough
PE1 1JY

Email:

Date site proposed as SCI: 1997-10

Date site confirmed as SCI: 2004-12

Date site designated as SAC: 2004-12

National legal reference of SAC designation:

Regulations 11 and 13-15 of the Conservation of Habitats and Species Regulations 2010
(<http://www.legislation.gov.uk/uksi/2010/490/contents/made>).

2. SITE LOCATION

[Back to top](#)

2.1 Site-centre location [decimal degrees]:

Longitude
-5.615833333

Latitude
51.72638889

2.2 Area [ha]:
138038.5

2.3 Marine area [%]
99.3

2.4 Sitelength [km]:
0.0

2.5 Administrative region code and name

NUTS level 2 code	Region Name
UKZZ	Extra-Region
UKL1	West Wales and The Valleys

2.6 Biogeographical Region(s)

Atlantic (100.0 %)

3. ECOLOGICAL INFORMATION

[Back to top](#)

3.1 Habitat types present on the site and assessment for them

Annex I Habitat types						Site assessment			
Code	PF	NP	Cover [ha]	Cave [number]	Data quality	A B C D	A B C		
						Representativity	Relative Surface	Conservation	Global
1110B			41411.55	0	M	C	B	B	C
1130B			5466.32	0	G	A	C	B	B
1140B			1780.7	0	G	B	C	B	C
1150B	X			0		C	C	C	C
1160B			22086.16	0	G	A	B	B	B
1170B			40997.43	0	G	B	B	A	A
1330B			276.08	0	G	C	C	C	C
8330B			13.8	0	M	C	C	B	C

- **PF:** for the habitat types that can have a non-priority as well as a priority form (6210, 7130, 9430) enter "X" in the column PF to indicate the priority form.
- **NP:** in case that a habitat type no longer exists in the site enter: x (optional)
- **Cover:** decimal values can be entered
- **Caves:** for habitat types 8310, 8330 (caves) enter the number of caves if estimated surface is not available.
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation)

3.2 Species referred to in Article 4 of Directive 2009/147/EC and listed in Annex II of Directive 92/43/EEC and site evaluation for them

Species					Population in the site						Site assessment			
G	Code	Scientific Name	S	NP	T	Size		Unit	Cat.	D.qual.	A B C D	A B C		
						Min	Max				Pop.	Con.	Iso.	Glo.
F	1102	Alosa alosa			p				P	DD	C	C	C	C
F	1103	Alosa fallax			p				P	DD	C	C	C	C
M	1364	Halichoerus grypus			p	1001	10000	i		M	B	A	B	B
F	1099	Lampetra fluviatilis			p				P	DD	C	C	C	C
M	1355	Lutra lutra			p				P	DD	C	B	C	C
F	1095	Petromyzon marinus			p				P	DD	C	C	C	C
M	1351	Phocoena phocoena			p				C	DD	D			
P	1441	Rumex rupestris			p				P	DD	B	B	B	B
M	1349	Tursiops truncatus			p				V	DD	D			

- **Group:** A = Amphibians, B = Birds, F = Fish, I = Invertebrates, M = Mammals, P = Plants, R = Reptiles
- **S:** in case that the data on species are sensitive and therefore have to be blocked for any public access enter: yes
- **NP:** in case that a species is no longer present in the site enter: x (optional)
- **Type:** p = permanent, r = reproducing, c = concentration, w = wintering (for plant and non-migratory species use permanent)
- **Unit:** i = individuals, p = pairs or other units according to the Standard list of population units and codes in accordance with Article 12 and 17 reporting (see [reference portal](#))
- **Abundance categories (Cat.):** C = common, R = rare, V = very rare, P = present - to fill if data are deficient (DD) or in addition to population size information
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation); VP = 'Very poor' (use this category only, if not even a rough estimation of the population size can be made, in this case the fields for population size can remain empty, but the field "Abundance categories" has to be filled in)

4. SITE DESCRIPTION

4.1 General site character

[Back to top](#)

Habitat class	% Cover

N02	3.8
N03	0.2
N01	96.0
Total Habitat Cover	100

Other Site Characteristics

1 Terrestrial: Soil & Geology: igneous,metamorphic,mud,sand,sedimentary,shingle 2 Terrestrial: Geomorphology and landscape: coastal 3 Marine: Geology: peat,mud,igneous,sedimentary,limestone/chalk,chert/flint,metamorphic,sand,slate/shale,shingle,clay,sand,reef,boulder,pebble 4 Marine: Geomorphology: intertidal sediments (including sandflat/mudflat),tidal rapids,cave/tunnel,cliffs,enclosed coast (including embayment),estuary,intertidal rock,islands,lagoon,open coast (including bay),pools,ria,sound/strait,subtidal rock (including rocky reefs),subtidal sediments (including sandbank/mudbank),surge gullies,geos (rocky inlets)

4.2 Quality and importance

Sandbanks which are slightly covered by sea water all the time for which the area is considered to support a significant presence. Estuaries for which this is considered to be one of the best areas in the United Kingdom. Mudflats and sandflats not covered by seawater at low tide for which the area is considered to support a significant presence. Coastal lagoons for which the area is considered to support a significant presence. Large shallow inlets and bays for which this is considered to be one of the best areas in the United Kingdom. Reefs for which this is considered to be one of the best areas in the United Kingdom. Submerged or partially submerged sea caves for which the area is considered to support a significant presence. Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) for which the area is considered to support a significant presence. *Rumex rupestris* for which this is considered to be one of the best areas in the United Kingdom. *Petromyzon marinus* for which the area is considered to support a significant presence. *Lampetra fluviatilis* for which the area is considered to support a significant presence. *Alosa alosa* for which the area is considered to support a significant presence. *Alosa fallax* for which the area is considered to support a significant presence. *Lutra lutra* for which the area is considered to support a significant presence. *Halichoerus grypus* for which this is considered to be one of the best areas in the United Kingdom.

4.3 Threats, pressures and activities with impacts on the site

The most important impacts and activities with high effect on the site

Negative Impacts			
Rank	Threats and pressures [code]	Pollution (optional) [code]	inside/outside [i o b]
H	J02		B
M	G05		I
H	H01		B
M	K01		B
L	H04		B
M	C02		I
M	M01		B
M	D03		I
H	F06		I
H	I01		B
M	G01		I
H	F02		I
M	H03		I

Rank: H = high, M = medium, L = low

Pollution: N = Nitrogen input, P = Phosphor/Phosphate input, A = Acid input/acidification,

T = toxic inorganic chemicals, O = toxic organic chemicals, X = Mixed pollutions

i = inside, o = outside, b = both

Positive Impacts			
Rank	Activities, management [code]	Pollution (optional) [code]	inside/outside [i o b]
M	G01		I
M	G03		B
M	A04		B

4.5 Documentation

The Natural Resources Wales weblink below provides access to information on its designated sites. Detailed information about this Natura 2000 site can be accessed via the Management Plan link provided in Section 6.2. See also the 'UK Approach' document for more information (link via the JNCC website).

Link(s): <https://naturalresources.wales/guidance-and-advice/environmental-topics/wildlife-and-biodiversity/protected-areas-of-land>
http://jncc.defra.gov.uk/pdf/Natura2000_StandardDataForm_UKApproach_Dec2015.pdf

5. SITE PROTECTION STATUS (optional)

[Back to top](#)

5.1 Designation types at national and regional level:

Code	Cover [%]	Code	Cover [%]	Code	Cover [%]
UK04	2.5	UK02	1.0	UK00	96.5
UK01	0.1				

6. SITE MANAGEMENT

[Back to top](#)

6.1 Body(ies) responsible for the site management:

Organisation:	Natural Resources Wales
Address:	
Email:	

6.2 Management Plan(s):

An actual management plan does exist:

☒	Yes	Name: PEMBROKESHIRE MARINE / SIR BENFRO FOROL Link: https://www.naturalresources.wales/media/673806/Pembrokeshire%20Marine%20Reg%2033%20Advice%20Feb%202020
☐	No, but in preparation	
☐	No	

EXPLANATION OF CODES USED IN THE SPECIAL AREA OF CONSERVATION (SAC) AND SPECIAL PROTECTION AREA (SPA) STANDARD DATA FORMS

The codes in the table below generally follow those explained in the [official European Union guidelines for the Standard Data Form](#) (also referencing the relevant page number).

1.1 Site type

CODE	DESCRIPTION	PAGE NO
A	SPA (classified Special Protection Area)	53
B	cSAC, SCI or SAC (candidate Special Area of Conservation, Site of Community Importance, designated Special Area of Conservation)	53
C	SPA area/boundary is the same as the cSAC/SCI/SAC i.e. a co-classified/designated site (Note: this situation only occurs in Gibraltar)	53

3.1 Habitat code

CODE	DESCRIPTION	PAGE NO
1110	Sandbanks which are slightly covered by sea water all the time	57
1130	Estuaries	57
1140	Mudflats and sandflats not covered by seawater at low tide	57
1150	Coastal lagoons	57
1160	Large shallow inlets and bays	57
1170	Reefs	57
1180	Submarine structures made by leaking gases	57
1210	Annual vegetation of drift lines	57
1220	Perennial vegetation of stony banks	57
1230	Vegetated sea cliffs of the Atlantic and Baltic Coasts	57
1310	Salicornia and other annuals colonizing mud and sand	57
1320	Spartina swards (Spartinion maritimae)	57
1330	Atlantic salt meadows (Glaucio-Puccinellietalia maritimae)	57
1340	Inland salt meadows	57
1420	Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)	57
2110	Embryonic shifting dunes	57
2120	Shifting dunes along the shoreline with Ammophila arenaria ("white dunes")	57
2130	Fixed coastal dunes with herbaceous vegetation ("grey dunes")	57
2140	Decalcified fixed dunes with Empetrum nigrum	57
2150	Atlantic decalcified fixed dunes (Calluno-Ulicetea)	57
2160	Dunes with Hippophya• rhamnoides	57
2170	Dunes with Salix repens ssp. argentea (Salicion arenariae)	57
2190	Humid dune slacks	57
21A0	Machairs (* in Ireland)	57
2250	Coastal dunes with Juniperus spp.	57
2330	Inland dunes with open Corynephorus and Agrostis grasslands	57
3110	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	57
3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea	57
3140	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	57
3150	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation	57

CODE	DESCRIPTION	PAGE NO
3160	Natural dystrophic lakes and ponds	57
3170	Mediterranean temporary ponds	57
3180	Turloughs	57
3260	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation	57
4010	Northern Atlantic wet heaths with Erica tetralix	57
4020	Temperate Atlantic wet heaths with Erica ciliaris and Erica tetralix	57
4030	European dry heaths	57
4040	Dry Atlantic coastal heaths with Erica vagans	57
4060	Alpine and Boreal heaths	57
4080	Sub-Arctic Salix spp. scrub	57
5110	Stable xerothermophilous formations with Buxus sempervirens on rock slopes (Berberidion p.p.)	57
5130	Juniperus communis formations on heaths or calcareous grasslands	57
6130	Calaminarian grasslands of the Violetalia calaminariae	57
6150	Siliceous alpine and boreal grasslands	57
6170	Alpine and subalpine calcareous grasslands	57
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	57
6230	Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	57
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	57
6430	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	57
6510	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	57
6520	Mountain hay meadows	57
7110	Active raised bogs	57
7120	Degraded raised bogs still capable of natural regeneration	57
7130	Blanket bogs (* if active bog)	57
7140	Transition mires and quaking bogs	57
7150	Depressions on peat substrates of the Rhynchosporion	57
7210	Calcareous fens with Cladium mariscus and species of the Caricion davallianae	57
7220	Petrifying springs with tufa formation (Cratoneurion)	57
7230	Alkaline fens	57
7240	Alpine pioneer formations of the Caricion bicoloris-atrofuscae	57
8110	Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	57
8120	Calcareous and calcshist scree of the montane to alpine levels (Thlaspietalia rotundifoliae)	57
8210	Calcareous rocky slopes with chasmophytic vegetation	57
8220	Siliceous rocky slopes with chasmophytic vegetation	57
8240	Limestone pavements	57
8310	Caves not open to the public	57
8330	Submerged or partially submerged sea caves	57
9120	Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robur-petraeae or Ilici-Fagenion)	57
9130	Asperulo-Fagetum beech forests	57
9160	Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli	57
9180	Tilio-Acerion forests of slopes, scree and ravines	57
9190	Old acidophilous oak woods with Quercus robur on sandy plains	57
91A0	Old sessile oak woods with Ilex and Blechnum in the British Isles	57
91C0	Caledonian forest	57
91D0	Bog woodland	57
91E0	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	57
91J0	Taxus baccata woods of the British Isles	57

3.1 Habitat representativity (abbreviated to 'Representativity' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent representativity	57
B	Good representativity	57
C	Significant representativity	57
D	Non-significant presence representativity	57

3.1 Relative surface

CODE	DESCRIPTION	PAGE NO
A	> 15%-100%	58
B	> 2%-15%	58
C	≤ 2%	58

3.1 Degree of conservation (abbreviated to 'Conservation' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	59
B	Good conservation	59
C	Average or reduced conservation	59

3.1 Global assessment (abbreviated to 'Global' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	59
B	Good value	59
C	Significant value	59

3.2 Population (abbreviated to 'Pop.' in data form)

CODE	DESCRIPTION	PAGE NO
A	> 15%-100%	62
B	> 2%-15%	62
C	≤ 2%	62
D	Non-significant population	62

3.2 Degree of conservation (abbreviated to 'Con.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	63
B	Good conservation	63
C	Average or reduced conservation	63

3.2 Isolation (abbreviated to 'Iso.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Population (almost) Isolated	63
B	Population not-isolated, but on margins of area of distribution	63
C	Population not-isolated within extended distribution range	63

3.2 Global Grade (abbreviated to 'Glo.' or 'G.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	63
B	Good value	63
C	Significant value	63

3.3 Other species – essentially covers bird assemblage types

CODE	DESCRIPTION	PAGE NO
WATR	Non-breeding waterbird assemblage	UK specific code
SBA	Breeding seabird assemblage	UK specific code

BBA	Breeding bird assemblage (applies only to sites classified pre 2000)	UK specific code
-----	--	------------------

4.1 Habitat class code

CODE	DESCRIPTION	PAGE NO
N01	Marine areas, Sea inlets	65
N02	Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins)	65
N03	Salt marshes, Salt pastures, Salt steppes	65
N04	Coastal sand dunes, Sand beaches, Machair	65
N05	Shingle, Sea cliffs, Islets	65
N06	Inland water bodies (Standing water, Running water)	65
N07	Bogs, Marshes, Water fringed vegetation, Fens	65
N08	Heath, Scrub, Maquis and Garrigue, Phygrana	65
N09	Dry grassland, Steppes	65
N10	Humid grassland, Mesophile grassland	65
N11	Alpine and sub-Alpine grassland	65
N14	Improved grassland	65
N15	Other arable land	65
N16	Broad-leaved deciduous woodland	65
N17	Coniferous woodland	65
N19	Mixed woodland	65
N21	Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas)	65
N22	Inland rocks, Screes, Sands, Permanent Snow and ice	65
N23	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	65
N25	Grassland and scrub habitats (general)	65
N26	Woodland habitats (general)	65

4.3 Threats code

CODE	DESCRIPTION	PAGE NO
A01	Cultivation	65
A02	Modification of cultivation practices	65
A03	Mowing / cutting of grassland	65
A04	Grazing	65
A05	Livestock farming and animal breeding (without grazing)	65
A06	Annual and perennial non-timber crops	65
A07	Use of biocides, hormones and chemicals	65
A08	Fertilisation	65
A10	Restructuring agricultural land holding	65
A11	Agriculture activities not referred to above	65
B01	Forest planting on open ground	65
B02	Forest and Plantation management & use	65
B03	Forest exploitation without replanting or natural regrowth	65
B04	Use of biocides, hormones and chemicals (forestry)	65
B06	Grazing in forests/ woodland	65
B07	Forestry activities not referred to above	65
C01	Mining and quarrying	65
C02	Exploration and extraction of oil or gas	65
C03	Renewable abiotic energy use	65
D01	Roads, paths and railroads	65
D02	Utility and service lines	65
D03	Shipping lanes, ports, marine constructions	65
D04	Airports, flightpaths	65
D05	Improved access to site	65
E01	Urbanised areas, human habitation	65
E02	Industrial or commercial areas	65

CODE	DESCRIPTION	PAGE NO
E03	Discharges	65
E04	Structures, buildings in the landscape	65
E06	Other urbanisation, industrial and similar activities	65
F01	Marine and Freshwater Aquaculture	65
F02	Fishing and harvesting aquatic resources	65
F03	Hunting and collection of wild animals (terrestrial), including damage caused by game (excessive density), and taking/removal of terrestrial animals (including collection of insects, reptiles, amphibians, birds of prey, etc., trapping, poisoning, poaching, predator control, accidental capture (e.g. due to fishing gear), etc.)	65
F04	Taking / Removal of terrestrial plants, general	65
F05	Illegal taking/ removal of marine fauna	65
F06	Hunting, fishing or collecting activities not referred to above	65
G01	Outdoor sports and leisure activities, recreational activities	65
G02	Sport and leisure structures	65
G03	Interpretative centres	65
G04	Military use and civil unrest	65
G05	Other human intrusions and disturbances	65
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)	65
H02	Pollution to groundwater (point sources and diffuse sources)	65
H03	Marine water pollution	65
H04	Air pollution, air-borne pollutants	65
H05	Soil pollution and solid waste (excluding discharges)	65
H06	Excess energy	65
H07	Other forms of pollution	65
I01	Invasive non-native species	65
I02	Problematic native species	65
I03	Introduced genetic material, GMO	65
J01	Fire and fire suppression	65
J02	Human induced changes in hydraulic conditions	65
J03	Other ecosystem modifications	65
K01	Abiotic (slow) natural processes	65
K02	Biocenotic evolution, succession	65
K03	Interspecific faunal relations	65
K04	Interspecific floral relations	65
K05	Reduced fecundity/ genetic depression	65
L05	Collapse of terrain, landslide	65
L07	Storm, cyclone	65
L08	Inundation (natural processes)	65
L10	Other natural catastrophes	65
M01	Changes in abiotic conditions	65
M02	Changes in biotic conditions	65
U	Unknown threat or pressure	65
XO	Threats and pressures from outside the Member State	65

5.1 Designation type codes

CODE	DESCRIPTION	PAGE NO
UK00	No Protection Status	67
UK01	National Nature Reserve	67
UK04	Site of Special Scientific Interest (GB)	67
UK05	Marine Conservation Zone	67
UK06	Nature Conservation Marine Protected Area	67
UK86	Special Area (Channel Islands)	67
UK98	Area of Special Scientific Interest (NI)	67
IN00	Ramsar Convention site	67
IN08	Special Protection Area	67
IN09	Special Area of Conservation	67

STANDARD DATA FORM for sites within the 'UK national site network of European sites'

Special Protection Areas (SPAs) are classified and Special Areas of Conservation (SACs) are designated under:

- the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales (including the adjacent territorial sea) and to a limited extent in Scotland (reserved matters) and Northern Ireland (excepted matters);
- the Conservation (Natural Habitats &c.) Regulations 1994 (as amended) in Scotland;
- the Conservation (Natural Habitats, &c) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland; and
- the Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended) in the UK offshore area.

Each SAC or SPA (forming part of the UK national site network of European sites) has its own Standard Data Form containing site-specific information. The information provided here generally follows the same documenting format for SACs and SPAs, as set out in the [Official Journal of the European Union recording the Commission Implementing Decision of 11 July 2011 \(2011/484/EU\)](#).

Please note that these forms contain a number of codes, all of which are explained either within the data forms themselves or in the end notes.

More general information on SPAs and SACs in the UK is available from the [SPA homepage](#) and [SAC homepage](#) on the JNCC website. These webpages also provide links to Standard Data Forms for all SAC and SPA sites in the UK.

<https://jncc.gov.uk/>



NATURA 2000 - STANDARD DATA FORM

For Special Protection Areas (SPA),
Proposed Sites for Community Importance (pSCI),
Sites of Community Importance (SCI) and
for Special Areas of Conservation (SAC)

SITE UK0012670
SITENAME Afon Teifi/ River Teifi

TABLE OF CONTENTS

- [1. SITE IDENTIFICATION](#)
- [2. SITE LOCATION](#)
- [3. ECOLOGICAL INFORMATION](#)
- [4. SITE DESCRIPTION](#)
- [5. SITE PROTECTION STATUS AND RELATION WITH CORINE BIOTOPES](#)
- [6. SITE MANAGEMENT](#)

1. SITE IDENTIFICATION

1.1 Type B	1.2 Site code UK0012670	Back to top
----------------------	-----------------------------------	-----------------------------

1.3 Site name

Afon Teifi/ River Teifi

1.4 First Compilation date 1998-06	1.5 Update date 2015-12
--	-----------------------------------

1.6 Respondent:

Name/Organisation: Joint Nature Conservation Committee
Address: Joint Nature Conservation Committee Monkstone House City Road Peterborough PE1 1JY
Email:

Date site proposed as SCI:	1998-06
Date site confirmed as SCI:	2004-12
Date site designated as SAC:	2004-12
National legal reference of SAC designation:	Regulations 11 and 13-15 of the Conservation of Habitats and Species Regulations 2010 (http://www.legislation.gov.uk/uksi/2010/490/contents/made).

2. SITE LOCATION

[Back to top](#)

2.1 Site-centre location [decimal degrees]:

Longitude

-4.170833333

Latitude

52.13583333

2.2 Area [ha]:

691.07

2.3 Marine area [%]

0.0

2.4 Sitelength [km]:

0.0

2.5 Administrative region code and name

NUTS level 2 code

Region Name

UKL1	West Wales and The Valleys
------	----------------------------

2.6 Biogeographical Region(s)

Atlantic (100.0
%)

3. ECOLOGICAL INFORMATION

3.1 Habitat types present on the site and assessment for them

[Back to top](#)

Annex I Habitat types						Site assessment			
Code	PF	NP	Cover [ha]	Cave [number]	Data quality	A B C D	A B C		
						Representativity	Relative Surface	Conservation	Global
1140B			106.42	0	G	D			
1310B			18.38	0	G	D			
1330B			13.61	0	G	D			
2110B			11.54	0	G	D			
3130B			55.29	0	M	C	C	B	C
3260B			69.11	0	M	A	C	A	A

- **PF:** for the habitat types that can have a non-priority as well as a priority form (6210, 7130, 9430) enter "X" in the column PF to indicate the priority form.
- **NP:** in case that a habitat type no longer exists in the site enter: x (optional)
- **Cover:** decimal values can be entered
- **Caves:** for habitat types 8310, 8330 (caves) enter the number of caves if estimated surface is not available.

- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation)

3.2 Species referred to in Article 4 of Directive 2009/147/EC and listed in Annex II of Directive 92/43/EEC and site evaluation for them

Species					Population in the site						Site assessment			
G	Code	Scientific Name	S	NP	T	Size		Unit	Cat.	D.qual.	A B C D	A B C		
						Min	Max				Pop.	Con.	Iso.	Glo.
F	1163	Cottus gobio			p				P	DD	C	B	B	B
F	1099	Lampetra fluviatilis			p				P	DD	C	B	C	B
F	1096	Lampetra planeri			p				P	DD	C	B	C	B
P	1831	Luronium natans			p	10000	10000	i		M	B	B	A	A
M	1355	Lutra lutra			p	11	50	i		M	C	B	C	B
I	1029	Margaritifera margaritifera			p				P	DD	D			
F	1095	Petromyzon marinus			p				P	DD	C	B	C	C
F	1106	Salmo salar			p				P	DD	C	B	C	B

- **Group:** A = Amphibians, B = Birds, F = Fish, I = Invertebrates, M = Mammals, P = Plants, R = Reptiles
- **S:** in case that the data on species are sensitive and therefore have to be blocked for any public access enter: yes
- **NP:** in case that a species is no longer present in the site enter: x (optional)
- **Type:** p = permanent, r = reproducing, c = concentration, w = wintering (for plant and non-migratory species use permanent)
- **Unit:** i = individuals, p = pairs or other units according to the Standard list of population units and codes in accordance with Article 12 and 17 reporting (see [reference portal](#))
- **Abundance categories (Cat.):** C = common, R = rare, V = very rare, P = present - to fill if data are deficient (DD) or in addition to population size information
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation); VP = 'Very poor' (use this category only, if not even a rough estimation of the population size can be made, in this case the fields for population size can remain empty, but the field "Abundance categories" has to be filled in)

4. SITE DESCRIPTION

4.1 General site character

[Back to top](#)

Habitat class	% Cover
N16	10.5
N02	20.0
N08	2.7
N10	1.7
N07	8.9

N03	1.7
N22	1.1
N23	0.8
N06	45.1
N14	7.5
Total Habitat Cover	100.00000000000001

Other Site Characteristics

1 Terrestrial: Soil & Geology: peat,sandstone,alluvium,clay,sand,shingle 2 Terrestrial: Geomorphology and landscape: valley,floodplain,upland,lowland 3 Marine: Geology: mud

4.2 Quality and importance

Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea for which the area is considered to support a significant presence. Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation for which this is considered to be one of the best areas in the United Kingdom. Luronium natans for which this is considered to be one of the best areas in the United Kingdom. Petromyzon marinus for which the area is considered to support a significant presence. Lampetra fluviatilis for which this is considered to be one of the best areas in the United Kingdom. Lampetra planeri for which this is considered to be one of the best areas in the United Kingdom. Salmo salar for which this is considered to be one of the best areas in the United Kingdom. Cottus gobio for which this is considered to be one of the best areas in the United Kingdom. Lutra lutra for which this is considered to be one of the best areas in the United Kingdom.

4.3 Threats, pressures and activities with impacts on the site

The most important impacts and activities with high effect on the site

Negative Impacts			
Rank	Threats and pressures [code]	Pollution (optional) [code]	inside/outside [i o b]
M	C01		I
H	I01		I
M	J02		B
M	F02		I
M	G05		B
L	G01		B
H	H04		B
M	J03		B
H	M01		B
L	A03		I
H	H01		B

Rank: H = high, M = medium, L = low

Pollution: N = Nitrogen input, P = Phosphor/Phosphate input, A = Acid input/acidification,

T = toxic inorganic chemicals, O = toxic organic chemicals, X = Mixed pollutions

i = inside, o = outside, b = both

Positive Impacts			
Rank	Activities, management [code]	Pollution (optional) [code]	inside/outside [i o b]
M	J03		I

4.5 Documentation

The Natural Resources Wales weblink below provides access to information on its designated sites. Detailed information about this Natura 2000 site can be accessed via the Management Plan link provided in Section 6.2. See also the 'UK Approach' document for more information (link via the JNCC website).

Link(s): <https://naturalresources.wales/guidance-and-advice/environmental-topics/wildlife-and-biodiversity/protected-areas-of-land>

http://jncc.defra.gov.uk/pdf/Natura2000_StandardDataForm_UKApproach_Dec2015.pdf

5. SITE PROTECTION STATUS (optional)

[Back to top](#)

5.1 Designation types at national and regional level:

Code	Cover [%]	Code	Cover [%]	Code	Cover [%]
UK01	1.6	UK04	100.0		

6. SITE MANAGEMENT

[Back to top](#)

6.1 Body(ies) responsible for the site management:

Organisation:	Natural Resources Wales
Address:	
Email:	

6.2 Management Plan(s):

An actual management plan does exist:

☒	Yes	Name: AFON TEIFI / RIVER TEIFI
		Link: https://www.naturalresources.wales/media/670702/Afon%20Teifi%20%20River%20Teifi%20Management%20Plan.pdf
☐	No, but in preparation	
☐	No	

EXPLANATION OF CODES USED IN THE SPECIAL AREA OF CONSERVATION (SAC) AND SPECIAL PROTECTION AREA (SPA) STANDARD DATA FORMS

The codes in the table below generally follow those explained in the [official European Union guidelines for the Standard Data Form](#) (also referencing the relevant page number).

