

Câr-Y-Môr Farm Site: Seascape, Landscape and Visual Impact Assessment

For The Love Of The Sea Limited January 2025



Project Title: Câr-Y-Môr Farm Site: Seascape, Landscape and Visual Impact Assessment

Client: For The Love Of The Sea Limited

Version	Date	Version Details	Prepared by	Checked by	Approved by
1.0	27/01/2025	Draft	MS		

Câr-Y-Môr Farm Site: Seascape, Landscape and Visual Impact Assessment

For The Love Of The Sea Limited December 2024

Table of Contents

Executive Summary	7
1.0 Introduction	8
Purpose of this Report	8
2.0 Approach and Methodology	9
Scope of the Assessment	9
Effects Scoped Out	9
Legislation, Policy and Guidance	9
Guidance	12
Consultation	13
Assessment Methodology	13
Methodological Overview	14
Judging the Levels of Effect	15
Direction of Effects	16
Cumulative Seascape Landscape and Visual Effects	16
3.0 Existing Conditions	17
Câr-Y-Môr Shellfish Farm Site	17
The Study Area	19
Landscape and Coastal Character	20
Pembrokeshire Landscape Character Area (LCA) Assessment	22
Landscape Value and Designations	26
Visual Baseline	26
Key Visual Receptors	27
4.0 The Proposed Development	29
Project Overview	29
Location of New Proposed Sites	29
Buoys and Operations	29
Farm equipment	30
Number and Configuration of buoys	30
Marine Works	31
Lighting and Marking	31
Realistic Worst-case Scenario	32
5.0 Assessment of Effects	33
Assessment of Effects on Coastal and Landscape Character	33
Effects on Coastal Character	33
Effects on Landscape Character	35

Effects of Lighting	36
Assessment of Effects on Views	37
Viewpoint Assessment	37
Effects on Recreational Receptors in the Study Area	39
Effects on Community Receptors	39
Effects on Travelling Receptors	40
Effects on the Pembrokeshire Coast National Park (PCNP) – Assessment of Key Special Qualities	41
Dramatic Coastal Scenery	41
Land and Sea in Constantly Changing Combinations	41
Tranquillity and Wildness	42
Cultural Landscapes	42
Summary of Effects on Special Qualities	43
Mitigation	43
Residual Effects	44
6.0 Conclusion	45
7.0 Reference List	46
Legislation and Policy Documents	46
Guidance Documents	46
Local Plans and Designations	46
Technical and Data Sources	46
Seascape and Landscape Studies	46
Research and Supporting Information	47
Appendix 1 Assessment Methodology	48
Assessment Criteria	48
Magnitude of Change to Seascapes	49
Landscape Sensitivity to Change	51
Sensitivity of Visual Receptors to change	53
Magnitude of Change to Views and Visual Amenity	54
Environmental Consequence: Seascape, Landscape and Visual effects	55
Significance of Landscape, Seascape and Visual Effects	56
Appendix 2 Methods for Creating ZTVs and Visualisations	58
Appendix 3 Assessment of Effects on Landscape Character	60
Appendix 4 Assessment of Effects on Views	74
Appendix 5 Assessment of Effects on Special Qualities of the National Park	82
Figures	88

Executive Summary

This Seascape, Landscape, and Visual Impact Assessment (SLVIA) evaluates the potential effects of the proposed Câr-Y-Môr shellfish farm on the surrounding seascape and landscape character, as well as on visual receptors within the study area. The project is located within the Pembrokeshire Coast National Park (PCNP), a highly valued and protected landscape. The assessment has been carried out in accordance with Guidelines for Landscape and Visual Impact Assessment (GLVIA3) and draws on relevant policy frameworks, including national planning policies and PCNP's special qualities.

The key findings of the assessment are as follows:

1. Effects on Seascape and Landscape Character

- The seascape character areas (SCAs) and landscape character areas (LCAs) within the study area are valued for their dramatic coastal scenery, sense of remoteness, and ecological significance.
- The overall sensitivity of the seascape and landscape to change is judged to be high, particularly in areas such as St. Bride's Bay, Ramsey Sound, and St. David's Headland, where the natural and visual qualities are most prominent.
- The magnitude of effect is generally low due to the small scale, low height, and unobtrusive design of the infrastructure. However, localised moderate effects are predicted in areas with direct and clear views of the development.

2. Effects on Visual Receptors

- Views from key viewpoints (VP1–VP7) and recreational routes such as the Pembrokeshire Coast Path have been assessed. The closest viewpoints will experience moderate visual effects, particularly where elevated vantage points provide uninterrupted views of the project.
- Recreational receptors, including walkers and maritime users, may perceive small-scale changes to the visual experience. However, these effects are unlikely to significantly detract from the overall character and enjoyment of the area.

3. Effects on Designated Landscapes

- The Pembrokeshire Coast National Park's special qualities—including its dramatic coastal scenery, wildness, and changing land and sea combinations—were considered in detail.
- The project introduces subtle, localised changes but is not anticipated to significantly undermine the integrity of these special qualities. The small scale and reversibility of the infrastructure help mitigate potential effects.

4. Mitigation Measures

- A series of embedded and secondary mitigation measures have been proposed, including careful placement of devices and visual coherence in design. These measures aim to reduce potential impacts on the landscape and visual amenity.

In conclusion, the assessment finds that while the Câr-Y-Môr shellfish farm will introduce localised changes to the seascape, landscape, and visual experience, these effects are generally minor or moderate and are largely confined to the immediate area. The integrity of the wider landscape, including the Pembrokeshire Coast National Park, will remain intact, and the project is consistent with the area's existing maritime character.

1.0 Introduction

Purpose of this Report

- 1.1 The Câr-Y-Môr shellfish farm project seeks to establish a sustainable and innovative marine farming operation within the context of the Pembrokeshire Coast National Park (PCNP), a designated landscape of national importance. This Seascape and Landscape Visual Impact Assessment (SLVIA) has been prepared to evaluate the likely significant effects of the proposed development on landscape and visual resources, ensuring compliance with GLVIA3 principles.
- 1.2 The assessment focuses on potential impacts arising from the introduction of shellfish farming infrastructure into the existing seascape and landscape, including:
 - Effects on landscape as a resource in its own right, including changes to its physical elements, aesthetic qualities, and character.
 - Effects on views and visual amenity as experienced by residents, visitors, and recreational users.
- 1.3 The study also considers a realistic worst-case development scenario, evaluating the maximum potential impacts based on the project's parameters.
- 1.4 This report has been undertaken, utilising fieldwork, desk studies, and stakeholder engagement to ensure a comprehensive analysis.
- 1.5 The SLVIA report comprises the following sections:
 - **Section 2** outlines the scope, methodology, and relevant policy and guidance.
 - **Section 3** describes baseline conditions, including landscape character, designations, and visual receptors.
 - **Section 4** details the proposed development, including a realistic worst-case scenario.
 - **Section 5** presents the assessment of effects, focusing on landscape, views, and designated areas, alongside potential mitigation measures.
 - **Section 6** provides a summary of findings and conclusions.
 - **Section 7** lists references.
- 1.6 The report is supported by detailed appendices and graphics, including:
 - Appendix 1: SLVIA methodology.
 - Appendix 2: ZTV and visualisation methodology.
 - Appendix 3: Detailed assessment of landscape effects.
 - Appendix 4: Detailed assessment of visual effects.
 - Appendix 5: Assessment of effects on special qualities of PCNP.

2.0 Approach and Methodology

Scope of the Assessment

- 2.1 This assessment evaluates changes in the marine and coastal environment resulting from the Câr-Y-Môr shellfish farm project. It focuses on the character of the marine and coastal landscape and examines the effects of the project on views and visual amenity as experienced by people. Additionally, the assessment considers changes to the special qualities of the Pembrokeshire Coast National Park (PCNP), where the project is located.
- 2.2 The development activities and installations will vary over the lifespan of the project. As such, effects are not assessed separately for construction, operation, and decommissioning phases. Instead, it is assumed that installation and removal works may occur at any time during the project's operation.
- 2.3 All potentially significant landscape and visual effects have been examined.

Effects Scoped Out

- 2.4 The following topics have been excluded from detailed assessment, based on desk studies, field surveys, professional judgment, and feedback from consultees:
- Effects on receptors outside the visual envelope or beyond 10 km from the project boundary, where significant effects are unlikely.
 - Effects on residential visual amenity, as the infrastructure will not dominate any property to the extent of affecting living conditions.
 - Physical effects on coastal or onshore landscapes, as there are no onshore elements within the project.
 - Effects arising from vessel movements outside the project area, as these will occur in areas where shipping is already a feature.

Legislation, Policy and Guidance

- 2.5 The legislation that is applicable to the assessment of seascape and landscape character and visual amenity is summarised below.
- 2.6 The European Landscape Convention (ELC), also known as the Florence Convention, came into force in 2004 and focuses on the protection, management, and planning of landscapes across Europe.

The key objectives are:

- Recognition of Landscapes: Acknowledging landscapes as an essential part of human heritage, culture, identity, and well-being.
- Protection and Management: Promoting sustainable development by protecting and managing landscapes effectively.
- Public Involvement: Encouraging public participation in landscape policies and decisions.

- Integration: Incorporating landscape considerations into policies at all levels (local, regional, national, and international).

The main principles are:

- Comprehensive Scope: The ELC applies to all types of landscapes—urban, rural, natural, and degraded—rather than focusing solely on protected or scenic areas.
- Public Participation: Emphasises the involvement of communities in shaping and preserving their landscapes.
- Cultural and Natural Balance: Recognises landscapes as a combination of natural and cultural elements shaped by human interaction.

The ELC underscores that landscapes are not just backdrops but integral to cultural and ecological heritage, requiring collaborative efforts to preserve and enhance them for future generations. Within Wales the ELC is reflected in Planning Policy Wales, which prioritises the sustainable management of landscapes and natural resources.

- 2.7 The National Parks and Access to the Countryside Act 1949 is a landmark piece of legislation in the UK that provided the framework for the establishment of National Parks and recognised the importance of preserving natural and cultural heritage while encouraging public access and enjoyment. The statutory purposes of National Parks are:

- Conservation and Enhancement: To conserve and enhance the natural beauty, wildlife, and cultural heritage of National Parks, ensuring their integrity for future generations.
- Understanding and Enjoyment: To promote opportunities for understanding and enjoying the special qualities of the parks by the public, while fostering appreciation and knowledge of their natural and cultural value.

National Parks, in partnership with local communities aim to balance conservation with economic and social well-being. While National Parks are protected areas, they are living landscapes where people live and work, making sustainable development a key consideration.

National Planning Policy

- 2.8 The National Plan 2040 positions coastal communities as a priority for development and sustainability, balancing economic growth with environmental stewardship and community resilience.
- 2.9 Planning Policy Wales (Edition 12) places landscapes at the heart of sustainable development in Wales. By requiring local authorities to protect and enhance the special characteristics of landscapes while considering their multifaceted benefits, the policy ensures that landscapes contribute to the creation of vibrant, resilient, and valued places for present and future generations.
- 2.10 Planning Policy Wales (PPW) Technical Advice Note (TAN) 12 focuses on achieving sustainability through good design. When it comes to landscapes, the guidance outlines a comprehensive approach to appraising and integrating landscape considerations into developments. TAN 12 reinforces that the quality of a landscape is integral to good design and ensures developments can achieve sustainability while respecting and enhancing the unique character of Wales' landscapes. This approach ensures landscapes remain valuable assets,

ensuring developments harmonise with the landscape, avoiding disruption to key views or sensory qualities, whilst protecting and reflecting cultural and historic elements of the landscape.

- 2.11 Planning Policy Wales (PPW) Technical Advice Note (TAN) 24 underscores the importance of safeguarding Registered Historic Parks and Gardens as part of Wales' rich heritage. Developers are required to thoroughly understand the significance of these landscapes and assess the potential impacts of their proposals. By prioritising preservation and enhancement, TAN 24 ensures that these valuable historic assets are protected for future generations while accommodating thoughtful and sustainable development.

Marine Planning

- 2.12 The Marine Planning Policy Statement (2011) highlights the need for careful consideration of seascape character, statutory designations, and design as part of marine planning and development. By emphasising quality, value, and capacity for change, the policy ensures that marine activities are aligned with the conservation of natural and cultural heritage while supporting sustainable use of marine environments.
- 2.13 Welsh National Marine Plan (WNMP) Policy SOC_06 focuses on ensuring that developments and activities in marine areas consider their potential impacts on National Parks in Wales. The policy emphasizes the importance of safeguarding the purpose and special qualities of National Parks while accommodating sustainable marine development. It outlines the "avoid, minimise, mitigate hierarchy" as a guiding framework for managing these impacts. The policy provides a framework for balancing development with conservation, ensuring that National Parks continue to offer ecological, cultural, and recreational benefits for future generations.
- 2.14 The Wales National Marine Plan (WNMP) Policy SOC_07 emphasises the importance of safeguarding seascapes and ensuring that their unique qualities are preserved while accommodating sustainable marine development. This policy outlines the "avoid, minimise, mitigate hierarchy" to manage potential impacts on seascapes effectively. The policy promotes a balanced approach to marine development, safeguarding seascapes for their cultural, environmental, and aesthetic importance while supporting sustainable economic activities.

Local Planning Policy

- 2.15 Pembrokeshire County Council (PCC) Local Development Plan (LDP) Policy GN 1 ensures that development in Pembrokeshire aligns with the capacity and character of its environment. By protecting visual amenity, landscape quality, and the special qualities of the Pembrokeshire Coast National Park, the policy fosters sustainable development that respects and enhances the unique identity of the area.
- 2.16 The Pembrokeshire County Council (PCC) Local Development Plan (LDP) Supplementary Guidance: Landscape Character Assessment (LCA) provides detailed insights into the diverse landscapes of Pembrokeshire. It identifies landscape character areas and their defining features to guide planning and development decisions, ensuring alignment with Policy GN 1. It supports Policy GN 1 by offering detailed, area-specific guidance to developers and decision-makers, fostering sustainable development that aligns with the county's natural, cultural, and aesthetic values
- 2.17 The Pembrokeshire Coast National Park Local Development Plan 2 (LDP2) Policy 8 emphasises the protection and enhancement of the special qualities of the Pembrokeshire Coast National Park (PCNP). Policy 8 ensures that development within or affecting the Pembrokeshire Coast National Park is carried out in a way that protects and enhances its unique natural, cultural, and aesthetic qualities.
- 2.18 The Pembrokeshire Coast National Park Local Development Plan 2 (LDP2) Policy 10 focuses on ensuring that developments within the Pembrokeshire Coast National Park contribute positively to the Park's communities and economy while respecting its natural beauty, cultural heritage, and special qualities. By encouraging locally focused, high-quality developments that meet community needs while respecting the environment, the policy aims to foster vibrant communities within the National Park without compromising its natural and cultural heritage.
- 2.19 The Pembrokeshire Coast National Park (LDP2) Policy 14 ensures the protection of the Park's special landscape and seascape character and its locally distinctive features. The policy supports sustainable development that preserves the integrity and beauty of this unique area for future generations.