1.1 Site type

CODE	DESCRIPTION	PAGE NO
A	SPA (classified Special Protection Area)	53
B	cSAC, SCI or SAC (candidate Special Area of Conservation, Site of Community Importance, designated Special Area of Conservation)	53
C	SPA area/boundary is the same as the cSAC/SCI/SAC i.e. a co-classified/designated site (Note: this situation only occurs in Gibraltar)	53

3.1 Habitat code

CODE	DESCRIPTION	PAGE NO
1110	Sandbanks which are slightly covered by sea water all the time	57
1130	Estuaries	57
1140	Mudflats and sandflats not covered by seawater at low tide	57
1150	Coastal lagoons	57
1160	Large shallow inlets and bays	57
1170	Reefs	57
1180	Submarine structures made by leaking gases	57
1210	Annual vegetation of drift lines	57
1220	Perennial vegetation of stony banks	57
1230	Vegetated sea cliffs of the Atlantic and Baltic Coasts	57
1310	Salicornia and other annuals colonizing mud and sand	57
1320	Spartina swards (Spartinion maritimae)	57
1330	Atlantic salt meadows (Glaucio-Puccinellietalia maritimae)	57
1340	Inland salt meadows	57
1420	Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)	57
2110	Embryonic shifting dunes	57
2120	Shifting dunes along the shoreline with Ammophila arenaria ("white dunes")	57
2130	Fixed coastal dunes with herbaceous vegetation ("grey dunes")	57
2140	Decalcified fixed dunes with Empetrum nigrum	57
2150	Atlantic decalcified fixed dunes (Calluno-Ulicetea)	57
2160	Dunes with Hippophya• rhamnoides	57
2170	Dunes with Salix repens ssp. argentea (Salicion arenariae)	57
2190	Humid dune slacks	57
21A0	Machairs (* in Ireland)	57
2250	Coastal dunes with Juniperus spp.	57
2330	Inland dunes with open Corynephorus and Agrostis grasslands	57
3110	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	57
3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea	57
3140	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	57
3150	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation	57

CODE	DESCRIPTION	PAGE NO
3160	Natural dystrophic lakes and ponds	57
3170	Mediterranean temporary ponds	57
3180	Turloughs	57
3260	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation	57
4010	Northern Atlantic wet heaths with Erica tetralix	57
4020	Temperate Atlantic wet heaths with Erica ciliaris and Erica tetralix	57
4030	European dry heaths	57
4040	Dry Atlantic coastal heaths with Erica vagans	57
4060	Alpine and Boreal heaths	57
4080	Sub-Arctic Salix spp. scrub	57
5110	Stable xerothermophilous formations with Buxus sempervirens on rock slopes (Berberidion p.p.)	57
5130	Juniperus communis formations on heaths or calcareous grasslands	57
6130	Calaminarian grasslands of the Violetalia calaminariae	57
6150	Siliceous alpine and boreal grasslands	57
6170	Alpine and subalpine calcareous grasslands	57
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	57
6230	Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	57
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	57
6430	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	57
6510	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	57
6520	Mountain hay meadows	57
7110	Active raised bogs	57
7120	Degraded raised bogs still capable of natural regeneration	57
7130	Blanket bogs (* if active bog)	57
7140	Transition mires and quaking bogs	57
7150	Depressions on peat substrates of the Rhynchosporion	57
7210	Calcareous fens with Cladium mariscus and species of the Caricion davallianae	57
7220	Petrifying springs with tufa formation (Cratoneurion)	57
7230	Alkaline fens	57
7240	Alpine pioneer formations of the Caricion bicoloris-atrofuscae	57
8110	Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	57
8120	Calcareous and calcshist scree of the montane to alpine levels (Thlaspietalia rotundifoliae)	57
8210	Calcareous rocky slopes with chasmophytic vegetation	57
8220	Siliceous rocky slopes with chasmophytic vegetation	57
8240	Limestone pavements	57
8310	Caves not open to the public	57
8330	Submerged or partially submerged sea caves	57
9120	Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robur-petraeae or Ilici-Fagenion)	57
9130	Asperulo-Fagetum beech forests	57
9160	Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli	57
9180	Tilio-Acerion forests of slopes, scree and ravines	57
9190	Old acidophilous oak woods with Quercus robur on sandy plains	57
91A0	Old sessile oak woods with Ilex and Blechnum in the British Isles	57
91C0	Caledonian forest	57
91D0	Bog woodland	57
91E0	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	57
91J0	Taxus baccata woods of the British Isles	57

3.1 Habitat representativity (abbreviated to 'Representativity' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent representativity	57
B	Good representativity	57
C	Significant representativity	57
D	Non-significant presence representativity	57

3.1 Relative surface

CODE	DESCRIPTION	PAGE NO
A	> 15%-100%	58
B	> 2%-15%	58
C	≤ 2%	58

3.1 Degree of conservation (abbreviated to 'Conservation' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	59
B	Good conservation	59
C	Average or reduced conservation	59

3.1 Global assessment (abbreviated to 'Global' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	59
B	Good value	59
C	Significant value	59

3.2 Population (abbreviated to 'Pop.' in data form)

CODE	DESCRIPTION	PAGE NO
A	> 15%-100%	62
B	> 2%-15%	62
C	≤ 2%	62
D	Non-significant population	62

3.2 Degree of conservation (abbreviated to 'Con.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	63
B	Good conservation	63
C	Average or reduced conservation	63

3.2 Isolation (abbreviated to 'Iso.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Population (almost) Isolated	63
B	Population not-isolated, but on margins of area of distribution	63
C	Population not-isolated within extended distribution range	63

3.2 Global Grade (abbreviated to 'Glo.' or 'G.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	63
B	Good value	63
C	Significant value	63

3.3 Other species – essentially covers bird assemblage types

CODE	DESCRIPTION	PAGE NO
WATR	Non-breeding waterbird assemblage	UK specific code
SBA	Breeding seabird assemblage	UK specific code

BBA	Breeding bird assemblage (applies only to sites classified pre 2000)	UK specific code
-----	--	------------------

4.1 Habitat class code

CODE	DESCRIPTION	PAGE NO
N01	Marine areas, Sea inlets	65
N02	Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins)	65
N03	Salt marshes, Salt pastures, Salt steppes	65
N04	Coastal sand dunes, Sand beaches, Machair	65
N05	Shingle, Sea cliffs, Islets	65
N06	Inland water bodies (Standing water, Running water)	65
N07	Bogs, Marshes, Water fringed vegetation, Fens	65
N08	Heath, Scrub, Maquis and Garrigue, Phygrana	65
N09	Dry grassland, Steppes	65
N10	Humid grassland, Mesophile grassland	65
N11	Alpine and sub-Alpine grassland	65
N14	Improved grassland	65
N15	Other arable land	65
N16	Broad-leaved deciduous woodland	65
N17	Coniferous woodland	65
N19	Mixed woodland	65
N21	Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas)	65
N22	Inland rocks, Screes, Sands, Permanent Snow and ice	65
N23	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	65
N25	Grassland and scrub habitats (general)	65
N26	Woodland habitats (general)	65

4.3 Threats code

CODE	DESCRIPTION	PAGE NO
A01	Cultivation	65
A02	Modification of cultivation practices	65
A03	Mowing / cutting of grassland	65
A04	Grazing	65
A05	Livestock farming and animal breeding (without grazing)	65
A06	Annual and perennial non-timber crops	65
A07	Use of biocides, hormones and chemicals	65
A08	Fertilisation	65
A10	Restructuring agricultural land holding	65
A11	Agriculture activities not referred to above	65
B01	Forest planting on open ground	65
B02	Forest and Plantation management & use	65
B03	Forest exploitation without replanting or natural regrowth	65
B04	Use of biocides, hormones and chemicals (forestry)	65
B06	Grazing in forests/ woodland	65
B07	Forestry activities not referred to above	65
C01	Mining and quarrying	65
C02	Exploration and extraction of oil or gas	65
C03	Renewable abiotic energy use	65
D01	Roads, paths and railroads	65
D02	Utility and service lines	65
D03	Shipping lanes, ports, marine constructions	65
D04	Airports, flightpaths	65
D05	Improved access to site	65
E01	Urbanised areas, human habitation	65
E02	Industrial or commercial areas	65

CODE	DESCRIPTION	PAGE NO
E03	Discharges	65
E04	Structures, buildings in the landscape	65
E06	Other urbanisation, industrial and similar activities	65
F01	Marine and Freshwater Aquaculture	65
F02	Fishing and harvesting aquatic resources	65
F03	Hunting and collection of wild animals (terrestrial), including damage caused by game (excessive density), and taking/removal of terrestrial animals (including collection of insects, reptiles, amphibians, birds of prey, etc., trapping, poisoning, poaching, predator control, accidental capture (e.g. due to fishing gear), etc.)	65
F04	Taking / Removal of terrestrial plants, general	65
F05	Illegal taking/ removal of marine fauna	65
F06	Hunting, fishing or collecting activities not referred to above	65
G01	Outdoor sports and leisure activities, recreational activities	65
G02	Sport and leisure structures	65
G03	Interpretative centres	65
G04	Military use and civil unrest	65
G05	Other human intrusions and disturbances	65
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)	65
H02	Pollution to groundwater (point sources and diffuse sources)	65
H03	Marine water pollution	65
H04	Air pollution, air-borne pollutants	65
H05	Soil pollution and solid waste (excluding discharges)	65
H06	Excess energy	65
H07	Other forms of pollution	65
I01	Invasive non-native species	65
I02	Problematic native species	65
I03	Introduced genetic material, GMO	65
J01	Fire and fire suppression	65
J02	Human induced changes in hydraulic conditions	65
J03	Other ecosystem modifications	65
K01	Abiotic (slow) natural processes	65
K02	Biocenotic evolution, succession	65
K03	Interspecific faunal relations	65
K04	Interspecific floral relations	65
K05	Reduced fecundity/ genetic depression	65
L05	Collapse of terrain, landslide	65
L07	Storm, cyclone	65
L08	Inundation (natural processes)	65
L10	Other natural catastrophes	65
M01	Changes in abiotic conditions	65
M02	Changes in biotic conditions	65
U	Unknown threat or pressure	65
XO	Threats and pressures from outside the Member State	65

5.1 Designation type codes

CODE	DESCRIPTION	PAGE NO
UK00	No Protection Status	67
UK01	National Nature Reserve	67
UK04	Site of Special Scientific Interest (GB)	67
UK05	Marine Conservation Zone	67
UK06	Nature Conservation Marine Protected Area	67
UK86	Special Area (Channel Islands)	67
UK98	Area of Special Scientific Interest (NI)	67
IN00	Ramsar Convention site	67
IN08	Special Protection Area	67
IN09	Special Area of Conservation	67

STANDARD DATA FORM for sites within the 'UK national site network of European sites'

Special Protection Areas (SPAs) are classified and Special Areas of Conservation (SACs) are designated under:

- the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales (including the adjacent territorial sea) and to a limited extent in Scotland (reserved matters) and Northern Ireland (excepted matters);
- the Conservation (Natural Habitats &c.) Regulations 1994 (as amended) in Scotland;
- the Conservation (Natural Habitats, &c) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland; and
- the Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended) in the UK offshore area.

Each SAC or SPA (forming part of the UK national site network of European sites) has its own Standard Data Form containing site-specific information. The information provided here generally follows the same documenting format for SACs and SPAs, as set out in the [Official Journal of the European Union recording the Commission Implementing Decision of 11 July 2011 \(2011/484/EU\)](#).

Please note that these forms contain a number of codes, all of which are explained either within the data forms themselves or in the end notes.

More general information on SPAs and SACs in the UK is available from the [SPA homepage](#) and [SAC homepage](#) on the JNCC website. These webpages also provide links to Standard Data Forms for all SAC and SPA sites in the UK.

<https://jncc.gov.uk/>



NATURA 2000 - STANDARD DATA FORM

For Special Protection Areas (SPA),
Proposed Sites for Community Importance (pSCI),
Sites of Community Importance (SCI) and
for Special Areas of Conservation (SAC)

SITE UK0030397

SITENAME West Wales Marine / Gorllewin Cymru Forol

TABLE OF CONTENTS

- [1. SITE IDENTIFICATION](#)
- [2. SITE LOCATION](#)
- [3. ECOLOGICAL INFORMATION](#)
- [4. SITE DESCRIPTION](#)
- [6. SITE MANAGEMENT](#)
- [7. MAP OF THE SITE](#)

1. SITE IDENTIFICATION

1.1 Type B	1.2 Site code UK0030397	Back to top
----------------------	-----------------------------------	-----------------------------

1.3 Site name

West Wales Marine / Gorllewin Cymru Forol

1.4 First Compilation date 2017-01	1.5 Update date 2019-03
--	-----------------------------------

1.6 Respondent:

Name/Organisation: Joint Nature Conservation Committee
Address: Monkstone House, City Road, Peterborough PE1 1JY
Email:

Date site proposed as SCI:	2017-01
Date site confirmed as SCI:	2017-12
Date site designated as SAC:	2019-02
National legal reference of SAC designation:	Regulations 13 and 17-19 of The Conservation of Habitats and Species Regulations 2017 (https://www.legislation.gov.uk/uksi/2017/1012/contents/made), and Regulations 11, 19 and 20 of The Conservation of Offshore Marine Habitats and Species Regulations 2017 (http://www.legislation.gov.uk/uksi/2017/1013/contents/made).

2. SITE LOCATION

2.1 Site-centre location [decimal degrees]:

Longitude

-4.8897

Latitude

52.2687

2.2 Area [ha]:

737614.0

2.3 Marine area [%]

100.0

2.4 Sitelength [km]:

0.0

2.5 Administrative region code and name

NUTS level 2 code

Region Name

UKZZ

Extra-Regio

2.6 Biogeographical Region(s)

Atlantic (100.0
%)

3. ECOLOGICAL INFORMATION

3.2 Species referred to in Article 4 of Directive 2009/147/EC and listed in Annex II of Directive 92/43/EEC and site evaluation for them

Species					Population in the site						Site assessment			
G	Code	Scientific Name	S	NP	T	Size		Unit	Cat.	D.qual.	A B C D	A B C		
						Min	Max				Pop.	Con.	Iso.	Glo.
M	1351	Phocoena phocoena			p	1419	4484	i	C	M	B	A	C	B

- **Group:** A = Amphibians, B = Birds, F = Fish, I = Invertebrates, M = Mammals, P = Plants, R = Reptiles
- **S:** in case that the data on species are sensitive and therefore have to be blocked for any public access enter: yes
- **NP:** in case that a species is no longer present in the site enter: x (optional)
- **Type:** p = permanent, r = reproducing, c = concentration, w = wintering (for plant and non-migratory species use permanent)
- **Unit:** i = individuals, p = pairs or other units according to the Standard list of population units and codes in accordance with Article 12 and 17 reporting (see [reference portal](#))
- **Abundance categories (Cat.):** C = common, R = rare, V = very rare, P = present - to fill if data are deficient (DD) or in addition to population size information
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation); VP = 'Very poor' (use this category only, if not even a rough estimation of the population size can be made, in this case the fields for population size can remain empty, but the field "Abundance categories" has to be filled in)

4. SITE DESCRIPTION

[Back to top](#)

4.1 General site character

Habitat class	% Cover
N01	100.0
Total Habitat Cover	100

Other Site Characteristics

General site characteristics: A mixture of hard substrate and sediments, including rock, coarse sediment, sand and mud. Full salinity. Water depths between Mean Low Water Tide and 100m.

4.2 Quality and importance

Harbour porpoise (*Phocoena phocoena*) "For which this is considered to be one of the best areas in the United Kingdom".

4.3 Threats, pressures and activities with impacts on the site

The most important impacts and activities with high effect on the site

Negative Impacts			
Rank	Threats and pressures [code]	Pollution (optional) [code]	inside/outside [i o b]
M	C02		b
L	D03		b
L	F02		b
M	G04		b
M	H03	O	b
L	C03		b

Positive Impacts			
Rank	Activities, management [code]	Pollution (optional) [code]	inside/outside [i o b]

Rank: H = high, M = medium, L = low

Pollution: N = Nitrogen input, P = Phosphor/Phosphate input, A = Acid input/acidification,

T = toxic inorganic chemicals, O = toxic organic chemicals, X = Mixed pollutions

i = inside, o = outside, b = both

4.5 Documentation

For information on this site, including the Selection Assessment Document, Conservation Objectives and Advice on Activities document, as well as information about the identification process of the UK network of harbour porpoise SACs, see the Site Information Centre (see link) for this site. The population size estimate in Section 3.2, provided at the time the site was proposed as an SCI, is based on data from a survey conducted in 2005 (Hammond et al. 2013). Revised "population in the site" estimates based on the 2016 survey (Hammond et al. 2017) are a minimum of 964 (lower 95% CI) and maximum of 2558 (higher 95% CI). All these estimates are derived from one-month summer surveys and should not be considered as specific population sizes for the site. Hammond, P. Macleod, K. Berggren, P. Borchers, D. Burt, L. Canadas, A. Desportes, G. Donovan, G. Gilles, A. Gillespie, D. Gordon, J. Hiby, L. Kuklik, I. Leaper, R. Lehnert, K. Leopold, M. Lovell, P. Øien, N. Paxton, C. Ridoux, V. Rogan, E. Samarra, F. Scheidat, M. Sequeira, M. Siebert, U. Skov, H. Swift, R. Tasker, M. Teilmann, J. van Canneyt, O. Vazques, J. (2013). Cetacean abundance and distribution in European Atlantic shelf waters to inform conservation and management. Biological Conservation. 164. 107 - 122. Hammond, P. Lacey, C. Gilles, A. Viquerat, S. Börjesson, P. Herr, H. Macleod, K. Ridoux, V. Santos, M. Scheidat, M. Teilmann, J. Vingada, J. Øien, N. (2017). Estimates of cetacean abundance in European Atlantic waters in summer 2016 from the SCANS-III aerial and shipboard surveys. Available: <https://synergy.st-andrews.ac.uk/scans3/files/2017/05/SCANS-III-design-based-estimates-2017-05-12-final-revis>

Link(s): <http://jncc.defra.gov.uk/page-7343>

6. SITE MANAGEMENT

[Back to top](#)

6.1 Body(ies) responsible for the site management:

Organisation:	Joint Nature Conservation Committee
Address:	
Email:	

Organisation:	Natural Resources Wales
Address:	
Email:	

6.2 Management Plan(s):

An actual management plan does exist:

☐	Yes
☐	No, but in preparation
☒	No

7. MAP OF THE SITES

[Back to top](#)

INSPIRE ID:

Map delivered as PDF in electronic format (optional)

☐ Yes ☒ No

Reference(s) to the original map used for the digitalisation of the electronic boundaries (optional).

EXPLANATION OF CODES USED IN THE SPECIAL AREA OF CONSERVATION (SAC) AND SPECIAL PROTECTION AREA (SPA) STANDARD DATA FORMS

The codes in the table below generally follow those explained in the [official European Union guidelines for the Standard Data Form](#) (also referencing the relevant page number).

1.1 Site type

CODE	DESCRIPTION	PAGE NO
A	SPA (classified Special Protection Area)	53
B	cSAC, SCI or SAC (candidate Special Area of Conservation, Site of Community Importance, designated Special Area of Conservation)	53
C	SPA area/boundary is the same as the cSAC/SCI/SAC i.e. a co-classified/designated site (Note: this situation only occurs in Gibraltar)	53

3.1 Habitat code

CODE	DESCRIPTION	PAGE NO
1110	Sandbanks which are slightly covered by sea water all the time	57
1130	Estuaries	57
1140	Mudflats and sandflats not covered by seawater at low tide	57
1150	Coastal lagoons	57
1160	Large shallow inlets and bays	57
1170	Reefs	57
1180	Submarine structures made by leaking gases	57
1210	Annual vegetation of drift lines	57
1220	Perennial vegetation of stony banks	57
1230	Vegetated sea cliffs of the Atlantic and Baltic Coasts	57
1310	Salicornia and other annuals colonizing mud and sand	57
1320	Spartina swards (Spartinion maritimae)	57
1330	Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	57
1340	Inland salt meadows	57
1420	Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)	57
2110	Embryonic shifting dunes	57
2120	Shifting dunes along the shoreline with Ammophila arenaria ("white dunes")	57
2130	Fixed coastal dunes with herbaceous vegetation ("grey dunes")	57
2140	Decalcified fixed dunes with Empetrum nigrum	57
2150	Atlantic decalcified fixed dunes (Calluno-Ulicetea)	57
2160	Dunes with Hippophya• rhamnoides	57
2170	Dunes with Salix repens ssp. argentea (Salicion arenariae)	57
2190	Humid dune slacks	57
21A0	Machairs (* in Ireland)	57
2250	Coastal dunes with Juniperus spp.	57
2330	Inland dunes with open Corynephorus and Agrostis grasslands	57
3110	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	57
3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea	57
3140	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	57
3150	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation	57

CODE	DESCRIPTION	PAGE NO
3160	Natural dystrophic lakes and ponds	57
3170	Mediterranean temporary ponds	57
3180	Turloughs	57
3260	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation	57
4010	Northern Atlantic wet heaths with Erica tetralix	57
4020	Temperate Atlantic wet heaths with Erica ciliaris and Erica tetralix	57
4030	European dry heaths	57
4040	Dry Atlantic coastal heaths with Erica vagans	57
4060	Alpine and Boreal heaths	57
4080	Sub-Arctic Salix spp. scrub	57
5110	Stable xerothermophilous formations with Buxus sempervirens on rock slopes (Berberidion p.p.)	57
5130	Juniperus communis formations on heaths or calcareous grasslands	57
6130	Calaminarian grasslands of the Violetalia calaminariae	57
6150	Siliceous alpine and boreal grasslands	57
6170	Alpine and subalpine calcareous grasslands	57
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	57
6230	Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	57
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	57
6430	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	57
6510	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	57
6520	Mountain hay meadows	57
7110	Active raised bogs	57
7120	Degraded raised bogs still capable of natural regeneration	57
7130	Blanket bogs (* if active bog)	57
7140	Transition mires and quaking bogs	57
7150	Depressions on peat substrates of the Rhynchosporion	57
7210	Calcareous fens with Cladium mariscus and species of the Caricion davallianae	57
7220	Petrifying springs with tufa formation (Cratoneurion)	57
7230	Alkaline fens	57
7240	Alpine pioneer formations of the Caricion bicoloris-atrofuscae	57
8110	Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	57
8120	Calcareous and calcshist scree of the montane to alpine levels (Thlaspietalia rotundifoliae)	57
8210	Calcareous rocky slopes with chasmophytic vegetation	57
8220	Siliceous rocky slopes with chasmophytic vegetation	57
8240	Limestone pavements	57
8310	Caves not open to the public	57
8330	Submerged or partially submerged sea caves	57
9120	Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robur-petraeae or Ilici-Fagenion)	57
9130	Asperulo-Fagetum beech forests	57
9160	Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli	57
9180	Tilio-Acerion forests of slopes, scree and ravines	57
9190	Old acidophilous oak woods with Quercus robur on sandy plains	57
91A0	Old sessile oak woods with Ilex and Blechnum in the British Isles	57
91C0	Caledonian forest	57
91D0	Bog woodland	57
91E0	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	57
91J0	Taxus baccata woods of the British Isles	57

3.1 Habitat representativity (abbreviated to 'Representativity' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent representativity	57
B	Good representativity	57
C	Significant representativity	57
D	Non-significant presence representativity	57

3.1 Relative surface

CODE	DESCRIPTION	PAGE NO
A	> 15%-100%	58
B	> 2%-15%	58
C	≤ 2%	58

3.1 Degree of conservation (abbreviated to 'Conservation' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	59
B	Good conservation	59
C	Average or reduced conservation	59

3.1 Global assessment (abbreviated to 'Global' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	59
B	Good value	59
C	Significant value	59

3.2 Population (abbreviated to 'Pop.' in data form)

CODE	DESCRIPTION	PAGE NO
A	> 15%-100%	62
B	> 2%-15%	62
C	≤ 2%	62
D	Non-significant population	62

3.2 Degree of conservation (abbreviated to 'Con.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	63
B	Good conservation	63
C	Average or reduced conservation	63

3.2 Isolation (abbreviated to 'Iso.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Population (almost) Isolated	63
B	Population not-isolated, but on margins of area of distribution	63
C	Population not-isolated within extended distribution range	63

3.2 Global Grade (abbreviated to 'Glo.' or 'G.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	63
B	Good value	63
C	Significant value	63

3.3 Other species – essentially covers bird assemblage types

CODE	DESCRIPTION	PAGE NO
WATR	Non-breeding waterbird assemblage	UK specific code
SBA	Breeding seabird assemblage	UK specific code

BBA	Breeding bird assemblage (applies only to sites classified pre 2000)	UK specific code
-----	--	------------------

4.1 Habitat class code

CODE	DESCRIPTION	PAGE NO
N01	Marine areas, Sea inlets	65
N02	Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins)	65
N03	Salt marshes, Salt pastures, Salt steppes	65
N04	Coastal sand dunes, Sand beaches, Machair	65
N05	Shingle, Sea cliffs, Islets	65
N06	Inland water bodies (Standing water, Running water)	65
N07	Bogs, Marshes, Water fringed vegetation, Fens	65
N08	Heath, Scrub, Maquis and Garrigue, Phygrana	65
N09	Dry grassland, Steppes	65
N10	Humid grassland, Mesophile grassland	65
N11	Alpine and sub-Alpine grassland	65
N14	Improved grassland	65
N15	Other arable land	65
N16	Broad-leaved deciduous woodland	65
N17	Coniferous woodland	65
N19	Mixed woodland	65
N21	Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas)	65
N22	Inland rocks, Screes, Sands, Permanent Snow and ice	65
N23	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	65
N25	Grassland and scrub habitats (general)	65
N26	Woodland habitats (general)	65

4.3 Threats code

CODE	DESCRIPTION	PAGE NO
A01	Cultivation	65
A02	Modification of cultivation practices	65
A03	Mowing / cutting of grassland	65
A04	Grazing	65
A05	Livestock farming and animal breeding (without grazing)	65
A06	Annual and perennial non-timber crops	65
A07	Use of biocides, hormones and chemicals	65
A08	Fertilisation	65
A10	Restructuring agricultural land holding	65
A11	Agriculture activities not referred to above	65
B01	Forest planting on open ground	65
B02	Forest and Plantation management & use	65
B03	Forest exploitation without replanting or natural regrowth	65
B04	Use of biocides, hormones and chemicals (forestry)	65
B06	Grazing in forests/ woodland	65
B07	Forestry activities not referred to above	65
C01	Mining and quarrying	65
C02	Exploration and extraction of oil or gas	65
C03	Renewable abiotic energy use	65
D01	Roads, paths and railroads	65
D02	Utility and service lines	65
D03	Shipping lanes, ports, marine constructions	65
D04	Airports, flightpaths	65
D05	Improved access to site	65
E01	Urbanised areas, human habitation	65
E02	Industrial or commercial areas	65

CODE	DESCRIPTION	PAGE NO
E03	Discharges	65
E04	Structures, buildings in the landscape	65
E06	Other urbanisation, industrial and similar activities	65
F01	Marine and Freshwater Aquaculture	65
F02	Fishing and harvesting aquatic resources	65
F03	Hunting and collection of wild animals (terrestrial), including damage caused by game (excessive density), and taking/removal of terrestrial animals (including collection of insects, reptiles, amphibians, birds of prey, etc., trapping, poisoning, poaching, predator control, accidental capture (e.g. due to fishing gear), etc.)	65
F04	Taking / Removal of terrestrial plants, general	65
F05	Illegal taking/ removal of marine fauna	65
F06	Hunting, fishing or collecting activities not referred to above	65
G01	Outdoor sports and leisure activities, recreational activities	65
G02	Sport and leisure structures	65
G03	Interpretative centres	65
G04	Military use and civil unrest	65
G05	Other human intrusions and disturbances	65
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)	65
H02	Pollution to groundwater (point sources and diffuse sources)	65
H03	Marine water pollution	65
H04	Air pollution, air-borne pollutants	65
H05	Soil pollution and solid waste (excluding discharges)	65
H06	Excess energy	65
H07	Other forms of pollution	65
I01	Invasive non-native species	65
I02	Problematic native species	65
I03	Introduced genetic material, GMO	65
J01	Fire and fire suppression	65
J02	Human induced changes in hydraulic conditions	65
J03	Other ecosystem modifications	65
K01	Abiotic (slow) natural processes	65
K02	Biocenotic evolution, succession	65
K03	Interspecific faunal relations	65
K04	Interspecific floral relations	65
K05	Reduced fecundity/ genetic depression	65
L05	Collapse of terrain, landslide	65
L07	Storm, cyclone	65
L08	Inundation (natural processes)	65
L10	Other natural catastrophes	65
M01	Changes in abiotic conditions	65
M02	Changes in biotic conditions	65
U	Unknown threat or pressure	65
XO	Threats and pressures from outside the Member State	65

5.1 Designation type codes

CODE	DESCRIPTION	PAGE NO
UK00	No Protection Status	67
UK01	National Nature Reserve	67
UK04	Site of Special Scientific Interest (GB)	67
UK05	Marine Conservation Zone	67
UK06	Nature Conservation Marine Protected Area	67
UK86	Special Area (Channel Islands)	67
UK98	Area of Special Scientific Interest (NI)	67
IN00	Ramsar Convention site	67
IN08	Special Protection Area	67
IN09	Special Area of Conservation	67

STANDARD DATA FORM for sites within the 'UK national site network of European sites'

Special Protection Areas (SPAs) are classified and Special Areas of Conservation (SACs) are designated under:

- the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales (including the adjacent territorial sea) and to a limited extent in Scotland (reserved matters) and Northern Ireland (excepted matters);
- the Conservation (Natural Habitats &c.) Regulations 1994 (as amended) in Scotland;
- the Conservation (Natural Habitats, &c) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland; and
- the Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended) in the UK offshore area.

Each SAC or SPA (forming part of the UK national site network of European sites) has its own Standard Data Form containing site-specific information. The information provided here generally follows the same documenting format for SACs and SPAs, as set out in the [Official Journal of the European Union recording the Commission Implementing Decision of 11 July 2011 \(2011/484/EU\)](#).

Please note that these forms contain a number of codes, all of which are explained either within the data forms themselves or in the end notes.

More general information on SPAs and SACs in the UK is available from the [SPA homepage](#) and [SAC homepage](#) on the JNCC website. These webpages also provide links to Standard Data Forms for all SAC and SPA sites in the UK.

<https://jncc.gov.uk/>



NATURA 2000 - STANDARD DATA FORM

For Special Protection Areas (SPA),
Proposed Sites for Community Importance (pSCI),
Sites of Community Importance (SCI) and
for Special Areas of Conservation (SAC)

SITE UK0013117
SITENAME Pen Lln a`r Sarnau/ Lleyn Peninsula and the Sarnau

TABLE OF CONTENTS

- [1. SITE IDENTIFICATION](#)
- [2. SITE LOCATION](#)
- [3. ECOLOGICAL INFORMATION](#)
- [4. SITE DESCRIPTION](#)
- [5. SITE PROTECTION STATUS AND RELATION WITH CORINE BIOTOPES](#)
- [6. SITE MANAGEMENT](#)

1. SITE IDENTIFICATION

1.1 Type B	1.2 Site code UK0013117	Back to top
----------------------	-----------------------------------	-----------------------------

1.3 Site name

Pen Lln a`r Sarnau/ Lleyn Peninsula and the Sarnau

1.4 First Compilation date 1996-01	1.5 Update date 2015-12
--	-----------------------------------

1.6 Respondent:

Name/Organisation: Joint Nature Conservation Committee

Address: Joint Nature Conservation Committee Monkstone House City Road Peterborough
PE1 1JY

Email:

Date site proposed as SCI: 1996-01

Date site confirmed as SCI: 2004-12

Date site designated as SAC: 2004-12

National legal reference of SAC designation:

Regulations 11 and 13-15 of the Conservation of Habitats and Species Regulations 2010
(<http://www.legislation.gov.uk/uksi/2010/490/contents/made>).

2. SITE LOCATION

[Back to top](#)

		0.0	0	G	D			
1330		730.05	0	G	B	B	B	C
8330		146.01	0	G	C	C	A	C

- **PF:** for the habitat types that can have a non-priority as well as a priority form (6210, 7130, 9430) enter "X" in the column PF to indicate the priority form.
- **NP:** in case that a habitat type no longer exists in the site enter: x (optional)
- **Cover:** decimal values can be entered
- **Caves:** for habitat types 8310, 8330 (caves) enter the number of caves if estimated surface is not available.
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation)

3.2 Species referred to in Article 4 of Directive 2009/147/EC and listed in Annex II of Directive 92/43/EEC and site evaluation for them

Species					Population in the site						Site assessment			
G	Code	Scientific Name	S	NP	T	Size		Unit	Cat.	D.qual.	A B C D	A B C		
						Min	Max				Pop.	Con.	Iso.	Glo.
F	1102	Alosa alosa			p				P	DD	D			
F	1103	Alosa fallax			p				P	DD	D			
M	1364	Halichoerus grypus			p	101	250	i		M	C	B	B	C
F	1099	Lampetra fluviatilis			p				P	DD	D			
M	1355	Lutra lutra			p				P	DD	C	B	C	C
F	1095	Petromyzon marinus			p				P	DD	D			
M	1351	Phocoena phocoena			p				P	DD	D			
M	1349	Tursiops truncatus			p				P	DD	C	B	C	C

- **Group:** A = Amphibians, B = Birds, F = Fish, I = Invertebrates, M = Mammals, P = Plants, R = Reptiles
- **S:** in case that the data on species are sensitive and therefore have to be blocked for any public access enter: yes
- **NP:** in case that a species is no longer present in the site enter: x (optional)
- **Type:** p = permanent, r = reproducing, c = concentration, w = wintering (for plant and non-migratory species use permanent)
- **Unit:** i = individuals, p = pairs or other units according to the Standard list of population units and codes in accordance with Article 12 and 17 reporting (see [reference portal](#))
- **Abundance categories (Cat.):** C = common, R = rare, V = very rare, P = present - to fill if data are deficient (DD) or in addition to population size information
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation); VP = 'Very poor' (use this category only, if not even a rough estimation of the population size can be made, in this case the fields for population size can remain empty, but the field "Abundance categories" has to be filled in)

4. SITE DESCRIPTION

4.1 General site character

Habitat class	% Cover
N05	0.2
N07	0.1
N03	1.2
N04	0.5
N01	92.6
N02	5.4
Total Habitat Cover	100

Other Site Characteristics

1 Terrestrial: Soil & Geology: sand, sedimentary, shingle, clay, igneous, metamorphic, mud 2 Terrestrial: Geomorphology and landscape: caves, coastal, island, floodplain 3 Marine: Geology: metamorphic, sedimentary, igneous, mud, gravel, cobble, biogenic reef, sand, pebble, maerl, boulder, clay, peat, slate/shale 4 Marine: Geomorphology: open coast (including bay), cliffs, estuary, lagoon, surge gullies, subtidal sediments (including sandbank/mudbank), subtidal rock (including rocky reefs), sound/strait, islands, intertidal sediments (including sandflat/mudflat), intertidal rock, cave/tunnel, basins

4.2 Quality and importance

Sandbanks which are slightly covered by sea water all the time for which this is considered to be one of the best areas in the United Kingdom. Estuaries for which this is considered to be one of the best areas in the United Kingdom. Mudflats and sandflats not covered by seawater at low tide for which the area is considered to support a significant presence. Coastal lagoons for which this is considered to be one of the best areas in the United Kingdom. Large shallow inlets and bays for which this is considered to be one of the best areas in the United Kingdom. Reefs for which this is considered to be one of the best areas in the United Kingdom. Submerged or partially submerged sea caves for which the area is considered to support a significant presence. Salicornia and other annuals colonising mud and sand for which the area is considered to support a significant presence. Atlantic salt meadows (*Glauco-Puccinellietalia maritima*) for which the area is considered to support a significant presence. *Lutra lutra* for which the area is considered to support a significant presence. *Halichoerus grypus* for which the area is considered to support a significant presence. *Tursiops truncatus* for which the area is considered to support a significant presence.

4.3 Threats, pressures and activities with impacts on the site

The most important impacts and activities with high effect on the site

Negative Impacts			
Rank	Threats and pressures [code]	Pollution (optional) [code]	inside/outside [i o b]
M	H01		B
H	A04		I
M	H03		B
H	I01		B
H	J02		B
H	F02		B
M	M01		B
H	G05		I
M	B02		B
M	G01		B
M	H02		B

Positive Impacts			
Rank	Activities, management [code]	Pollution (optional) [code]	inside/outside [i o b]
M	G01		I
M	D01		I
M	G03		B
M	A04		B
M	G02		I

Rank: H = high, M = medium, L = low

Pollution: N = Nitrogen input, P = Phosphor/Phosphate input, A = Acid input/acidification,

T = toxic inorganic chemicals, O = toxic organic chemicals, X = Mixed pollutions

i = inside, o = outside, b = both

4.5 Documentation

The Natural Resources Wales weblink below provides access to information on its designated sites. Detailed information about this Natura 2000 site can be accessed via the Management Plan link provided in Section 6.2. See also the 'UK Approach' document for more information (link via the JNCC website).

Link(s): <https://naturalresources.wales/guidance-and-advice/environmental-topics/wildlife-and-biodiversity/protected-areas-of-lan>

http://jncc.defra.gov.uk/pdf/Natura2000_StandardDataForm_UKApproach_Dec2015.pdf

5. SITE PROTECTION STATUS (optional)

[Back to top](#)

5.1 Designation types at national and regional level:

Code	Cover [%]	Code	Cover [%]	Code	Cover [%]
UK04	4.6	UK01	1.6	UK00	95.4

6. SITE MANAGEMENT

[Back to top](#)

6.1 Body(ies) responsible for the site management:

Organisation:	Natural Resources Wales
Address:	
Email:	

6.2 Management Plan(s):

An actual management plan does exist:

☒	Yes	Name: PEN LLYN A'R SARNAU / LLEYN PENINSULA AND THE SARNAU
		Link: https://www.naturalresources.wales/media/673816/Pen%20Llyn%20ar%20Sarnau%20%20R33%20Feb%202009.pdf
☐	No, but in preparation	
☐	No	

EXPLANATION OF CODES USED IN THE SPECIAL AREA OF CONSERVATION (SAC) AND SPECIAL PROTECTION AREA (SPA) STANDARD DATA FORMS

The codes in the table below generally follow those explained in the [official European Union guidelines for the Standard Data Form](#) (also referencing the relevant page number).

1.1 Site type

CODE	DESCRIPTION	PAGE NO
A	SPA (classified Special Protection Area)	53
B	cSAC, SCI or SAC (candidate Special Area of Conservation, Site of Community Importance, designated Special Area of Conservation)	53
C	SPA area/boundary is the same as the cSAC/SCI/SAC i.e. a co-classified/designated site (Note: this situation only occurs in Gibraltar)	53

3.1 Habitat code

CODE	DESCRIPTION	PAGE NO
1110	Sandbanks which are slightly covered by sea water all the time	57
1130	Estuaries	57
1140	Mudflats and sandflats not covered by seawater at low tide	57
1150	Coastal lagoons	57
1160	Large shallow inlets and bays	57
1170	Reefs	57
1180	Submarine structures made by leaking gases	57
1210	Annual vegetation of drift lines	57
1220	Perennial vegetation of stony banks	57
1230	Vegetated sea cliffs of the Atlantic and Baltic Coasts	57
1310	Salicornia and other annuals colonizing mud and sand	57
1320	Spartina swards (Spartinion maritimae)	57
1330	Atlantic salt meadows (Glaucio-Puccinellietalia maritimae)	57
1340	Inland salt meadows	57
1420	Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)	57
2110	Embryonic shifting dunes	57
2120	Shifting dunes along the shoreline with Ammophila arenaria ("white dunes")	57
2130	Fixed coastal dunes with herbaceous vegetation ("grey dunes")	57
2140	Decalcified fixed dunes with Empetrum nigrum	57
2150	Atlantic decalcified fixed dunes (Calluno-Ulicetea)	57
2160	Dunes with Hippophya• rhamnoides	57
2170	Dunes with Salix repens ssp. argentea (Salicion arenariae)	57
2190	Humid dune slacks	57
21A0	Machairs (* in Ireland)	57
2250	Coastal dunes with Juniperus spp.	57
2330	Inland dunes with open Corynephorus and Agrostis grasslands	57
3110	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	57
3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea	57
3140	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	57
3150	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation	57

CODE	DESCRIPTION	PAGE NO
3160	Natural dystrophic lakes and ponds	57
3170	Mediterranean temporary ponds	57
3180	Turloughs	57
3260	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation	57
4010	Northern Atlantic wet heaths with Erica tetralix	57
4020	Temperate Atlantic wet heaths with Erica ciliaris and Erica tetralix	57
4030	European dry heaths	57
4040	Dry Atlantic coastal heaths with Erica vagans	57
4060	Alpine and Boreal heaths	57
4080	Sub-Arctic Salix spp. scrub	57
5110	Stable xerothermophilous formations with Buxus sempervirens on rock slopes (Berberidion p.p.)	57
5130	Juniperus communis formations on heaths or calcareous grasslands	57
6130	Calaminarian grasslands of the Violetalia calaminariae	57
6150	Siliceous alpine and boreal grasslands	57
6170	Alpine and subalpine calcareous grasslands	57
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	57
6230	Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	57
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	57
6430	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	57
6510	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	57
6520	Mountain hay meadows	57
7110	Active raised bogs	57
7120	Degraded raised bogs still capable of natural regeneration	57
7130	Blanket bogs (* if active bog)	57
7140	Transition mires and quaking bogs	57
7150	Depressions on peat substrates of the Rhynchosporion	57
7210	Calcareous fens with Cladium mariscus and species of the Caricion davallianae	57
7220	Petrifying springs with tufa formation (Cratoneurion)	57
7230	Alkaline fens	57
7240	Alpine pioneer formations of the Caricion bicoloris-atrofuscae	57
8110	Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	57
8120	Calcareous and calcshist scree of the montane to alpine levels (Thlaspietalia rotundifoliae)	57
8210	Calcareous rocky slopes with chasmophytic vegetation	57
8220	Siliceous rocky slopes with chasmophytic vegetation	57
8240	Limestone pavements	57
8310	Caves not open to the public	57
8330	Submerged or partially submerged sea caves	57
9120	Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robur-petraeae or Ilici-Fagenion)	57
9130	Asperulo-Fagetum beech forests	57
9160	Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli	57
9180	Tilio-Acerion forests of slopes, scree and ravines	57
9190	Old acidophilous oak woods with Quercus robur on sandy plains	57
91A0	Old sessile oak woods with Ilex and Blechnum in the British Isles	57
91C0	Caledonian forest	57
91D0	Bog woodland	57
91E0	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	57
91J0	Taxus baccata woods of the British Isles	57

3.1 Habitat representativity (abbreviated to 'Representativity' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent representativity	57
B	Good representativity	57
C	Significant representativity	57
D	Non-significant presence representativity	57

3.1 Relative surface

CODE	DESCRIPTION	PAGE NO
A	> 15%-100%	58
B	> 2%-15%	58
C	≤ 2%	58

3.1 Degree of conservation (abbreviated to 'Conservation' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	59
B	Good conservation	59
C	Average or reduced conservation	59

3.1 Global assessment (abbreviated to 'Global' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	59
B	Good value	59
C	Significant value	59

3.2 Population (abbreviated to 'Pop.' in data form)

CODE	DESCRIPTION	PAGE NO
A	> 15%-100%	62
B	> 2%-15%	62
C	≤ 2%	62
D	Non-significant population	62

3.2 Degree of conservation (abbreviated to 'Con.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	63
B	Good conservation	63
C	Average or reduced conservation	63

3.2 Isolation (abbreviated to 'Iso.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Population (almost) Isolated	63
B	Population not-isolated, but on margins of area of distribution	63
C	Population not-isolated within extended distribution range	63

3.2 Global Grade (abbreviated to 'Glo.' or 'G.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	63
B	Good value	63
C	Significant value	63

3.3 Other species – essentially covers bird assemblage types

CODE	DESCRIPTION	PAGE NO
WATR	Non-breeding waterbird assemblage	UK specific code
SBA	Breeding seabird assemblage	UK specific code

BBA	Breeding bird assemblage (applies only to sites classified pre 2000)	UK specific code
-----	--	------------------

4.1 Habitat class code

CODE	DESCRIPTION	PAGE NO
N01	Marine areas, Sea inlets	65
N02	Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins)	65
N03	Salt marshes, Salt pastures, Salt steppes	65
N04	Coastal sand dunes, Sand beaches, Machair	65
N05	Shingle, Sea cliffs, Islets	65
N06	Inland water bodies (Standing water, Running water)	65
N07	Bogs, Marshes, Water fringed vegetation, Fens	65
N08	Heath, Scrub, Maquis and Garrigue, Phygrana	65
N09	Dry grassland, Steppes	65
N10	Humid grassland, Mesophile grassland	65
N11	Alpine and sub-Alpine grassland	65
N14	Improved grassland	65
N15	Other arable land	65
N16	Broad-leaved deciduous woodland	65
N17	Coniferous woodland	65
N19	Mixed woodland	65
N21	Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas)	65
N22	Inland rocks, Screes, Sands, Permanent Snow and ice	65
N23	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	65
N25	Grassland and scrub habitats (general)	65
N26	Woodland habitats (general)	65

4.3 Threats code

CODE	DESCRIPTION	PAGE NO
A01	Cultivation	65
A02	Modification of cultivation practices	65
A03	Mowing / cutting of grassland	65
A04	Grazing	65
A05	Livestock farming and animal breeding (without grazing)	65
A06	Annual and perennial non-timber crops	65
A07	Use of biocides, hormones and chemicals	65
A08	Fertilisation	65
A10	Restructuring agricultural land holding	65
A11	Agriculture activities not referred to above	65
B01	Forest planting on open ground	65
B02	Forest and Plantation management & use	65
B03	Forest exploitation without replanting or natural regrowth	65
B04	Use of biocides, hormones and chemicals (forestry)	65
B06	Grazing in forests/ woodland	65
B07	Forestry activities not referred to above	65
C01	Mining and quarrying	65
C02	Exploration and extraction of oil or gas	65
C03	Renewable abiotic energy use	65
D01	Roads, paths and railroads	65
D02	Utility and service lines	65
D03	Shipping lanes, ports, marine constructions	65
D04	Airports, flightpaths	65
D05	Improved access to site	65
E01	Urbanised areas, human habitation	65
E02	Industrial or commercial areas	65

CODE	DESCRIPTION	PAGE NO
E03	Discharges	65
E04	Structures, buildings in the landscape	65
E06	Other urbanisation, industrial and similar activities	65
F01	Marine and Freshwater Aquaculture	65
F02	Fishing and harvesting aquatic resources	65
F03	Hunting and collection of wild animals (terrestrial), including damage caused by game (excessive density), and taking/removal of terrestrial animals (including collection of insects, reptiles, amphibians, birds of prey, etc., trapping, poisoning, poaching, predator control, accidental capture (e.g. due to fishing gear), etc.)	65
F04	Taking / Removal of terrestrial plants, general	65
F05	Illegal taking/ removal of marine fauna	65
F06	Hunting, fishing or collecting activities not referred to above	65
G01	Outdoor sports and leisure activities, recreational activities	65
G02	Sport and leisure structures	65
G03	Interpretative centres	65
G04	Military use and civil unrest	65
G05	Other human intrusions and disturbances	65
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)	65
H02	Pollution to groundwater (point sources and diffuse sources)	65
H03	Marine water pollution	65
H04	Air pollution, air-borne pollutants	65
H05	Soil pollution and solid waste (excluding discharges)	65
H06	Excess energy	65
H07	Other forms of pollution	65
I01	Invasive non-native species	65
I02	Problematic native species	65
I03	Introduced genetic material, GMO	65
J01	Fire and fire suppression	65
J02	Human induced changes in hydraulic conditions	65
J03	Other ecosystem modifications	65
K01	Abiotic (slow) natural processes	65
K02	Biocenotic evolution, succession	65
K03	Interspecific faunal relations	65
K04	Interspecific floral relations	65
K05	Reduced fecundity/ genetic depression	65
L05	Collapse of terrain, landslide	65
L07	Storm, cyclone	65
L08	Inundation (natural processes)	65
L10	Other natural catastrophes	65
M01	Changes in abiotic conditions	65
M02	Changes in biotic conditions	65
U	Unknown threat or pressure	65
XO	Threats and pressures from outside the Member State	65

5.1 Designation type codes

CODE	DESCRIPTION	PAGE NO
UK00	No Protection Status	67
UK01	National Nature Reserve	67
UK04	Site of Special Scientific Interest (GB)	67
UK05	Marine Conservation Zone	67
UK06	Nature Conservation Marine Protected Area	67
UK86	Special Area (Channel Islands)	67
UK98	Area of Special Scientific Interest (NI)	67
IN00	Ramsar Convention site	67
IN08	Special Protection Area	67
IN09	Special Area of Conservation	67

STANDARD DATA FORM for sites within the 'UK national site network of European sites'

Special Protection Areas (SPAs) are classified and Special Areas of Conservation (SACs) are designated under:

- the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales (including the adjacent territorial sea) and to a limited extent in Scotland (reserved matters) and Northern Ireland (excepted matters);
- the Conservation (Natural Habitats &c.) Regulations 1994 (as amended) in Scotland;
- the Conservation (Natural Habitats, &c) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland; and
- the Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended) in the UK offshore area.

Each SAC or SPA (forming part of the UK national site network of European sites) has its own Standard Data Form containing site-specific information. The information provided here generally follows the same documenting format for SACs and SPAs, as set out in the [Official Journal of the European Union recording the Commission Implementing Decision of 11 July 2011 \(2011/484/EU\)](#).

Please note that these forms contain a number of codes, all of which are explained either within the data forms themselves or in the end notes.

More general information on SPAs and SACs in the UK is available from the [SPA homepage](#) and [SAC homepage](#) on the JNCC website. These webpages also provide links to Standard Data Forms for all SAC and SPA sites in the UK.

<https://jncc.gov.uk/>



NATURA 2000 - STANDARD DATA FORM

For Special Protection Areas (SPA),
Proposed Sites for Community Importance (pSCI),
Sites of Community Importance (SCI) and
for Special Areas of Conservation (SAC)

SITE UK0030396

SITENAME Bristol Channel Approaches / Dynesfeydd Môr Hafren

TABLE OF CONTENTS

- [1. SITE IDENTIFICATION](#)
- [2. SITE LOCATION](#)
- [3. ECOLOGICAL INFORMATION](#)
- [4. SITE DESCRIPTION](#)
- [6. SITE MANAGEMENT](#)
- [7. MAP OF THE SITE](#)

1. SITE IDENTIFICATION

1.1 Type B	1.2 Site code UK0030396	Back to top
----------------------	-----------------------------------	-----------------------------

1.3 Site name

Bristol Channel Approaches / Dynesfeydd Môr Hafren

1.4 First Compilation date 2017-01	1.5 Update date 2019-03
--	-----------------------------------

1.6 Respondent:

Name/Organisation: Joint Nature Conservation Committee
Address: Monkstone House, City Road, Peterborough, PE1 1JY
Email:

Date site proposed as SCI:	2017-01
Date site confirmed as SCI:	2017-12
Date site designated as SAC:	2019-02
National legal reference of SAC designation:	Regulations 13 and 17-19 of The Conservation of Habitats and Species Regulations 2017 (https://www.legislation.gov.uk/uksi/2017/1012/contents/made), and Regulations 11, 19 and 20 of The Conservation of Offshore Marine Habitats and Species Regulations 2017 (http://www.legislation.gov.uk/uksi/2017/1013/contents/made).

2. SITE LOCATION

2.1 Site-centre location [decimal degrees]:

Longitude

-4.9093

Latitude

51.0291

2.2 Area [ha]:

584994.0

2.3 Marine area [%]

100.0

2.4 Sitelength [km]:

0.0

2.5 Administrative region code and name

NUTS level 2 code

Region Name

UKZZ	Extra-Regio
------	-------------

2.6 Biogeographical Region(s)

Atlantic (100.0 %)

3. ECOLOGICAL INFORMATION

3.2 Species referred to in Article 4 of Directive 2009/147/EC and listed in Annex II of Directive 92/43/EEC and site evaluation for them

Species					Population in the site						Site assessment			
G	Code	Scientific Name	S	NP	T	Size		Unit	Cat.	D.qual.	A B C D	A B C		
						Min	Max				Pop.	Con.	Iso.	Glo.
M	1351	Phocoena phocoena			p	810	5693	i	C	M	B	B	C	B

- **Group:** A = Amphibians, B = Birds, F = Fish, I = Invertebrates, M = Mammals, P = Plants, R = Reptiles
- **S:** in case that the data on species are sensitive and therefore have to be blocked for any public access enter: yes
- **NP:** in case that a species is no longer present in the site enter: x (optional)
- **Type:** p = permanent, r = reproducing, c = concentration, w = wintering (for plant and non-migratory species use permanent)
- **Unit:** i = individuals, p = pairs or other units according to the Standard list of population units and codes in accordance with Article 12 and 17 reporting (see [reference portal](#))
- **Abundance categories (Cat.):** C = common, R = rare, V = very rare, P = present - to fill if data are deficient (DD) or in addition to population size information
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation); VP = 'Very poor' (use this category only, if not even a rough estimation of the population size can be made, in this case the fields for population size can remain empty, but the field "Abundance categories" has to be filled in)

4. SITE DESCRIPTION

[Back to top](#)

4.1 General site character

Habitat class	% Cover
N01	100.0
Total Habitat Cover	100

Other Site Characteristics

General site characteristics: Sand and coarse sediments. Full salinity. Water depths between Mean Low Water Tide and 70m.

4.2 Quality and importance

Harbour porpoise (*Phocoena phocoena*) "For which this is considered to be one of the best areas in the United Kingdom".

4.3 Threats, pressures and activities with impacts on the site

The most important impacts and activities with high effect on the site

Negative Impacts			
Rank	Threats and pressures [code]	Pollution (optional) [code]	inside/outside [i o b]
L	J03		b
H	F02		b
M	H03	O	b
L	D03		b
L	C02		b
L	C03		b
M	G04		b

Rank: H = high, M = medium, L = low

Pollution: N = Nitrogen input, P = Phosphor/Phosphate input, A = Acid input/acidification,

T = toxic inorganic chemicals, O = toxic organic chemicals, X = Mixed pollutions

i = inside, o = outside, b = both

Positive Impacts			
Rank	Activities, management [code]	Pollution (optional) [code]	inside/outside [i o b]

4.5 Documentation

For information on this site, including the Selection Assessment Document, Conservation Objectives and Advice on Activities document, as well as information about the identification process of the UK network of harbour porpoise SACs, see the Site Information Centre (see link) for this site. The population size estimate in Section 3.2, provided at the time the site was proposed as an SCI, is based on data from a survey conducted in 2005 (Hammond et al. 2013). Revised "population in the site" estimates based on the 2016 survey (Hammond et al. 2017) are a minimum of 278 (lower 95% CI) and maximum of 1713 (higher 95% CI). All these estimates are derived from one-month summer surveys and should not be considered as specific population sizes for the site. Hammond, P. Macleod, K. Berggren, P. Borchers, D. Burt, L. Canadas, A. Desportes, G. Donovan, G. Gilles, A. Gillespie, D. Gordon, J. Hiby, L. Kuklik, I. Leaper, R. Lehnert, K. Leopold, M. Lovell, P. Øien, N. Paxton, C. Ridoux, V. Rogan, E. Samarra, F. Scheidat, M. Sequeira, M. Siebert, U. Skov, H. Swift, R. Tasker, M. Teilmann, J. van Canneyt, O. Vazques, J. (2013). Cetacean abundance and distribution in European Atlantic shelf waters to inform conservation and management. Biological Conservation. 164. 107 - 122. Hammond, P. Lacey, C. Gilles, A. Viquerat, S. Börjesson, P. Herr, H. Macleod, K. Ridoux, V. Santos, M. Scheidat, M. Teilmann, J. Vingada, J. Øien, N. (2017). Estimates of cetacean abundance in European Atlantic waters in summer 2016 from the SCANS-III aerial and shipboard surveys. Available: <https://synergy.st-andrews.ac.uk/scans3/files/2017/05/SCANS-III-design-based-estimates-2017-05-12-final-revis>

Link(s): <http://jncc.defra.gov.uk/page-7241>

6. SITE MANAGEMENT

[Back to top](#)

6.1 Body(ies) responsible for the site management:

Organisation:	Natural England
Address:	
Email:	

Organisation:	Natural Resources Wales
Address:	
Email:	

Organisation:	Joint Nature Conservation Committee
Address:	
Email:	

6.2 Management Plan(s):

An actual management plan does exist:

☐	Yes
☐	No, but in preparation
☒	No

7. MAP OF THE SITES

[Back to top](#)

INSPIRE ID:	
-------------	--

Map delivered as PDF in electronic format (optional)

☐	Yes	☒	No
--------------------------	-----	-------------------------------------	----

Reference(s) to the original map used for the digitalisation of the electronic boundaries (optional).

--

EXPLANATION OF CODES USED IN THE SPECIAL AREA OF CONSERVATION (SAC) AND SPECIAL PROTECTION AREA (SPA) STANDARD DATA FORMS

The codes in the table below generally follow those explained in the [official European Union guidelines for the Standard Data Form](#) (also referencing the relevant page number).