Guidance

- 2.20 PCNP Supplementary Planning Guidance documents relevant to SLVIA include Landscape Character; Renewable Energy; Cumulative Impact of Wind Turbines on Landscape and Visual Amenity; and Seascape Character Assessment. These documents, as well as those listed below were considered in producing this report:
- Landscape Institute and Institute of Environmental Management and Assessment (2013) "Guidelines for Landscape and Visual Impact Assessment" (GLVIA3).
 - Landscape Institute (2011) "Photography and Photomontage in Landscape and Visual Impact Assessment".
 - Natural Resources Wales guidance on coastal and seascape assessments.
 - Using LANDMAP in Landscape and Visual Impact Assessments, NRW 2016

- Guidelines for Landscape and Visual Impact Assessment, Third Edition, Landscape Institute and Institute of Environmental Management & Assessment
- Technical Guidance Note 06/19 Visual Representation of development proposals, The Landscape Institute
- Technical Guidance Note 02/19 Residential Visual Amenity Assessment (RVAA), The Landscape Institute
- Assessing the Cumulative Impact of Onshore Wind Energy Developments, NatureScot 2021
- Visual Representation of Wind Farms, NatureScot 2017

Consultation

- 2.21 Consultation on the scope and approach was undertaken with relevant stakeholders, including Natural Resources Wales (NRW), The Crown Estate (TCE), and the Pembrokeshire Coast National Park Authority (PCNPA). Key feedback informed the development of the study area, viewpoint selection, and assessment methodologies. Meetings have been held with all parties, and responses are summarised in Table 2.1.

Table 2.1: Consultation Responses

Consultee	Date of response	Comment Raised	Response/Action Taken
PCNPA	19/12/24	A less formal Landscape (Seascape) Visual Appraisal may be acceptable for the expansion, given that some infrastructure already exists.	CYM - Produce SLVIA
PCNPA	09/12/24	Any development offshore may have a visual impact on the park and therefore is a material planning consideration from a formal third party consultee. LVIA and cumulative impact assessment required and requested due to expansion in a highly sensitive location	PCNPA - The guidance documents referred to need to be shared and if a seascape assessment is required. CYM – Undertake LVIA
NRW	09/12/24	No marine licence is being sort for this project	N/A
Crown Estate	09/12/24	HRA will be completed by the Crown estate. LVIA not required as part of this process.	N/A
NRW	09/12/24	The current marine licence runs out July 2025 with a view to change this to a crown estate lease.	N/A
PCNPA	20/01/24	PCNPA have confirmed that an EIA is not required and that only a Landscape and Visual Appraisal (LVA) is required for the proposed development.	CYM – Produce and table LVIA for review by stakeholders

Assessment Methodology

- 2.22 The methodology follows GLVIA3 principles and includes:
- Analysis of the landscape (including seascape) within the study area.
 - Creation of a Zone of Theoretical Visibility (ZTV) to establish the project's visibility extent.
 - Identification of visual receptors and their sensitivity to changes.
 - Selection of representative, specific, and illustrative viewpoints.
 - Evaluation of the significance of effects by combining sensitivity and magnitude.

Study Area

Defined Area

- 2.23 The study area for the SLVIA is defined as a 10km radius around the proposed Câr-Y-Môr farm site. This distance was established through field observations and a review of the site's visibility within the surrounding seascape and coastal context. Topographical barriers and landscape features informed the refinement of the study area, ensuring a focus on locations where the development might have significant effects.
- 2.24 The Zone of Theoretical Visibility (ZTV) was generated to determine areas where the proposed development might be visible. specific viewpoints with potential sensitivity, such as elevated coastal locations, were included within the 10 km radius, to capture the broader visual impact.

Data Sources

- 2.25 The following data sources informed the assessment:
- Ordnance Survey (OS) maps and LIDAR Composite 10m DTM 2022 height data for ZTV analysis.
 - Pembrokeshire Landscape Character Assessment
 - Pembrokeshire Coast National Park Seascape Character Assessment.
 - GIS data for mapping and analysis (Natural Resources Wales).
 - Field survey observations and photography.

Field Survey

- 2.26 Fieldwork was conducted over multiple days to capture a range of weather and lighting conditions. Key survey activities included:
- Visiting proposed viewpoints and surrounding areas.
 - Recording observations of the landscape and seascape characteristics.
 - Capturing panoramic photographs to support visualisations.

Methodological Overview

- 2.27 The methodology is set out in detail in Appendix 1. The key steps for assessing landscape and visual effects are as follows: The assessment followed the steps outlined in GLVIA3, as follows:
1. **Landscape and Seascape Analysis:** Identifying key receptors and character areas.
 2. **ZTV Creation:** Determining potential visibility of the development.
 3. **Baseline Recording:** Documenting existing conditions and visual receptors.
 4. **Viewpoint Selection:** Agreeing on representative and illustrative locations.
 5. **Impact Assessment:** Evaluating the magnitude and significance of effects.
- 2.28 Potential uncertainties include:
- Variability in deployment and removal schedules.

- Changing environmental conditions influencing visibility and perception.

Judging the Levels of Effect

Overview of Methodology

- 2.29 The separate judgments of susceptibility, value, scale, geographical extent, duration, and reversibility are considered collectively to create an overall profile of each identified effect. An overview of the distribution of judgments is then used to make an informed professional assessment of the overall level of each effect, following the guidance provided in GLVIA3. No numerical or formal weighting system is applied; instead, the relative importance of each factor informs the final decision.

Levels of Effect

- 2.30 The levels of effect used in this SLVIA are defined in Table 2.2 for landscape effects and Table 2.3 for visual effects. These descriptions serve as examples, with each effect judged on an individual basis.

Table 2.2: Levels of Landscape Effect

Level	Effect Description
Severe	The Project will result in a transformative and widespread change in landscape/seascape characteristics and character, such as permanent loss of key characteristics, likely affecting a highly valued landscape with very high sensitivity.
Very High	The Project will result in a pronounced and extensive change in landscape/seascape characteristics and character. For example, a significant but temporary change in landscape features or a smaller-scale change in a highly valued landscape.
High	The Project will cause a clear change in landscape/seascape characteristics and character, such as a noticeable and long-term change, or a broader effect on a moderately sensitive or valued area.
Medium	The Project will cause a discernible change in landscape/seascape characteristics and character, such as a localised or moderate-scale effect that is apparent but not transformative to the overall character.
Low	The Project will result in a limited and localised change in landscape/seascape characteristics, such as a small-scale or short-term effect that does not notably alter the overall character or perception of the landscape.
Negligible	The Project will not result in a discernible change in landscape/seascape characteristics or character.

Table 2.3: Levels of Visual Effect

Level	Effect Description
Severe	The Project will result in a transformative and widespread change in the visual amenity experienced by the receptor(s), such as the permanent obstruction of a highly valued view or alteration of a visually iconic landscape.
Very High	The Project will result in a significant change in visual amenity for receptor(s) with very high sensitivity, such as large-scale temporary interruptions to a highly valued view or localised but noticeable changes in key vistas.
High	The Project will result in a moderate change in visual amenity experienced by receptor(s) with high sensitivity, such as localised but noticeable interruptions in key views or subtle effects on the visual setting of iconic landmarks.
Medium	The Project will result in a discernible change in visual amenity experienced by receptor(s), such as a moderate-scale or localised effect that is perceptible but does not dominate the view.
Low	The Project will result in a limited and localised change in the visual amenity experienced by receptor(s), such as a small-scale or short-term effect visible only under specific conditions and not altering overall visual appreciation.
Negligible	The Project will not result in a noticeable change in the visual amenity experienced by receptor(s).

Direction of Effects

- 2.31 The direction of effect—whether positive, negative, or neutral—is assessed based on the degree to which the proposed development aligns with existing landscape character and the contribution it makes to the landscape or visual amenity. This assessment evaluates how the development integrates with or contrasts against key features of the area.
- 2.32 In this case, the precautionary principle has been applied, reflecting the sensitive nature of the highly scenic and nationally designated Pembrokeshire Coast National Park. The introduction of the shellfish farm is considered a negative change due to its potential visual impact and perceived alteration of the natural seascape. The introduction of infrastructure in this setting may detract from the unspoiled and wild qualities that define the area's character as the potential for even subtle alterations to impact the valued landscape and visual qualities of the site.

Cumulative Seascape Landscape and Visual Effects

- 2.33 The Methodology for the assessment of Cumulative Seascape and Landscape Effects will accord with key guidance in:
- Landscape Institute and Institute of Environmental Management and Assessment 2013 "Guidelines for Landscape and Visual Assessment 3rd Edition" (in particular Chapter 7 pp120 134);
 - Landscape Character Supplementary Planning Guidance - Pembrokeshire Coast National Park.
 - Seascape Character Supplementary Planning Guidance - Pembrokeshire Coast National Park.
- 2.34 The assessment will include cumulative effects associated with the development proposal in combination with a list of developments to be agreed with statutory consultees which will include:
- existing development, either built or under construction;
 - approved development, awaiting implementation; and
 - proposals awaiting determination within the planning process with design information in the public domain.
 - The projects may include the following categories of development:
 - Buildings;
 - Harbour, port, waterfront and other related coastal development;
- 2.35 A list of projects to be included in the assessment will be agreed between Câr-Y-Môr and statutory consultees.

3.0 Existing Conditions

- 3.1 This section provides a description of the site and the study area and sets out the landscape and visual baseline against which the development is assessed.

Câr-Y-Môr Shellfish Farm Site

- 3.2 Câr-Y-Môr are a Community Benefit Society based in Pembrokeshire, West Wales - Registered Company Number RS008172 as “For the love of the sea Limited”. Trading address – Upper Clegyr, St Davids, Pembrokeshire, SA62 6QN.

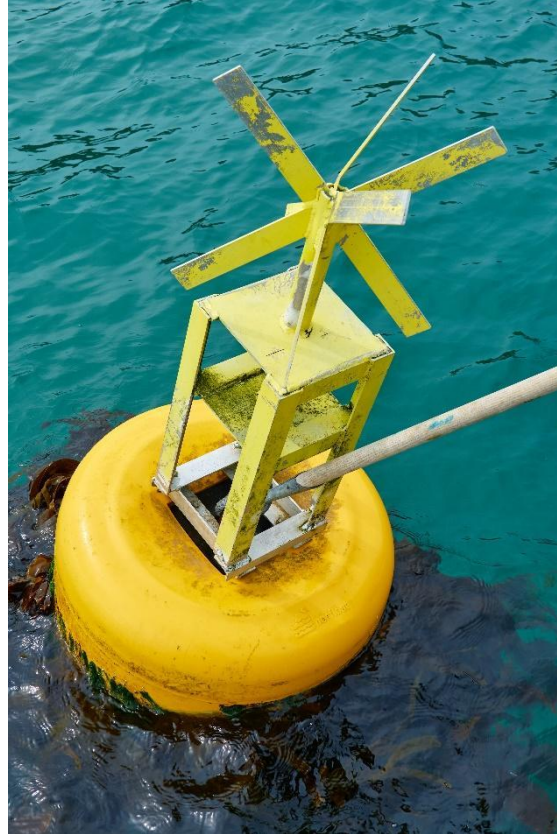
Câr-Y-Môr operate a test aquaculture site at the Carn Ar Wig and Porthlysgi sites and was initially licensed as a trial seaweed and shellfish IMTA site under Marine License DEML2013. This license was granted by NRW to run from 01/08/2020 to 31/07/2025.

- 3.3 As of January 2025, CYM are finalising an extended area lease agreement with the Crown Estate Wales, and the site for the purposes of this assessment is therefore this larger area, rather than the current trial farm site. The extent of both the trial farm site and the extended lease area (proposed farm site) are shown on Figure 11, and where the term ‘farm site’ is used in this report, this should be taken as a reference to the larger area.
- 3.4 At its greatest dimension, the farm site is a maximum of 352m in length, and in total covers around 0.051km² of the sea.
- 3.5 The proposed farm site extends to within a minimum of 25m of the mean low water shoreline, extending out to around 190m in places. The proposed farm site currently consists of open sea and the existing farm site (0.03km²) which is approximately 260m NE, with a number of buoys that are visible to observers on nearby land.



View of Ramsey Sound and the Pembrokeshire Mainland from the North: the current farm site can be seen on the right of the view (two rows of buoys) and Ramsey Island can be seen as the landmass furthest to the right.

- 3.6 The current Farm sites are marked out by four cardinal buoys at its corners and one along each of the longest sides. Each buoy is conical, around 0.3m across and rising 1.5m above the waterline. The buoys are each painted yellow so that they may be distinguished. By night, the buoys are each marked with a white flashing light with a nominal range of four miles (5.4km). The Trinity House buoys have been in place since 2020 and mark out the zone that vessels are advised to avoid.



Trinity House buoy at current farm site, and to be used for the same purpose at the proposed farm site

- 3.7 The current trial farm sites are currently used for growing shellfish and seaweed. At the time of undertaking the assessment the only installations visible above the surface were the existing shellfish and seaweed buoys, the Trinity House buoys and other vishing buoys and small vessel moorings. An example of the buoys used at the current and the proposed farm site is shown below.



Seaweed and Mussel buoy at current farm site, and to be used for the same purpose at the proposed farm site

The Study Area

- 3.8 The study area has been defined as a 10km radius around the boundary of the farm sites. The landward extent of the study area is shown in Figures 7 and the focus of the SLVIA is on the area with potential visibility of the site, as shown on Figure 8.
- 3.9 The northern and Southern extents of the study area primarily comprise open sea to the west of Pembrokeshire headland. This part of the Atlantic is wide, open and expansive. On calm days the sea may appear tranquil, at other times choppy, and a deep swell is often evident. Towards Ramsey Sound the sea becomes turbulent with strong tidal currents, and large waves crash against the rocky coasts. Marine activity in this area includes some fishing boats inshore, and in summer, tourist and recreational boats. The lifeboat station is to the north of the study area, and further offshore, larger vessels heading to and from Milford waterway are visible.
- 3.10 The inland study area comprises two distinct areas: the Pembrokeshire mainland; and the island of Ramsey. Within the study area, notable features on the mainland include the city of St. Davids, dispersed outlying habitations, and the intricate coastline. Both Ramsey Island and the mainland coast include dramatic coastline, with cliffs, inlets, bays and beaches. Overall the landscapes are remote and rural, with small scattered settlements. There are generally wide-ranging views towards the open sea and the distant islands and headlands.
- 3.11 Moorland and marginal farmland to the west of St Davids, are typical of the less settled parts of the peninsular.
- 3.12 The Pembrokeshire coast displays an extraordinary variety of rock types and landforms which meet gently sloping farmland. Land cover consists largely of improved grassland with windswept rough grasses and moorland. Vegetation is low growing, with little to no tree cover.

The land is mainly used for pastoral farming, which gives way to patches of undeveloped moorland

- 3.13 The City of St. Davids sits in the western peninsular. Other settlements are dispersed, as individual farms or small clusters of houses, surrounding St. Davids and Solva or following the A-road NE towards Fishguard (25KM), or SE towards Haverfordwest (26KM). There is little else in the way of built environment, other than farm buildings, and basic infrastructure. There is a small network of roads radiating out from St. Davids and across the Peninsula. The A487 is the main route, with a few minor roads branching west towards the coast. The Wales / Pembrokeshire Footpath along the clifftop, and there is a small network of paths in the surrounding area
- 3.14 The northernmost part of The St. Davids Peninsula, including the impressive Carn Llidi, also sits within the study area. Carn Llidi, a hill (594 feet / 181m) east of St David's Head stands in a prominent position dominating Whitesands Bay. On clear days, there are views south west towards Ramsey Island and the Bishops and Clerks islets, and north east towards Strumble Head.
- 3.15 Some bedrock is exposed and the coastal landscape is characterised by its towering cliffs. The area displays an extraordinary variety of rock types and landforms. It is this geodiversity that was one of the deciding factors leading to the designation of the Pembrokeshire Coast as a National Park in 1952.
- 3.16 The town of Solva lies on the north side of St Bride's Bay, approximately 5km east of St. Davids in the eastern extent of the study area. Lying in a deep valley at the mouth of the River Solva, Lower Solva, consists of a long street ending at the small harbour. Most of the modern development has been in Upper Solva, on the cliff top to the west of the harbour.
- 3.17 The study area also includes Ramsey island. This is similar in topography to the Mainland, being low lying with limited relief. It is much smaller and less settled than the adjacent area of mainland with only a few buildings.
- 3.18 Being off the western coast of Wales, Pembrokeshire experiences a temperate, wet climate, with temperatures mild in winter and low in summer.
- 3.19 Pembrokeshire is also well known for its evidence of Neolithic and bronze age settlements and has a rich cultural history, still evident as standing stones throughout much of its landscape. Visible remains within the study are present.