1.1 Site type

CODE	DESCRIPTION	PAGE NO
A	SPA (classified Special Protection Area)	53
B	cSAC, SCI or SAC (candidate Special Area of Conservation, Site of Community Importance, designated Special Area of Conservation)	53
C	SPA area/boundary is the same as the cSAC/SCI/SAC i.e. a co-classified/designated site (Note: this situation only occurs in Gibraltar)	53

3.1 Habitat code

CODE	DESCRIPTION	PAGE NO
1110	Sandbanks which are slightly covered by sea water all the time	57
1130	Estuaries	57
1140	Mudflats and sandflats not covered by seawater at low tide	57
1150	Coastal lagoons	57
1160	Large shallow inlets and bays	57
1170	Reefs	57
1180	Submarine structures made by leaking gases	57
1210	Annual vegetation of drift lines	57
1220	Perennial vegetation of stony banks	57
1230	Vegetated sea cliffs of the Atlantic and Baltic Coasts	57
1310	Salicornia and other annuals colonizing mud and sand	57
1320	Spartina swards (Spartinion maritimae)	57
1330	Atlantic salt meadows (Glaucio-Puccinellietalia maritimae)	57
1340	Inland salt meadows	57
1420	Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)	57
2110	Embryonic shifting dunes	57
2120	Shifting dunes along the shoreline with Ammophila arenaria ("white dunes")	57
2130	Fixed coastal dunes with herbaceous vegetation ("grey dunes")	57
2140	Decalcified fixed dunes with Empetrum nigrum	57
2150	Atlantic decalcified fixed dunes (Calluno-Ulicetea)	57
2160	Dunes with Hippophya• rhamnoides	57
2170	Dunes with Salix repens ssp. argentea (Salicion arenariae)	57
2190	Humid dune slacks	57
21A0	Machairs (* in Ireland)	57
2250	Coastal dunes with Juniperus spp.	57
2330	Inland dunes with open Corynephorus and Agrostis grasslands	57
3110	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	57
3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea	57
3140	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	57
3150	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation	57

CODE	DESCRIPTION	PAGE NO
3160	Natural dystrophic lakes and ponds	57
3170	Mediterranean temporary ponds	57
3180	Turloughs	57
3260	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation	57
4010	Northern Atlantic wet heaths with Erica tetralix	57
4020	Temperate Atlantic wet heaths with Erica ciliaris and Erica tetralix	57
4030	European dry heaths	57
4040	Dry Atlantic coastal heaths with Erica vagans	57
4060	Alpine and Boreal heaths	57
4080	Sub-Arctic Salix spp. scrub	57
5110	Stable xerothermophilous formations with Buxus sempervirens on rock slopes (Berberidion p.p.)	57
5130	Juniperus communis formations on heaths or calcareous grasslands	57
6130	Calaminarian grasslands of the Violetalia calaminariae	57
6150	Siliceous alpine and boreal grasslands	57
6170	Alpine and subalpine calcareous grasslands	57
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	57
6230	Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	57
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	57
6430	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	57
6510	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	57
6520	Mountain hay meadows	57
7110	Active raised bogs	57
7120	Degraded raised bogs still capable of natural regeneration	57
7130	Blanket bogs (* if active bog)	57
7140	Transition mires and quaking bogs	57
7150	Depressions on peat substrates of the Rhynchosporion	57
7210	Calcareous fens with Cladium mariscus and species of the Caricion davallianae	57
7220	Petrifying springs with tufa formation (Cratoneurion)	57
7230	Alkaline fens	57
7240	Alpine pioneer formations of the Caricion bicoloris-atrofuscae	57
8110	Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	57
8120	Calcareous and calcshist scree of the montane to alpine levels (Thlaspietalia rotundifoliae)	57
8210	Calcareous rocky slopes with chasmophytic vegetation	57
8220	Siliceous rocky slopes with chasmophytic vegetation	57
8240	Limestone pavements	57
8310	Caves not open to the public	57
8330	Submerged or partially submerged sea caves	57
9120	Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robur-petraeae or Ilici-Fagenion)	57
9130	Asperulo-Fagetum beech forests	57
9160	Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli	57
9180	Tilio-Acerion forests of slopes, scree and ravines	57
9190	Old acidophilous oak woods with Quercus robur on sandy plains	57
91A0	Old sessile oak woods with Ilex and Blechnum in the British Isles	57
91C0	Caledonian forest	57
91D0	Bog woodland	57
91E0	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	57
91J0	Taxus baccata woods of the British Isles	57

3.1 Habitat representativity (abbreviated to 'Representativity' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent representativity	57
B	Good representativity	57
C	Significant representativity	57
D	Non-significant presence representativity	57

3.1 Relative surface

CODE	DESCRIPTION	PAGE NO
A	> 15%-100%	58
B	> 2%-15%	58
C	≤ 2%	58

3.1 Degree of conservation (abbreviated to 'Conservation' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	59
B	Good conservation	59
C	Average or reduced conservation	59

3.1 Global assessment (abbreviated to 'Global' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	59
B	Good value	59
C	Significant value	59

3.2 Population (abbreviated to 'Pop.' in data form)

CODE	DESCRIPTION	PAGE NO
A	> 15%-100%	62
B	> 2%-15%	62
C	≤ 2%	62
D	Non-significant population	62

3.2 Degree of conservation (abbreviated to 'Con.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	63
B	Good conservation	63
C	Average or reduced conservation	63

3.2 Isolation (abbreviated to 'Iso.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Population (almost) Isolated	63
B	Population not-isolated, but on margins of area of distribution	63
C	Population not-isolated within extended distribution range	63

3.2 Global Grade (abbreviated to 'Glo.' or 'G.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	63
B	Good value	63
C	Significant value	63

3.3 Other species – essentially covers bird assemblage types

CODE	DESCRIPTION	PAGE NO
WATR	Non-breeding waterbird assemblage	UK specific code
SBA	Breeding seabird assemblage	UK specific code

BBA	Breeding bird assemblage (applies only to sites classified pre 2000)	UK specific code
-----	--	------------------

4.1 Habitat class code

CODE	DESCRIPTION	PAGE NO
N01	Marine areas, Sea inlets	65
N02	Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins)	65
N03	Salt marshes, Salt pastures, Salt steppes	65
N04	Coastal sand dunes, Sand beaches, Machair	65
N05	Shingle, Sea cliffs, Islets	65
N06	Inland water bodies (Standing water, Running water)	65
N07	Bogs, Marshes, Water fringed vegetation, Fens	65
N08	Heath, Scrub, Maquis and Garrigue, Phygrana	65
N09	Dry grassland, Steppes	65
N10	Humid grassland, Mesophile grassland	65
N11	Alpine and sub-Alpine grassland	65
N14	Improved grassland	65
N15	Other arable land	65
N16	Broad-leaved deciduous woodland	65
N17	Coniferous woodland	65
N19	Mixed woodland	65
N21	Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas)	65
N22	Inland rocks, Screes, Sands, Permanent Snow and ice	65
N23	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	65
N25	Grassland and scrub habitats (general)	65
N26	Woodland habitats (general)	65

4.3 Threats code

CODE	DESCRIPTION	PAGE NO
A01	Cultivation	65
A02	Modification of cultivation practices	65
A03	Mowing / cutting of grassland	65
A04	Grazing	65
A05	Livestock farming and animal breeding (without grazing)	65
A06	Annual and perennial non-timber crops	65
A07	Use of biocides, hormones and chemicals	65
A08	Fertilisation	65
A10	Restructuring agricultural land holding	65
A11	Agriculture activities not referred to above	65
B01	Forest planting on open ground	65
B02	Forest and Plantation management & use	65
B03	Forest exploitation without replanting or natural regrowth	65
B04	Use of biocides, hormones and chemicals (forestry)	65
B06	Grazing in forests/ woodland	65
B07	Forestry activities not referred to above	65
C01	Mining and quarrying	65
C02	Exploration and extraction of oil or gas	65
C03	Renewable abiotic energy use	65
D01	Roads, paths and railroads	65
D02	Utility and service lines	65
D03	Shipping lanes, ports, marine constructions	65
D04	Airports, flightpaths	65
D05	Improved access to site	65
E01	Urbanised areas, human habitation	65
E02	Industrial or commercial areas	65

CODE	DESCRIPTION	PAGE NO
E03	Discharges	65
E04	Structures, buildings in the landscape	65
E06	Other urbanisation, industrial and similar activities	65
F01	Marine and Freshwater Aquaculture	65
F02	Fishing and harvesting aquatic resources	65
F03	Hunting and collection of wild animals (terrestrial), including damage caused by game (excessive density), and taking/removal of terrestrial animals (including collection of insects, reptiles, amphibians, birds of prey, etc., trapping, poisoning, poaching, predator control, accidental capture (e.g. due to fishing gear), etc.)	65
F04	Taking / Removal of terrestrial plants, general	65
F05	Illegal taking/ removal of marine fauna	65
F06	Hunting, fishing or collecting activities not referred to above	65
G01	Outdoor sports and leisure activities, recreational activities	65
G02	Sport and leisure structures	65
G03	Interpretative centres	65
G04	Military use and civil unrest	65
G05	Other human intrusions and disturbances	65
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)	65
H02	Pollution to groundwater (point sources and diffuse sources)	65
H03	Marine water pollution	65
H04	Air pollution, air-borne pollutants	65
H05	Soil pollution and solid waste (excluding discharges)	65
H06	Excess energy	65
H07	Other forms of pollution	65
I01	Invasive non-native species	65
I02	Problematic native species	65
I03	Introduced genetic material, GMO	65
J01	Fire and fire suppression	65
J02	Human induced changes in hydraulic conditions	65
J03	Other ecosystem modifications	65
K01	Abiotic (slow) natural processes	65
K02	Biocenotic evolution, succession	65
K03	Interspecific faunal relations	65
K04	Interspecific floral relations	65
K05	Reduced fecundity/ genetic depression	65
L05	Collapse of terrain, landslide	65
L07	Storm, cyclone	65
L08	Inundation (natural processes)	65
L10	Other natural catastrophes	65
M01	Changes in abiotic conditions	65
M02	Changes in biotic conditions	65
U	Unknown threat or pressure	65
XO	Threats and pressures from outside the Member State	65

5.1 Designation type codes

CODE	DESCRIPTION	PAGE NO
UK00	No Protection Status	67
UK01	National Nature Reserve	67
UK04	Site of Special Scientific Interest (GB)	67
UK05	Marine Conservation Zone	67
UK06	Nature Conservation Marine Protected Area	67
UK86	Special Area (Channel Islands)	67
UK98	Area of Special Scientific Interest (NI)	67
IN00	Ramsar Convention site	67
IN08	Special Protection Area	67
IN09	Special Area of Conservation	67

2.A

APPENDIX 2.A Standard Data Forms

STANDARD DATA FORM for sites within the 'UK national site network of European sites'

Special Protection Areas (SPAs) are classified and Special Areas of Conservation (SACs) are designated under:

- the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales (including the adjacent territorial sea) and to a limited extent in Scotland (reserved matters) and Northern Ireland (excepted matters);
- the Conservation (Natural Habitats &c.) Regulations 1994 (as amended) in Scotland;
- the Conservation (Natural Habitats, &c) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland; and
- the Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended) in the UK offshore area.

Each SAC or SPA (forming part of the UK national site network of European sites) has its own Standard Data Form containing site-specific information. The information provided here generally follows the same documenting format for SACs and SPAs, as set out in the [Official Journal of the European Union recording the Commission Implementing Decision of 11 July 2011 \(2011/484/EU\)](#).

Please note that these forms contain a number of codes, all of which are explained either within the data forms themselves or in the end notes.

More general information on SPAs and SACs in the UK is available from the [SPA homepage](#) and [SAC homepage](#) on the JNCC website. These webpages also provide links to Standard Data Forms for all SAC and SPA sites in the UK.

<https://jncc.gov.uk/>



NATURA 2000 - STANDARD DATA FORM

For Special Protection Areas (SPA),
Proposed Sites for Community Importance (pSCI),
Sites of Community Importance (SCI) and
for Special Areas of Conservation (SAC)

SITE UK0012712
SITENAME Cardigan Bay/ Bae Ceredigion

TABLE OF CONTENTS

- [1. SITE IDENTIFICATION](#)
- [2. SITE LOCATION](#)
- [3. ECOLOGICAL INFORMATION](#)
- [4. SITE DESCRIPTION](#)
- [5. SITE PROTECTION STATUS AND RELATION WITH CORINE BIOTOPES](#)
- [6. SITE MANAGEMENT](#)

1. SITE IDENTIFICATION

1.1 Type B	1.2 Site code UK0012712	Back to top
----------------------	-----------------------------------	-----------------------------

1.3 Site name

Cardigan Bay/ Bae Ceredigion

1.4 First Compilation date 1996-01	1.5 Update date 2015-12
--	-----------------------------------

1.6 Respondent:

Name/Organisation: Joint Nature Conservation Committee

Address: Joint Nature Conservation Committee Monkstone House City Road Peterborough
PE1 1JY

Email:

Date site proposed as SCI: 1996-01

Date site confirmed as SCI: 2004-12

Date site designated as SAC: 2004-12

National legal reference of SAC designation:

Regulations 11 and 13-15 of the Conservation of Habitats and Species Regulations 2010
(<http://www.legislation.gov.uk/uksi/2010/490/contents/made>).

2. SITE LOCATION

[Back to top](#)

2.1 Site-centre location [decimal degrees]:

Longitude

-4.617222222

Latitude

52.24638889

2.2 Area [ha]:

95857.06

2.3 Marine area [%]

99.5

2.4 Sitelength [km]:

0.0

2.5 Administrative region code and name

NUTS level 2 code

Region Name

UKZZ	Extra-Regio
UKL1	West Wales and The Valleys

2.6 Biogeographical Region(s)

Atlantic (100.0
%)

3. ECOLOGICAL INFORMATION

[Back to top](#)

3.1 Habitat types present on the site and assessment for them

Annex I Habitat types						Site assessment			
Code	PF	NP	Cover [ha]	Cave [number]	Data quality	A B C D	A B C		
						Representativity	Relative Surface	Conservation	Global
1110B			15298.79	0	G	C	C	B	C
1140B			153.37	0	G	D			
1170B			22948.18	0	G	C	B	B	C
8330B			95.86	0	G	B	C	B	C

- **PF:** for the habitat types that can have a non-priority as well as a priority form (6210, 7130, 9430) enter "X" in the column PF to indicate the priority form.
- **NP:** in case that a habitat type no longer exists in the site enter: x (optional)
- **Cover:** decimal values can be entered
- **Caves:** for habitat types 8310, 8330 (caves) enter the number of caves if estimated surface is not available.
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation)

3.2 Species referred to in Article 4 of Directive 2009/147/EC and listed in Annex II of Directive 92/43/EEC and site evaluation for them

Species					Population in the site						Site assessment			
G	Code	Scientific Name	S	NP	T	Size		Unit	Cat.	D.qual.	A B C D	A B C		
						Min	Max				Pop.	Con.	Iso.	Glo.
F	1102	Alosa alosa			p				P	DD	D			
F	1103	Alosa fallax			p				P	DD	D			
M	1364	Halichoerus grypus			p				P	DD	C	B	C	C
F	1099	Lampetra fluviatilis			p				P	DD	C	C	C	C
F	1095	Petromyzon marinus			p				P	DD	C	C	C	C
M	1351	Phocoena phocoena			p				P	DD	D			
M	1349	Tursiops truncatus			p	101	250	i		M	A	B	C	A

- **Group:** A = Amphibians, B = Birds, F = Fish, I = Invertebrates, M = Mammals, P = Plants, R = Reptiles
- **S:** in case that the data on species are sensitive and therefore have to be blocked for any public access enter: yes
- **NP:** in case that a species is no longer present in the site enter: x (optional)
- **Type:** p = permanent, r = reproducing, c = concentration, w = wintering (for plant and non-migratory species use permanent)
- **Unit:** i = individuals, p = pairs or other units according to the Standard list of population units and codes in accordance with Article 12 and 17 reporting (see [reference portal](#))
- **Abundance categories (Cat.):** C = common, R = rare, V = very rare, P = present - to fill if data are deficient (DD) or in addition to population size information
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation); VP = 'Very poor' (use this category only, if not even a rough estimation of the population size can be made, in this case the fields for population size can remain empty, but the field "Abundance categories" has to be filled in)

4. SITE DESCRIPTION

4.1 General site character

[Back to top](#)

Habitat class	% Cover
N05	0.4
N08	0.1
N01	99.5
N06	
N04	
N16	
Total Habitat Cover	NaN

Other Site Characteristics

3 Marine: Geology: shingle,clay,sandstone/mudstone,sedimentary,mud,biogenic

reef, pebble, metamorphic, cobble, slate/shale, gravel, boulder, sand 4 Marine: Geomorphology: surge gullies, cave/tunnel, pools, intertidal sediments (including sandflat/mudflat), subtidal rock (including rocky reefs), cliffs, intertidal rock, open coast (including bay), islands, subtidal sediments (including sandbank/mudbank)

4.2 Quality and importance

Sandbanks which are slightly covered by sea water all the time for which the area is considered to support a significant presence. Reefs for which the area is considered to support a significant presence. Submerged or partially submerged sea caves for which the area is considered to support a significant presence. *Petromyzon marinus* for which the area is considered to support a significant presence. *Lampetra fluviatilis* for which the area is considered to support a significant presence. *Halichoerus grypus* for which the area is considered to support a significant presence. *Tursiops truncatus* for which this is one of only two known outstanding localities in the United Kingdom.

4.3 Threats, pressures and activities with impacts on the site

The most important impacts and activities with high effect on the site

Negative Impacts			
Rank	Threats and pressures [code]	Pollution (optional) [code]	inside/outside [i o b]
M	H05		B
M	G05		I
M	H03		B
M	F02		B
M	I01		B

Rank: H = high, M = medium, L = low

Pollution: N = Nitrogen input, P = Phosphor/Phosphate input, A = Acid input/acidification,

T = toxic inorganic chemicals, O = toxic organic chemicals, X = Mixed pollutions

i = inside, o = outside, b = both

Positive Impacts			
Rank	Activities, management [code]	Pollution (optional) [code]	inside/outside [i o b]
M	G03		I
M	G01		I

4.5 Documentation

The Natural Resources Wales weblink below provides access to information on its designated sites. Detailed information about this Natura 2000 site can be accessed via the Management Plan link provided in Section 6.2. See also the 'UK Approach' document for more information (link via the JNCC website).

Link(s): <https://naturalresources.wales/guidance-and-advice/environmental-topics/wildlife-and-biodiversity/protected-areas-of-land>

http://jncc.defra.gov.uk/pdf/Natura2000_StandardDataForm_UKApproach_Dec2015.pdf

5. SITE PROTECTION STATUS (optional)

[Back to top](#)

5.1 Designation types at national and regional level:

Code	Cover [%]	Code	Cover [%]	Code	Cover [%]
UK00	98.4	UK04	1.7		

6. SITE MANAGEMENT

[Back to top](#)

6.1 Body(ies) responsible for the site management:

Organisation:	Natural Resources Wales
---------------	-------------------------

Address: _____

Email: _____

6.2 Management Plan(s):

An actual management plan does exist:

☒

Yes

Name: CARDIGAN BAY / BAE CEREDIGION

Link: <https://www.naturalresources.wales/media/673505/Cardigan%20Bay%20R33%20Feb%202009.pdf>

☐

No, but in preparation

☐

No

EXPLANATION OF CODES USED IN THE SPECIAL AREA OF CONSERVATION (SAC) AND SPECIAL PROTECTION AREA (SPA) STANDARD DATA FORMS

The codes in the table below generally follow those explained in the [official European Union guidelines for the Standard Data Form](#) (also referencing the relevant page number).

1.1 Site type

CODE	DESCRIPTION	PAGE NO
A	SPA (classified Special Protection Area)	53
B	cSAC, SCI or SAC (candidate Special Area of Conservation, Site of Community Importance, designated Special Area of Conservation)	53
C	SPA area/boundary is the same as the cSAC/SCI/SAC i.e. a co-classified/designated site (Note: this situation only occurs in Gibraltar)	53

3.1 Habitat code

CODE	DESCRIPTION	PAGE NO
1110	Sandbanks which are slightly covered by sea water all the time	57
1130	Estuaries	57
1140	Mudflats and sandflats not covered by seawater at low tide	57
1150	Coastal lagoons	57
1160	Large shallow inlets and bays	57
1170	Reefs	57
1180	Submarine structures made by leaking gases	57
1210	Annual vegetation of drift lines	57
1220	Perennial vegetation of stony banks	57
1230	Vegetated sea cliffs of the Atlantic and Baltic Coasts	57
1310	Salicornia and other annuals colonizing mud and sand	57
1320	Spartina swards (Spartinion maritimae)	57
1330	Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	57
1340	Inland salt meadows	57
1420	Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)	57
2110	Embryonic shifting dunes	57
2120	Shifting dunes along the shoreline with Ammophila arenaria ("white dunes")	57
2130	Fixed coastal dunes with herbaceous vegetation ("grey dunes")	57
2140	Decalcified fixed dunes with Empetrum nigrum	57
2150	Atlantic decalcified fixed dunes (Calluno-Ulicetea)	57
2160	Dunes with Hippophya• rhamnoides	57
2170	Dunes with Salix repens ssp. argentea (Salicion arenariae)	57
2190	Humid dune slacks	57
21A0	Machairs (* in Ireland)	57
2250	Coastal dunes with Juniperus spp.	57
2330	Inland dunes with open Corynephorus and Agrostis grasslands	57
3110	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	57
3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea	57
3140	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	57
3150	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation	57

CODE	DESCRIPTION	PAGE NO
3160	Natural dystrophic lakes and ponds	57
3170	Mediterranean temporary ponds	57
3180	Turloughs	57
3260	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation	57
4010	Northern Atlantic wet heaths with Erica tetralix	57
4020	Temperate Atlantic wet heaths with Erica ciliaris and Erica tetralix	57
4030	European dry heaths	57
4040	Dry Atlantic coastal heaths with Erica vagans	57
4060	Alpine and Boreal heaths	57
4080	Sub-Arctic Salix spp. scrub	57
5110	Stable xerothermophilous formations with Buxus sempervirens on rock slopes (Berberidion p.p.)	57
5130	Juniperus communis formations on heaths or calcareous grasslands	57
6130	Calaminarian grasslands of the Violetalia calaminariae	57
6150	Siliceous alpine and boreal grasslands	57
6170	Alpine and subalpine calcareous grasslands	57
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	57
6230	Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	57
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	57
6430	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	57
6510	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	57
6520	Mountain hay meadows	57
7110	Active raised bogs	57
7120	Degraded raised bogs still capable of natural regeneration	57
7130	Blanket bogs (* if active bog)	57
7140	Transition mires and quaking bogs	57
7150	Depressions on peat substrates of the Rhynchosporion	57
7210	Calcareous fens with Cladium mariscus and species of the Caricion davallianae	57
7220	Petrifying springs with tufa formation (Cratoneurion)	57
7230	Alkaline fens	57
7240	Alpine pioneer formations of the Caricion bicoloris-atrofuscae	57
8110	Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	57
8120	Calcareous and calcshist scree of the montane to alpine levels (Thlaspietalia rotundifoliae)	57
8210	Calcareous rocky slopes with chasmophytic vegetation	57
8220	Siliceous rocky slopes with chasmophytic vegetation	57
8240	Limestone pavements	57
8310	Caves not open to the public	57
8330	Submerged or partially submerged sea caves	57
9120	Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robur-petraeae or Ilici-Fagenion)	57
9130	Asperulo-Fagetum beech forests	57
9160	Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli	57
9180	Tilio-Acerion forests of slopes, scree and ravines	57
9190	Old acidophilous oak woods with Quercus robur on sandy plains	57
91A0	Old sessile oak woods with Ilex and Blechnum in the British Isles	57
91C0	Caledonian forest	57
91D0	Bog woodland	57
91E0	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	57
91J0	Taxus baccata woods of the British Isles	57

3.1 Habitat representativity (abbreviated to 'Representativity' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent representativity	57
B	Good representativity	57
C	Significant representativity	57
D	Non-significant presence representativity	57

3.1 Relative surface

CODE	DESCRIPTION	PAGE NO
A	> 15%-100%	58
B	> 2%-15%	58
C	≤ 2%	58

3.1 Degree of conservation (abbreviated to 'Conservation' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	59
B	Good conservation	59
C	Average or reduced conservation	59

3.1 Global assessment (abbreviated to 'Global' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	59
B	Good value	59
C	Significant value	59

3.2 Population (abbreviated to 'Pop.' in data form)

CODE	DESCRIPTION	PAGE NO
A	> 15%-100%	62
B	> 2%-15%	62
C	≤ 2%	62
D	Non-significant population	62

3.2 Degree of conservation (abbreviated to 'Con.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	63
B	Good conservation	63
C	Average or reduced conservation	63

3.2 Isolation (abbreviated to 'Iso.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Population (almost) Isolated	63
B	Population not-isolated, but on margins of area of distribution	63
C	Population not-isolated within extended distribution range	63

3.2 Global Grade (abbreviated to 'Glo.' or 'G.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	63
B	Good value	63
C	Significant value	63

3.3 Other species – essentially covers bird assemblage types

CODE	DESCRIPTION	PAGE NO
WATR	Non-breeding waterbird assemblage	UK specific code
SBA	Breeding seabird assemblage	UK specific code

BBA	Breeding bird assemblage (applies only to sites classified pre 2000)	UK specific code
-----	--	------------------

4.1 Habitat class code

CODE	DESCRIPTION	PAGE NO
N01	Marine areas, Sea inlets	65
N02	Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins)	65
N03	Salt marshes, Salt pastures, Salt steppes	65
N04	Coastal sand dunes, Sand beaches, Machair	65
N05	Shingle, Sea cliffs, Islets	65
N06	Inland water bodies (Standing water, Running water)	65
N07	Bogs, Marshes, Water fringed vegetation, Fens	65
N08	Heath, Scrub, Maquis and Garrigue, Phygrana	65
N09	Dry grassland, Steppes	65
N10	Humid grassland, Mesophile grassland	65
N11	Alpine and sub-Alpine grassland	65
N14	Improved grassland	65
N15	Other arable land	65
N16	Broad-leaved deciduous woodland	65
N17	Coniferous woodland	65
N19	Mixed woodland	65
N21	Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas)	65
N22	Inland rocks, Screes, Sands, Permanent Snow and ice	65
N23	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	65
N25	Grassland and scrub habitats (general)	65
N26	Woodland habitats (general)	65

4.3 Threats code

CODE	DESCRIPTION	PAGE NO
A01	Cultivation	65
A02	Modification of cultivation practices	65
A03	Mowing / cutting of grassland	65
A04	Grazing	65
A05	Livestock farming and animal breeding (without grazing)	65
A06	Annual and perennial non-timber crops	65
A07	Use of biocides, hormones and chemicals	65
A08	Fertilisation	65
A10	Restructuring agricultural land holding	65
A11	Agriculture activities not referred to above	65
B01	Forest planting on open ground	65
B02	Forest and Plantation management & use	65
B03	Forest exploitation without replanting or natural regrowth	65
B04	Use of biocides, hormones and chemicals (forestry)	65
B06	Grazing in forests/ woodland	65
B07	Forestry activities not referred to above	65
C01	Mining and quarrying	65
C02	Exploration and extraction of oil or gas	65
C03	Renewable abiotic energy use	65
D01	Roads, paths and railroads	65
D02	Utility and service lines	65
D03	Shipping lanes, ports, marine constructions	65
D04	Airports, flightpaths	65
D05	Improved access to site	65
E01	Urbanised areas, human habitation	65
E02	Industrial or commercial areas	65

CODE	DESCRIPTION	PAGE NO
E03	Discharges	65
E04	Structures, buildings in the landscape	65
E06	Other urbanisation, industrial and similar activities	65
F01	Marine and Freshwater Aquaculture	65
F02	Fishing and harvesting aquatic resources	65
F03	Hunting and collection of wild animals (terrestrial), including damage caused by game (excessive density), and taking/removal of terrestrial animals (including collection of insects, reptiles, amphibians, birds of prey, etc., trapping, poisoning, poaching, predator control, accidental capture (e.g. due to fishing gear), etc.)	65
F04	Taking / Removal of terrestrial plants, general	65
F05	Illegal taking/ removal of marine fauna	65
F06	Hunting, fishing or collecting activities not referred to above	65
G01	Outdoor sports and leisure activities, recreational activities	65
G02	Sport and leisure structures	65
G03	Interpretative centres	65
G04	Military use and civil unrest	65
G05	Other human intrusions and disturbances	65
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)	65
H02	Pollution to groundwater (point sources and diffuse sources)	65
H03	Marine water pollution	65
H04	Air pollution, air-borne pollutants	65
H05	Soil pollution and solid waste (excluding discharges)	65
H06	Excess energy	65
H07	Other forms of pollution	65
I01	Invasive non-native species	65
I02	Problematic native species	65
I03	Introduced genetic material, GMO	65
J01	Fire and fire suppression	65
J02	Human induced changes in hydraulic conditions	65
J03	Other ecosystem modifications	65
K01	Abiotic (slow) natural processes	65
K02	Biocenotic evolution, succession	65
K03	Interspecific faunal relations	65
K04	Interspecific floral relations	65
K05	Reduced fecundity/ genetic depression	65
L05	Collapse of terrain, landslide	65
L07	Storm, cyclone	65
L08	Inundation (natural processes)	65
L10	Other natural catastrophes	65
M01	Changes in abiotic conditions	65
M02	Changes in biotic conditions	65
U	Unknown threat or pressure	65
XO	Threats and pressures from outside the Member State	65

5.1 Designation type codes

CODE	DESCRIPTION	PAGE NO
UK00	No Protection Status	67
UK01	National Nature Reserve	67
UK04	Site of Special Scientific Interest (GB)	67
UK05	Marine Conservation Zone	67
UK06	Nature Conservation Marine Protected Area	67
UK86	Special Area (Channel Islands)	67
UK98	Area of Special Scientific Interest (NI)	67
IN00	Ramsar Convention site	67
IN08	Special Protection Area	67
IN09	Special Area of Conservation	67

STANDARD DATA FORM for sites within the 'UK national site network of European sites'

Special Protection Areas (SPAs) are classified and Special Areas of Conservation (SACs) are designated under:

- the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales (including the adjacent territorial sea) and to a limited extent in Scotland (reserved matters) and Northern Ireland (excepted matters);
- the Conservation (Natural Habitats &c.) Regulations 1994 (as amended) in Scotland;
- the Conservation (Natural Habitats, &c) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland; and
- the Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended) in the UK offshore area.

Each SAC or SPA (forming part of the UK national site network of European sites) has its own Standard Data Form containing site-specific information. The information provided here generally follows the same documenting format for SACs and SPAs, as set out in the [Official Journal of the European Union recording the Commission Implementing Decision of 11 July 2011 \(2011/484/EU\)](#).

Please note that these forms contain a number of codes, all of which are explained either within the data forms themselves or in the end notes.