Landscape and Coastal Character

- 3.20 This section provides a description of the landscape and coastal character across the study area, drawing on published studies. The maritime character of the study area is defined in the Pembrokeshire Seascape Character Assessment, while the onshore landscape character is described in the Pembrokeshire Seascape Character Assessment.

3.21 The key characteristics of all the SCAs in the study area, and from where the test site is potentially visible, are presented in Table 3.1 and Figure 10.

Table 3.1 Seascape Character Assessment Areas

Seascape Character Assessment Areas	Key characteristics
SCA 13: Penbwdy to Penllechwen	This area is defined by a rugged and exposed coastline with dramatic high cliffs and rocky shores, interspersed with narrow valleys. The interplay of steep terrain and crashing waves creates a dynamic and visually striking landscape. There is a strong sense of wildness and remote beauty, further enhanced by limited human presence and minimal development. The area's ecological significance is underscored by rich marine and bird life, making it a key part of Pembrokeshire's natural heritage. Views from the cliffs offer expansive panoramas over the Irish Sea, reinforcing its untamed character.
SCA15: St. Davids Head	St. David's Head is a seascape of exceptional drama, dominated by rugged cliffs and bold headlands interspersed with patches of open heathland. The area offers panoramic views of offshore islands and the Irish Sea, presenting a landscape of unspoiled beauty. It is a popular destination for walkers and nature enthusiasts due to its stunning vistas and abundant wildlife. The sense of remoteness and connection to the natural world defines this area, with its geological features and dynamic interplay of land and sea enhancing its unique character.
SCA16: Whitesands Bay	Whitesands Bay is characterised by its wide, sweeping sandy beaches, which are backed by rolling dunes and patches of heathland. The bay is a focal point for recreational activities, including surfing, swimming, and beachcombing, making it a vibrant and well-loved destination. The seascape is framed by dramatic views of the coastline and distant islands, creating a strong visual connection to the sea. The dynamic interaction between the natural and human elements of this area contributes to its cultural and scenic significance.
SCA 17: Ramsey Sound	Ramsey Sound is known for its dynamic tidal flows and the narrow channel that separates Ramsey Island from the mainland. This seascape features steep cliffs, rocky shorelines, and a rich diversity of marine and bird life. The powerful tidal currents create a constantly shifting waterscape, adding an element of energy to the area. Ramsey Sound is an important ecological zone, supporting seals, seabirds, and diverse underwater habitats. The area also holds cultural significance, with its historic maritime use and connections to local lore.
SCA 18: Ramsey Island Coastal Waters	The coastal waters surrounding Ramsey Island are characterised by their sense of remoteness, tranquility, and ecological richness. Towering cliffs and secluded coves define the seascape, offering refuge for a variety of wildlife, including breeding seabirds and marine mammals. These waters are part of a wider ecological network, with their pristine character making them a valuable natural asset. Recreational boating and wildlife tours are common, as visitors seek to experience the area's unspoiled beauty and its strong sense of isolation.
SCA19: Bishop and Clerks	This offshore area features a series of rocky islets and treacherous waters, known for their navigational hazards and abundant marine life. The rugged seascape, marked by dramatic rock formations, creates a sense of mystery and raw natural power. The Bishop and Clerks area is an important habitat for seabirds and marine species, providing ecological value alongside its striking visual appeal. The isolation and challenge of these waters are a testament to the untamed nature of Pembrokeshire's seascapes.
SCA 20: St. Brides Coast Waters North	This section of coastline combines striking cliffs and secluded coves with a blend of semi-natural vegetation and farmland extending to the water's edge. Clear waters and occasional rocky outcrops enhance its visual interest, while the area supports a variety of marine habitats. It offers scenic views towards the open sea and inland landscapes, making it a location of both ecological and recreational importance. The interplay between the natural coastline and human influence contributes to its character.
SCA21: St. Brides Bay coastal waters East	The eastern waters of St. Brides Bay are characterised by gently sloping sandy sea floors and a semi-enclosed setting that provides sheltered conditions. The bay is framed by picturesque coastal settlements and enjoys strong connections to the surrounding landscapes. The tranquil waters and soft interplay of light create a serene environment, attracting recreational users such as sailors and beachgoers. Its visual and cultural importance is reflected in its role as a hub for local activity.

Seascape Character Assessment Areas	Key characteristics
SCA22: St. Brides Bay coastal waters South	The southern section of St. Brides Bay is defined by steep cliffs, rocky intertidal zones, and a sense of tranquillity. Wide, open views across the bay are a defining feature, as are the area's historical and cultural landmarks. This part of the seascape offers a strong connection to the region's maritime heritage while maintaining its natural beauty. The combination of visual appeal and a peaceful atmosphere makes it an integral part of the bay's overall character. Steeply sloping wild, vegetated cliffs culminating in Borough Head which dominates the coastal waters.
SCA24: St. Brides Bay	St. Brides Bay is a broad and open seascape that serves as one of Pembrokeshire's most iconic coastal features. The bay encompasses sandy beaches, dynamic tidal zones, and picturesque coastal settlements. Its expansive nature creates a sense of openness, with wide horizons and long views over the water. The bay is a key destination for recreational activities, including sailing, fishing, and walking, and supports diverse marine habitats. The balance of natural beauty and human activity defines its enduring appeal.
SCA28: West open sea	The West Open Sea area represents a vast, dynamic, and exposed offshore seascape. Characterised by uninterrupted horizons and the constant movement of waves and swells, this area conveys a strong sense of remoteness and natural power. The waters are influenced by tidal currents and oceanic conditions, creating a challenging marine environment. Views across the open sea are vast and unbroken, providing a dramatic backdrop to the Pembrokeshire Coast. While human activity is minimal in this area, occasional maritime traffic and distant views of islands like Skomer and Ramsey contribute to the seascape's character. The wild, untamed quality and expansive nature of the West Open Sea make it a highly sensitive and visually significant area, with limited capacity to absorb change without impacting its character.

3.22 Since all SCAs, by definition, have a marine element and key characteristics that relate to the sea, all the above SCAs were considered in the assessment. However, of these, significant effects on the character SCAs 13, 14 and 15 are considered unlikely and it is not anticipated that substantive changes to their character will occur. Likewise SCA 21 was omitted as only a small proportion of the SCA fell within the study area. As such, the SLVIA examines effects on SCAs 16, 17, 18, 19, 20, 24 and 28 only.

Pembrokeshire Landscape Character Area (LCA) Assessment

3.23 The Pembrokeshire Landscape Area Assessments were commissioned by the Pembrokeshire Coast National Park Authority in October 2006. The LCA defines a number of distinct landscape character areas that occur across the mainland and islands of the national park, some of which have a strong coastal component. The key characteristics of the LCAs in the study area are presented in Table 3.2 and in figure 9. Only those LCAs that are with potential visibility of the test site (Figure 2) are listed.

Table 3.2 Landscape Character Areas

LCA	Key characteristics
LCA 12 - St. Bride's Bay	Defined by sandy beaches, rugged headlands, and rolling farmland, this area is a dynamic and vibrant coastal landscape. It supports a mix of tourism, recreational activities such as sailing and surfing, and small-scale fishing. Panoramic views of the bay and the horizon contribute to its openness and scenic value, while settlements and cultural landmarks enhance its character. Sensitive to visual changes but somewhat resilient due to existing maritime activities that integrate with the seascape. • This is a very large tract of landscape with a strong visual relationship to the coast from the broad views across St. Brides Bay and along the coastline, which is mostly undeveloped • There is a high degree of exposure, especially along the higher ground and along the wide expanse of cobble beach that is Newgale Sands; there is more shelter within the lower areas of the rolling farmed landscape

LCA	Key characteristics
	• The sight and sound of this expanse of sea is a constant presence, a perception heightened by the sound of waves breaking onto the cobble beach when there is sufficient wind to raise the swell, and apparent in short, medium and long distance views • There are some landscapes of high ecological value with habitats of international importance • The historical and archaeological features present result in a historical landscape with mostly high value and some outstanding value, which underpins the outstanding cultural value. The cultural value is further supported by the continuous tract of open access National Trust land along the northern stretch of coast running eastwards from Solva almost to the northern tip of Newgale Sands.
LCA 15 - Dowrog & Tretio Commons	This LCA features extensive open moorland and heathland, interspersed with scattered farms and occasional wooded areas. Its sense of remoteness and ecological habitats are significant, supporting rare flora and fauna. Prehistoric and medieval archaeological sites add cultural depth, while strong hedgerows and low tree cover shape the rolling lowland character. The area's visual and ecological integrity make it moderately sensitive to change. • This exposed, slightly undulating area has a largely open character comprised of a mosaic of farmland, marshy grassland and scrub • Its character is enhanced by views north-westwards to the distinctive hills of Carn Llidi and south westwards towards the city of St. David's • There are internationally significant habitats here which contribute to the high ecological value of much of the area • The wealth of historical and archaeological features recorded here is of national significance and result in a landscape of outstanding value. The scattered farm steads and hamlets have a very strong architectural 'signature' which contributes very strongly to the sense of place here. There are strong archaeological similarities to the adjacent St David's Headland LCA - a historical landscape of outstanding value • The prehistoric significance of this landscape is a key attribute, some exceptional survivals indicating that this landscape has been occupied for thousands of years. This has been formally recognised by its inclusion within the St. David's Headland and Ramsey Island Registered Landscape of Outstanding Historical Interest in Wales. There is extensive and well-preserved evidence of land use and intense ritual and religious activity from the prehistoric period onwards, including Neolithic chambered tombs and settlement, Iron Age forts and field systems within this Historic Landscape. • The cultural value is outstanding by virtue of its position in relation to the cathedral city of St David's. Dowrog and Tretio Commons are important elements in the traditional agricultural management of the landscape. This cultural value is further supported by their acquisition by the National Trust. • There is a Conservation Area at the long-established small hamlet of Caerfarchell (designated in March 1997), which is unusually centred on an open green.
LCA 16 - Carn Llidi	Dominated by rocky outcrops, heathlands, and steep cliffs, Carn Llidi offers sweeping views across Whitesands Bay and St. David's Head. The exposed character of this iconic landmark enhances its sense of wildness, attracting walkers and nature enthusiasts. Rich in archaeological features, the area is visually dramatic and highly sensitive to seascape changes due to its prominence and cultural importance. Panoramic vistas strengthen its visual connection to the wider coastal landscape. • There is a pervading sense of exposure created by the bare rocky outcrops on the hill tops and lack of tall vegetation and a feeling of remoteness. The line of scattered farmsteads along a spring line on the lower slopes shows the human response to the exposure to north-westerly winds off the sea. The distinctive north Pembrokeshire vernacular architecture is strongly apparent, as in the adjacent Dowrog & Tretio Commons LCA • There are panoramic views of coastal cliffs and beaches which reinforce the coastal sense of place • The landscape appears naturalistic and largely undisturbed and has habitats of international significance of outstanding value • The wealth of archaeological and historical features recorded hereabouts is nationally significant and of outstanding value. This is an extremely important prehistoric landscape with extant features covering thousands of years of use and settlement which have not been strongly overlain by modern land use. This has been formally recognised by its inclusion in the St. David's Headland and Ramsey Island Registered Landscape of Outstanding Historical Interest in Wales. There is extensive and well-preserved evidence of land use and intense ritual and religious activity from the prehistoric period onwards, including Neolithic chambered tombs and settlement, Iron Age forts and field systems. • There is an important cultural reference to the patron saint of Wales because of St David's Head and there are clear views across the intervening lower ground towards the city of St David's and its cathedral. The cultural value is further supported by the large continuous tract of National Trust land along the northern coast of the area and including the hill summits • This LCA has outstanding values recorded across all Aspects.
LCA 17 - St. David's	This LCA encompasses the historic city of St. David's, known for its cathedral, medieval features, and cultural significance. Rolling farmland, traditional stone walls, and distinctive settlements blend seamlessly with coastal features to create a harmonious landscape. It serves as a gateway for visitors

LCA	Key characteristics
	exploring the Pembrokeshire Coast National Park. The area's scenic, cultural, and historical value makes it highly sensitive to visual and environmental changes, particularly along its coastal boundaries. • This LCA was defined by the urban form of the city itself, with the addition of the Merry Vale valley. The valley-floor setting of the main ecclesiastical site relates strongly to Merry Vale and the historic access link to the sea at Porth Clais • There is a very strong sense of place and the nature and extent of the imposing cathedral building and the ecclesiastical ruins generates an awareness of the long-established importance of this settlement in Welsh history. The Medieval buildings and features within the cathedral close are the core defining characteristic • St David's and its environs has a historical landscape of outstanding value and is arguably of international significance for its importance within the Christian church. The city lies at the heart of the St. David's Peninsula and Ramsey Island Landscape of Outstanding Historic Interest in Wales, regarded as being of continuing supreme cultural significance and importance in Wales as Dewisland • The cathedral's imposing presence serves as a visual reminder of the importance of the city to the present day in Welsh culture. The association of this cathedral city with the patron saint of Wales means that this area is of outstanding cultural significance and value within Wales, a place of pilgrimage until the present day • There is a large Conservation Area (designated in 1977 and extended in 1995) covering the old city core and extending down into the valley to the west and north west of the centre, encompassing the cathedral and its close and the monastic ruins.
LCA 18 - St. David's Headland	Rugged cliffs, rocky inlets, and expansive lowland heath define this dramatic and exposed coastal landscape. Internationally significant habitats support diverse wildlife, while archaeological sites reflect the area's historical importance. The peaceful and open rural environment is visually striking, offering uninterrupted views of the Irish Sea. This headland is highly valued for its scenic, ecological, and historical significance, making it particularly susceptible to changes in its character or visual quality. • This is largely a rather peaceful open rural environment with attractive views to the coast and the cathedral at St David's • There are three stretches of lowland heathland and wetlands with areas of standing water, a rare element within the National Park. There are internationally significant habitats here, especially lowland heath and grasslands • There is a wealth of historical and archaeological features which are of national significance and result in a landscape of outstanding historical value. There are some fine examples of the distinctive vernacular Pembrokeshire houses with their 'outshots' and massive round chimneys • The abundance of early Christian sites is important. Whitesands Bay in particular has strong connections with St. David's, due in part to the site of the pilgrims' chapel of St Patrick in the field behind the beach. This would have been a landing point for boats for those making the pilgrimage to St. David's by sea. • The associations with the cathedral city of St. David's are highly significant in Welsh culture and underpin this area's outstanding cultural value. The cultural value is further supported by the large continuous tract of National Trust land along the Pen Dal-aderyn promontory and running eastwards to Porth Clais and beyond to Solva. This has been formally recognised by its inclusion in the St. David's Headland and Ramsey Island Registered Landscape of Outstanding Historic Interest in Wales. There is extensive and well-preserved evidence of land use and intense ritual and religious activity from the prehistoric period onwards, including Neolithic chambered tombs and settlement, Iron Age forts and field systems. • Clegyr Boia is the only Pembrokeshire example of a Neolithic domestic settlement, a fortified stronghold on a rocky hill outcrop to the west of St. David's.
LCA 19 - Ramsey Island	Characterised by towering cliffs, secluded coves, and an abundance of biodiversity, Ramsey Island remains a remote and ecologically significant landscape. It serves as a sanctuary for bird species, seals, and other marine wildlife, with limited human intervention preserving its wild and untouched character. The island's steep rock formations and rich habitats are complemented by its isolation and stunning views, making it highly sensitive to visual and ecological changes. • The offshore islands of the Pembrokeshire coast are of international importance for their spectacular natural heritage, diversity of habitats and species, and archaeological evidence. Ramsey is an excellent example, with the full range of these attributes • There is a pervading sense of exposure and wildness, of being 'at the edge', in this undisturbed coastal landscape with extensive views of the surrounding coast • The great sense of remoteness and strong coastal sense of place are of great importance, coupled with the island effect of arousing curiosity and a tendency to want to cross the water and explore land which is beyond the mainland and surrounded by sea, made all the more challenging by the strong tidal races through the narrow channel