More general information on SPAs and SACs in the UK is available from the [SPA homepage](#) and [SAC homepage](#) on the JNCC website. These webpages also provide links to Standard Data Forms for all SAC and SPA sites in the UK.

<https://jncc.gov.uk/>



NATURA 2000 - STANDARD DATA FORM

For Special Protection Areas (SPA),
Proposed Sites for Community Importance (pSCI),
Sites of Community Importance (SCI) and
for Special Areas of Conservation (SAC)

SITE UK0013116
SITENAME Pembrokeshire Marine/ Sir Benfro Forol

TABLE OF CONTENTS

- [1. SITE IDENTIFICATION](#)
- [2. SITE LOCATION](#)
- [3. ECOLOGICAL INFORMATION](#)
- [4. SITE DESCRIPTION](#)
- [5. SITE PROTECTION STATUS AND RELATION WITH CORINE BIOTOPES](#)
- [6. SITE MANAGEMENT](#)

1. SITE IDENTIFICATION

1.1 Type B	1.2 Site code UK0013116	Back to top
----------------------	-----------------------------------	-----------------------------

1.3 Site name

Pembrokeshire Marine/ Sir Benfro Forol

1.4 First Compilation date 1997-10	1.5 Update date 2015-12
--	-----------------------------------

1.6 Respondent:

Name/Organisation: Joint Nature Conservation Committee

Address: Joint Nature Conservation Committee Monkstone House City Road Peterborough
PE1 1JY

Email:

Date site proposed as SCI: 1997-10

Date site confirmed as SCI: 2004-12

Date site designated as SAC: 2004-12

National legal reference of SAC designation:

Regulations 11 and 13-15 of the Conservation of Habitats and Species Regulations 2010
(<http://www.legislation.gov.uk/uksi/2010/490/contents/made>).

2. SITE LOCATION

[Back to top](#)

2.1 Site-centre location [decimal degrees]:

Longitude

-5.615833333

Latitude

51.72638889

2.2 Area [ha]:

138038.5

2.3 Marine area [%]

99.3

2.4 Sitelength [km]:

0.0

2.5 Administrative region code and name

NUTS level 2 code	Region Name
UKZZ	Extra-Region
UKL1	West Wales and The Valleys

2.6 Biogeographical Region(s)

Atlantic

(100.0 %)

3. ECOLOGICAL INFORMATION

[Back to top](#)

3.1 Habitat types present on the site and assessment for them

Annex I Habitat types						Site assessment			
Code	PF	NP	Cover [ha]	Cave [number]	Data quality	A B C D	A B C		
						Representativity	Relative Surface	Conservation	Global
1110			41411.55	0	M	C	B	B	C
1130			5466.32	0	G	A	C	B	B
1140			1780.7	0	G	B	C	B	C
1150	X			0		C	C	C	C
1160			22086.16	0	G	A	B	B	B
1170			40997.43	0	G	B	B	A	A
1330			276.08	0	G	C	C	C	C
8330			13.8	0	M	C	C	B	C

- **PF:** for the habitat types that can have a non-priority as well as a priority form (6210, 7130, 9430) enter "X" in the column PF to indicate the priority form.
- **NP:** in case that a habitat type no longer exists in the site enter: x (optional)
- **Cover:** decimal values can be entered
- **Caves:** for habitat types 8310, 8330 (caves) enter the number of caves if estimated surface is not available.
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation)

3.2 Species referred to in Article 4 of Directive 2009/147/EC and listed in Annex II of Directive 92/43/EEC and site evaluation for them

Species					Population in the site						Site assessment			
G	Code	Scientific Name	S	NP	T	Size		Unit	Cat.	D.qual.	A B C D	A B C		
						Min	Max				Pop.	Con.	Iso.	Glo.
F	1102	Alosa alosa			p				P	DD	C	C	C	C
F	1103	Alosa fallax			p				P	DD	C	C	C	C
M	1364	Halichoerus grypus			p	1001	10000	i		M	B	A	B	B
F	1099	Lampetra fluviatilis			p				P	DD	C	C	C	C
M	1355	Lutra lutra			p				P	DD	C	B	C	C
F	1095	Petromyzon marinus			p				P	DD	C	C	C	C
M	1351	Phocoena phocoena			p				C	DD	D			
P	1441	Rumex rupestris			p				P	DD	B	B	B	B
M	1349	Tursiops truncatus			p				V	DD	D			

- **Group:** A = Amphibians, B = Birds, F = Fish, I = Invertebrates, M = Mammals, P = Plants, R = Reptiles
- **S:** in case that the data on species are sensitive and therefore have to be blocked for any public access enter: yes
- **NP:** in case that a species is no longer present in the site enter: x (optional)
- **Type:** p = permanent, r = reproducing, c = concentration, w = wintering (for plant and non-migratory species use permanent)
- **Unit:** i = individuals, p = pairs or other units according to the Standard list of population units and codes in accordance with Article 12 and 17 reporting (see [reference portal](#))
- **Abundance categories (Cat.):** C = common, R = rare, V = very rare, P = present - to fill if data are deficient (DD) or in addition to population size information
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation); VP = 'Very poor' (use this category only, if not even a rough estimation of the population size can be made, in this case the fields for population size can remain empty, but the field "Abundance categories" has to be filled in)

4. SITE DESCRIPTION

4.1 General site character

[Back to top](#)

Habitat class	% Cover

N02	3.8
N03	0.2
N01	96.0
Total Habitat Cover	100

Other Site Characteristics

1 Terrestrial: Soil & Geology: igneous,metamorphic,mud,sand,sedimentary,shingle 2 Terrestrial: Geomorphology and landscape: coastal 3 Marine: Geology: peat,mud,igneous,sedimentary,limestone/chalk,chert/flint,metamorphic,sand,slate/shale,shingle,clay,sand,reef,boulder,pebble 4 Marine: Geomorphology: intertidal sediments (including sandflat/mudflat),tidal rapids,cave/tunnel,cliffs,enclosed coast (including embayment),estuary,intertidal rock,islands,lagoon,open coast (including bay),pools,ria,sound/strait,subtidal rock (including rocky reefs),subtidal sediments (including sandbank/mudbank),surge gullies,geos (rocky inlets)

4.2 Quality and importance

Sandbanks which are slightly covered by sea water all the time for which the area is considered to support a significant presence. Estuaries for which this is considered to be one of the best areas in the United Kingdom. Mudflats and sandflats not covered by seawater at low tide for which the area is considered to support a significant presence. Coastal lagoons for which the area is considered to support a significant presence. Large shallow inlets and bays for which this is considered to be one of the best areas in the United Kingdom. Reefs for which this is considered to be one of the best areas in the United Kingdom. Submerged or partially submerged sea caves for which the area is considered to support a significant presence. Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) for which the area is considered to support a significant presence. *Rumex rupestris* for which this is considered to be one of the best areas in the United Kingdom. *Petromyzon marinus* for which the area is considered to support a significant presence. *Lampetra fluviatilis* for which the area is considered to support a significant presence. *Alosa alosa* for which the area is considered to support a significant presence. *Alosa fallax* for which the area is considered to support a significant presence. *Lutra lutra* for which the area is considered to support a significant presence. *Halichoerus grypus* for which this is considered to be one of the best areas in the United Kingdom.

4.3 Threats, pressures and activities with impacts on the site

The most important impacts and activities with high effect on the site

Negative Impacts			
Rank	Threats and pressures [code]	Pollution (optional) [code]	inside/outside [i o b]
H	J02		B
M	G05		I
H	H01		B
M	K01		B
L	H04		B
M	C02		I
M	M01		B
M	D03		I
H	F06		I
H	I01		B
M	G01		I
H	F02		I
M	H03		I

Rank: H = high, M = medium, L = low

Pollution: N = Nitrogen input, P = Phosphor/Phosphate input, A = Acid input/acidification,

T = toxic inorganic chemicals, O = toxic organic chemicals, X = Mixed pollutions

i = inside, o = outside, b = both

Positive Impacts			
Rank	Activities, management [code]	Pollution (optional) [code]	inside/outside [i o b]
M	G01		I
M	G03		B
M	A04		B

4.5 Documentation

The Natural Resources Wales weblink below provides access to information on its designated sites. Detailed information about this Natura 2000 site can be accessed via the Management Plan link provided in Section 6.2. See also the 'UK Approach' document for more information (link via the JNCC website).

Link(s): <https://naturalresources.wales/guidance-and-advice/environmental-topics/wildlife-and-biodiversity/protected-areas-of-land>
http://jncc.defra.gov.uk/pdf/Natura2000_StandardDataForm_UKApproach_Dec2015.pdf

5. SITE PROTECTION STATUS (optional)

[Back to top](#)

5.1 Designation types at national and regional level:

Code	Cover [%]	Code	Cover [%]	Code	Cover [%]
UK04	2.5	UK02	1.0	UK00	96.5
UK01	0.1				

6. SITE MANAGEMENT

[Back to top](#)

6.1 Body(ies) responsible for the site management:

Organisation:	Natural Resources Wales
Address:	
Email:	

6.2 Management Plan(s):

An actual management plan does exist:

☒	Yes	Name: PEMBROKESHIRE MARINE / SIR BENFRO FOROL
		Link: https://www.naturalresources.wales/media/673806/Pembrokeshire%20Marine%20Reg%2033%20Advice%20Feb%202020
☐	No, but in preparation	
☐	No	

EXPLANATION OF CODES USED IN THE SPECIAL AREA OF CONSERVATION (SAC) AND SPECIAL PROTECTION AREA (SPA) STANDARD DATA FORMS

The codes in the table below generally follow those explained in the [official European Union guidelines for the Standard Data Form](#) (also referencing the relevant page number).

1.1 Site type

CODE	DESCRIPTION	PAGE NO
A	SPA (classified Special Protection Area)	53
B	cSAC, SCI or SAC (candidate Special Area of Conservation, Site of Community Importance, designated Special Area of Conservation)	53
C	SPA area/boundary is the same as the cSAC/SCI/SAC i.e. a co-classified/designated site (Note: this situation only occurs in Gibraltar)	53

3.1 Habitat code

CODE	DESCRIPTION	PAGE NO
1110	Sandbanks which are slightly covered by sea water all the time	57
1130	Estuaries	57
1140	Mudflats and sandflats not covered by seawater at low tide	57
1150	Coastal lagoons	57
1160	Large shallow inlets and bays	57
1170	Reefs	57
1180	Submarine structures made by leaking gases	57
1210	Annual vegetation of drift lines	57
1220	Perennial vegetation of stony banks	57
1230	Vegetated sea cliffs of the Atlantic and Baltic Coasts	57
1310	Salicornia and other annuals colonizing mud and sand	57
1320	Spartina swards (Spartinion maritimae)	57
1330	Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	57
1340	Inland salt meadows	57
1420	Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)	57
2110	Embryonic shifting dunes	57
2120	Shifting dunes along the shoreline with Ammophila arenaria ("white dunes")	57
2130	Fixed coastal dunes with herbaceous vegetation ("grey dunes")	57
2140	Decalcified fixed dunes with Empetrum nigrum	57
2150	Atlantic decalcified fixed dunes (Calluno-Ulicetea)	57
2160	Dunes with Hippophya• rhamnoides	57
2170	Dunes with Salix repens ssp. argentea (Salicion arenariae)	57
2190	Humid dune slacks	57
21A0	Machairs (* in Ireland)	57
2250	Coastal dunes with Juniperus spp.	57
2330	Inland dunes with open Corynephorus and Agrostis grasslands	57
3110	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	57
3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea	57
3140	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	57
3150	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation	57

CODE	DESCRIPTION	PAGE NO
3160	Natural dystrophic lakes and ponds	57
3170	Mediterranean temporary ponds	57
3180	Turloughs	57
3260	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation	57
4010	Northern Atlantic wet heaths with Erica tetralix	57
4020	Temperate Atlantic wet heaths with Erica ciliaris and Erica tetralix	57
4030	European dry heaths	57
4040	Dry Atlantic coastal heaths with Erica vagans	57
4060	Alpine and Boreal heaths	57
4080	Sub-Arctic Salix spp. scrub	57
5110	Stable xerothermophilous formations with Buxus sempervirens on rock slopes (Berberidion p.p.)	57
5130	Juniperus communis formations on heaths or calcareous grasslands	57
6130	Calaminarian grasslands of the Violetalia calaminariae	57
6150	Siliceous alpine and boreal grasslands	57
6170	Alpine and subalpine calcareous grasslands	57
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	57
6230	Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	57
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	57
6430	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	57
6510	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	57
6520	Mountain hay meadows	57
7110	Active raised bogs	57
7120	Degraded raised bogs still capable of natural regeneration	57
7130	Blanket bogs (* if active bog)	57
7140	Transition mires and quaking bogs	57
7150	Depressions on peat substrates of the Rhynchosporion	57
7210	Calcareous fens with Cladium mariscus and species of the Caricion davallianae	57
7220	Petrifying springs with tufa formation (Cratoneurion)	57
7230	Alkaline fens	57
7240	Alpine pioneer formations of the Caricion bicoloris-atrofuscae	57
8110	Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	57
8120	Calcareous and calcshist scree of the montane to alpine levels (Thlaspietalia rotundifoliae)	57
8210	Calcareous rocky slopes with chasmophytic vegetation	57
8220	Siliceous rocky slopes with chasmophytic vegetation	57
8240	Limestone pavements	57
8310	Caves not open to the public	57
8330	Submerged or partially submerged sea caves	57
9120	Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robur-petraeae or Ilici-Fagenion)	57
9130	Asperulo-Fagetum beech forests	57
9160	Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli	57
9180	Tilio-Acerion forests of slopes, scree and ravines	57
9190	Old acidophilous oak woods with Quercus robur on sandy plains	57
91A0	Old sessile oak woods with Ilex and Blechnum in the British Isles	57
91C0	Caledonian forest	57
91D0	Bog woodland	57
91E0	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	57
91J0	Taxus baccata woods of the British Isles	57

3.1 Habitat representativity (abbreviated to 'Representativity' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent representativity	57
B	Good representativity	57
C	Significant representativity	57
D	Non-significant presence representativity	57

3.1 Relative surface

CODE	DESCRIPTION	PAGE NO
A	> 15%-100%	58
B	> 2%-15%	58
C	≤ 2%	58

3.1 Degree of conservation (abbreviated to 'Conservation' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	59
B	Good conservation	59
C	Average or reduced conservation	59

3.1 Global assessment (abbreviated to 'Global' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	59
B	Good value	59
C	Significant value	59

3.2 Population (abbreviated to 'Pop.' in data form)

CODE	DESCRIPTION	PAGE NO
A	> 15%-100%	62
B	> 2%-15%	62
C	≤ 2%	62
D	Non-significant population	62

3.2 Degree of conservation (abbreviated to 'Con.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	63
B	Good conservation	63
C	Average or reduced conservation	63

3.2 Isolation (abbreviated to 'Iso.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Population (almost) Isolated	63
B	Population not-isolated, but on margins of area of distribution	63
C	Population not-isolated within extended distribution range	63

3.2 Global Grade (abbreviated to 'Glo.' or 'G.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	63
B	Good value	63
C	Significant value	63

3.3 Other species – essentially covers bird assemblage types

CODE	DESCRIPTION	PAGE NO
WATR	Non-breeding waterbird assemblage	UK specific code
SBA	Breeding seabird assemblage	UK specific code

BBA	Breeding bird assemblage (applies only to sites classified pre 2000)	UK specific code
-----	--	------------------

4.1 Habitat class code

CODE	DESCRIPTION	PAGE NO
N01	Marine areas, Sea inlets	65
N02	Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins)	65
N03	Salt marshes, Salt pastures, Salt steppes	65
N04	Coastal sand dunes, Sand beaches, Machair	65
N05	Shingle, Sea cliffs, Islets	65
N06	Inland water bodies (Standing water, Running water)	65
N07	Bogs, Marshes, Water fringed vegetation, Fens	65
N08	Heath, Scrub, Maquis and Garrigue, Phygrana	65
N09	Dry grassland, Steppes	65
N10	Humid grassland, Mesophile grassland	65
N11	Alpine and sub-Alpine grassland	65
N14	Improved grassland	65
N15	Other arable land	65
N16	Broad-leaved deciduous woodland	65
N17	Coniferous woodland	65
N19	Mixed woodland	65
N21	Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas)	65
N22	Inland rocks, Screes, Sands, Permanent Snow and ice	65
N23	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	65
N25	Grassland and scrub habitats (general)	65
N26	Woodland habitats (general)	65

4.3 Threats code

CODE	DESCRIPTION	PAGE NO
A01	Cultivation	65
A02	Modification of cultivation practices	65
A03	Mowing / cutting of grassland	65
A04	Grazing	65
A05	Livestock farming and animal breeding (without grazing)	65
A06	Annual and perennial non-timber crops	65
A07	Use of biocides, hormones and chemicals	65
A08	Fertilisation	65
A10	Restructuring agricultural land holding	65
A11	Agriculture activities not referred to above	65
B01	Forest planting on open ground	65
B02	Forest and Plantation management & use	65
B03	Forest exploitation without replanting or natural regrowth	65
B04	Use of biocides, hormones and chemicals (forestry)	65
B06	Grazing in forests/ woodland	65
B07	Forestry activities not referred to above	65
C01	Mining and quarrying	65
C02	Exploration and extraction of oil or gas	65
C03	Renewable abiotic energy use	65
D01	Roads, paths and railroads	65
D02	Utility and service lines	65
D03	Shipping lanes, ports, marine constructions	65
D04	Airports, flightpaths	65
D05	Improved access to site	65
E01	Urbanised areas, human habitation	65
E02	Industrial or commercial areas	65

CODE	DESCRIPTION	PAGE NO
E03	Discharges	65
E04	Structures, buildings in the landscape	65
E06	Other urbanisation, industrial and similar activities	65
F01	Marine and Freshwater Aquaculture	65
F02	Fishing and harvesting aquatic resources	65
F03	Hunting and collection of wild animals (terrestrial), including damage caused by game (excessive density), and taking/removal of terrestrial animals (including collection of insects, reptiles, amphibians, birds of prey, etc., trapping, poisoning, poaching, predator control, accidental capture (e.g. due to fishing gear), etc.)	65
F04	Taking / Removal of terrestrial plants, general	65
F05	Illegal taking/ removal of marine fauna	65
F06	Hunting, fishing or collecting activities not referred to above	65
G01	Outdoor sports and leisure activities, recreational activities	65
G02	Sport and leisure structures	65
G03	Interpretative centres	65
G04	Military use and civil unrest	65
G05	Other human intrusions and disturbances	65
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)	65
H02	Pollution to groundwater (point sources and diffuse sources)	65
H03	Marine water pollution	65
H04	Air pollution, air-borne pollutants	65
H05	Soil pollution and solid waste (excluding discharges)	65
H06	Excess energy	65
H07	Other forms of pollution	65
I01	Invasive non-native species	65
I02	Problematic native species	65
I03	Introduced genetic material, GMO	65
J01	Fire and fire suppression	65
J02	Human induced changes in hydraulic conditions	65
J03	Other ecosystem modifications	65
K01	Abiotic (slow) natural processes	65
K02	Biocenotic evolution, succession	65
K03	Interspecific faunal relations	65
K04	Interspecific floral relations	65
K05	Reduced fecundity/ genetic depression	65
L05	Collapse of terrain, landslide	65
L07	Storm, cyclone	65
L08	Inundation (natural processes)	65
L10	Other natural catastrophes	65
M01	Changes in abiotic conditions	65
M02	Changes in biotic conditions	65
U	Unknown threat or pressure	65
XO	Threats and pressures from outside the Member State	65

5.1 Designation type codes

CODE	DESCRIPTION	PAGE NO
UK00	No Protection Status	67
UK01	National Nature Reserve	67
UK04	Site of Special Scientific Interest (GB)	67
UK05	Marine Conservation Zone	67
UK06	Nature Conservation Marine Protected Area	67
UK86	Special Area (Channel Islands)	67
UK98	Area of Special Scientific Interest (NI)	67
IN00	Ramsar Convention site	67
IN08	Special Protection Area	67
IN09	Special Area of Conservation	67

STANDARD DATA FORM for sites within the 'UK national site network of European sites'

Special Protection Areas (SPAs) are classified and Special Areas of Conservation (SACs) are designated under:

- the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales (including the adjacent territorial sea) and to a limited extent in Scotland (reserved matters) and Northern Ireland (excepted matters);
- the Conservation (Natural Habitats &c.) Regulations 1994 (as amended) in Scotland;
- the Conservation (Natural Habitats, &c) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland; and
- the Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended) in the UK offshore area.

Each SAC or SPA (forming part of the UK national site network of European sites) has its own Standard Data Form containing site-specific information. The information provided here generally follows the same documenting format for SACs and SPAs, as set out in the [Official Journal of the European Union recording the Commission Implementing Decision of 11 July 2011 \(2011/484/EU\)](#).

Please note that these forms contain a number of codes, all of which are explained either within the data forms themselves or in the end notes.

More general information on SPAs and SACs in the UK is available from the [SPA homepage](#) and [SAC homepage](#) on the JNCC website. These webpages also provide links to Standard Data Forms for all SAC and SPA sites in the UK.

<https://jncc.gov.uk/>



NATURA 2000 - STANDARD DATA FORM

For Special Protection Areas (SPA),
Proposed Sites for Community Importance (pSCI),
Sites of Community Importance (SCI) and
for Special Areas of Conservation (SAC)

SITE UK0012670
SITENAME Afon Teifi/ River Teifi

TABLE OF CONTENTS

- [1. SITE IDENTIFICATION](#)
- [2. SITE LOCATION](#)
- [3. ECOLOGICAL INFORMATION](#)
- [4. SITE DESCRIPTION](#)
- [5. SITE PROTECTION STATUS AND RELATION WITH CORINE BIOTOPES](#)
- [6. SITE MANAGEMENT](#)

1. SITE IDENTIFICATION

1.1 Type B	1.2 Site code UK0012670	Back to top
----------------------	-----------------------------------	-----------------------------

1.3 Site name

Afon Teifi/ River Teifi

1.4 First Compilation date 1998-06	1.5 Update date 2015-12
--	-----------------------------------

1.6 Respondent:

Name/Organisation: Joint Nature Conservation Committee

Address: Joint Nature Conservation Committee Monkstone House City Road Peterborough
PE1 1JY

Email:

Date site proposed as SCI: 1998-06

Date site confirmed as SCI: 2004-12

Date site designated as SAC: 2004-12

National legal reference of SAC designation:

Regulations 11 and 13-15 of the Conservation of Habitats and Species Regulations 2010
(<http://www.legislation.gov.uk/uksi/2010/490/contents/made>).

2. SITE LOCATION

[Back to top](#)

2.1 Site-centre location [decimal degrees]:

Longitude

-4.170833333

Latitude

52.13583333

2.2 Area [ha]:

691.07

2.3 Marine area [%]

0.0

2.4 Sitelength [km]:

0.0

2.5 Administrative region code and name

NUTS level 2 code

Region Name

UKL1	West Wales and The Valleys
------	----------------------------

2.6 Biogeographical Region(s)

Atlantic (100.0
%)

3. ECOLOGICAL INFORMATION

3.1 Habitat types present on the site and assessment for them

[Back to top](#)

Annex I Habitat types						Site assessment			
Code	PF	NP	Cover [ha]	Cave [number]	Data quality	A B C D	A B C		
						Representativity	Relative Surface	Conservation	Global
1140B			106.42	0	G	D			
1310B			18.38	0	G	D			
1330B			13.61	0	G	D			
2110B			11.54	0	G	D			
3130B			55.29	0	M	C	C	B	C
3260B			69.11	0	M	A	C	A	A

- **PF:** for the habitat types that can have a non-priority as well as a priority form (6210, 7130, 9430) enter "X" in the column PF to indicate the priority form.
- **NP:** in case that a habitat type no longer exists in the site enter: x (optional)
- **Cover:** decimal values can be entered
- **Caves:** for habitat types 8310, 8330 (caves) enter the number of caves if estimated surface is not available.

- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation)

3.2 Species referred to in Article 4 of Directive 2009/147/EC and listed in Annex II of Directive 92/43/EEC and site evaluation for them

Species					Population in the site						Site assessment			
G	Code	Scientific Name	S	NP	T	Size		Unit	Cat.	D.qual.	A B C D	A B C		
						Min	Max				Pop.	Con.	Iso.	Glo.
F	1163	Cottus gobio			p				P	DD	C	B	B	B
F	1099	Lampetra fluviatilis			p				P	DD	C	B	C	B
F	1096	Lampetra planeri			p				P	DD	C	B	C	B
P	1831	Luronium natans			p	10000	10000	i		M	B	B	A	A
M	1355	Lutra lutra			p	11	50	i		M	C	B	C	B
I	1029	Margaritifera margaritifera			p				P	DD	D			
F	1095	Petromyzon marinus			p				P	DD	C	B	C	C
F	1106	Salmo salar			p				P	DD	C	B	C	B

- **Group:** A = Amphibians, B = Birds, F = Fish, I = Invertebrates, M = Mammals, P = Plants, R = Reptiles
- **S:** in case that the data on species are sensitive and therefore have to be blocked for any public access enter: yes
- **NP:** in case that a species is no longer present in the site enter: x (optional)
- **Type:** p = permanent, r = reproducing, c = concentration, w = wintering (for plant and non-migratory species use permanent)
- **Unit:** i = individuals, p = pairs or other units according to the Standard list of population units and codes in accordance with Article 12 and 17 reporting (see [reference portal](#))
- **Abundance categories (Cat.):** C = common, R = rare, V = very rare, P = present - to fill if data are deficient (DD) or in addition to population size information
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation); VP = 'Very poor' (use this category only, if not even a rough estimation of the population size can be made, in this case the fields for population size can remain empty, but the field "Abundance categories" has to be filled in)

4. SITE DESCRIPTION

4.1 General site character

[Back to top](#)

Habitat class	% Cover
N16	10.5
N02	20.0
N08	2.7
N10	1.7
N07	8.9

N03	1.7
N22	1.1
N23	0.8
N06	45.1
N14	7.5
Total Habitat Cover	100.00000000000001

Other Site Characteristics

1 Terrestrial: Soil & Geology: peat,sandstone,alluvium,clay,sand,shingle 2 Terrestrial: Geomorphology and landscape: valley,floodplain,upland,lowland 3 Marine: Geology: mud

4.2 Quality and importance

Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea for which the area is considered to support a significant presence. Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation for which this is considered to be one of the best areas in the United Kingdom. Luronium natans for which this is considered to be one of the best areas in the United Kingdom. Petromyzon marinus for which the area is considered to support a significant presence. Lampetra fluviatilis for which this is considered to be one of the best areas in the United Kingdom. Lampetra planeri for which this is considered to be one of the best areas in the United Kingdom. Salmo salar for which this is considered to be one of the best areas in the United Kingdom. Cottus gobio for which this is considered to be one of the best areas in the United Kingdom. Lutra lutra for which this is considered to be one of the best areas in the United Kingdom.

4.3 Threats, pressures and activities with impacts on the site

The most important impacts and activities with high effect on the site

Negative Impacts			
Rank	Threats and pressures [code]	Pollution (optional) [code]	inside/outside [i o b]
M	C01		I
H	I01		I
M	J02		B
M	F02		I
M	G05		B
L	G01		B
H	H04		B
M	J03		B
H	M01		B
L	A03		I
H	H01		B

Rank: H = high, M = medium, L = low

Pollution: N = Nitrogen input, P = Phosphor/Phosphate input, A = Acid input/acidification,

T = toxic inorganic chemicals, O = toxic organic chemicals, X = Mixed pollutions

i = inside, o = outside, b = both

Positive Impacts			
Rank	Activities, management [code]	Pollution (optional) [code]	inside/outside [i o b]
M	J03		I

4.5 Documentation

The Natural Resources Wales weblink below provides access to information on its designated sites. Detailed information about this Natura 2000 site can be accessed via the Management Plan link provided in Section 6.2. See also the 'UK Approach' document for more information (link via the JNCC website).

Link(s): <https://naturalresources.wales/guidance-and-advice/environmental-topics/wildlife-and-biodiversity/protected-areas-of-land>

http://jncc.defra.gov.uk/pdf/Natura2000_StandardDataForm_UKApproach_Dec2015.pdf

5. SITE PROTECTION STATUS (optional)

[Back to top](#)

5.1 Designation types at national and regional level:

Code	Cover [%]	Code	Cover [%]	Code	Cover [%]
UK01	1.6	UK04	100.0		

6. SITE MANAGEMENT

[Back to top](#)

6.1 Body(ies) responsible for the site management:

Organisation:	Natural Resources Wales
Address:	
Email:	

6.2 Management Plan(s):

An actual management plan does exist:

☒	Yes	Name: AFON TEIFI / RIVER TEIFI
		Link: https://www.naturalresources.wales/media/670702/Afon%20Teifi%20%20River%20Teifi%20Management%20Plan.pdf
☐	No, but in preparation	
☐	No	

EXPLANATION OF CODES USED IN THE SPECIAL AREA OF CONSERVATION (SAC) AND SPECIAL PROTECTION AREA (SPA) STANDARD DATA FORMS

The codes in the table below generally follow those explained in the [official European Union guidelines for the Standard Data Form](#) (also referencing the relevant page number).

1.1 Site type

CODE	DESCRIPTION	PAGE NO
A	SPA (classified Special Protection Area)	53
B	cSAC, SCI or SAC (candidate Special Area of Conservation, Site of Community Importance, designated Special Area of Conservation)	53
C	SPA area/boundary is the same as the cSAC/SCI/SAC i.e. a co-classified/designated site (Note: this situation only occurs in Gibraltar)	53

3.1 Habitat code

CODE	DESCRIPTION	PAGE NO
1110	Sandbanks which are slightly covered by sea water all the time	57
1130	Estuaries	57
1140	Mudflats and sandflats not covered by seawater at low tide	57
1150	Coastal lagoons	57
1160	Large shallow inlets and bays	57
1170	Reefs	57
1180	Submarine structures made by leaking gases	57
1210	Annual vegetation of drift lines	57
1220	Perennial vegetation of stony banks	57
1230	Vegetated sea cliffs of the Atlantic and Baltic Coasts	57
1310	Salicornia and other annuals colonizing mud and sand	57
1320	Spartina swards (Spartinion maritimae)	57
1330	Atlantic salt meadows (Glaucopuccinellietalia maritimae)	57
1340	Inland salt meadows	57
1420	Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)	57
2110	Embryonic shifting dunes	57
2120	Shifting dunes along the shoreline with Ammophila arenaria ("white dunes")	57
2130	Fixed coastal dunes with herbaceous vegetation ("grey dunes")	57
2140	Decalcified fixed dunes with Empetrum nigrum	57
2150	Atlantic decalcified fixed dunes (Calluno-Ulicetea)	57
2160	Dunes with Hippophya• rhamnoides	57
2170	Dunes with Salix repens ssp. argentea (Salicion arenariae)	57
2190	Humid dune slacks	57
21A0	Machairs (* in Ireland)	57
2250	Coastal dunes with Juniperus spp.	57
2330	Inland dunes with open Corynephorus and Agrostis grasslands	57
3110	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	57
3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea	57
3140	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	57
3150	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation	57

CODE	DESCRIPTION	PAGE NO
3160	Natural dystrophic lakes and ponds	57
3170	Mediterranean temporary ponds	57
3180	Turloughs	57
3260	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation	57
4010	Northern Atlantic wet heaths with Erica tetralix	57
4020	Temperate Atlantic wet heaths with Erica ciliaris and Erica tetralix	57
4030	European dry heaths	57
4040	Dry Atlantic coastal heaths with Erica vagans	57
4060	Alpine and Boreal heaths	57
4080	Sub-Arctic Salix spp. scrub	57
5110	Stable xerothermophilous formations with Buxus sempervirens on rock slopes (Berberidion p.p.)	57
5130	Juniperus communis formations on heaths or calcareous grasslands	57
6130	Calaminarian grasslands of the Violetalia calaminariae	57
6150	Siliceous alpine and boreal grasslands	57
6170	Alpine and subalpine calcareous grasslands	57
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	57
6230	Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	57
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	57
6430	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	57
6510	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	57
6520	Mountain hay meadows	57
7110	Active raised bogs	57
7120	Degraded raised bogs still capable of natural regeneration	57
7130	Blanket bogs (* if active bog)	57
7140	Transition mires and quaking bogs	57
7150	Depressions on peat substrates of the Rhynchosporion	57
7210	Calcareous fens with Cladium mariscus and species of the Caricion davallianae	57
7220	Petrifying springs with tufa formation (Cratoneurion)	57
7230	Alkaline fens	57
7240	Alpine pioneer formations of the Caricion bicoloris-atrofuscae	57
8110	Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	57
8120	Calcareous and calcshist scree of the montane to alpine levels (Thlaspietalia rotundifoliae)	57
8210	Calcareous rocky slopes with chasmophytic vegetation	57
8220	Siliceous rocky slopes with chasmophytic vegetation	57
8240	Limestone pavements	57
8310	Caves not open to the public	57
8330	Submerged or partially submerged sea caves	57
9120	Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robur-petraeae or Ilici-Fagenion)	57
9130	Asperulo-Fagetum beech forests	57
9160	Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli	57
9180	Tilio-Acerion forests of slopes, scree and ravines	57
9190	Old acidophilous oak woods with Quercus robur on sandy plains	57
91A0	Old sessile oak woods with Ilex and Blechnum in the British Isles	57
91C0	Caledonian forest	57
91D0	Bog woodland	57
91E0	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	57
91J0	Taxus baccata woods of the British Isles	57

3.1 Habitat representativity (abbreviated to 'Representativity' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent representativity	57
B	Good representativity	57
C	Significant representativity	57
D	Non-significant presence representativity	57

3.1 Relative surface

CODE	DESCRIPTION	PAGE NO
A	> 15%-100%	58
B	> 2%-15%	58
C	≤ 2%	58

3.1 Degree of conservation (abbreviated to 'Conservation' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	59
B	Good conservation	59
C	Average or reduced conservation	59

3.1 Global assessment (abbreviated to 'Global' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	59
B	Good value	59
C	Significant value	59

3.2 Population (abbreviated to 'Pop.' in data form)

CODE	DESCRIPTION	PAGE NO
A	> 15%-100%	62
B	> 2%-15%	62
C	≤ 2%	62
D	Non-significant population	62

3.2 Degree of conservation (abbreviated to 'Con.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	63
B	Good conservation	63
C	Average or reduced conservation	63

3.2 Isolation (abbreviated to 'Iso.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Population (almost) Isolated	63
B	Population not-isolated, but on margins of area of distribution	63
C	Population not-isolated within extended distribution range	63

3.2 Global Grade (abbreviated to 'Glo.' or 'G.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	63
B	Good value	63
C	Significant value	63

3.3 Other species – essentially covers bird assemblage types

CODE	DESCRIPTION	PAGE NO
WATR	Non-breeding waterbird assemblage	UK specific code
SBA	Breeding seabird assemblage	UK specific code

BBA	Breeding bird assemblage (applies only to sites classified pre 2000)	UK specific code
-----	--	------------------

4.1 Habitat class code

CODE	DESCRIPTION	PAGE NO
N01	Marine areas, Sea inlets	65
N02	Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins)	65
N03	Salt marshes, Salt pastures, Salt steppes	65
N04	Coastal sand dunes, Sand beaches, Machair	65
N05	Shingle, Sea cliffs, Islets	65
N06	Inland water bodies (Standing water, Running water)	65
N07	Bogs, Marshes, Water fringed vegetation, Fens	65
N08	Heath, Scrub, Maquis and Garrigue, Phygrana	65
N09	Dry grassland, Steppes	65
N10	Humid grassland, Mesophile grassland	65
N11	Alpine and sub-Alpine grassland	65
N14	Improved grassland	65
N15	Other arable land	65
N16	Broad-leaved deciduous woodland	65
N17	Coniferous woodland	65
N19	Mixed woodland	65
N21	Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas)	65
N22	Inland rocks, Screes, Sands, Permanent Snow and ice	65
N23	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	65
N25	Grassland and scrub habitats (general)	65
N26	Woodland habitats (general)	65

4.3 Threats code

CODE	DESCRIPTION	PAGE NO
A01	Cultivation	65
A02	Modification of cultivation practices	65
A03	Mowing / cutting of grassland	65
A04	Grazing	65
A05	Livestock farming and animal breeding (without grazing)	65
A06	Annual and perennial non-timber crops	65
A07	Use of biocides, hormones and chemicals	65
A08	Fertilisation	65
A10	Restructuring agricultural land holding	65
A11	Agriculture activities not referred to above	65
B01	Forest planting on open ground	65
B02	Forest and Plantation management & use	65
B03	Forest exploitation without replanting or natural regrowth	65
B04	Use of biocides, hormones and chemicals (forestry)	65
B06	Grazing in forests/ woodland	65
B07	Forestry activities not referred to above	65
C01	Mining and quarrying	65
C02	Exploration and extraction of oil or gas	65
C03	Renewable abiotic energy use	65
D01	Roads, paths and railroads	65
D02	Utility and service lines	65
D03	Shipping lanes, ports, marine constructions	65
D04	Airports, flightpaths	65
D05	Improved access to site	65
E01	Urbanised areas, human habitation	65
E02	Industrial or commercial areas	65

CODE	DESCRIPTION	PAGE NO
E03	Discharges	65
E04	Structures, buildings in the landscape	65
E06	Other urbanisation, industrial and similar activities	65
F01	Marine and Freshwater Aquaculture	65
F02	Fishing and harvesting aquatic resources	65
F03	Hunting and collection of wild animals (terrestrial), including damage caused by game (excessive density), and taking/removal of terrestrial animals (including collection of insects, reptiles, amphibians, birds of prey, etc., trapping, poisoning, poaching, predator control, accidental capture (e.g. due to fishing gear), etc.)	65
F04	Taking / Removal of terrestrial plants, general	65
F05	Illegal taking/ removal of marine fauna	65
F06	Hunting, fishing or collecting activities not referred to above	65
G01	Outdoor sports and leisure activities, recreational activities	65
G02	Sport and leisure structures	65
G03	Interpretative centres	65
G04	Military use and civil unrest	65
G05	Other human intrusions and disturbances	65
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)	65
H02	Pollution to groundwater (point sources and diffuse sources)	65
H03	Marine water pollution	65
H04	Air pollution, air-borne pollutants	65
H05	Soil pollution and solid waste (excluding discharges)	65
H06	Excess energy	65
H07	Other forms of pollution	65
I01	Invasive non-native species	65
I02	Problematic native species	65
I03	Introduced genetic material, GMO	65
J01	Fire and fire suppression	65
J02	Human induced changes in hydraulic conditions	65
J03	Other ecosystem modifications	65
K01	Abiotic (slow) natural processes	65
K02	Biocenotic evolution, succession	65
K03	Interspecific faunal relations	65
K04	Interspecific floral relations	65
K05	Reduced fecundity/ genetic depression	65
L05	Collapse of terrain, landslide	65
L07	Storm, cyclone	65
L08	Inundation (natural processes)	65
L10	Other natural catastrophes	65
M01	Changes in abiotic conditions	65
M02	Changes in biotic conditions	65
U	Unknown threat or pressure	65
XO	Threats and pressures from outside the Member State	65

5.1 Designation type codes

CODE	DESCRIPTION	PAGE NO
UK00	No Protection Status	67
UK01	National Nature Reserve	67
UK04	Site of Special Scientific Interest (GB)	67
UK05	Marine Conservation Zone	67
UK06	Nature Conservation Marine Protected Area	67
UK86	Special Area (Channel Islands)	67
UK98	Area of Special Scientific Interest (NI)	67
IN00	Ramsar Convention site	67
IN08	Special Protection Area	67
IN09	Special Area of Conservation	67

STANDARD DATA FORM for sites within the 'UK national site network of European sites'

Special Protection Areas (SPAs) are classified and Special Areas of Conservation (SACs) are designated under:

- the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales (including the adjacent territorial sea) and to a limited extent in Scotland (reserved matters) and Northern Ireland (excepted matters);
- the Conservation (Natural Habitats &c.) Regulations 1994 (as amended) in Scotland;
- the Conservation (Natural Habitats, &c) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland; and
- the Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended) in the UK offshore area.

Each SAC or SPA (forming part of the UK national site network of European sites) has its own Standard Data Form containing site-specific information. The information provided here generally follows the same documenting format for SACs and SPAs, as set out in the [Official Journal of the European Union recording the Commission Implementing Decision of 11 July 2011 \(2011/484/EU\)](#).

Please note that these forms contain a number of codes, all of which are explained either within the data forms themselves or in the end notes.

More general information on SPAs and SACs in the UK is available from the [SPA homepage](#) and [SAC homepage](#) on the JNCC website. These webpages also provide links to Standard Data Forms for all SAC and SPA sites in the UK.

<https://jncc.gov.uk/>



NATURA 2000 - STANDARD DATA FORM

For Special Protection Areas (SPA),
Proposed Sites for Community Importance (pSCI),
Sites of Community Importance (SCI) and
for Special Areas of Conservation (SAC)

SITE UK0030397
SITENAME West Wales Marine / Gorllewin Cymru Forol

TABLE OF CONTENTS

- [1. SITE IDENTIFICATION](#)
- [2. SITE LOCATION](#)
- [3. ECOLOGICAL INFORMATION](#)
- [4. SITE DESCRIPTION](#)
- [6. SITE MANAGEMENT](#)
- [7. MAP OF THE SITE](#)

1. SITE IDENTIFICATION

1.1 Type B	1.2 Site code UK0030397	Back to top
----------------------	-----------------------------------	-----------------------------

1.3 Site name

West Wales Marine / Gorllewin Cymru Forol

1.4 First Compilation date 2017-01	1.5 Update date 2019-03
--	-----------------------------------

1.6 Respondent:

Name/Organisation: Joint Nature Conservation Committee
Address: Monkstone House, City Road, Peterborough PE1 1JY
Email:

Date site proposed as SCI:	2017-01
Date site confirmed as SCI:	2017-12
Date site designated as SAC:	2019-02
National legal reference of SAC designation:	Regulations 13 and 17-19 of The Conservation of Habitats and Species Regulations 2017 (https://www.legislation.gov.uk/uksi/2017/1012/contents/made), and Regulations 11, 19 and 20 of The Conservation of Offshore Marine Habitats and Species Regulations 2017 (http://www.legislation.gov.uk/uksi/2017/1013/contents/made).

2. SITE LOCATION

2.1 Site-centre location [decimal degrees]:

Longitude

-4.8897

Latitude

52.2687

2.2 Area [ha]:

737614.0

2.3 Marine area [%]

100.0

2.4 Sitelength [km]:

0.0

2.5 Administrative region code and name

NUTS level 2 code

Region Name

UKZZ	Extra-Regio
------	-------------

2.6 Biogeographical Region(s)

Atlantic (100.0 %)

3. ECOLOGICAL INFORMATION

3.2 Species referred to in Article 4 of Directive 2009/147/EC and listed in Annex II of Directive 92/43/EEC and site evaluation for them

Species					Population in the site						Site assessment			
G	Code	Scientific Name	S	NP	T	Size		Unit	Cat.	D.qual.	A B C D	A B C		
						Min	Max				Pop.	Con.	Iso.	Glo.
M	1351	Phocoena phocoena			p	1419	4484	i	C	M	B	A	C	B

- **Group:** A = Amphibians, B = Birds, F = Fish, I = Invertebrates, M = Mammals, P = Plants, R = Reptiles
- **S:** in case that the data on species are sensitive and therefore have to be blocked for any public access enter: yes
- **NP:** in case that a species is no longer present in the site enter: x (optional)
- **Type:** p = permanent, r = reproducing, c = concentration, w = wintering (for plant and non-migratory species use permanent)
- **Unit:** i = individuals, p = pairs or other units according to the Standard list of population units and codes in accordance with Article 12 and 17 reporting (see [reference portal](#))
- **Abundance categories (Cat.):** C = common, R = rare, V = very rare, P = present - to fill if data are deficient (DD) or in addition to population size information
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation); VP = 'Very poor' (use this category only, if not even a rough estimation of the population size can be made, in this case the fields for population size can remain empty, but the field "Abundance categories" has to be filled in)

4. SITE DESCRIPTION

[Back to top](#)

4.1 General site character

Habitat class	% Cover
N01	100.0
Total Habitat Cover	100

Other Site Characteristics

General site characteristics: A mixture of hard substrate and sediments, including rock, coarse sediment, sand and mud. Full salinity. Water depths between Mean Low Water Tide and 100m.

4.2 Quality and importance

Harbour porpoise (*Phocoena phocoena*) "For which this is considered to be one of the best areas in the United Kingdom".

4.3 Threats, pressures and activities with impacts on the site

The most important impacts and activities with high effect on the site

Negative Impacts			
Rank	Threats and pressures [code]	Pollution (optional) [code]	inside/outside [i o b]
M	C02		b
L	D03		b
L	F02		b
M	G04		b
M	H03	O	b
L	C03		b

Positive Impacts			
Rank	Activities, management [code]	Pollution (optional) [code]	inside/outside [i o b]

Rank: H = high, M = medium, L = low

Pollution: N = Nitrogen input, P = Phosphor/Phosphate input, A = Acid input/acidification,

T = toxic inorganic chemicals, O = toxic organic chemicals, X = Mixed pollutions

i = inside, o = outside, b = both

4.5 Documentation

For information on this site, including the Selection Assessment Document, Conservation Objectives and Advice on Activities document, as well as information about the identification process of the UK network of harbour porpoise SACs, see the Site Information Centre (see link) for this site. The population size estimate in Section 3.2, provided at the time the site was proposed as an SCI, is based on data from a survey conducted in 2005 (Hammond et al. 2013). Revised "population in the site" estimates based on the 2016 survey (Hammond et al. 2017) are a minimum of 964 (lower 95% CI) and maximum of 2558 (higher 95% CI). All these estimates are derived from one-month summer surveys and should not be considered as specific population sizes for the site. Hammond, P. Macleod, K. Berggren, P. Borchers, D. Burt, L. Canadas, A. Desportes, G. Donovan, G. Gilles, A. Gillespie, D. Gordon, J. Hiby, L. Kuklik, I. Leaper, R. Lehnert, K. Leopold, M. Lovell, P. Øien, N. Paxton, C. Ridoux, V. Rogan, E. Samarra, F. Scheidat, M. Sequeira, M. Siebert, U. Skov, H. Swift, R. Tasker, M. Teilmann, J. van Canneyt, O. Vazques, J. (2013). Cetacean abundance and distribution in European Atlantic shelf waters to inform conservation and management. Biological Conservation. 164. 107 - 122. Hammond, P. Lacey, C. Gilles, A. Viquerat, S. Börjesson, P. Herr, H. Macleod, K. Ridoux, V. Santos, M. Scheidat, M. Teilmann, J. Vingada, J. Øien, N. (2017). Estimates of cetacean abundance in European Atlantic waters in summer 2016 from the SCANS-III aerial and shipboard surveys. Available: <https://synergy.st-andrews.ac.uk/scans3/files/2017/05/SCANS-III-design-based-estimates-2017-05-12-final-revis>

Link(s): <http://jncc.defra.gov.uk/page-7343>

6. SITE MANAGEMENT

[Back to top](#)

6.1 Body(ies) responsible for the site management:

Organisation:	Joint Nature Conservation Committee
Address:	
Email:	

Organisation:	Natural Resources Wales
Address:	
Email:	

6.2 Management Plan(s):

An actual management plan does exist:

☐	Yes
☐	No, but in preparation
☒	No

7. MAP OF THE SITES

[Back to top](#)

INSPIRE ID:

Map delivered as PDF in electronic format (optional)

☐ Yes ☒ No

Reference(s) to the original map used for the digitalisation of the electronic boundaries (optional).

EXPLANATION OF CODES USED IN THE SPECIAL AREA OF CONSERVATION (SAC) AND SPECIAL PROTECTION AREA (SPA) STANDARD DATA FORMS

The codes in the table below generally follow those explained in the [official European Union guidelines for the Standard Data Form](#) (also referencing the relevant page number).

1.1 Site type

CODE	DESCRIPTION	PAGE NO
A	SPA (classified Special Protection Area)	53
B	cSAC, SCI or SAC (candidate Special Area of Conservation, Site of Community Importance, designated Special Area of Conservation)	53
C	SPA area/boundary is the same as the cSAC/SCI/SAC i.e. a co-classified/designated site (Note: this situation only occurs in Gibraltar)	53

3.1 Habitat code

CODE	DESCRIPTION	PAGE NO
1110	Sandbanks which are slightly covered by sea water all the time	57
1130	Estuaries	57
1140	Mudflats and sandflats not covered by seawater at low tide	57
1150	Coastal lagoons	57
1160	Large shallow inlets and bays	57
1170	Reefs	57
1180	Submarine structures made by leaking gases	57
1210	Annual vegetation of drift lines	57
1220	Perennial vegetation of stony banks	57
1230	Vegetated sea cliffs of the Atlantic and Baltic Coasts	57
1310	Salicornia and other annuals colonizing mud and sand	57
1320	Spartina swards (Spartinion maritimae)	57
1330	Atlantic salt meadows (Glaucio-Puccinellietalia maritimae)	57
1340	Inland salt meadows	57
1420	Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)	57
2110	Embryonic shifting dunes	57
2120	Shifting dunes along the shoreline with Ammophila arenaria ("white dunes")	57
2130	Fixed coastal dunes with herbaceous vegetation ("grey dunes")	57
2140	Decalcified fixed dunes with Empetrum nigrum	57
2150	Atlantic decalcified fixed dunes (Calluno-Ulicetea)	57
2160	Dunes with Hippophya• rhamnoides	57
2170	Dunes with Salix repens ssp. argentea (Salicion arenariae)	57
2190	Humid dune slacks	57
21A0	Machairs (* in Ireland)	57
2250	Coastal dunes with Juniperus spp.	57
2330	Inland dunes with open Corynephorus and Agrostis grasslands	57
3110	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	57
3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea	57
3140	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	57
3150	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation	57

CODE	DESCRIPTION	PAGE NO
3160	Natural dystrophic lakes and ponds	57
3170	Mediterranean temporary ponds	57
3180	Turloughs	57
3260	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation	57
4010	Northern Atlantic wet heaths with Erica tetralix	57
4020	Temperate Atlantic wet heaths with Erica ciliaris and Erica tetralix	57
4030	European dry heaths	57
4040	Dry Atlantic coastal heaths with Erica vagans	57
4060	Alpine and Boreal heaths	57
4080	Sub-Arctic Salix spp. scrub	57
5110	Stable xerothermophilous formations with Buxus sempervirens on rock slopes (Berberidion p.p.)	57
5130	Juniperus communis formations on heaths or calcareous grasslands	57
6130	Calaminarian grasslands of the Violetalia calaminariae	57
6150	Siliceous alpine and boreal grasslands	57
6170	Alpine and subalpine calcareous grasslands	57
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	57
6230	Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	57
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	57
6430	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	57
6510	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	57
6520	Mountain hay meadows	57
7110	Active raised bogs	57
7120	Degraded raised bogs still capable of natural regeneration	57
7130	Blanket bogs (* if active bog)	57
7140	Transition mires and quaking bogs	57
7150	Depressions on peat substrates of the Rhynchosporion	57
7210	Calcareous fens with Cladium mariscus and species of the Caricion davallianae	57
7220	Petrifying springs with tufa formation (Cratoneurion)	57
7230	Alkaline fens	57
7240	Alpine pioneer formations of the Caricion bicoloris-atrofuscae	57
8110	Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	57
8120	Calcareous and calcshist scree of the montane to alpine levels (Thlaspietalia rotundifoliae)	57
8210	Calcareous rocky slopes with chasmophytic vegetation	57
8220	Siliceous rocky slopes with chasmophytic vegetation	57
8240	Limestone pavements	57
8310	Caves not open to the public	57
8330	Submerged or partially submerged sea caves	57
9120	Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robur-petraeae or Ilici-Fagenion)	57
9130	Asperulo-Fagetum beech forests	57
9160	Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli	57
9180	Tilio-Acerion forests of slopes, scree and ravines	57
9190	Old acidophilous oak woods with Quercus robur on sandy plains	57
91A0	Old sessile oak woods with Ilex and Blechnum in the British Isles	57
91C0	Caledonian forest	57
91D0	Bog woodland	57
91E0	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	57
91J0	Taxus baccata woods of the British Isles	57

3.1 Habitat representativity (abbreviated to 'Representativity' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent representativity	57
B	Good representativity	57
C	Significant representativity	57
D	Non-significant presence representativity	57

3.1 Relative surface

CODE	DESCRIPTION	PAGE NO
A	> 15%-100%	58
B	> 2%-15%	58
C	≤ 2%	58

3.1 Degree of conservation (abbreviated to 'Conservation' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	59
B	Good conservation	59
C	Average or reduced conservation	59

3.1 Global assessment (abbreviated to 'Global' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	59
B	Good value	59
C	Significant value	59

3.2 Population (abbreviated to 'Pop.' in data form)

CODE	DESCRIPTION	PAGE NO
A	> 15%-100%	62
B	> 2%-15%	62
C	≤ 2%	62
D	Non-significant population	62

3.2 Degree of conservation (abbreviated to 'Con.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	63
B	Good conservation	63
C	Average or reduced conservation	63

3.2 Isolation (abbreviated to 'Iso.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Population (almost) Isolated	63
B	Population not-isolated, but on margins of area of distribution	63
C	Population not-isolated within extended distribution range	63

3.2 Global Grade (abbreviated to 'Glo.' or 'G.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	63
B	Good value	63
C	Significant value	63

3.3 Other species – essentially covers bird assemblage types

CODE	DESCRIPTION	PAGE NO
WATR	Non-breeding waterbird assemblage	UK specific code
SBA	Breeding seabird assemblage	UK specific code

BBA	Breeding bird assemblage (applies only to sites classified pre 2000)	UK specific code
-----	--	------------------

4.1 Habitat class code

CODE	DESCRIPTION	PAGE NO
N01	Marine areas, Sea inlets	65
N02	Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins)	65
N03	Salt marshes, Salt pastures, Salt steppes	65
N04	Coastal sand dunes, Sand beaches, Machair	65
N05	Shingle, Sea cliffs, Islets	65
N06	Inland water bodies (Standing water, Running water)	65
N07	Bogs, Marshes, Water fringed vegetation, Fens	65
N08	Heath, Scrub, Maquis and Garrigue, Phygrana	65
N09	Dry grassland, Steppes	65
N10	Humid grassland, Mesophile grassland	65
N11	Alpine and sub-Alpine grassland	65
N14	Improved grassland	65
N15	Other arable land	65
N16	Broad-leaved deciduous woodland	65
N17	Coniferous woodland	65
N19	Mixed woodland	65
N21	Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas)	65
N22	Inland rocks, Screes, Sands, Permanent Snow and ice	65
N23	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	65
N25	Grassland and scrub habitats (general)	65
N26	Woodland habitats (general)	65

4.3 Threats code

CODE	DESCRIPTION	PAGE NO
A01	Cultivation	65
A02	Modification of cultivation practices	65
A03	Mowing / cutting of grassland	65
A04	Grazing	65
A05	Livestock farming and animal breeding (without grazing)	65
A06	Annual and perennial non-timber crops	65
A07	Use of biocides, hormones and chemicals	65
A08	Fertilisation	65
A10	Restructuring agricultural land holding	65
A11	Agriculture activities not referred to above	65
B01	Forest planting on open ground	65
B02	Forest and Plantation management & use	65
B03	Forest exploitation without replanting or natural regrowth	65
B04	Use of biocides, hormones and chemicals (forestry)	65
B06	Grazing in forests/ woodland	65
B07	Forestry activities not referred to above	65
C01	Mining and quarrying	65
C02	Exploration and extraction of oil or gas	65
C03	Renewable abiotic energy use	65
D01	Roads, paths and railroads	65
D02	Utility and service lines	65
D03	Shipping lanes, ports, marine constructions	65
D04	Airports, flightpaths	65
D05	Improved access to site	65
E01	Urbanised areas, human habitation	65
E02	Industrial or commercial areas	65

CODE	DESCRIPTION	PAGE NO
E03	Discharges	65
E04	Structures, buildings in the landscape	65
E06	Other urbanisation, industrial and similar activities	65
F01	Marine and Freshwater Aquaculture	65
F02	Fishing and harvesting aquatic resources	65
F03	Hunting and collection of wild animals (terrestrial), including damage caused by game (excessive density), and taking/removal of terrestrial animals (including collection of insects, reptiles, amphibians, birds of prey, etc., trapping, poisoning, poaching, predator control, accidental capture (e.g. due to fishing gear), etc.)	65
F04	Taking / Removal of terrestrial plants, general	65
F05	Illegal taking/ removal of marine fauna	65
F06	Hunting, fishing or collecting activities not referred to above	65
G01	Outdoor sports and leisure activities, recreational activities	65
G02	Sport and leisure structures	65
G03	Interpretative centres	65
G04	Military use and civil unrest	65
G05	Other human intrusions and disturbances	65
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)	65
H02	Pollution to groundwater (point sources and diffuse sources)	65
H03	Marine water pollution	65
H04	Air pollution, air-borne pollutants	65
H05	Soil pollution and solid waste (excluding discharges)	65
H06	Excess energy	65
H07	Other forms of pollution	65
I01	Invasive non-native species	65
I02	Problematic native species	65
I03	Introduced genetic material, GMO	65
J01	Fire and fire suppression	65
J02	Human induced changes in hydraulic conditions	65
J03	Other ecosystem modifications	65
K01	Abiotic (slow) natural processes	65
K02	Biocenotic evolution, succession	65
K03	Interspecific faunal relations	65
K04	Interspecific floral relations	65
K05	Reduced fecundity/ genetic depression	65
L05	Collapse of terrain, landslide	65
L07	Storm, cyclone	65
L08	Inundation (natural processes)	65
L10	Other natural catastrophes	65
M01	Changes in abiotic conditions	65
M02	Changes in biotic conditions	65
U	Unknown threat or pressure	65
XO	Threats and pressures from outside the Member State	65

5.1 Designation type codes

CODE	DESCRIPTION	PAGE NO
UK00	No Protection Status	67
UK01	National Nature Reserve	67
UK04	Site of Special Scientific Interest (GB)	67
UK05	Marine Conservation Zone	67
UK06	Nature Conservation Marine Protected Area	67
UK86	Special Area (Channel Islands)	67
UK98	Area of Special Scientific Interest (NI)	67
IN00	Ramsar Convention site	67
IN08	Special Protection Area	67
IN09	Special Area of Conservation	67

STANDARD DATA FORM for sites within the 'UK national site network of European sites'

Special Protection Areas (SPAs) are classified and Special Areas of Conservation (SACs) are designated under:

- the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales (including the adjacent territorial sea) and to a limited extent in Scotland (reserved matters) and Northern Ireland (excepted matters);
- the Conservation (Natural Habitats &c.) Regulations 1994 (as amended) in Scotland;
- the Conservation (Natural Habitats, &c) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland; and
- the Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended) in the UK offshore area.