LCA	Key characteristics
	• Ramsey has outstanding values across all five evaluated landscape Aspects. • Its historical importance has been formally recognised by its inclusion in the St. David's Headland and Ramsey Island Registered Landscape of Outstanding Historical Interest in Wales • Ramsey Island LCA has a preponderance of outstanding values recorded across four Aspects.
LCA 20 - Trefin	Coastal farmland interwoven with rugged cliffs, small coves, and scattered traditional settlements define this LCA. Features such as hedgebanks, dry stone walls, and historic sites create a strong sense of place and cultural heritage. The area transitions between pastoral fields and small woodlands, offering a sheltered contrast to the more exposed coastal landscapes nearby. Its open coastline, coupled with expansive views, enriches its character while making it moderately sensitive to visual or environmental changes. • An exposed and diverse coastal landscape with extensive views along the coastline • There is a strong, long-established settled character, arising from small scale settlements and scattered farmsteads within an undulating, predominantly pastoral farmland landscape. There is a very distinctive local vernacular architecture, stone-built with slate / grouted roofs • The field pattern is well defined and imparts a rich texture to the open landscape, where small areas of wood land and scrub serve as punctuation points. The importance of the traditional field boundary hedgebanks and dry-stone walls cannot be over-emphasised and the quality of their condition as a result of management practices is a defining element within the landscape • There are nationally important habitats well represented here, notably lowland heathland habitats and the coastal cliffs. The cliffs along the greater part of the length of the coast in this LCA are assessed as being of outstanding value, which is supported by the designation of over 50% of the coastline as SSSI, Special Area of Conservation or Special Protection Area • The wealth of historical and archaeological features present, dating from prehistoric times to the recent industrial past, contribute to the outstanding historical value of much of this landscape, some of which is of national importance. At the northernmost extremity of this LCA, there is a small part of the Pen Caer: Garn Fawr and Strumble Head Registered Landscape of Special Historic Interest in Wales. This large and distinctive headland forms a landscape strong in elements of historic continuity and survival, from the prehistoric period onwards. • The industrial remains are at a landscape scale and include the iconic 'blue lagoon' at Abereiddy and the hoppers at Porthgain. The stretch of coast between Abereiddy and Porthgain is a walk-through of industrial history, with stone quarries, workers' cottages, the manager's house, tramways and jetties, all of which contribute to the story of this landscape • There are Conservation Areas at Trefin (designated August 1997), including the historically important site of the bishop's palace, and at Porthgain (designated November 1997) in recognition of the large scale industrial heritage - especially the harbour, lime kilns and structures of this small commercial port and fishing village. These and earlier slate quarrying related structures including the lime kiln, harbour and Pilots House give Porthgain a unique historic character. Following review of the Conservation Area in 2019, the boundary has been expanded to include the industrial landscape immediately to the west, consisting of open fields

3.24 Based on a review of the above LCAs, it was determined that the following LCAs have a strong coastal component, the key characteristics of which would be susceptible to the activities proposed within the project envelope:

- LCA 12 - ST. Bride's Bay
- LCA 16 - Carn Llidi
- LCA 17: St. David's.
- LCA 18: St. David's Headland.
- LCA 19: Ramsey Island.
- LCA 20: Trefin.

3.25 Of these, only a small part of LCA 20 - Trefin is located in the study area, and significant effects on the character of this LCA are considered unlikely. As such, the SLVIA examines effects on LCAs 12, 16, 17, 18 and 19 only.

Landscape Value and Designations

- 3.26 This section sets out the relative value that is, or may be, attached to different landscapes within the study area by society.
- 3.27 Valued landscapes are often recognised by designation (defined either by statute or identified in development plans). However, the fact that an area of landscape is not designated does not mean that it does not have value. Factors which indicate that a landscape is valued may also include whether or not it contributes to a distinctive or attractive landscape setting of a settlement, if it has high conservation interest (including cultural or historical or nature conservation interest) or if recreational activities are concentrated there.
- 3.28 In the case of the present SLVIA, the whole of the study area lies within the Pembrokeshire Coast National Park, designated in 1951 in recognition of the outstanding quality of its landscape. Much of the coastline is also defined as heritage coast. The whole of St Bride's Bay along with adjoining areas of sea around the Pembrokeshire Coast is protected under European environmental law as a special area of conservation (SAC). Parts of the coast are additionally defined as special protection areas (SPAs) and sites of special scientific interest (SSSIs), mainly around the coastal perimeter. The effect of the realistic worst-case development on these special qualities is examined in detail in Appendix 5.

Visual Baseline

Analysis of Visibility

- 3.29 This section identifies the extent of potential visibility of the farm site and introduces the visual receptors and viewpoints used for assessment. The analysis considers the site's location within the Pembrokeshire Coast National Park, emphasising its scenic and recreational significance.
- 3.30 A Zone of Theoretical Visibility (ZTV) was generated based on a maximum assumed height of 0.3m above high water across the entire project area. This height represents the majority of the infrastructure that will be present at the farm site. The ZTV, depicted in Figure 7 & 8, indicates the maximum theoretical extent of visibility of project structures across the study area.
- 3.31 The ZTV reflects the maximum potential visibility without accounting for mitigating factors such as weather, vegetation, or intervening landforms. Individual devices or components are likely to be less visible in practice than the ZTV suggests.
- 3.32 Visibility is concentrated along the coastal zones within the 2km and 5km study areas, particularly from elevated or open locations. Inland visibility is generally restricted by the undulating topography, while the open seaward areas exhibit extensive potential visibility.
- 3.33 The ZTV suggests visibility from notable headlands, beaches, and sections of the Pembrokeshire Coast Path. Visibility also extends across parts of the marine environment used for recreational and small watercraft activities.

Key Visual Receptors

- 3.34 Key visual receptors have been identified by analysing the ZTV and determining locations where sensitive receptors are likely to experience visual impacts. This process involved desk-based research, field observations, and careful evaluation of both land-based and marine environments. The receptors encompass a range of users and residents whose experiences and views may be affected by the proposed development. These include:
- **Recreational Walkers:** Walkers on the Pembrokeshire Coast Path and other public rights of way that pass through open, elevated, or scenic coastal areas within the ZTV. These paths are a critical component of the National Park's recreational offer, providing panoramic sea and land views.
 - **Marine Users:** Recreational sailors, kayakers, and other leisure craft users navigating Ramsey Sound and its surrounding waters. These individuals experience the seascape from water level, often with uninterrupted views of the coastline.
 - **Wildlife Observers and Visitors:** Tourists participating in wildlife observation tours, particularly those near Ramsey Island, which is renowned for its seabird colonies and marine life. Boat-based wildlife tours are a key attraction in this area.
 - **Residents:** Communities and individuals residing in settlements or isolated properties along the coastline who may have views of the proposed site from their homes or surroundings.
 - **Tourists and General Visitors:** Visitors to iconic landmarks such as Carn Llidi, St. David's Head, Whitesands Bay, and Ramsey Island. These locations attract a broad range of users seeking scenic vistas, cultural experiences, or peaceful retreats.

Selection of Viewpoints for Assessment

- 3.35 This section outlines the representative viewpoints selected to evaluate the potential visual effects on identified receptors. The viewpoints were chosen based on their prominence within the ZTV, their accessibility, and their ability to reflect diverse receptor experiences and viewing conditions.
- 3.36 Seven viewpoints (VP1 to VP7) were selected to ensure a comprehensive assessment of visual impacts across both terrestrial and marine environments. These viewpoints represent a balance of recreational, residential, and maritime perspectives and include a mix of elevated and low-lying vantage points.
- 3.37 Additional viewpoints were considered during field visits but were excluded due to limited visibility of the project site or insufficient relevance to the identified key receptors.

Table 3.3: Viewpoint Selection

Viewpoint	Grid Reference	Location	Reason for Selection	Receptor and Activity Represented
VP1	X 171976.103, Y 224122.074	Elevated coastal path overlooking Ramsey Sound	Represents walkers on the Pembrokeshire Coast Path with panoramic views of Ramsey Sound, Ramsey Island and the shellfish farm.	Recreational walkers
VP2	X 171662.697, Y 223800.856	Coastal path on Ramsey sound	Captures elevated land-based views towards both the proposed and current shellfish farms and St. Davids lifeboat station.	Walkers and residents
VP3	X 170604.371, Y 223777.015	Near buildings on Ramsey Island	Reflects views experienced by wildlife tourists and visitors on boat trips around the island.	Wildlife observers and visitors
VP4	X 171650.076, Y 224221.720	Maritime viewpoint in Ramsey Sound	Highlights the experience of recreational and small boat users navigating near the proposed site.	Marine users
VP5	X 173092.858, Y 223384.931	Elevated viewpoint near St. Bride's Bay	Represents walkers on the coastal path with views of the proposed shellfish farm and Milford Haven traffic.	Recreational walkers
VP6	X 173147.422, Y 223698.195	Elevated viewpoint overlooking beach at Porthlysgi	Offers picturesque views of the over Porthlysgi beach towards the open sea and coastline, representing a popular recreational and wildlife tourist location.	Recreational walkers and tourists
VP7	X 171667.528, Y 221310.461	Maritime viewpoint south of the Porthlysgi site boundary	Captures the inland-facing view of the coastline as seen by marine users.	Marine users

Additional Considerations

3.38 During the field study, other potential viewpoints were assessed but ultimately not included. These included:

- **Carn Llidi:** While offering excellent panoramic views, visibility of the proposed site was minimal due to intervening topography and distance to proposed farm site.
- **Low-lying Areas near Ramsey Sound:** Some sections provided partial views but lacked sufficient exposure to the project site for meaningful assessment.
- **Dwelling house at St. Jusinians:** Despite being able to view the proposed farm from the property. The view is minimal, and due to the distance between receptor and target the specific viewshed is considered less sensitive compared to public and recreational receptors like walkers and tourists. The infrastructure will not dominate the property to the extent of affecting living conditions.

4.0 The Proposed Development

Project Overview

- 4.1 Câr-Y-Môr currently operates a trial seaweed and Shellfish Farm located at Carn Ar Wig and Porthlysgi in the Ramsey Sound. The Marine License for these sites is due to expire on 31st July 2025. Under Article 13 of the Marine Licensing (Exempted Activities) (Wales) Order 2011, Câr-Y-Môr is seeking to obtain an exemption from the requirement of further Marine Licensing as these sites will only be used for commercial shellfish production. The proposed farm sites will encompass the current farm sites and expand these to a scale that is commercially viable.

Location of New Proposed Sites

4.2 **Table 4.1 The locations of the proposed new farm areas in WGS84 format**

Site Name	WGS84 Coordinates
Porthlysgi	Longitude: -5.303353, Latitude: 51.863061 Longitude: -5.306021, Latitude: 51.860414 Longitude: -5.307452, Latitude: 51.860913 Longitude: -5.304722, Latitude: 51.863583
Carn ar Wig	Longitude: -5.315380, Latitude: 51.867975 Longitude: -5.315872, Latitude: 51.867152 Longitude: -5.316970, Latitude: 51.867463 Longitude: -5.316296, Latitude: 51.868174 Longitude: -5.315539, Latitude: 51.868951 Longitude: -5.315034, Latitude: 51.868803

Buoys and Operations

- 4.3 Carn Ar Wig would consist of up to 4 mussel longline ropes spaced 20m apart. Three of these lines will be approximately 200m long and a forth will be approximately 115m long. Porthlysgi would consist of up to 7 mussel longlines, spaced 18m apart. Each mussel longline will be approximately 350m long
- 4.4 As the project will use existing onshore infrastructure, this assessment does not include any onshore infrastructure, and all installations and activities (with the exception of boat movements to and from the site) will take place within the farm site, as shown on Figures 3, 4 & 5, and described in Section 3.
- 4.5 The extent and level of effects on landscape and views is considered to be most closely related to the following parameters:
- The size of buoys deployed in the farm site (length, width and height above sea level), as well as their form and colour;
 - The number of buoys deployed in the farm site at any one time;

- The size and form of different buoys deployed simultaneously, and the resulting composition of the farm site as seen in views;
- The likely change in deployed buoys during the license period;
- Installed lighting across the farm site; and
- The activities associated with installation and decommissioning of each device.

Farm equipment

- 4.6 Various equipment will be used at the farm site, including floating, submerged and fixed devices, and take a variety of forms. Table 4.2 sets out the key parameters that limit the size of any one of these components. The greater the size of any given component, the greater its visibility, and therefore the greater the level and extent of likely impact.

Table 4.2 Buoy Parameters

Equipment parameter	Maximum dimensions
Distance above sea surface for floating elements	Maximum distance protruding from sea surface should not exceed 1.5m, including navigational and communication equipment.
Length of floating structures	Maximum length of 1m for surface elements of floating devices.
Width of floating structures	Maximum width of 1m for surface elements of floating devices.

- 4.7 The maximum buoy dimensions would therefore be:

- 1m long by 1m wide and 1.5m high – Trinity house buoys

However, the majority of deployed buoys would be

- 1.0m long by 0.56m wide with approximately 0.3m floating above the water line – Mussel buoys.

Number and Configuration of buoys

- 4.8 In terms of the layout and configuration of buoys within the farm site, the project defines a minimum spacing of 7m between buoys in a row and a minimum spacing of 18m between the rows of buoys.

The buoy arrays will be positioned linearly along the longest length of the farm sites.

- Carn ar Wig will consist of 3 rows of 192m, and a single row of 115m in length.
- Porthlysgi will consist of 7 rows of 352m in length.

- 4.9 The Project allows for a maximum of 16 Trinity house buoys to be installed on the farm sites at any one time. Eight at Porthlysgi and eight at Carn ar Wig. Trinity house buoys are floating and

will extend a maximum of 1.5m above the sea surface, and are for the purpose of aiding navigation.

- 4.10 The Project allows for approximately 600 mussel buoys to be installed on the farm sites at any one time. Mussels buoys are floating and will extend a maximum of 0.3m above the sea surface, and are for the purpose of holding and suspending the shellfish buoys.

Marine Works

- 4.11 Marine works covers operational activities on site, including installation, maintenance and decommissioning of components. The following information is summarised from the Project.
- 4.12 Major works such as installation, retrieval/redeployment, and decommissioning activities may take up to five days each.
- 4.13 A wide range of other activities will be required, including harvesting, surveys, regular maintenance visits, and so on. These activities will all be undertaken with the existing barge (10m length) and will take place on a weekly basis. An image of the farm barge is shown below.



Farm barge at current farm site, and to be used for the same purpose at the proposed farm site

Lighting and Marking

- 4.14 The marker buoys will be marked and lit in accordance with marine safety standards, and this will be specified by the relevant regulatory authorities. For the purposes of the SLVIA, it is assumed that all devices and equipment will be painted yellow and will be fitted with flashing

lights similar in brightness to those attached to the existing Trinity House buoys. It is assumed that flashing patterns will not be coordinated across different devices.

Realistic Worst-case Scenario

- 4.15 This defines the 'realistic worst-case' development scenario, based on the above summary of the Project, which has been assessed in the SLVIA. The scenario assumes that the deployment of buoys will occur at once. However, the expected reality is that the buoys will be deployed over the license period, with buoys being installed as required.
- 4.16 Installation of the below surface components will take place at the beginning of the project and decommissioning of the site will be undertaken at the end of licence period. The below surface installation will take approximately a 10 days and the decommissioning phase at the end will take a few days to complete. The SLVIA only considers the operational effects as described above.