Each SAC or SPA (forming part of the UK national site network of European sites) has its own Standard Data Form containing site-specific information. The information provided here generally follows the same documenting format for SACs and SPAs, as set out in the [Official Journal of the European Union recording the Commission Implementing Decision of 11 July 2011 \(2011/484/EU\)](#).

Please note that these forms contain a number of codes, all of which are explained either within the data forms themselves or in the end notes.

More general information on SPAs and SACs in the UK is available from the [SPA homepage](#) and [SAC homepage](#) on the JNCC website. These webpages also provide links to Standard Data Forms for all SAC and SPA sites in the UK.

<https://jncc.gov.uk/>



NATURA 2000 - STANDARD DATA FORM

For Special Protection Areas (SPA),
Proposed Sites for Community Importance (pSCI),
Sites of Community Importance (SCI) and
for Special Areas of Conservation (SAC)

SITE UK0013117

SITENAME Pen Lln a`r Sarnau/ Lleyn Peninsula and the Sarnau

TABLE OF CONTENTS

- [1. SITE IDENTIFICATION](#)
- [2. SITE LOCATION](#)
- [3. ECOLOGICAL INFORMATION](#)
- [4. SITE DESCRIPTION](#)
- [5. SITE PROTECTION STATUS AND RELATION WITH CORINE BIOTOPES](#)
- [6. SITE MANAGEMENT](#)

1. SITE IDENTIFICATION

1.1 Type B	1.2 Site code UK0013117	Back to top
----------------------	-----------------------------------	-----------------------------

1.3 Site name

Pen Lln a`r Sarnau/ Lleyn Peninsula and the Sarnau

1.4 First Compilation date 1996-01	1.5 Update date 2015-12
--	-----------------------------------

1.6 Respondent:

Name/Organisation: Joint Nature Conservation Committee

Address: Joint Nature Conservation Committee Monkstone House City Road Peterborough
PE1 1JY

Email:

Date site proposed as SCI: 1996-01

Date site confirmed as SCI: 2004-12

Date site designated as SAC: 2004-12

National legal reference of SAC designation:

Regulations 11 and 13-15 of the Conservation of Habitats and Species Regulations 2010
(<http://www.legislation.gov.uk/uksi/2010/490/contents/made>).

2. SITE LOCATION

[Back to top](#)

		0.0	0	G	D			
1330		730.05	0	G	B	B	B	C
8330		146.01	0	G	C	C	A	C

- **PF:** for the habitat types that can have a non-priority as well as a priority form (6210, 7130, 9430) enter "X" in the column PF to indicate the priority form.
- **NP:** in case that a habitat type no longer exists in the site enter: x (optional)
- **Cover:** decimal values can be entered
- **Caves:** for habitat types 8310, 8330 (caves) enter the number of caves if estimated surface is not available.
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation)

3.2 Species referred to in Article 4 of Directive 2009/147/EC and listed in Annex II of Directive 92/43/EEC and site evaluation for them

Species					Population in the site						Site assessment			
G	Code	Scientific Name	S	NP	T	Size		Unit	Cat.	D.qual.	A B C D	A B C		
						Min	Max				Pop.	Con.	Iso.	Glo.
F	1102	Alosa alosa			p				P	DD	D			
F	1103	Alosa fallax			p				P	DD	D			
M	1364	Halichoerus grypus			p	101	250	i		M	C	B	B	C
F	1099	Lampetra fluviatilis			p				P	DD	D			
M	1355	Lutra lutra			p				P	DD	C	B	C	C
F	1095	Petromyzon marinus			p				P	DD	D			
M	1351	Phocoena phocoena			p				P	DD	D			
M	1349	Tursiops truncatus			p				P	DD	C	B	C	C

- **Group:** A = Amphibians, B = Birds, F = Fish, I = Invertebrates, M = Mammals, P = Plants, R = Reptiles
- **S:** in case that the data on species are sensitive and therefore have to be blocked for any public access enter: yes
- **NP:** in case that a species is no longer present in the site enter: x (optional)
- **Type:** p = permanent, r = reproducing, c = concentration, w = wintering (for plant and non-migratory species use permanent)
- **Unit:** i = individuals, p = pairs or other units according to the Standard list of population units and codes in accordance with Article 12 and 17 reporting (see [reference portal](#))
- **Abundance categories (Cat.):** C = common, R = rare, V = very rare, P = present - to fill if data are deficient (DD) or in addition to population size information
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation); VP = 'Very poor' (use this category only, if not even a rough estimation of the population size can be made, in this case the fields for population size can remain empty, but the field "Abundance categories" has to be filled in)

4. SITE DESCRIPTION

4.1 General site character

Habitat class	% Cover
N05	0.2
N07	0.1
N03	1.2
N04	0.5
N01	92.6
N02	5.4
Total Habitat Cover	100

Other Site Characteristics

1 Terrestrial: Soil & Geology: sand, sedimentary, shingle, clay, igneous, metamorphic, mud 2 Terrestrial: Geomorphology and landscape: caves, coastal, island, floodplain 3 Marine: Geology: metamorphic, sedimentary, igneous, mud, gravel, cobble, biogenic reef, sand, pebble, maerl, boulder, clay, peat, slate/shale 4 Marine: Geomorphology: open coast (including bay), cliffs, estuary, lagoon, surge gullies, subtidal sediments (including sandbank/mudbank), subtidal rock (including rocky reefs), sound/strait, islands, intertidal sediments (including sandflat/mudflat), intertidal rock, cave/tunnel, basins

4.2 Quality and importance

Sandbanks which are slightly covered by sea water all the time for which this is considered to be one of the best areas in the United Kingdom. Estuaries for which this is considered to be one of the best areas in the United Kingdom. Mudflats and sandflats not covered by seawater at low tide for which the area is considered to support a significant presence. Coastal lagoons for which this is considered to be one of the best areas in the United Kingdom. Large shallow inlets and bays for which this is considered to be one of the best areas in the United Kingdom. Reefs for which this is considered to be one of the best areas in the United Kingdom. Submerged or partially submerged sea caves for which the area is considered to support a significant presence. Salicornia and other annuals colonising mud and sand for which the area is considered to support a significant presence. Atlantic salt meadows (*Glauco-Puccinellietalia maritima*) for which the area is considered to support a significant presence. *Lutra lutra* for which the area is considered to support a significant presence. *Halichoerus grypus* for which the area is considered to support a significant presence. *Tursiops truncatus* for which the area is considered to support a significant presence.

4.3 Threats, pressures and activities with impacts on the site

The most important impacts and activities with high effect on the site

Negative Impacts			
Rank	Threats and pressures [code]	Pollution (optional) [code]	inside/outside [i o b]
M	H01		B
H	A04		I
M	H03		B
H	I01		B
H	J02		B
H	F02		B
M	M01		B
H	G05		I
M	B02		B
M	G01		B
M	H02		B

Positive Impacts			
Rank	Activities, management [code]	Pollution (optional) [code]	inside/outside [i o b]
M	G01		I
M	D01		I
M	G03		B
M	A04		B
M	G02		I

Rank: H = high, M = medium, L = low

Pollution: N = Nitrogen input, P = Phosphor/Phosphate input, A = Acid input/acidification,

T = toxic inorganic chemicals, O = toxic organic chemicals, X = Mixed pollutions

i = inside, o = outside, b = both

4.5 Documentation

The Natural Resources Wales weblink below provides access to information on its designated sites. Detailed information about this Natura 2000 site can be accessed via the Management Plan link provided in Section 6.2. See also the 'UK Approach' document for more information (link via the JNCC website).

Link(s): <https://naturalresources.wales/guidance-and-advice/environmental-topics/wildlife-and-biodiversity/protected-areas-of-land>

http://jncc.defra.gov.uk/pdf/Natura2000_StandardDataForm_UKApproach_Dec2015.pdf

5. SITE PROTECTION STATUS (optional)

[Back to top](#)

5.1 Designation types at national and regional level:

Code	Cover [%]	Code	Cover [%]	Code	Cover [%]
UK04	4.6	UK01	1.6	UK00	95.4

6. SITE MANAGEMENT

[Back to top](#)

6.1 Body(ies) responsible for the site management:

Organisation:	Natural Resources Wales
Address:	
Email:	

6.2 Management Plan(s):

An actual management plan does exist:

☒	Yes	Name: PEN LLYN A'R SARNAU / LLEYN PENINSULA AND THE SARNAU
		Link:
		https://www.naturalresources.wales/media/673816/Pen%20Llyn%20ar%20Sarnau%20%20R33%20Feb%202009.pdf
☐	No, but in preparation	
☐	No	

EXPLANATION OF CODES USED IN THE SPECIAL AREA OF CONSERVATION (SAC) AND SPECIAL PROTECTION AREA (SPA) STANDARD DATA FORMS

The codes in the table below generally follow those explained in the [official European Union guidelines for the Standard Data Form](#) (also referencing the relevant page number).

1.1 Site type

CODE	DESCRIPTION	PAGE NO
A	SPA (classified Special Protection Area)	53
B	cSAC, SCI or SAC (candidate Special Area of Conservation, Site of Community Importance, designated Special Area of Conservation)	53
C	SPA area/boundary is the same as the cSAC/SCI/SAC i.e. a co-classified/designated site (Note: this situation only occurs in Gibraltar)	53

3.1 Habitat code

CODE	DESCRIPTION	PAGE NO
1110	Sandbanks which are slightly covered by sea water all the time	57
1130	Estuaries	57
1140	Mudflats and sandflats not covered by seawater at low tide	57
1150	Coastal lagoons	57
1160	Large shallow inlets and bays	57
1170	Reefs	57
1180	Submarine structures made by leaking gases	57
1210	Annual vegetation of drift lines	57
1220	Perennial vegetation of stony banks	57
1230	Vegetated sea cliffs of the Atlantic and Baltic Coasts	57
1310	Salicornia and other annuals colonizing mud and sand	57
1320	Spartina swards (Spartinion maritimae)	57
1330	Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	57
1340	Inland salt meadows	57
1420	Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)	57
2110	Embryonic shifting dunes	57
2120	Shifting dunes along the shoreline with Ammophila arenaria ("white dunes")	57
2130	Fixed coastal dunes with herbaceous vegetation ("grey dunes")	57
2140	Decalcified fixed dunes with Empetrum nigrum	57
2150	Atlantic decalcified fixed dunes (Calluno-Ulicetea)	57
2160	Dunes with Hippophya• rhamnoides	57
2170	Dunes with Salix repens ssp. argentea (Salicion arenariae)	57
2190	Humid dune slacks	57
21A0	Machairs (* in Ireland)	57
2250	Coastal dunes with Juniperus spp.	57
2330	Inland dunes with open Corynephorus and Agrostis grasslands	57
3110	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	57
3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea	57
3140	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	57
3150	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation	57

CODE	DESCRIPTION	PAGE NO
3160	Natural dystrophic lakes and ponds	57
3170	Mediterranean temporary ponds	57
3180	Turloughs	57
3260	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation	57
4010	Northern Atlantic wet heaths with Erica tetralix	57
4020	Temperate Atlantic wet heaths with Erica ciliaris and Erica tetralix	57
4030	European dry heaths	57
4040	Dry Atlantic coastal heaths with Erica vagans	57
4060	Alpine and Boreal heaths	57
4080	Sub-Arctic Salix spp. scrub	57
5110	Stable xerothermophilous formations with Buxus sempervirens on rock slopes (Berberidion p.p.)	57
5130	Juniperus communis formations on heaths or calcareous grasslands	57
6130	Calaminarian grasslands of the Violetalia calaminariae	57
6150	Siliceous alpine and boreal grasslands	57
6170	Alpine and subalpine calcareous grasslands	57
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	57
6230	Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	57
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	57
6430	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	57
6510	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	57
6520	Mountain hay meadows	57
7110	Active raised bogs	57
7120	Degraded raised bogs still capable of natural regeneration	57
7130	Blanket bogs (* if active bog)	57
7140	Transition mires and quaking bogs	57
7150	Depressions on peat substrates of the Rhynchosporion	57
7210	Calcareous fens with Cladium mariscus and species of the Caricion davallianae	57
7220	Petrifying springs with tufa formation (Cratoneurion)	57
7230	Alkaline fens	57
7240	Alpine pioneer formations of the Caricion bicoloris-atrofuscae	57
8110	Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	57
8120	Calcareous and calcshist scree of the montane to alpine levels (Thlaspietalia rotundifoliae)	57
8210	Calcareous rocky slopes with chasmophytic vegetation	57
8220	Siliceous rocky slopes with chasmophytic vegetation	57
8240	Limestone pavements	57
8310	Caves not open to the public	57
8330	Submerged or partially submerged sea caves	57
9120	Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robur-petraeae or Ilici-Fagenion)	57
9130	Asperulo-Fagetum beech forests	57
9160	Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli	57
9180	Tilio-Acerion forests of slopes, scree and ravines	57
9190	Old acidophilous oak woods with Quercus robur on sandy plains	57
91A0	Old sessile oak woods with Ilex and Blechnum in the British Isles	57
91C0	Caledonian forest	57
91D0	Bog woodland	57
91E0	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	57
91J0	Taxus baccata woods of the British Isles	57

3.1 Habitat representativity (abbreviated to 'Representativity' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent representativity	57
B	Good representativity	57
C	Significant representativity	57
D	Non-significant presence representativity	57

3.1 Relative surface

CODE	DESCRIPTION	PAGE NO
A	> 15%-100%	58
B	> 2%-15%	58
C	≤ 2%	58

3.1 Degree of conservation (abbreviated to 'Conservation' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	59
B	Good conservation	59
C	Average or reduced conservation	59

3.1 Global assessment (abbreviated to 'Global' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	59
B	Good value	59
C	Significant value	59

3.2 Population (abbreviated to 'Pop.' in data form)

CODE	DESCRIPTION	PAGE NO
A	> 15%-100%	62
B	> 2%-15%	62
C	≤ 2%	62
D	Non-significant population	62

3.2 Degree of conservation (abbreviated to 'Con.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	63
B	Good conservation	63
C	Average or reduced conservation	63

3.2 Isolation (abbreviated to 'Iso.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Population (almost) Isolated	63
B	Population not-isolated, but on margins of area of distribution	63
C	Population not-isolated within extended distribution range	63

3.2 Global Grade (abbreviated to 'Glo.' or 'G.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	63
B	Good value	63
C	Significant value	63

3.3 Other species – essentially covers bird assemblage types

CODE	DESCRIPTION	PAGE NO
WATR	Non-breeding waterbird assemblage	UK specific code
SBA	Breeding seabird assemblage	UK specific code

BBA	Breeding bird assemblage (applies only to sites classified pre 2000)	UK specific code
-----	--	------------------

4.1 Habitat class code

CODE	DESCRIPTION	PAGE NO
N01	Marine areas, Sea inlets	65
N02	Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins)	65
N03	Salt marshes, Salt pastures, Salt steppes	65
N04	Coastal sand dunes, Sand beaches, Machair	65
N05	Shingle, Sea cliffs, Islets	65
N06	Inland water bodies (Standing water, Running water)	65
N07	Bogs, Marshes, Water fringed vegetation, Fens	65
N08	Heath, Scrub, Maquis and Garrigue, Phygrana	65
N09	Dry grassland, Steppes	65
N10	Humid grassland, Mesophile grassland	65
N11	Alpine and sub-Alpine grassland	65
N14	Improved grassland	65
N15	Other arable land	65
N16	Broad-leaved deciduous woodland	65
N17	Coniferous woodland	65
N19	Mixed woodland	65
N21	Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas)	65
N22	Inland rocks, Screes, Sands, Permanent Snow and ice	65
N23	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	65
N25	Grassland and scrub habitats (general)	65
N26	Woodland habitats (general)	65

4.3 Threats code

CODE	DESCRIPTION	PAGE NO
A01	Cultivation	65
A02	Modification of cultivation practices	65
A03	Mowing / cutting of grassland	65
A04	Grazing	65
A05	Livestock farming and animal breeding (without grazing)	65
A06	Annual and perennial non-timber crops	65
A07	Use of biocides, hormones and chemicals	65
A08	Fertilisation	65
A10	Restructuring agricultural land holding	65
A11	Agriculture activities not referred to above	65
B01	Forest planting on open ground	65
B02	Forest and Plantation management & use	65
B03	Forest exploitation without replanting or natural regrowth	65
B04	Use of biocides, hormones and chemicals (forestry)	65
B06	Grazing in forests/ woodland	65
B07	Forestry activities not referred to above	65
C01	Mining and quarrying	65
C02	Exploration and extraction of oil or gas	65
C03	Renewable abiotic energy use	65
D01	Roads, paths and railroads	65
D02	Utility and service lines	65
D03	Shipping lanes, ports, marine constructions	65
D04	Airports, flightpaths	65
D05	Improved access to site	65
E01	Urbanised areas, human habitation	65
E02	Industrial or commercial areas	65

CODE	DESCRIPTION	PAGE NO
E03	Discharges	65
E04	Structures, buildings in the landscape	65
E06	Other urbanisation, industrial and similar activities	65
F01	Marine and Freshwater Aquaculture	65
F02	Fishing and harvesting aquatic resources	65
F03	Hunting and collection of wild animals (terrestrial), including damage caused by game (excessive density), and taking/removal of terrestrial animals (including collection of insects, reptiles, amphibians, birds of prey, etc., trapping, poisoning, poaching, predator control, accidental capture (e.g. due to fishing gear), etc.)	65
F04	Taking / Removal of terrestrial plants, general	65
F05	Illegal taking/ removal of marine fauna	65
F06	Hunting, fishing or collecting activities not referred to above	65
G01	Outdoor sports and leisure activities, recreational activities	65
G02	Sport and leisure structures	65
G03	Interpretative centres	65
G04	Military use and civil unrest	65
G05	Other human intrusions and disturbances	65
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)	65
H02	Pollution to groundwater (point sources and diffuse sources)	65
H03	Marine water pollution	65
H04	Air pollution, air-borne pollutants	65
H05	Soil pollution and solid waste (excluding discharges)	65
H06	Excess energy	65
H07	Other forms of pollution	65
I01	Invasive non-native species	65
I02	Problematic native species	65
I03	Introduced genetic material, GMO	65
J01	Fire and fire suppression	65
J02	Human induced changes in hydraulic conditions	65
J03	Other ecosystem modifications	65
K01	Abiotic (slow) natural processes	65
K02	Biocenotic evolution, succession	65
K03	Interspecific faunal relations	65
K04	Interspecific floral relations	65
K05	Reduced fecundity/ genetic depression	65
L05	Collapse of terrain, landslide	65
L07	Storm, cyclone	65
L08	Inundation (natural processes)	65
L10	Other natural catastrophes	65
M01	Changes in abiotic conditions	65
M02	Changes in biotic conditions	65
U	Unknown threat or pressure	65
XO	Threats and pressures from outside the Member State	65

5.1 Designation type codes

CODE	DESCRIPTION	PAGE NO
UK00	No Protection Status	67
UK01	National Nature Reserve	67
UK04	Site of Special Scientific Interest (GB)	67
UK05	Marine Conservation Zone	67
UK06	Nature Conservation Marine Protected Area	67
UK86	Special Area (Channel Islands)	67
UK98	Area of Special Scientific Interest (NI)	67
IN00	Ramsar Convention site	67
IN08	Special Protection Area	67
IN09	Special Area of Conservation	67

STANDARD DATA FORM for sites within the 'UK national site network of European sites'

Special Protection Areas (SPAs) are classified and Special Areas of Conservation (SACs) are designated under:

- the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales (including the adjacent territorial sea) and to a limited extent in Scotland (reserved matters) and Northern Ireland (excepted matters);
- the Conservation (Natural Habitats &c.) Regulations 1994 (as amended) in Scotland;
- the Conservation (Natural Habitats, &c) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland; and
- the Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended) in the UK offshore area.

Each SAC or SPA (forming part of the UK national site network of European sites) has its own Standard Data Form containing site-specific information. The information provided here generally follows the same documenting format for SACs and SPAs, as set out in the [Official Journal of the European Union recording the Commission Implementing Decision of 11 July 2011 \(2011/484/EU\)](#).

Please note that these forms contain a number of codes, all of which are explained either within the data forms themselves or in the end notes.

More general information on SPAs and SACs in the UK is available from the [SPA homepage](#) and [SAC homepage](#) on the JNCC website. These webpages also provide links to Standard Data Forms for all SAC and SPA sites in the UK.

<https://jncc.gov.uk/>



NATURA 2000 - STANDARD DATA FORM

For Special Protection Areas (SPA),
Proposed Sites for Community Importance (pSCI),
Sites of Community Importance (SCI) and
for Special Areas of Conservation (SAC)

SITE UK0030398

SITENAME North Anglesey Marine / Gogledd Môn Forol

TABLE OF CONTENTS

- [1. SITE IDENTIFICATION](#)
- [2. SITE LOCATION](#)
- [3. ECOLOGICAL INFORMATION](#)
- [4. SITE DESCRIPTION](#)
- [6. SITE MANAGEMENT](#)
- [7. MAP OF THE SITE](#)

1. SITE IDENTIFICATION

1.1 Type B	1.2 Site code UK0030398	Back to top
----------------------	-----------------------------------	-----------------------------

1.3 Site name

North Anglesey Marine / Gogledd Môn Forol

1.4 First Compilation date 2017-01	1.5 Update date 2019-03
--	-----------------------------------

1.6 Respondent:

Name/Organisation: Joint Nature Conservation Committee
Address: Monkstone House, City Road, Peterborough, PE1 1JY
Email:

Date site proposed as SCI:	2017-01
Date site confirmed as SCI:	2017-12
Date site designated as SAC:	2019-02
National legal reference of SAC designation:	Regulations 13 and 17-19 of The Conservation of Habitats and Species Regulations 2017 (https://www.legislation.gov.uk/uksi/2017/1012/contents/made), and Regulations 11, 19 and 20 of The Conservation of Offshore Marine Habitats and Species Regulations 2017 (http://www.legislation.gov.uk/uksi/2017/1013/contents/made).

2. SITE LOCATION

2.1 Site-centre location [decimal degrees]:

Longitude

-4.8279

Latitude

53.5663

2.2 Area [ha]:

324949.0

2.3 Marine area [%]

100.0

2.4 Sitelength [km]:

0.0

2.5 Administrative region code and name

NUTS level 2 code

Region Name

UKZZ	Extra-Regio
------	-------------

2.6 Biogeographical Region(s)

Atlantic (100.0
%)

3. ECOLOGICAL INFORMATION

3.2 Species referred to in Article 4 of Directive 2009/147/EC and listed in Annex II of Directive 92/43/EEC and site evaluation for them

Species					Population in the site						Site assessment			
G	Code	Scientific Name	S	NP	T	Size		Unit	Cat.	D.qual.	A B C D	A B C		
						Min	Max				Pop.	Con.	Iso.	Glo.
M	1351	Phocoena phocoena			p	557	2111	i	C	M	B	A	C	B

- **Group:** A = Amphibians, B = Birds, F = Fish, I = Invertebrates, M = Mammals, P = Plants, R = Reptiles
- **S:** in case that the data on species are sensitive and therefore have to be blocked for any public access enter: yes
- **NP:** in case that a species is no longer present in the site enter: x (optional)
- **Type:** p = permanent, r = reproducing, c = concentration, w = wintering (for plant and non-migratory species use permanent)
- **Unit:** i = individuals, p = pairs or other units according to the Standard list of population units and codes in accordance with Article 12 and 17 reporting (see [reference portal](#))
- **Abundance categories (Cat.):** C = common, R = rare, V = very rare, P = present - to fill if data are deficient (DD) or in addition to population size information
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation); VP = 'Very poor' (use this category only, if not even a rough estimation of the population size can be made, in this case the fields for population size can remain empty, but the field "Abundance categories" has to be filled in)

4. SITE DESCRIPTION

[Back to top](#)

4.1 General site character

Habitat class	% Cover
N01	100.0
Total Habitat Cover	100

Other Site Characteristics

General site characteristics: A mixture of hard substrate and sediments, including rock, coarse sediment, sand and mud. Full salinity. Water depths between Mean Low Water Tide and 100m.

4.2 Quality and importance

Harbour porpoise (*Phocoena phocoena*) "For which this is considered to be one of the best areas in the United Kingdom".

4.3 Threats, pressures and activities with impacts on the site

The most important impacts and activities with high effect on the site

Negative Impacts			
Rank	Threats and pressures [code]	Pollution (optional) [code]	inside/outside [i o b]
L	D03		b
L	F02		b
L	G04		b
L	C02		b
L	C03		b
M	H03	O	b

Positive Impacts			
Rank	Activities, management [code]	Pollution (optional) [code]	inside/outside [i o b]

Rank: H = high, M = medium, L = low

Pollution: N = Nitrogen input, P = Phosphor/Phosphate input, A = Acid input/acidification,

T = toxic inorganic chemicals, O = toxic organic chemicals, X = Mixed pollutions

i = inside, o = outside, b = both

4.5 Documentation

For information on this site, including the Selection Assessment Document, Conservation Objectives and Advice on Activities document, as well as information about the identification process of the UK network of harbour porpoise SACs, see the Site Information Centre (see link) for this site. The population size estimate in Section 3.2, provided at the time the site was proposed as an SCI, is based on data from a survey conducted in 2005 (Hammond et al. 2013). Revised "population in the site" estimates based on the 2016 survey (Hammond et al. 2017) are a minimum of 453 (lower 95% CI) and maximum of 1331 (higher 95% CI). All these estimates are derived from one-month summer surveys and should not be considered as specific population sizes for the site. Hammond, P. Macleod, K. Berggren, P. Borchers, D. Burt, L. Canadas, A. Desportes, G. Donovan, G. Gilles, A. Gillespie, D. Gordon, J. Hiby, L. Kuklik, I. Leaper, R. Lehnert, K. Leopold, M. Lovell, P. Øien, N. Paxton, C. Ridoux, V. Rogan, E. Samarra, F. Scheidat, M. Sequeira, M. Siebert, U. Skov, H. Swift, R. Tasker, M. Teilmann, J. van Canneyt, O. Vazques, J. (2013). Cetacean abundance and distribution in European Atlantic shelf waters to inform conservation and management. Biological Conservation. 164. 107 - 122. Hammond, P. Lacey, C. Gilles, A. Viquerat, S. Börjesson, P. Herr, H. Macleod, K. Ridoux, V. Santos, M. Scheidat, M. Teilmann, J. Vingada, J. Øien, N. (2017). Estimates of cetacean abundance in European Atlantic waters in summer 2016 from the SCANS-III aerial and shipboard surveys. Available: <https://synergy.st-andrews.ac.uk/scans3/files/2017/05/SCANS-III-design-based-estimates-2017-05-12-final-revis>

Link(s): <http://jncc.defra.gov.uk/page-7244>

6. SITE MANAGEMENT

[Back to top](#)

6.1 Body(ies) responsible for the site management:

Organisation:	Joint Nature Conservation Committee
Address:	
Email:	

Organisation:	Natural Resources Wales
Address:	
Email:	

6.2 Management Plan(s):

An actual management plan does exist:

☐	Yes
☐	No, but in preparation
☒	No

7. MAP OF THE SITES

[Back to top](#)

INSPIRE ID:

Map delivered as PDF in electronic format (optional)

☐ Yes ☒ No

Reference(s) to the original map used for the digitalisation of the electronic boundaries (optional).

--

EXPLANATION OF CODES USED IN THE SPECIAL AREA OF CONSERVATION (SAC) AND SPECIAL PROTECTION AREA (SPA) STANDARD DATA FORMS

The codes in the table below generally follow those explained in the [official European Union guidelines for the Standard Data Form](#) (also referencing the relevant page number).