5.0 Assessment of Effects

Assessment of Effects on Coastal and Landscape Character

- 5.1 The landscape receptors potentially affected by the Câr-Y-Môr Shellfish Farm are identified in Section 3 and are illustrated in Figures 8, 9 and 10.
- 5.2 Judging the significance of effects requires assessing the sensitivity of the landscape receptors and the magnitude of the effects, as detailed in the methodology (Appendix 1). An assessment of effects on these receptors is provided in Appendix 3, with a summary below in table 5.1.

Effects on Coastal Character

- 5.3 The project will be visible from coastal landscapes within the study area, as indicated by the ZTV. The extent to which the presence of the shellfish farm impacts the character of these landscapes varies across the area.
- 5.4 The coastal landscapes of Pembrokeshire are characterised by dramatic cliffs, sandy beaches, and a sense of remoteness and wildness. While these landscapes are highly valued and distinctive, they are generally robust and less susceptible to small-scale changes such as those proposed. However, certain characteristics, particularly the sense of remoteness, and expansive views over the sea, may be more sensitive to changes introduced by visible marine structures.
- 5.5 The overall sensitivity of coastal landscapes in the study area is judged to be high due to their designation within the Pembrokeshire Coast National Park and their inherent scenic and recreational value. However, the sensitivity varies between SCAs depending on their proximity to the site and their defining characteristics. Elevated coastlines with panoramic views, such as those along the Pembrokeshire Coast Path, are judged to have higher sensitivity compared to more sheltered and developed coastal areas.
- 5.6 The magnitude of effect is generally judged to be low due to the limited size and scale of the project in comparison to the broader landscape. The structures are expected to introduce a small, localised change to the seascape visible from certain coastal areas. The effects are long-term but reversible, as the structures could be removed in the future.
- 5.7 Minor-Moderate effects are predicted along the SCAs closest to the site, particularly those with elevated views and a strong connection to the sea. These include sections of the coastline near Ramsey Island and St. David's Peninsula. In contrast, lower-lying, more developed and distant areas are anticipated to experience minor effects due to their reduced sensitivity and limited visibility.
- 5.8 Across the majority of the study area, the effects on coastal character are predicted to be minor. However, minor-moderate effects are anticipated for the SCA directly overlooking the shellfish farm, particularly along key sections of the Pembrokeshire Coast Path and areas with high recreational use and where visibility allows.

Table 5.1 Predicted effects of the Project on individual SCAs

SCA	Character Summary	Sensitivity	Magnitude of Effect	Predicted Effects
SCA 16: Whitesands Bay	Defined by sandy beaches, tidal flows, and recreational activities such as surfing and boating. Grassland and cliffs create a scenic backdrop, drawing both locals and tourists.	Medium to High: Recreational value and visual openness elevate sensitivity, but existing maritime activity reduces susceptibility.	Low: Buoys are unlikely to intrude significantly on recreational or aesthetic experiences.	Minor: Small visual elements occasionally perceptible, with no major disruption to the area's recreational or scenic value.
SCA 17: Ramsey Sound	This narrow, biodiverse stretch of water between Ramsey Island and the mainland features turbulent currents and dramatic cliffs. Popular for wildlife tours and recreational boating.	Very High: Ecological importance and wildlife sanctuary status make it highly sensitive.	Low to Moderate: Buoys may be visible from watercraft but are low-profile and dispersed.	Minor-moderate: Localised impacts for maritime users; mitigation measures could reduce visual intrusion.
SCA 18: Ramsey Island Coastal Waters	Encompasses the waters surrounding Ramsey Island with towering cliffs, tidal surges, and a sense of isolation. A haven for wildlife and a destination for natural beauty seekers.	Very High: Unspoiled character and ecological importance heighten sensitivity.	Low to Moderate: Buoys may be discernible from limited certain points but are minor in scale and distant from the island.	Minor: Potential effects on wildlife observation and isolation, but impacts are localised and reversible.
SCA 19: Bishop and Clerks	This exposed area of rocky islets and strong tidal currents is valued for its wildness and biodiversity. Primarily experienced by maritime users.	High: Remoteness and ecological significance enhance sensitivity; maritime activity reduces susceptibility.	Low: Small features in the vast seascape, with minimal influence on overall character. Only visible from small section of SCA	Minor: localised effects on users; the area's wild and open qualities remain intact.
SCA 20: St. Bride's Bay Coastal Waters North	A mix of rugged cliffs, small harbours, and open sea views popular for recreational activities such as sailing and wildlife observation.	Medium to High: Scenic and recreational value heightens sensitivity, though maritime infrastructure reduces susceptibility.	Low: Distant and low-profile buoys integrate into the existing maritime activity.	Minor: Localised effects; the area's scenic and recreational character remains largely unaffected.
SCA 24: St. Bride's Bay	A large bay defined by sandy beaches, rocky headlands, and unbroken sea horizons. Supports recreation, tourism, and maritime activity with strong visual connectivity.	Medium to High: Visual openness and recreational/scenic resources heighten sensitivity.	Low: Small buoys result in minimal visual intrusion.	Minor: The area's scenic and expansive quality remains undisturbed, with occasional glimpses of buoys under clear conditions.
SCA 28: West Open Sea	This vast seascape west of the Pembrokeshire Coast features open, deep waters, marked by a significant sense of remoteness and exposure. It is defined by natural forces with minimal human activity, enhancing its isolation and unspoiled character.	High: The open sea's isolation and unspoiled nature heighten sensitivity. However, its vast scale reduces susceptibility to small changes.	Negligible: Buoys will be imperceptible for the majority at the scale of the area.	Negligible: The shellfish farm will have no discernible impact on the open sea's vast and isolated character.

Effects on Landscape Character

- 5.9 The shellfish farm will introduce small-scale, localised changes to the landscape character within the study area. The extent of these effects varies depending on the defining characteristics and sensitivity of each LCA, particularly their proximity to the site and the presence of elevated viewpoints with clear views of the seascape. While the majority of LCAs are highly valued due to their location within the Pembrokeshire Coast National Park, the scale and nature of the development ensure that impacts remain limited and largely contained to specific areas.
- 5.10 The sensitivity of the landscapes within the study area is judged to be medium to high, reflecting their designation within the Pembrokeshire Coast National Park and their inherent scenic, cultural, and recreational value. Areas with elevated positions, such as, St. David's Headland (LCA 18), and Ramsey Island (LCA 19), are particularly sensitive due to their expansive views of the seascape, their strong sense of wildness and remoteness and proximity to the proposed farm site. In contrast, more sheltered or developed landscapes further from the proposed farm site such as St. Bride's Bay (LCA 12) and St Davids (LCA 17), exhibit slightly lower sensitivity. Despite the varying sensitivity, existing maritime activity and human elements are already part of their visual character. The defining qualities of the study area, including its open horizons, dramatic headlands, and cultural significance, remain key considerations in the assessment.
- 5.11 The magnitude of effect is generally judged to be low, owing to the small scale and subtle nature of the shellfish farm's components. The buoys, with surface profiles of 300mm and corner markers reaching 1.5m above the waterline, will be difficult to discern from most vantage points, particularly at distance. While elevated viewpoints will have clearer visibility, the unobtrusive nature of the farm ensures it will not dominate or detract significantly from the broader landscape. Atmospheric conditions, such as haze, glare, or reflections over the water, will further diminish the visibility of the structures, blending them into the marine environment. The presence of existing maritime activity also reduces the perceived magnitude of change within all the LCAs.
- 5.12 The predicted effects on landscape character are anticipated to be minor. Although LCAs with direct views of the shellfish farm, such as Ramsey Island (LCA 19) and St. David's Headland (LCA 18), will experience the greatest impact, the limited visibility at the distance of LCA19 and the limited impacted extent of LCA19 means only minor impacts are anticipated. . In these areas, the sense of remoteness and wildness may experience subtle reductions, particularly for visitors engaged in nature-based activities or observing the seascape. However, the impacts remain localised and do not fundamentally alter the overall experience or integrity of these valued landscapes. In LCAs further from the site or with existing maritime context, such as St. Bride's Bay (LCA 12) and St Davids (LCA 17), the effects will be minor and highly localised, with the overall character and visual qualities remaining intact. Across the study area, the defining attributes of Pembrokeshire's landscapes—openness, natural beauty, and cultural richness—will continue to prevail.

Table 5.2 Predicted effects of the Project on individual LCAs

LCA	Character Summary	Sensitivity	Magnitude of Effect	Predicted Effects
LCA 12: St. Bride's Bay	Defined by sweeping sandy beaches, rugged headlands, and rolling farmland extending to the coastline. A hub for tourism and local activity, offering openness, cultural value, and recreational opportunities such as sailing, surfing, and beachcombing.	High: The combination of natural beauty, recreational value, and tourism importance makes it highly sensitive, though existing maritime activity reduces susceptibility to visual changes.	Low: Buoys will blend into the marine environment, remaining inconspicuous due to scale and atmospheric conditions like haze or glare.	Minor: Subtle, localised changes will occur, visible from specific vantage points. The bay's overall scenic and cultural qualities will remain intact.
LCA 16: Carn Llidi	Rugged and dramatic landscape centered on the iconic Carn Llidi hill, with windswept heathlands, jagged cliffs, and panoramic views of Whitesands Bay. A popular area for recreational walking and nature observation, celebrated for its wild, untamed beauty.	High: Iconic status, unspoiled character, and recreational significance heighten sensitivity, especially given the elevated vantage points offering uninterrupted coastal views.	Low: Buoys will appear as small, discrete elements in the expansive seascape, reduced in prominence by their minimal height and distance from LCA.	Minor: Localised changes will not detract from the headland's dramatic and wild character. The overall experience of Carn Llidi will remain unaffected.
LCA 17: St. David's	Encompasses the historic city of St. David's, blending cultural heritage with natural beauty. Features rolling farmland, traditional stone walls, and strong visual connections to the coast. Attracts visitors exploring its cathedral and surrounding landscapes.	High: The area's cultural significance and role as a tourism hub enhance sensitivity, though its inland nature limits direct visual connections to the shellfish farm.	Negligible to Low: Limited visibility from select coastal vantage points ensures the buoys remain inconspicuous.	Negligible to Minor: Minimal impact on the LCA's character, with the majority of the area unaffected.
LCA 18: St. David's Headland	One of Pembrokeshire's iconic landscapes, marked by rugged cliffs, exposed heathland, and uninterrupted views of the Irish Sea. Provides a sense of wildness and remoteness, attracting walkers, photographers, and nature enthusiasts.	Very High: Unspoiled character and scenic significance make the headland particularly sensitive to changes in the seascape.	Low: Small-scale, buoys will introduce visible elements from elevated viewpoints but will not dominate the dramatic seascape of the LCA.	Minor: Subtle reductions in perceived remoteness may occur, but the headland's intrinsic qualities and overall experience will remain intact.
LCA 19: Ramsey Island	Characterised by towering cliffs, sheltered coves, and rich biodiversity. Serves as an ecological haven supporting numerous bird species and marine wildlife. A popular destination for recreational boating and wildlife tours.	Very High: High ecological significance and perceived isolation heighten sensitivity to visual changes.	Low to Moderate: Buoys will introduce small elements into the seascape, primarily noticeable from elevated viewpoints or maritime activities.	Minor: Localised changes in wildness and isolation may affect visitors engaged in wildlife observation or boating, but the island's overall character will remain intact.

Effects of Lighting

- 5.13 At night, lighting within the study area is limited to scattered coastal settlements, occasional passing boats, and navigational lights. These elements contribute to the sense of remoteness and dark skies that define much of the Pembrokeshire seascape.
- 5.14 The addition of marker lights on the shellfish farm structures may slightly intensify the level of visible lighting, particularly in areas where current lighting is minimal. However, the lights are

expected to be low-intensity and not overly intrusive. The visual impact of lighting is anticipated to be similar to that experienced during the day, with no additional significant effects on the character of the landscape or coastal environment.

Table 5.3 Summary of effects on landscape receptors

Receptor	Sensitivity	Magnitude	Level of effect
Landscape Character Areas			
LCA 12 - St. Bride's Bay	High	Low	Minor
LCA 16 - Carn Llidi	High	Low	Minor
LCA 17 - St. David's	High	Negligible	Negligible to Minor
LCA 18 - St. David's Headland	Very High	Low to Moderate	Minor
LCA 19 - Ramsey Island	Very High	Low to Moderate	Minor
Seascape Character Areas			
SCA 16 - Whitesands Bay	High	Low	Minor
SCA 17 - Ramsey Sound	High	Low to Moderate	Minor to Moderate
SCA 18 - Ramsey Island Coastal Waters	Very High	Low to Moderate	Minor
SCA 19 - Bishop and Clerks	High	Low	Minor
SCA 20 - St. Brides Coastal Waters North	Medium to High	Low	Minor
SCA 24 - St. Brides Bay	Medium to High	Low	Minor
SCA 28 - West Open Sea	Medium	Low	Minor

Assessment of Effects on Views

- 5.15 This section sets out the assessment of the predicted visual effects that will occur as a result of the Câr-Y-Môr Shellfish Farm. The relevant visual receptors are identified in Section 3.
- 5.16 Judging the significance of visual effects requires consideration of the nature of the visual receptors (sensitivity) and the nature of the effect on those receptors (magnitude).

Viewpoint Assessment

- 5.17 A viewpoint assessment was undertaken to help inform the visual assessment, focusing on sensitive receptors at seven representative locations. The selection of these viewpoints (VP1–VP7) reflects the diversity of receptor experiences within the study area. These viewpoints represent key locations within the study area, selected to assess the impacts of the shellfish farm on sensitive receptors, including coastal walkers, recreational users, and maritime users. The viewpoints cover a range of perspectives, including elevated coastal paths, Ramsey Island, and sea-level locations, offering a comprehensive understanding of the development's visibility from both land-based and marine perspectives.
- 5.18 The viewpoints include the following:
- VP1 to VP4: Representative of coastal recreational walkers, predominantly along the Pembrokeshire Coast Path.
 - VP5: Captures the elevated perspective from Ramsey Island, reflecting the unique offshore vantage point.
 - VP6 and VP7: Highlight the visual experience of maritime users, including recreational boaters and kayakers in close proximity to the site.

5.19 The findings of the viewpoint assessment are detailed in Appendix 4 and summarised in Table 5.2. The analysis considered the following factors:

- Sensitivity: Evaluating the susceptibility of visual receptors to change, with coastal walkers and maritime users judged as having medium to high sensitivity due to their focus on the landscape/seascape experience.
- Magnitude: Assessing the scale, geographical extent, and duration of visual changes resulting from the project.

Sensitivity

5.20 The sensitivity of each viewpoint varies based on its recreational importance, cultural value, and proximity to the proposed development. Elevated viewpoints, such as those along the Pembrokeshire Coast Path, or iconic locations such as Ramsey Island, typically exhibit high sensitivity due to their scenic value, recreational use, and unspoiled character. Sea-level viewpoints, while still sensitive, generally have lower susceptibility to change as maritime activity and natural variations in visibility reduce the perceived impact of small-scale developments.

Magnitude of Effect

5.21 The magnitude of effect considers the scale, prominence, and visibility of the shellfish farm's buoys from each viewpoint. At distances of several kilometres, the buoys (300mm in height with corner markers at 1.5m above water) appear as small, inconspicuous elements within the expansive seascape. Their visibility is further diminished by atmospheric conditions, such as haze or glare, and the presence of existing maritime activity.

Predicted Effects

5.22 The predicted effects across the viewpoints are generally minor due to the limited visual prominence of the shellfish farm. Elevated viewpoints (e.g., VP1 and VP6) with expansive, panoramic views may experience localised changes in the seascape, but these are unlikely to detract significantly from the overall experience. Maritime viewpoints VP4 is impacted by the proximity to the buoys but remain unaffected in terms of broader seascape character, however, at a distance of 2KM, maritime viewpoint VP7 was imperceptible at this distance.

Table 5.2 Summary of effects on viewpoint receptors

Viewpoint	Location	Sensitivity	Magnitude	Level of Effect
VP1	Elevated coastal path (Ramsey Sound)	Very High	Low to Moderate	Minor to Moderate
VP2	Coastal path Ramsey Sound	High	Low	Minor
VP3	Ramsey Island farm buildings	High	Low	Minor
VP4	Maritime viewpoint (Ramsey Sound)	High	Low to Moderate	Minor to Moderate
VP5	Coastal path near St. Bride's Bay	High	Low	Minor

Viewpoint	Location	Sensitivity	Magnitude	Level of Effect
VP6	Elevated viewpoint from footpath above Porthlysgi beach	Very High	Low to Moderate	Minor to Moderate
VP7	Maritime viewpoint (off St. Bride's Bay)	High	Low to Moderate	Negligible

Effects on Recreational Receptors in the Study Area

- 5.23 Recreational receptors in the study area include walkers along the Pembrokeshire Coast Path, visitors to Ramsey Island, hill walkers at Carn Llidi and St. David's Headland, and maritime users such as boaters and wildlife enthusiasts. These receptors are considered highly sensitive due to the area's designation within the Pembrokeshire Coast National Park, its iconic landscapes, and the strong sense of natural beauty and remoteness. Elevated locations like Carn Llidi, St. David's Headland, and Ramsey Island are particularly sensitive because of their panoramic views across the seascape. However, existing maritime activity, including fishing and leisure vessels, somewhat reduces sensitivity to small-scale changes.
- 5.24 The shellfish farm's buoys, are low in height profile, ensuring they remain relatively inconspicuous even from higher elevations. Along the Pembrokeshire Coast Path, walkers may experience occasional views of the buoys, particularly along stretches near Ramsey Sound and St. Bride's Bay. However, the scale of these changes is minor, blending into the broader context of the seascape. The effects are localised, and the farm's visual presence will not significantly detract from the overall recreational experience. Impacts are therefore judged as minor to minor-moderate.

Effects of Lighting at Night on Recreational Receptors

- 5.25 Lighting effects at night are expected to be minimal for most recreational receptors, as these users are unlikely to frequent the area after dark. Visitors may view the farm's marker lights, which are necessary for navigation, during twilight hours, particularly in winter when daylight hours are shorter. The additional lights may draw attention when viewed alongside existing maritime lighting, such as fishing vessels and navigation buoys. However, the lights are expected to be low-intensity and dispersed, creating a minor impact. The sense of remoteness and wildness along the coast may be subtly reduced for some, but overall, the integrity of the seascape and the recreational value of the area will remain intact.

Effects on Community Receptors

- 5.26 Community receptors, primarily residents in settlements such as St. David's, Solva, Trefin, and dispersed dwellings near Ramsey Sound, will experience minimal effects due to the farm's low-profile structures and its location offshore. It is anticipated that the farm will be visible from two dwellings, one on Ramsey Island and one at St. Justinians. Where visible, the buoys will appear as small-scale elements that blend into the broader maritime setting. The magnitude of change is judged to be low, with effects on community receptors classified as minor. The majority of community receptors will not experience a noticeable change to their visual environment or quality of life.

Effects of Lighting at Night on Community Receptors

- 5.27 At night, residents may notice marker lights on the shellfish farm, especially in areas with direct views of Ramsey Sound. These lights will be visible alongside existing navigation lights and maritime activity. Due to their low intensity and dispersed placement, the lighting will not dominate the view but may contribute to a subtle reduction in the sense of natural darkness and remoteness in the area. The effects are localised, small in scale, and reversible, resulting in a minor overall impact on community receptors.

Effects on Travelling Receptors

- 5.28 Travelling receptors in the study area primarily include recreational boaters, kayakers, and small watercraft users exploring the waters around Ramsey Sound, St. Bride's Bay, and the surrounding coastline. These users are typically engaged in activities such as wildlife observation, fishing, or leisure cruising. The shellfish farm's buoys, will be most noticeable to these receptors due to their proximity to the site. However, the buoys are small-scale structures that integrate well into the existing maritime environment and do not dominate the seascape. Given the focus of these activities on the natural surroundings and wildlife, the shellfish farm may appear as a minor feature in the context of the broader maritime setting. The magnitude of change is judged to be low, resulting in minor impacts on travelling receptors.

Effects of Lighting at Night on Travelling Receptors

- 5.29 For maritime users active during dusk or night, such as recreational boaters, the marker lights on the shellfish farm will be visible. These lights, designed to ensure navigational safety, will be seen alongside existing lighting from other maritime activity, including fishing vessels, larger vessels heading in and out of Milford Haven and navigation buoys. The low-intensity and scattered placement of these lights minimise their prominence, ensuring they do not detract significantly from the overall experience of travelling through the seascape. The sense of remoteness and natural darkness may be slightly diminished, but the overall impact is minor and localised, preserving the intrinsic qualities of the area for travelling receptors.

Table 5.3 Summary of effects on key recreational receptor

Receptor	Sensitivity	Magnitude	Level of Effect
Coastal Walkers (PCP)	High	Low to Moderate	Minor
Ramsey Island Visitors	Very High	Low to Moderate	Minor to Moderate
Hill Walkers (Carn Llidi)	High	Low	Minor
Walkers (St. Brides Bay to St. David's Head)	Very High	Low to Moderate	Minor to Moderate
Maritime Users (Ramsey Sound)	High	Low to Moderate	Minor
Visitors to Whitesands Bay	Medium	Low	Minor

Effects on the Pembrokeshire Coast National Park (PCNP) – Assessment of Key Special Qualities

- 5.30 The Pembrokeshire Coast National Park (PCNP) is recognised as one of the most scenically and ecologically important landscapes in the United Kingdom, defined by its dramatic coastal scenery, interplay between land and sea, sense of tranquillity and wildness, and cultural heritage. This section assesses the key special qualities of the PCNP most susceptible to the shellfish farm development.

Dramatic Coastal Scenery

- 5.31 The Pembrokeshire Coast is renowned for its rugged cliffs, sweeping sandy beaches, and striking headlands that provide uninterrupted panoramic views of the Irish Sea and surrounding landscapes. The special quality of "dramatic coastal scenery" is particularly sensitive to visual change, as even subtle alterations can draw attention away from the natural features that define the park's aesthetic appeal.
- 5.32 The proposed shellfish farm, comprising low-profile buoys, introduces small-scale, dispersed elements into the seascape. From key elevated viewpoints such as Carn Llidi, St. David's Head, and Ramsey Island, where the expansive sea views are a defining characteristic, the buoys may be visible in clear weather. However, their low height and unobtrusive design ensure they will not compete with the grandeur of the cliffs, beaches, and open sea. At ground level, particularly along the lower level sections of the Pembrokeshire Coast Path, the buoys will be more difficult to discern and are unlikely to detract significantly from the coastal scenery.
- 5.33 The magnitude of effect on this special quality is considered low due to the farm's small scale and the natural robustness of the landscape's dramatic features. While localised impacts may occur, particularly in areas of close proximity, the integrity of the coastal scenery will remain intact.

Land and Sea in Constantly Changing Combinations

- 5.34 The Pembrokeshire Coast is defined by the dynamic relationship between land and sea, where cliffs, bays, and headlands interact seamlessly with the open water. This quality is most pronounced in areas with unobstructed views, where changing light, tides, and weather patterns contribute to the perception of an ever-evolving seascape.
- 5.35 The proposed shellfish farm introduces marine infrastructure into an otherwise open seascape. While the buoys will appear as subtle additions to the water's surface, they may temporarily alter the visual dynamic of the uninterrupted horizons in localised areas. This is most relevant for elevated viewpoints on Ramsey Island and St. David's Headland, where visitors experience the sweeping coastal and marine vistas.
- 5.36 Despite this, the buoys' minimal scale and muted design will allow them to integrate into the existing maritime context, which already includes fishing boats, kayaks, and small leisure craft.

The constantly changing seascape, influenced by natural forces such as waves, weather, and tides, ensures that the farm will remain a subordinate feature, with its visual impact softened or obscured under varying atmospheric conditions.

- 5.37 The magnitude of effect on this special quality is judged as low, with impacts confined to specific locations and views. The underlying dynamic interplay between land and sea will remain dominant.

Tranquillity and Wildness

- 5.38 The sense of remoteness, tranquillity, and wildness is central to the experience of the Pembrokeshire Coast, particularly in areas such as Ramsey Island, St. David's Head, and Whitesands Bay. Visitors to these locations often seek a peaceful escape, defined by open, undeveloped seascapes and the absence of intrusive modern infrastructure. This quality is particularly sensitive to changes that introduce visible structures or activity into otherwise unspoiled areas.
- 5.39 While the shellfish farm is a low-profile development, its visible buoys could subtly alter the perception of wildness, particularly from Ramsey Island coastal waters and elevated coastal viewpoints. The introduction of man-made elements into the seascape may reduce the sense of remoteness for some visitors, particularly during calm weather when the buoys are most visible. However, the scale, spacing, and muted appearance of the infrastructure, along with its temporary and reversible nature, will help limit these effects.
- 5.40 The tranquil character of the area is further influenced by existing marine activity, including small fishing boats, kayaks, and other recreational watercraft. The presence of these activities provides a degree of context for the shellfish farm, which will not appear incongruous or dominant.
- 5.41 Overall, the magnitude of effect on tranquillity and wildness is assessed as low to moderate, with impacts limited to localised areas. While some visitors may perceive a reduction in wildness, the overall sense of remoteness and tranquillity will remain intact.

Cultural Landscapes

- 5.42 The Pembrokeshire Coast has a rich cultural history, evident in its traditional field patterns, coastal villages, and historic landmarks such as chapels, standing stones, and remnants of maritime activity. These elements contribute to the area's distinctive sense of place, where the relationship between people, land, and sea is central to the landscape's identity.
- 5.43 The shellfish farm aligns with this cultural narrative, reflecting the long-standing maritime traditions of fishing and aquaculture within Pembrokeshire. While the farm introduces a modern form of marine infrastructure, it can be interpreted as a continuation of the area's productive seascape, supporting local economies and sustainable practices.

- 5.44 From viewpoints near St. Bride's Bay and Ramsey Sound, the farm's low-profile buoys are unlikely to interfere with historic landmarks or cultural settings. The visual impact on cultural landscapes will be minimal, as the buoys are temporary, reversible, and will not dominate views of traditional villages or other heritage assets.
- 5.45 The magnitude of effect on this special quality is considered low, with the shellfish farm contributing a subtle, modern layer to Pembrokeshire's evolving relationship with the sea.

Summary of Effects on Special Qualities

- 5.46 The shellfish farm's effects on the key special qualities of the Pembrokeshire Coast National Park are considered low to moderate overall. While subtle, localised changes may occur, particularly in views from elevated viewpoints or areas with strong visual connections to the sea, the development's scale, design, and context ensure that the integrity of these special qualities remains intact.
- 5.47 The dramatic coastal scenery and wildness may experience the most notable, albeit minor, effects due to the farm's visibility in close proximity. However, the changing nature of the seascape, existing maritime activity, and the temporary, reversible nature of the development will mitigate these impacts. Additionally, the farm's scale and muted design, ensure that these effects are minor and localised, preserving the park's overall integrity.
- 5.48 The project's alignment with the cultural identity and productive traditions of the Pembrokeshire Coast further reduces its potential to detract from the park's special qualities, ensuring that the landscape and seascape remain valued, scenic, and meaningful for future generations.

Mitigation

Primary Mitigation Measures

- 5.49 A degree of mitigation is inherently designed into the project to reduce its potential visual and landscape effects. These measures include:
- **Site Extent and Design:** The spatial extent of the site has been carefully defined to limit the area of development and ensure its visual influence remains localised.
 - **Infrastructure dimensions:** Strict constraints on the size and height of structures have been established. Marker buoys are limited to a maximum height of 1.5m above the waterline, with most components lying just 300mm above the surface, ensuring their minimal visual prominence.
 - **Complete Reversibility:** All installations and associated activities are fully reversible. Upon decommissioning, no physical or permanent effects will remain on the seascape or landscape, preserving the long-term integrity of the area.
 - **Surface Visibility Management:** The number and density of visible buoys have been limited to minimise visual clutter and avoid dominating the seascape.
 - **Surface coherence:** The type, style, colour and size of buoys are to be of the same specifications to avoid visual contrast within their setting and between each other.

- 5.50 These inherent design constraints significantly reduce the development's potential impact while aligning with the character of the surrounding Pembrokeshire Coast National Park.

Secondary Mitigation Measures

- 5.51 While primary measures are embedded in the project's design, secondary mitigation is more challenging due to the location of the farm within the landscape, and the impracticality of visual screening for floating infrastructure in a marine environment. Therefore, mitigation measures must focus on the placement, arrangement, and appearance of the devices. The following recommendations build upon the primary mitigation, and should be observed at all stages of operation to minimise visual effects of the proposed shellfish farm:
1. Visual Coherence through Arrangement
 - Buoys of similar form, scale, and colour should be grouped together to maintain a sense of visual order and coherence.
 - Buoys of contrasting size or design should not be used, other than the buoys specified by Trinity House. This is to avoid visual clutter and ensure the site appears consistent.
 2. Spacing Between Devices
 - Maximum spacing between buoys should be maintained wherever operationally feasible. This will reduce the number of overall buoys at the farm site.
 3. Consistent Colour and Material Selection
 - All buoys should be the same muted colour, such as black, grey or blue, to blend with the surrounding seascape and reduce visual contrast.
 - Navigational marker lights should adhere to uniform brightness and colour standards (subject to safety requirements) to retain visual harmony and coherence within the site.

Residual Effects

- 5.52 Even with the implementation of the proposed mitigation measures, it is unlikely that the levels of visual or landscape effects assessed in this SLVIA will be substantively reduced.
- 5.53 The measures outlined above are anticipated to improve the visual coherence and overall appearance of the site, particularly from key viewpoints and recreational routes. This will ensure that the project integrates as seamlessly as possible into the wider seascape and landscape character of the Pembrokeshire Coast National Park.

6.0 Conclusion

6.1 This SLVIA has assessed the potential impacts of the Câr-Y-Môr shellfish farm on the seascape, landscape, and visual receptors within the study area. The proposed development lies within a sensitive and highly valued environment, the Pembrokeshire Coast National Park, where natural beauty, remoteness, and coastal character are defining features.

6.2 The key conclusions are as follows:

1. **Seascape and Landscape Effects:**

- The infrastructure's small size, low height, and unobtrusive nature ensure that its impact on seascape and landscape character remains low overall.
- Minor-Moderate effects are predicted for select LCAs and SCAs in close proximity to the site, such as Ramsey Sound where visibility is clearest.

2. **Visual Effects:**

- The project will be most noticeable from elevated or coastal viewpoints and recreational routes, such as some locations on Pembrokeshire Coast Path and certain maritime locations.
- Visual effects are judged to be minor-moderate at the closest points but reduce significantly with distance, resulting in predominantly minor effects across the wider study area.

3. **Designated Landscapes:**

- The Pembrokeshire Coast National Park's special qualities were carefully considered, particularly its coastal scenery, wildness, and land and sea combinations.
- While minor changes to views and sense of remoteness may occur locally, the project does not fundamentally undermine the integrity of these special qualities.

4. **Mitigation:**

- Mitigation measures, such as buoy placement and design coherence will help minimise visual and seascape impacts while preserving the area's natural character.