1.1 Site type

CODE	DESCRIPTION	PAGE NO
A	SPA (classified Special Protection Area)	53
B	cSAC, SCI or SAC (candidate Special Area of Conservation, Site of Community Importance, designated Special Area of Conservation)	53
C	SPA area/boundary is the same as the cSAC/SCI/SAC i.e. a co-classified/designated site (Note: this situation only occurs in Gibraltar)	53

3.1 Habitat code

CODE	DESCRIPTION	PAGE NO
1110	Sandbanks which are slightly covered by sea water all the time	57
1130	Estuaries	57
1140	Mudflats and sandflats not covered by seawater at low tide	57
1150	Coastal lagoons	57
1160	Large shallow inlets and bays	57
1170	Reefs	57
1180	Submarine structures made by leaking gases	57
1210	Annual vegetation of drift lines	57
1220	Perennial vegetation of stony banks	57
1230	Vegetated sea cliffs of the Atlantic and Baltic Coasts	57
1310	Salicornia and other annuals colonizing mud and sand	57
1320	Spartina swards (Spartinion maritimae)	57
1330	Atlantic salt meadows (Glaucopuccinellietalia maritimae)	57
1340	Inland salt meadows	57
1420	Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)	57
2110	Embryonic shifting dunes	57
2120	Shifting dunes along the shoreline with Ammophila arenaria ("white dunes")	57
2130	Fixed coastal dunes with herbaceous vegetation ("grey dunes")	57
2140	Decalcified fixed dunes with Empetrum nigrum	57
2150	Atlantic decalcified fixed dunes (Calluno-Ulicetea)	57
2160	Dunes with Hippophya• rhamnoides	57
2170	Dunes with Salix repens ssp. argentea (Salicion arenariae)	57
2190	Humid dune slacks	57
21A0	Machairs (* in Ireland)	57
2250	Coastal dunes with Juniperus spp.	57
2330	Inland dunes with open Corynephorus and Agrostis grasslands	57
3110	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	57
3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea	57
3140	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	57
3150	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation	57

CODE	DESCRIPTION	PAGE NO
3160	Natural dystrophic lakes and ponds	57
3170	Mediterranean temporary ponds	57
3180	Turloughs	57
3260	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation	57
4010	Northern Atlantic wet heaths with Erica tetralix	57
4020	Temperate Atlantic wet heaths with Erica ciliaris and Erica tetralix	57
4030	European dry heaths	57
4040	Dry Atlantic coastal heaths with Erica vagans	57
4060	Alpine and Boreal heaths	57
4080	Sub-Arctic Salix spp. scrub	57
5110	Stable xerothermophilous formations with Buxus sempervirens on rock slopes (Berberidion p.p.)	57
5130	Juniperus communis formations on heaths or calcareous grasslands	57
6130	Calaminarian grasslands of the Violetalia calaminariae	57
6150	Siliceous alpine and boreal grasslands	57
6170	Alpine and subalpine calcareous grasslands	57
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	57
6230	Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	57
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	57
6430	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	57
6510	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	57
6520	Mountain hay meadows	57
7110	Active raised bogs	57
7120	Degraded raised bogs still capable of natural regeneration	57
7130	Blanket bogs (* if active bog)	57
7140	Transition mires and quaking bogs	57
7150	Depressions on peat substrates of the Rhynchosporion	57
7210	Calcareous fens with Cladium mariscus and species of the Caricion davallianae	57
7220	Petrifying springs with tufa formation (Cratoneurion)	57
7230	Alkaline fens	57
7240	Alpine pioneer formations of the Caricion bicoloris-atrofuscae	57
8110	Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	57
8120	Calcareous and calcshist scree of the montane to alpine levels (Thlaspietalia rotundifoliae)	57
8210	Calcareous rocky slopes with chasmophytic vegetation	57
8220	Siliceous rocky slopes with chasmophytic vegetation	57
8240	Limestone pavements	57
8310	Caves not open to the public	57
8330	Submerged or partially submerged sea caves	57
9120	Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robur-petraeae or Ilici-Fagenion)	57
9130	Asperulo-Fagetum beech forests	57
9160	Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli	57
9180	Tilio-Acerion forests of slopes, scree and ravines	57
9190	Old acidophilous oak woods with Quercus robur on sandy plains	57
91A0	Old sessile oak woods with Ilex and Blechnum in the British Isles	57
91C0	Caledonian forest	57
91D0	Bog woodland	57
91E0	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	57
91J0	Taxus baccata woods of the British Isles	57

3.1 Habitat representativity (abbreviated to 'Representativity' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent representativity	57
B	Good representativity	57
C	Significant representativity	57
D	Non-significant presence representativity	57

3.1 Relative surface

CODE	DESCRIPTION	PAGE NO
A	> 15%-100%	58
B	> 2%-15%	58
C	≤ 2%	58

3.1 Degree of conservation (abbreviated to 'Conservation' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	59
B	Good conservation	59
C	Average or reduced conservation	59

3.1 Global assessment (abbreviated to 'Global' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	59
B	Good value	59
C	Significant value	59

3.2 Population (abbreviated to 'Pop.' in data form)

CODE	DESCRIPTION	PAGE NO
A	> 15%-100%	62
B	> 2%-15%	62
C	≤ 2%	62
D	Non-significant population	62

3.2 Degree of conservation (abbreviated to 'Con.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	63
B	Good conservation	63
C	Average or reduced conservation	63

3.2 Isolation (abbreviated to 'Iso.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Population (almost) Isolated	63
B	Population not-isolated, but on margins of area of distribution	63
C	Population not-isolated within extended distribution range	63

3.2 Global Grade (abbreviated to 'Glo.' or 'G.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	63
B	Good value	63
C	Significant value	63

3.3 Other species – essentially covers bird assemblage types

CODE	DESCRIPTION	PAGE NO
WATR	Non-breeding waterbird assemblage	UK specific code
SBA	Breeding seabird assemblage	UK specific code

BBA	Breeding bird assemblage (applies only to sites classified pre 2000)	UK specific code
-----	--	------------------

4.1 Habitat class code

CODE	DESCRIPTION	PAGE NO
N01	Marine areas, Sea inlets	65
N02	Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins)	65
N03	Salt marshes, Salt pastures, Salt steppes	65
N04	Coastal sand dunes, Sand beaches, Machair	65
N05	Shingle, Sea cliffs, Islets	65
N06	Inland water bodies (Standing water, Running water)	65
N07	Bogs, Marshes, Water fringed vegetation, Fens	65
N08	Heath, Scrub, Maquis and Garrigue, Phygrana	65
N09	Dry grassland, Steppes	65
N10	Humid grassland, Mesophile grassland	65
N11	Alpine and sub-Alpine grassland	65
N14	Improved grassland	65
N15	Other arable land	65
N16	Broad-leaved deciduous woodland	65
N17	Coniferous woodland	65
N19	Mixed woodland	65
N21	Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas)	65
N22	Inland rocks, Screes, Sands, Permanent Snow and ice	65
N23	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	65
N25	Grassland and scrub habitats (general)	65
N26	Woodland habitats (general)	65

4.3 Threats code

CODE	DESCRIPTION	PAGE NO
A01	Cultivation	65
A02	Modification of cultivation practices	65
A03	Mowing / cutting of grassland	65
A04	Grazing	65
A05	Livestock farming and animal breeding (without grazing)	65
A06	Annual and perennial non-timber crops	65
A07	Use of biocides, hormones and chemicals	65
A08	Fertilisation	65
A10	Restructuring agricultural land holding	65
A11	Agriculture activities not referred to above	65
B01	Forest planting on open ground	65
B02	Forest and Plantation management & use	65
B03	Forest exploitation without replanting or natural regrowth	65
B04	Use of biocides, hormones and chemicals (forestry)	65
B06	Grazing in forests/ woodland	65
B07	Forestry activities not referred to above	65
C01	Mining and quarrying	65
C02	Exploration and extraction of oil or gas	65
C03	Renewable abiotic energy use	65
D01	Roads, paths and railroads	65
D02	Utility and service lines	65
D03	Shipping lanes, ports, marine constructions	65
D04	Airports, flightpaths	65
D05	Improved access to site	65
E01	Urbanised areas, human habitation	65
E02	Industrial or commercial areas	65

CODE	DESCRIPTION	PAGE NO
E03	Discharges	65
E04	Structures, buildings in the landscape	65
E06	Other urbanisation, industrial and similar activities	65
F01	Marine and Freshwater Aquaculture	65
F02	Fishing and harvesting aquatic resources	65
F03	Hunting and collection of wild animals (terrestrial), including damage caused by game (excessive density), and taking/removal of terrestrial animals (including collection of insects, reptiles, amphibians, birds of prey, etc., trapping, poisoning, poaching, predator control, accidental capture (e.g. due to fishing gear), etc.)	65
F04	Taking / Removal of terrestrial plants, general	65
F05	Illegal taking/ removal of marine fauna	65
F06	Hunting, fishing or collecting activities not referred to above	65
G01	Outdoor sports and leisure activities, recreational activities	65
G02	Sport and leisure structures	65
G03	Interpretative centres	65
G04	Military use and civil unrest	65
G05	Other human intrusions and disturbances	65
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)	65
H02	Pollution to groundwater (point sources and diffuse sources)	65
H03	Marine water pollution	65
H04	Air pollution, air-borne pollutants	65
H05	Soil pollution and solid waste (excluding discharges)	65
H06	Excess energy	65
H07	Other forms of pollution	65
I01	Invasive non-native species	65
I02	Problematic native species	65
I03	Introduced genetic material, GMO	65
J01	Fire and fire suppression	65
J02	Human induced changes in hydraulic conditions	65
J03	Other ecosystem modifications	65
K01	Abiotic (slow) natural processes	65
K02	Biocenotic evolution, succession	65
K03	Interspecific faunal relations	65
K04	Interspecific floral relations	65
K05	Reduced fecundity/ genetic depression	65
L05	Collapse of terrain, landslide	65
L07	Storm, cyclone	65
L08	Inundation (natural processes)	65
L10	Other natural catastrophes	65
M01	Changes in abiotic conditions	65
M02	Changes in biotic conditions	65
U	Unknown threat or pressure	65
XO	Threats and pressures from outside the Member State	65

5.1 Designation type codes

CODE	DESCRIPTION	PAGE NO
UK00	No Protection Status	67
UK01	National Nature Reserve	67
UK04	Site of Special Scientific Interest (GB)	67
UK05	Marine Conservation Zone	67
UK06	Nature Conservation Marine Protected Area	67
UK86	Special Area (Channel Islands)	67
UK98	Area of Special Scientific Interest (NI)	67
IN00	Ramsar Convention site	67
IN08	Special Protection Area	67
IN09	Special Area of Conservation	67

STANDARD DATA FORM for sites within the 'UK national site network of European sites'

Special Protection Areas (SPAs) are classified and Special Areas of Conservation (SACs) are designated under:

- the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales (including the adjacent territorial sea) and to a limited extent in Scotland (reserved matters) and Northern Ireland (excepted matters);
- the Conservation (Natural Habitats &c.) Regulations 1994 (as amended) in Scotland;
- the Conservation (Natural Habitats, &c) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland; and
- the Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended) in the UK offshore area.

Each SAC or SPA (forming part of the UK national site network of European sites) has its own Standard Data Form containing site-specific information. The information provided here generally follows the same documenting format for SACs and SPAs, as set out in the [Official Journal of the European Union recording the Commission Implementing Decision of 11 July 2011 \(2011/484/EU\)](#).

Please note that these forms contain a number of codes, all of which are explained either within the data forms themselves or in the end notes.

More general information on SPAs and SACs in the UK is available from the [SPA homepage](#) and [SAC homepage](#) on the JNCC website. These webpages also provide links to Standard Data Forms for all SAC and SPA sites in the UK.

<https://jncc.gov.uk/>



NATURA 2000 - STANDARD DATA FORM

For Special Protection Areas (SPA),
Proposed Sites for Community Importance (pSCI),
Sites of Community Importance (SCI) and
for Special Areas of Conservation (SAC)

SITE UK0030396

SITENAME Bristol Channel Approaches / Dynesfeydd Môr Hafren

TABLE OF CONTENTS

- [1. SITE IDENTIFICATION](#)
- [2. SITE LOCATION](#)
- [3. ECOLOGICAL INFORMATION](#)
- [4. SITE DESCRIPTION](#)
- [6. SITE MANAGEMENT](#)
- [7. MAP OF THE SITE](#)

1. SITE IDENTIFICATION

1.1 Type B	1.2 Site code UK0030396	Back to top
----------------------	-----------------------------------	-----------------------------

1.3 Site name

Bristol Channel Approaches / Dynesfeydd Môr Hafren

1.4 First Compilation date 2017-01	1.5 Update date 2019-03
--	-----------------------------------

1.6 Respondent:

Name/Organisation: Joint Nature Conservation Committee
Address: Monkstone House, City Road, Peterborough, PE1 1JY
Email:

Date site proposed as SCI:	2017-01
Date site confirmed as SCI:	2017-12
Date site designated as SAC:	2019-02
National legal reference of SAC designation:	Regulations 13 and 17-19 of The Conservation of Habitats and Species Regulations 2017 (https://www.legislation.gov.uk/uksi/2017/1012/contents/made), and Regulations 11, 19 and 20 of The Conservation of Offshore Marine Habitats and Species Regulations 2017 (http://www.legislation.gov.uk/uksi/2017/1013/contents/made).

2. SITE LOCATION

2.1 Site-centre location [decimal degrees]:

Longitude

-4.9093

Latitude

51.0291

2.2 Area [ha]:

584994.0

2.3 Marine area [%]

100.0

2.4 Sitelength [km]:

0.0

2.5 Administrative region code and name

NUTS level 2 code

Region Name

UKZZ	Extra-Regio
------	-------------

2.6 Biogeographical Region(s)

Atlantic (100.0 %)

3. ECOLOGICAL INFORMATION

3.2 Species referred to in Article 4 of Directive 2009/147/EC and listed in Annex II of Directive 92/43/EEC and site evaluation for them

Species					Population in the site						Site assessment			
G	Code	Scientific Name	S	NP	T	Size		Unit	Cat.	D.qual.	A B C D	A B C		
						Min	Max				Pop.	Con.	Iso.	Glo.
M	1351	Phocoena phocoena			p	810	5693	i	C	M	B	B	C	B

- **Group:** A = Amphibians, B = Birds, F = Fish, I = Invertebrates, M = Mammals, P = Plants, R = Reptiles
- **S:** in case that the data on species are sensitive and therefore have to be blocked for any public access enter: yes
- **NP:** in case that a species is no longer present in the site enter: x (optional)
- **Type:** p = permanent, r = reproducing, c = concentration, w = wintering (for plant and non-migratory species use permanent)
- **Unit:** i = individuals, p = pairs or other units according to the Standard list of population units and codes in accordance with Article 12 and 17 reporting (see [reference portal](#))
- **Abundance categories (Cat.):** C = common, R = rare, V = very rare, P = present - to fill if data are deficient (DD) or in addition to population size information
- **Data quality:** G = 'Good' (e.g. based on surveys); M = 'Moderate' (e.g. based on partial data with some extrapolation); P = 'Poor' (e.g. rough estimation); VP = 'Very poor' (use this category only, if not even a rough estimation of the population size can be made, in this case the fields for population size can remain empty, but the field "Abundance categories" has to be filled in)

4. SITE DESCRIPTION

[Back to top](#)

4.1 General site character

Habitat class	% Cover
N01	100.0
Total Habitat Cover	100

Other Site Characteristics

General site characteristics: Sand and coarse sediments. Full salinity. Water depths between Mean Low Water Tide and 70m.

4.2 Quality and importance

Harbour porpoise (*Phocoena phocoena*) "For which this is considered to be one of the best areas in the United Kingdom".

4.3 Threats, pressures and activities with impacts on the site

The most important impacts and activities with high effect on the site

Negative Impacts			
Rank	Threats and pressures [code]	Pollution (optional) [code]	inside/outside [i o b]
L	J03		b
H	F02		b
M	H03	O	b
L	D03		b
L	C02		b
L	C03		b
M	G04		b

Rank: H = high, M = medium, L = low

Pollution: N = Nitrogen input, P = Phosphor/Phosphate input, A = Acid input/acidification,

T = toxic inorganic chemicals, O = toxic organic chemicals, X = Mixed pollutions

i = inside, o = outside, b = both

Positive Impacts			
Rank	Activities, management [code]	Pollution (optional) [code]	inside/outside [i o b]

4.5 Documentation

For information on this site, including the Selection Assessment Document, Conservation Objectives and Advice on Activities document, as well as information about the identification process of the UK network of harbour porpoise SACs, see the Site Information Centre (see link) for this site. The population size estimate in Section 3.2, provided at the time the site was proposed as an SCI, is based on data from a survey conducted in 2005 (Hammond et al. 2013). Revised "population in the site" estimates based on the 2016 survey (Hammond et al. 2017) are a minimum of 278 (lower 95% CI) and maximum of 1713 (higher 95% CI). All these estimates are derived from one-month summer surveys and should not be considered as specific population sizes for the site. Hammond, P. Macleod, K. Berggren, P. Borchers, D. Burt, L. Canadas, A. Desportes, G. Donovan, G. Gilles, A. Gillespie, D. Gordon, J. Hiby, L. Kuklik, I. Leaper, R. Lehnert, K. Leopold, M. Lovell, P. Øien, N. Paxton, C. Ridoux, V. Rogan, E. Samarra, F. Scheidat, M. Sequeira, M. Siebert, U. Skov, H. Swift, R. Tasker, M. Teilmann, J. van Canneyt, O. Vazques, J. (2013). Cetacean abundance and distribution in European Atlantic shelf waters to inform conservation and management. Biological Conservation. 164. 107 - 122. Hammond, P. Lacey, C. Gilles, A. Viquerat, S. Börjesson, P. Herr, H. Macleod, K. Ridoux, V. Santos, M. Scheidat, M. Teilmann, J. Vingada, J. Øien, N. (2017). Estimates of cetacean abundance in European Atlantic waters in summer 2016 from the SCANS-III aerial and shipboard surveys. Available: <https://synergy.st-andrews.ac.uk/scans3/files/2017/05/SCANS-III-design-based-estimates-2017-05-12-final-revis>

Link(s): <http://jncc.defra.gov.uk/page-7241>

6. SITE MANAGEMENT

[Back to top](#)

6.1 Body(ies) responsible for the site management:

Organisation:	Natural England
Address:	
Email:	

Organisation:	Natural Resources Wales
Address:	
Email:	

Organisation:	Joint Nature Conservation Committee
Address:	
Email:	

6.2 Management Plan(s):

An actual management plan does exist:

☐	Yes
☐	No, but in preparation
☒	No

7. MAP OF THE SITES

[Back to top](#)

INSPIRE ID:	
-------------	--

Map delivered as PDF in electronic format (optional)

☐	Yes	☒	No
--------------------------	-----	-------------------------------------	----

Reference(s) to the original map used for the digitalisation of the electronic boundaries (optional).

--

EXPLANATION OF CODES USED IN THE SPECIAL AREA OF CONSERVATION (SAC) AND SPECIAL PROTECTION AREA (SPA) STANDARD DATA FORMS

The codes in the table below generally follow those explained in the [official European Union guidelines for the Standard Data Form](#) (also referencing the relevant page number).

1.1 Site type

CODE	DESCRIPTION	PAGE NO
A	SPA (classified Special Protection Area)	53
B	cSAC, SCI or SAC (candidate Special Area of Conservation, Site of Community Importance, designated Special Area of Conservation)	53
C	SPA area/boundary is the same as the cSAC/SCI/SAC i.e. a co-classified/designated site (Note: this situation only occurs in Gibraltar)	53

3.1 Habitat code

CODE	DESCRIPTION	PAGE NO
1110	Sandbanks which are slightly covered by sea water all the time	57
1130	Estuaries	57
1140	Mudflats and sandflats not covered by seawater at low tide	57
1150	Coastal lagoons	57
1160	Large shallow inlets and bays	57
1170	Reefs	57
1180	Submarine structures made by leaking gases	57
1210	Annual vegetation of drift lines	57
1220	Perennial vegetation of stony banks	57
1230	Vegetated sea cliffs of the Atlantic and Baltic Coasts	57
1310	Salicornia and other annuals colonizing mud and sand	57
1320	Spartina swards (Spartinion maritimae)	57
1330	Atlantic salt meadows (Glaucio-Puccinellietalia maritimae)	57
1340	Inland salt meadows	57
1420	Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)	57
2110	Embryonic shifting dunes	57
2120	Shifting dunes along the shoreline with Ammophila arenaria ("white dunes")	57
2130	Fixed coastal dunes with herbaceous vegetation ("grey dunes")	57
2140	Decalcified fixed dunes with Empetrum nigrum	57
2150	Atlantic decalcified fixed dunes (Calluno-Ulicetea)	57
2160	Dunes with Hippophya• rhamnoides	57
2170	Dunes with Salix repens ssp. argentea (Salicion arenariae)	57
2190	Humid dune slacks	57
21A0	Machairs (* in Ireland)	57
2250	Coastal dunes with Juniperus spp.	57
2330	Inland dunes with open Corynephorus and Agrostis grasslands	57
3110	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	57
3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea	57
3140	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	57
3150	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation	57

CODE	DESCRIPTION	PAGE NO
3160	Natural dystrophic lakes and ponds	57
3170	Mediterranean temporary ponds	57
3180	Turloughs	57
3260	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation	57
4010	Northern Atlantic wet heaths with Erica tetralix	57
4020	Temperate Atlantic wet heaths with Erica ciliaris and Erica tetralix	57
4030	European dry heaths	57
4040	Dry Atlantic coastal heaths with Erica vagans	57
4060	Alpine and Boreal heaths	57
4080	Sub-Arctic Salix spp. scrub	57
5110	Stable xerothermophilous formations with Buxus sempervirens on rock slopes (Berberidion p.p.)	57
5130	Juniperus communis formations on heaths or calcareous grasslands	57
6130	Calaminarian grasslands of the Violetalia calaminariae	57
6150	Siliceous alpine and boreal grasslands	57
6170	Alpine and subalpine calcareous grasslands	57
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	57
6230	Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	57
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	57
6430	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	57
6510	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	57
6520	Mountain hay meadows	57
7110	Active raised bogs	57
7120	Degraded raised bogs still capable of natural regeneration	57
7130	Blanket bogs (* if active bog)	57
7140	Transition mires and quaking bogs	57
7150	Depressions on peat substrates of the Rhynchosporion	57
7210	Calcareous fens with Cladium mariscus and species of the Caricion davallianae	57
7220	Petrifying springs with tufa formation (Cratoneurion)	57
7230	Alkaline fens	57
7240	Alpine pioneer formations of the Caricion bicoloris-atrofuscae	57
8110	Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	57
8120	Calcareous and calcshist scree of the montane to alpine levels (Thlaspietalia rotundifoliae)	57
8210	Calcareous rocky slopes with chasmophytic vegetation	57
8220	Siliceous rocky slopes with chasmophytic vegetation	57
8240	Limestone pavements	57
8310	Caves not open to the public	57
8330	Submerged or partially submerged sea caves	57
9120	Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robur-petraeae or Ilici-Fagenion)	57
9130	Asperulo-Fagetum beech forests	57
9160	Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli	57
9180	Tilio-Acerion forests of slopes, scree and ravines	57
9190	Old acidophilous oak woods with Quercus robur on sandy plains	57
91A0	Old sessile oak woods with Ilex and Blechnum in the British Isles	57
91C0	Caledonian forest	57
91D0	Bog woodland	57
91E0	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	57
91J0	Taxus baccata woods of the British Isles	57

3.1 Habitat representativity (abbreviated to 'Representativity' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent representativity	57
B	Good representativity	57
C	Significant representativity	57
D	Non-significant presence representativity	57

3.1 Relative surface

CODE	DESCRIPTION	PAGE NO
A	> 15%-100%	58
B	> 2%-15%	58
C	≤ 2%	58

3.1 Degree of conservation (abbreviated to 'Conservation' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	59
B	Good conservation	59
C	Average or reduced conservation	59

3.1 Global assessment (abbreviated to 'Global' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	59
B	Good value	59
C	Significant value	59

3.2 Population (abbreviated to 'Pop.' in data form)

CODE	DESCRIPTION	PAGE NO
A	> 15%-100%	62
B	> 2%-15%	62
C	≤ 2%	62
D	Non-significant population	62

3.2 Degree of conservation (abbreviated to 'Con.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent conservation	63
B	Good conservation	63
C	Average or reduced conservation	63

3.2 Isolation (abbreviated to 'Iso.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Population (almost) Isolated	63
B	Population not-isolated, but on margins of area of distribution	63
C	Population not-isolated within extended distribution range	63

3.2 Global Grade (abbreviated to 'Glo.' or 'G.' in data form)

CODE	DESCRIPTION	PAGE NO
A	Excellent value	63
B	Good value	63
C	Significant value	63

3.3 Other species – essentially covers bird assemblage types

CODE	DESCRIPTION	PAGE NO
WATR	Non-breeding waterbird assemblage	UK specific code
SBA	Breeding seabird assemblage	UK specific code

BBA	Breeding bird assemblage (applies only to sites classified pre 2000)	UK specific code
-----	--	------------------

4.1 Habitat class code

CODE	DESCRIPTION	PAGE NO
N01	Marine areas, Sea inlets	65
N02	Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins)	65
N03	Salt marshes, Salt pastures, Salt steppes	65
N04	Coastal sand dunes, Sand beaches, Machair	65
N05	Shingle, Sea cliffs, Islets	65
N06	Inland water bodies (Standing water, Running water)	65
N07	Bogs, Marshes, Water fringed vegetation, Fens	65
N08	Heath, Scrub, Maquis and Garrigue, Phygrana	65
N09	Dry grassland, Steppes	65
N10	Humid grassland, Mesophile grassland	65
N11	Alpine and sub-Alpine grassland	65
N14	Improved grassland	65
N15	Other arable land	65
N16	Broad-leaved deciduous woodland	65
N17	Coniferous woodland	65
N19	Mixed woodland	65
N21	Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas)	65
N22	Inland rocks, Screes, Sands, Permanent Snow and ice	65
N23	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites)	65
N25	Grassland and scrub habitats (general)	65
N26	Woodland habitats (general)	65

4.3 Threats code

CODE	DESCRIPTION	PAGE NO
A01	Cultivation	65
A02	Modification of cultivation practices	65
A03	Mowing / cutting of grassland	65
A04	Grazing	65
A05	Livestock farming and animal breeding (without grazing)	65
A06	Annual and perennial non-timber crops	65
A07	Use of biocides, hormones and chemicals	65
A08	Fertilisation	65
A10	Restructuring agricultural land holding	65
A11	Agriculture activities not referred to above	65
B01	Forest planting on open ground	65
B02	Forest and Plantation management & use	65
B03	Forest exploitation without replanting or natural regrowth	65
B04	Use of biocides, hormones and chemicals (forestry)	65
B06	Grazing in forests/ woodland	65
B07	Forestry activities not referred to above	65
C01	Mining and quarrying	65
C02	Exploration and extraction of oil or gas	65
C03	Renewable abiotic energy use	65
D01	Roads, paths and railroads	65
D02	Utility and service lines	65
D03	Shipping lanes, ports, marine constructions	65
D04	Airports, flightpaths	65
D05	Improved access to site	65
E01	Urbanised areas, human habitation	65
E02	Industrial or commercial areas	65

CODE	DESCRIPTION	PAGE NO
E03	Discharges	65
E04	Structures, buildings in the landscape	65
E06	Other urbanisation, industrial and similar activities	65
F01	Marine and Freshwater Aquaculture	65
F02	Fishing and harvesting aquatic resources	65
F03	Hunting and collection of wild animals (terrestrial), including damage caused by game (excessive density), and taking/removal of terrestrial animals (including collection of insects, reptiles, amphibians, birds of prey, etc., trapping, poisoning, poaching, predator control, accidental capture (e.g. due to fishing gear), etc.)	65
F04	Taking / Removal of terrestrial plants, general	65
F05	Illegal taking/ removal of marine fauna	65
F06	Hunting, fishing or collecting activities not referred to above	65
G01	Outdoor sports and leisure activities, recreational activities	65
G02	Sport and leisure structures	65
G03	Interpretative centres	65
G04	Military use and civil unrest	65
G05	Other human intrusions and disturbances	65
H01	Pollution to surface waters (limnic & terrestrial, marine & brackish)	65
H02	Pollution to groundwater (point sources and diffuse sources)	65
H03	Marine water pollution	65
H04	Air pollution, air-borne pollutants	65
H05	Soil pollution and solid waste (excluding discharges)	65
H06	Excess energy	65
H07	Other forms of pollution	65
I01	Invasive non-native species	65
I02	Problematic native species	65
I03	Introduced genetic material, GMO	65
J01	Fire and fire suppression	65
J02	Human induced changes in hydraulic conditions	65
J03	Other ecosystem modifications	65
K01	Abiotic (slow) natural processes	65
K02	Biocenotic evolution, succession	65
K03	Interspecific faunal relations	65
K04	Interspecific floral relations	65
K05	Reduced fecundity/ genetic depression	65
L05	Collapse of terrain, landslide	65
L07	Storm, cyclone	65
L08	Inundation (natural processes)	65
L10	Other natural catastrophes	65
M01	Changes in abiotic conditions	65
M02	Changes in biotic conditions	65
U	Unknown threat or pressure	65
XO	Threats and pressures from outside the Member State	65

5.1 Designation type codes

CODE	DESCRIPTION	PAGE NO
UK00	No Protection Status	67
UK01	National Nature Reserve	67
UK04	Site of Special Scientific Interest (GB)	67
UK05	Marine Conservation Zone	67
UK06	Nature Conservation Marine Protected Area	67
UK86	Special Area (Channel Islands)	67
UK98	Area of Special Scientific Interest (NI)	67
IN00	Ramsar Convention site	67
IN08	Special Protection Area	67
IN09	Special Area of Conservation	67