6.3 Overall, the Câr-Y-Môr shellfish farm introduces small-scale, localised changes to the seascape and visual amenity. The development is in keeping with the maritime character of the area, and its reversibility ensures that long-term effects on the landscape can be mitigated. With appropriate measures, the project can coexist harmoniously within this nationally designated and valued landscape.

7.0 Reference List

Legislation and Policy Documents

- **Welsh Government** (2015). *Planning Policy Wales (Edition 8)*. Cardiff: Welsh Government.
- **Welsh Government** (2011). *Technical Advice Note (TAN) 8: Renewable Energy*. Cardiff: Welsh Government.
- **Welsh Government** (2017). *The Wales Marine and Fisheries Strategic Action Plan*. Cardiff: Welsh Government.

Guidance Documents

- **Landscape Institute and IEMA** (2013). *Guidelines for Landscape and Visual Impact Assessment (3rd Edition)* (GLVIA3). Routledge: London.
- **Natural Resources Wales (NRW)** (2017). *Marine Character Areas of Wales*. Cardiff: NRW.
- **Pembrokeshire Coast National Park Authority (PCNPA)** (2011). *Special Qualities of the Pembrokeshire Coast National Park*. Pembrokeshire: PCNPA.

Local Plans and Designations

- **Pembrokeshire County Council** (2013). *Pembrokeshire County Council Local Development Plan 2013-2021*. Pembrokeshire: PCC.
- **Pembrokeshire Coast National Park Authority** (2013). *Pembrokeshire Coast National Park Seascape Character Assessment*
- **Pembrokeshire Coast National Park Authority** (2020). *Pembrokeshire Coast National Park Local Development Plan 2*
- **Pembrokeshire Coast National Park Authority** (2011). *Landscape Character Supplementary Planning Guidance*
- **Pembrokeshire Coast National Park Authority** (2020). *Renewable Energy Supplementary Planning Guidance*
- **Pembrokeshire Coast National Park Authority** (2022). *Cumulative Impact of Wind Turbines on Landscape and Visual Amenity Supplementary Planning Guidance*
- **Pembrokeshire Coast National Park Authority** (2023). *Seascape Character Supplementary Planning Guidance*
- **Pembrokeshire Coast National Park Authority** (2019). *Pembrokeshire Coast National Park Management Plan 2020-2024*

Technical and Data Sources

- **Ordnance Survey (OS)** (2021). *Ordnance Survey Mapping at 1:25,000 and 1:50,000 Scales*.
- **GIS Data**: Provided by the project team, based on ZTV modelling, visibility analysis, and topographic datasets.
- **Natural Resources Wales (NRW)** (2020). *Marine Protected Area Data*. Cardiff: NRW.

Seascape and Landscape Studies

- **Natural Resources Wales (NRW)** (2018). *Seascape Character Assessment for Pembrokeshire Marine SAC*. Cardiff: NRW.
- **Pembrokeshire Coast National Park Authority (PCNPA)** (2020). *Seascape Character Areas (SCAs) Data Sheets*.
- **Pembrokeshire Coast National Park Authority (PCNPA)** (2020). *Special Qualities and Management Plan 2020-2024*. Pembrokeshire: PCNPA.

Research and Supporting Information

- **Visit Wales** (2022). *Visitor Economy Data for Pembrokeshire Coast*. Cardiff: Visit Wales.
- **Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW)** (2018). *Coastal Heritage Features and Archaeological Landmarks*. Cardiff: RCAHMW.
- **Met Office** (2023). *Climatic Conditions for Pembrokeshire*. Exeter: UK Met Office.

Appendix 1 Assessment Methodology

ASSESSMENT OF EFFECTS

7.1 The assessment of effects includes:

- Identification and evaluation of potential effects on seascape. ‘Seascape effects are effects on seascape as a resource and affect seascape receptors as defined in the baseline study’;
- Identification and evaluation of potential landscape effects. Landscape effects are effects on landscape as a resource and affect landscape receptors as defined in the baseline study;
- Identification and evaluation of potential visual effects. Visual effects are effects on views and visual amenity as experienced by people and affect visual receptors as defined in the baseline study; and
- Identification and evaluation of cumulative effects. Cumulative effects may occur to the seascape, landscape, or visual resource and are defined as “the additional changes caused by a proposed development in conjunction with other similar developments or as the combined effect of a set of developments, taken together.”

Assessment Criteria

Sensitivity to Change of Seascape

7.2 The relative sensitivity of the seascape within the Local Coastal Character Areas is specific to the proposed change and depends upon a range of criteria which take account of the coastline, and both landward and seaward perspectives. The published guidance (SNH 2012, SNH 2008, GLVIA3) has been referred to in developing and applying the criteria. For the purposes of this assessment the following definitions have been applied as noted in Table 7.1 below. It is stressed that in the assessment of a specific receptor/effect, the actual criteria applied may differ from the Typical Criteria noted below. In all cases a clear explanation of the reasons for the judgement of sensitivity will be given.

Table 7.1 Sensitivity of seascape receptors

Sensitivity of receptor	Typical Criteria
Very High	Susceptibility to Proposed Change Seascapes with very distinctive physical characteristics including shape, enclosure, fragmentation, and prominent historic, cultural, or geological features. Seascapes with spectacular views, very complex visual composition, very high diversity of detail, and aesthetic qualities which are intact and uncompromised. Value Seascapes located within and which contribute to the value of landscapes designated at national and international level. Seascapes with a very high degree of relative wildness, with strong evidence of and exposure to natural forces. Seascapes where there is evidence of high or very high value associated with natural heritage, recreational activity, cultural associations, or other special interests
High	Susceptibility to Proposed Change Seascapes with distinctive physical characteristics including shape, enclosure, fragmentation, and specific historic, cultural, geological features.

Sensitivity of receptor	Typical Criteria
	Seascapes with striking/expansive views, diverse visual composition and aesthetic qualities which are predominantly intact. Value Seascapes located within and which contribute to landscapes of high value, recognised at regional or local level. Seascapes with a high degree of relative wildness. Seascapes where there is evidence of value associated with natural heritage, recreational activity, cultural associations, or other special interests.
Medium	Susceptibility to Proposed Change Seascapes with relatively unremarkable physical characteristics including linear shape, large-scale, and little fragmentation, Seascapes with relatively simple visual composition. Seascapes where settings of key views include some developed features and shipping or other maritime activity. Value Seascapes with a degree of relative wildness, which may be compromised by factors including existing development and accessibility. Seascapes with few specific features of natural heritage, cultural associations, or other special interest.
Low	Susceptibility to Proposed Change Seascapes comprising well-settled and readily accessible coastlines and hinterlands. Seascapes with prominent and frequent shipping or other maritime activity. Value Seascapes with no specific features of natural heritage, cultural associations, or other special interest.
Negligible	Susceptibility to Proposed Change Seascapes comprising urban coastlines and hinterlands dominated by development. Seascapes with seaward views dominated by shipping or other maritime activity. Value Seascapes with no specific features of natural heritage, cultural associations, or other special interest.

Magnitude of Change to Seascapes

7.3 The magnitude of change to seascapes is assessed in terms of 3 sets of criteria: (GLVIA3)

- Size or scale;
- Geographical extent; and
- Duration and reversibility

For the purposes of this assessment the following definitions have been applied as noted in Table 7.2 below. It is stressed that in the assessment of a specific receptor/effect, the actual criteria applied may differ from the Typical Criteria noted below. In all cases a clear explanation of the reasons for the judgement of magnitude will be given.

Table 2 Definitions of magnitude of change to seascape

Magnitude of change to receptor	Typical Criteria
Severe	Size or Scale Very high proportion of seascape unit affected Very high proportion of seascape elements affected Complete loss of, or fundamental change to, the key characteristics of the seascape. Geographical Extent Very large number of seascape units affected throughout the study area; very large area affected of the seascape unit(s) within which the development will sit; fundamental change to the immediate setting; fundamental change to the site of the proposed development. Duration and reversibility Permanent change to seascape Change not reversible.
Major	Size or Scale High proportion of seascape unit affected High proportion of seascape elements affected. Substantial change to key characteristics of seascape. Geographical Extent Large number of seascape units affected in the majority of the study area; large area affected of the seascape unit(s) within which the development will sit; considerable change to the immediate setting; considerable change to the site of the proposed development. Duration and reversibility Long term change to seascape (25 or more years) Change difficult to remove or reinstate
Moderate	Size or Scale Moderate proportion of seascape unit affected Moderate proportion of seascape elements affected. Material change to key characteristics of the seascape. Geographical Extent Several seascape units affected over part of the study area; medium area affected of the seascape unit(s) within which the development will sit; noticeable change to the immediate setting; noticeable change to the site of the proposed development. Duration and reversibility Medium term change to seascape (5-24 years) Change that can be partially removed or reinstated.
Minor	Size or Scale Small proportion of seascape unit affected Small proportion of seascape elements affected. Discernible changes to key characteristics of the seascape. Geographical Extent Few seascape units affected over a small part of the study area; small area affected of the seascape unit(s) within which the development will sit; insignificant change to the immediate setting; insignificant change to the site of the proposed development. Duration and reversibility Short term change to seascape (up to 5 years) Change that can be fully removed and reinstated
Negligible	Size or Scale Changes which are not discernible or have no effect on the integrity of seascape elements or seascape unit. Geographical Extent Few seascape units affected over part of the study area; very small area affected of the seascape unit(s) within which the development will sit; imperceptible change to the immediate setting; imperceptible change to the site of the proposed development.

Landscape Sensitivity to Change

7.4 The relative sensitivity of the landscape character within each character area is specific to the proposed change and is assessed in terms of 2 sets of criteria: (GLVIA3):

- Susceptibility to the change; and
- Value of the receptor

7.5 For the purposes of this assessment the following definitions have been applied as noted in Table 7.3 below. It is stressed that in the assessment of a specific receptor/effect, the actual criteria applied may differ from the Typical Criteria noted below. In all cases a clear explanation of the reasons for the judgement of sensitivity will be given.

Table 7.3 Definitions of landscape sensitivity

Sensitivity of receptor	Typical Criteria
Very High	Susceptibility to Proposed Change Landscapes of very high quality and condition: with consistent, intact, well-defined, and distinctive attributes, well-managed, in exceptional state of repair. None of the key characteristics of the landscape relate well to the proposed development Value Landscapes located within and which contribute to the value of landscapes designated at national and/or international level: e.g. National Park, and World Heritage Site. Landscapes where there is evidence of very high value associated with natural heritage, recreational activity, cultural associations, or other special interests.
High	Susceptibility to Proposed Change Landscapes of high quality and condition. Few of the key characteristics of the landscape relate well to the proposed development Value Landscapes located within and which contribute to the value of landscapes designated or recognised at regional or local level e.g., Historic Gardens and Designed Landscapes. Landscapes where there is evidence of high value associated with natural heritage, recreational activity, cultural associations, or other special interests.
Medium	Susceptibility to Proposed Change Landscapes of moderate quality and condition. Some of the key characteristics of the landscape relate well to the proposed development Value Landscapes may be locally valued but with no explicit designation or recognition of value. Landscapes dominated by agricultural or other man-modified land uses. Landscapes where there is evidence of some value associated with natural heritage, recreational activity, cultural associations, or other special interests.
Low	Susceptibility to Proposed Change Landscapes of low or poor quality and condition, attributes poorly managed, in poor condition and state of repair Settled landscapes, with complex land use patterns where built elements and structures are already a strong part of the landscape character. Landscape intrinsically able to accommodate proposed change with many of the key characteristics relating well to the proposed development, or unlikely to be diminished. Value Landscapes with few specific features of natural heritage, cultural associations, or other special interest.
Negligible	Susceptibility to Proposed Change Landscapes with no specific features of natural heritage, cultural associations, or other special interest. Heavily developed, industrial landscapes. Landscapes of very low or very poor quality and condition, attributes very poorly-managed, in very poor condition and state of repair. None of the key characteristics are likely to be diminished by the

Sensitivity of receptor	Typical Criteria
	proposed change. Value Landscapes with no specific features of natural heritage, cultural associations, or other special interest.

Magnitude of Landscape Change

7.6 The magnitude of change to landscapes is assessed in terms of 3 sets of criteria: (GLVIA3)

- Size or scale;
- Geographical extent; and
- Duration and reversibility

7.7 For the purposes of this assessment the following definitions have been applied as noted in Table 7.4 below. It is stressed that in the assessment of a specific receptor/effect, the actual criteria applied may differ from the Typical Criteria noted below. In all cases a clear explanation of the reasons for the judgement of magnitude will be given.

Table 7.4 Definitions of magnitude of Landscape change

Magnitude of change	Typical Criteria
Severe	Size or Scale Very high proportion of landscape unit affected Very high proportion of landscape elements affected Complete loss of, or fundamental change to, the key characteristics of the landscape. Geographical Extent Very large number of Landscape Character Areas (LCAs) affected throughout the study area; very large area affected of the LCA(s) within which the development will sit; fundamental change to the immediate setting; fundamental change to the site of the proposed development. Duration and reversibility Permanent change to landscape Change not reversible.
Major	Size or Scale High proportion of landscape unit affected High proportion of landscape elements affected. Substantial change to key characteristics of landscape. Geographical Extent Large number of LCAs affected in the majority of the study area; large area affected of the LCA(s) within which the development will sit; considerable change to the immediate setting; considerable change to the site of the proposed development. Duration and reversibility Long term change to landscape (25 or more years) Change difficult to remove or reinstate
Moderate	Size or Scale Moderate proportion of landscape unit affected Moderate proportion of landscape elements affected. Material change to key characteristics of the landscape. Geographical Extent Several LCAs affected over part of the study area; medium area affected of the LCA(s) within which the development will sit; noticeable change to the immediate setting; noticeable change to the site of the proposed development. Duration and reversibility Medium term change to landscape (5-24 years) Change that can be partially removed or reinstated.

Magnitude of change	Typical Criteria
Minor	Size or Scale Small proportion of landscape unit affected Small proportion of landscape elements affected. Discernible changes to key characteristics of the landscape. Geographical Extent Few LCAs affected over a small part of the study area; small area affected of the LCAs(s) within which the development will sit; insignificant change to the immediate setting; insignificant change to the site of the proposed development. Duration and reversibility Short term change to landscape (up to 5 years) Change that can be fully removed and reinstated.
Negligible	Size or Scale Changes which are not discernible or have no effect on the integrity of landscape elements or landscape unit. Geographical Extent Very few LCAs affected over part of the study area; very small area affected of the LCAs (s) within which the development will sit; imperceptible change to the immediate setting; imperceptible change to the site of the proposed development.

Sensitivity of Visual Receptors to change

7.8 All visual receptors are people. The relative sensitivity of the visual receptors is specific to the proposed change and is assessed in terms of two sets of criteria (GLVIA3):

- Susceptibility of visual receptors to the proposed change; and
- Value attached to views experienced by receptors

7.9 For the purposes of this assessment the following definitions have been applied as noted in Table 7.5 below. It is stressed that in the assessment of a specific receptor/effect, the actual criteria applied may differ from the Typical Criteria noted below. In all cases a clear explanation of the reasons for the judgement of sensitivity will be given.

Table 7.5 Definitions of visual sensitivity

Sensitivity of receptor	Typical Criteria
Very High	Susceptibility to Proposed Change Users of strategic outdoor recreational facilities (including national long distance footpaths, national cycle routes). Visitors to important mountain summits, landmarks, heritage assets or other attractions, where views are an essential contributor to the experience Residents at home with views of the development* Value Attached to Views Very high value placed on the View: celebrated viewpoint included in tourist guides, view located within a landscape designated at national or international level.
High	Susceptibility to Proposed Change Users of outdoor recreational facilities (including local Core Paths and other recreational footpaths, cycle routes or rights of way) Special interest groups to whom landscape setting is important. Residents of communities/settlements where views are an important contributor to the landscape setting enjoyed by residents in the area Value Attached to Views

Sensitivity of receptor	Typical Criteria
	High value placed on the View: recognised viewpoint marked on maps, views within landscapes designated at regional or local level, views from recognised scenic routes/designated tourist routes, views of (or from) landscape or built features with important physical, cultural or historic attributes. View protected at local or regional level by Development Plan
Medium	Susceptibility to Proposed Change People engaged in outdoor sports or recreation where appreciation of the landscape setting contributes to the experience People at places of work, whose attention may be focused on their activity rather than the wider landscape. but where the setting is recognised as an important contributor to the quality of working life Travellers on road, rail, ferry or other transport routes Value Attached to Views Some evidence of value placed on view, view may contribute to setting of activity
Low	Susceptibility to Proposed Change People at places of work, whose attention may be focused on their activity rather than the wider landscape. People engaged in outdoor sports or recreation which does not involve or depend on appreciation of views of the landscape Value Attached to Views No evidence of value placed on view
Negligible	Susceptibility to change of viewers and value attached to views are of a level not considered relevant to the assessment

* Where agreed with the Planning Authority

Magnitude of Change to Views and Visual Amenity

7.10 The magnitude of change to views and visual amenity experienced by the receptor is assessed in terms of 3 sets of criteria (GLVIA3):

- Size or scale;
- Geographical extent; and
- Duration and reversibility

7.11 For the purposes of this assessment the following definitions have been applied as noted in Table 7.6 below. It is stressed that in the assessment of a specific receptor/effect, the actual criteria applied may differ from the Typical Criteria noted below. In all cases a clear explanation of the reasons for the judgement of magnitude will be given.

Table 7.6 Definitions of magnitude of visual change

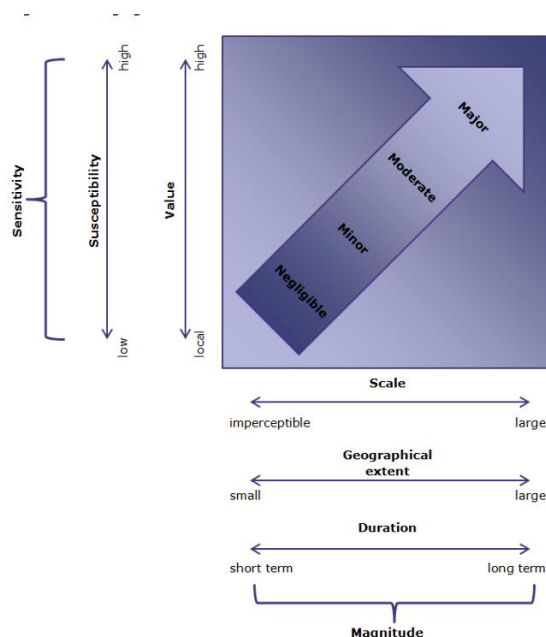
Magnitude of change	Definition
Severe	Size or Scale Proposed change will define view. All of development visible. Very strong contrast with key visual characteristics of the baseline view e.g. scale, horizontality, composition. Duration of view long, view studied/enjoyed for considerable time. Geographical Extent Angle of view to development directly coincides with focus of receptor activity/viewpoint/road alignment, etc. Very short distance from viewpoint to development Development occupying the majority of the view. Duration and Reversibility Permanent change to view Change not reversible
Major	Size or Scale

Magnitude of change	Definition
	Development will be the dominant feature in the view. High proportion of development visible, no significant screening effects. Strong contrast with key visual characteristics of the baseline view e.g. scale, horizontality, composition. Duration of view not curtailed by physical parameters. Geographical Extent Angle of view to development coincides with focus of receptor activity/viewpoint/road alignment, etc. Short distance from viewpoint to development Development occupying a high proportion of the view. Duration and Reversibility Long term change to view (25 or more years) Change difficult to remove or reinstate
Moderate	Size or Scale Development will be a noticeable component of the view Development partially screened by topography, vegetation, etc. Some conflicts with key visual characteristics of the baseline view e.g. scale, horizontality, composition. Duration of view relatively short. Time to absorb or contemplate view curtailed by physical parameters. Geographical Extent Angle of view to development does not coincide with focus of receptor activity/viewpoint/road alignment, etc. Moderate distance from viewpoint to development Development occupying part of the view. Duration and Reversibility Medium term change to view (5-24 years) Change that can be partially removed or reinstated.
Minor	Size or Scale Development is a minor component of view Development substantially screened by topography, vegetation, etc. Development compatible with key visual characteristics of the baseline view e.g. scale, horizontality, composition. Duration of view short or transient. Glimpse or interrupted views Geographical Extent Angle of view predominantly away from development Long distance from viewpoint to development Development occupying a small part of the view. Duration and Reversibility Short term change to view (up to 5 years) Change that can be fully removed and reinstated
Negligible	Changes which are not discernible.

Environmental Consequence: Seascape, Landscape and Visual effects

- 7.12 The evaluations of the individual aspects set out above (susceptibility, value, scale, geographical extent, duration and reversibility) are considered together to provide an overall profile of each identified effect. An overview is then taken of the distribution of judgements for each aspect to make an informed professional assessment of the overall level of each effect, drawing on guidance provided in GLVIA3. A numerical or formal weighting system is not applied. Instead, consideration of the relative importance of each aspect feeds into the overall decision and to define the environmental consequence of the effect.
- 7.13 Levels of effect are identified as negligible, minor, moderate or major. The following Diagram 7.1 indicates how these various components are combined to inform the overall level of effect.

Diagram 7.1 Judging levels of effect



7.14 A clear explanation of how each judgement has been reached will be given in narrative form in the text, supported by reference to an impact matrix. It is important to note that with regard to Seascape, Landscape and Visual effects this matrix has been used as a guide only. The matrix is not used as a prescriptive tool, and the analysis of specific effects must make allowance for the exercise of professional judgement. Therefore, in some instances, a particular parameter may be considered as having a determining effect on the analysis at the expense of the matrix. It should also be noted that likelihood of impact is not considered a relevant parameter for landscape, seascape and visual effects and has not been included in the assessment.

7.15 For the purposes of the SLVIA methodology, the impact matrix is presented in Table 7.7 below.

Table 7.7 Determination of consequence of effect

MAGNITUDE	SENSITIVITY				
	VERY HIGH	HIGH	MEDIUM	LOW	NEGLIGIBLE
SEVERE	Severe	Severe	Major	Moderate	Minor
MAJOR	Severe	Major	Major	Moderate	Minor
MODERATE	Major	Moderate	Moderate	Minor	Negligible
MINOR	Moderate	Moderate	Minor	Minor	Negligible
NEGLIGIBLE	Minor	Minor	Negligible	Negligible	Negligible

Significance of Landscape, Seascape and Visual Effects

7.16 The determination of the level of significance of the effect is shown in table 7.8 below.

Table 7.8 Determination of significance of effect

Consequence of Impact	Significance under EIA Regulations
Severe	Significant Intolerable risk and / or significance. Effects to be avoided at all costs.
Major	Significant Highly significant and requires immediate action. Effects to be avoided rather than managed.
Moderate	Significant Requires additional control measures and/or active management
Minor	Not Significant May require some management to ensure remains within acceptable levels
Negligible	Not Significant Difficult to detect or measure.
Neutral	No significance No action required
Beneficial	Positive To be encouraged

Appendix 2 Methods for Creating ZTVs and Visualisations

Methods for Creating ZTVs and Visualisations

Zones of Theoretical Visibility (ZTVs)

- 7.17 A Zone of Theoretical Visibility (ZTV) identifies the areas from which the proposed development can theoretically be seen, based on a two-meter eye level. For this project, ZTVs were generated to represent the maximum visibility of the shellfish farm, with an assumed structure height of 300mm for surface buoys.
- 7.18 The ZTV was calculated across the proposed site, illustrating areas where the proposed farm site buoys of these dimensions may theoretically be visible. It is important to note that the ZTV represents the maximum potential visibility of the infrastructure; the visibility of individual buoys will be significantly reduced.
- 7.19 ZTVs for this project were created using a digital terrain model derived from the Ordnance Survey Terrain 5 data (obtained in 2024). These analyses were processed in QGIS 3.28 software, reflecting the latest geospatial processing tools. The sea level was standardized to 0 meters above high-water level, using data from the OS Boundary Line dataset. Both earth curvature and atmospheric refraction were accounted for in the ZTV calculations.
- 7.20 The ZTV does not account for features such as built structures, localised terrain variations, or vegetation. As a result, actual visibility on-site will typically be less extensive than indicated. For marine areas, the ZTV assumes a flat sea surface and does not incorporate the effects of swell or wave patterns on visibility. Atmospheric conditions, such as haze or reduced visibility at greater distances, are also not reflected in the ZTV.
- 7.21 The ZTV map is illustrated in Figures 7 & 8.

Digital Terrain Model (DTM)

- 7.23 A three-dimensional Digital Terrain Model (DTM) of the study area was created using gridded Ordnance Survey (OS) 10m DEM lidar data. This dataset, aligned to the OS National Grid coordinate system, comprises height values (measured in meters above Ordnance Datum, AOD) at 10-meter horizontal grid intervals.

Visualisations:

Visualisation Methodology

- 7.24 The visual assessment is supported by a series of visualisations prepared from selected viewpoint locations. The visualisations include baseline panoramas and photomontages. These have been produced to provide an accurate representation of the potential visual impact of the proposed development.

Photography

- 7.25 Baseline photography was captured using a Canon EOS 70D Digital camera equipped with a 55mm fixed lens, mounted on a tripod at a height of approximately 1.5m above ground level. For each location, overlapping photographs were taken at intervals of 15-20° to create a panoramic baseline.

Baseline Panoramas

- 7.26 Baseline panoramas were generated for the viewpoints. These images serve as a reference for existing conditions and provide landscape and visual context. Where necessary, cumulative baseline panoramas were prepared, consisting of multiple segments.

Photomontages

- 7.27 Specialist panorama stitching software was used to align and merge individual photographic frames into cylindrical panoramas. Alignment was manually checked and refined in Adobe Photoshop.
- 7.28 The rendered buoys were matched to the real-world landscape by aligning buoys preplaced at placed at the corner locations for the proposed site.

Limitations of the Visual Representations

- 7.29 While visualisations provide valuable insights into the proposed development's potential impact, certain limitations should be acknowledged:
- Real-world conditions vary: Weather, lighting, and seasonal changes influence visibility.
 - Photographic limitations: Camera resolution and contrast levels differ from human perception.
 - Viewpoint selection: Representative but not exhaustive of all possible viewpoints.
 - These images were not produced using industry standard best practice and only serve to provide an indication of the visual impact of the proposed shellfish farm. While every effort has been made to ensure that the scale, number, and positioning of buoys are accurately represented, it should be noted that these visualisations are indicative rather than definitive. The images do not account for variations in lighting, atmospheric conditions, or seasonal differences, which may affect the actual visibility and perception of the proposed structures in the landscape. Additionally, minor discrepancies may exist due to limitations in software accuracy, image stitching techniques, and the challenges of aligning real-world conditions with digitally generated representations. As such, these images should be viewed with caution and in conjunction with other sources of landscape assessment to gain a well-rounded understanding of potential visual impacts.

Appendix 3 Assessment of Effects on Landscape Character

Effects on LCA 16 Carn Llidi

Key Characteristics

- Dominated by the prominent hill of Carn Llidi, a striking natural feature visible from vast stretches of the surrounding landscape.
- Rugged heathland interspersed with jagged rock outcrops and panoramic views over Whitesands Bay and the Pembrokeshire Coast.
- A key destination for walkers and nature enthusiasts, offering elevated vantage points and a sense of remoteness.
- Characterised by a contrast between dramatic cliffs and open heathland, contributing to its wild and untamed aesthetic.
- Recognised as a significant recreational and cultural landscape due to its proximity to St. David's and its prominence in Pembrokeshire's natural heritage.

Sensitivity

- **Susceptibility**

The prominence and iconic nature of Carn Llidi make it highly susceptible to visual changes. The panoramic views from its summit and slopes are integral to its identity, particularly towards the surrounding coastline and seascape. While some existing built elements are visible, they are minimal and do not detract from the overall sense of wildness. **Susceptibility is judged to be high.**

- **Value**

As part of the Pembrokeshire Coast National Park, Carn Llidi is highly valued for its scenic, recreational, and ecological significance. The landscape contributes to the park's special qualities, particularly in terms of dramatic coastal scenery and cultural significance. **Value is judged to be very high.**

The sensitivity of this landscape to the proposed shellfish farm is judged to be high.

Magnitude of Effect

- **Scale**

The shellfish farm is located at a considerable distance offshore. From elevated viewpoints on Carn Llidi, the buoys will appear as small, dispersed elements in the expansive seascape. The low height (300mm to 1.5m above water) ensures that they do not disrupt the vast scale of the sea or dominate the dramatic coastal views. **The scale of the effect is judged to be low.**

- **Geographical Extent**

The visual presence of the shellfish farm will be limited to areas with direct line-of-sight to the offshore location. The effects will primarily affect the southward and westward seascape views from Carn Llidi. This represents a small geographical extent relative to the entirety of the LCA. **The geographical extent is judged to be small.**

- **Duration and Reversibility**

The development is long-term but fully reversible, with infrastructure capable of being removed. **Duration is judged to be long-term, and the effects are reversible.**

The magnitude of effect is judged to be low.

Level of Effect

Considering the sensitivity of Carn Llidi and the limited scale and extent of the visual changes, the overall level of effect on this LCA is judged to be **minor**.

Effects on LCA 17 St. David's

Key Characteristics

- Encompasses the historic city of St. David's and surrounding rolling farmland interspersed with traditional stone walls and hedgerows.
- A blend of cultural heritage and natural beauty, with the St. David's Cathedral forming a focal point of historical and architectural significance.
- Visual connections to the nearby coast, with expansive seaward views contributing to the character of the area.
- A hub for visitors exploring the Pembrokeshire Coast National Park, combining tranquil rural settings with proximity to dramatic coastal landscapes.
- Strong cultural associations and contributions to the national park's special qualities, including its historical and scenic value.

Sensitivity

- **Susceptibility**

The inland nature of much of this LCA reduces its susceptibility to direct visual changes from coastal developments. However, key coastal vantage points and transitions from farmland to cliff edges are more susceptible to visual alterations, particularly in valued seascape views.

Susceptibility is judged to be medium.

- **Value**

The cultural and historical significance of St. David's and its role as a gateway to the Pembrokeshire Coast National Park enhance the value of this LCA. The area's connection to the park's special qualities, including dramatic coastal scenery and cultural heritage, contributes to its importance. **Value is judged to be very high.**

The sensitivity of this landscape to the proposed shellfish farm is judged to be high.

Magnitude of Effect

- **Scale**

Visual impacts are limited to select coastal vantage points where the land transitions to cliffs, such as Pen Dal-aderyn and Caerfai Bay. The buoys' low height (300mm to 1.5m) ensures they remain minor elements in the wide seascape. Inland areas of the LCA remain unaffected.

The scale of the effect is judged to be low.

- **Geographical Extent**

The effects are confined to specific locations along the coast with direct visibility of the shellfish farm. The inland areas and primary focal points, such as St. David's Cathedral, are unaffected. **The geographical extent is judged to be small.**

- **Duration and Reversibility**

The development is long-term but fully reversible. Infrastructure can be removed, restoring the seascape to its original condition. **Duration is judged to be long-term, and the effects are reversible.**

The magnitude of effect is judged to be low.

Level of Effect

Considering the high value of this LCA but the limited scale and extent of changes, the overall level of effect is judged to be **negligible to minor.**

Effects on LCA 18 St. David's Headland

Key Characteristics

- Defined by its rugged cliffs, exposed heathland, and expansive views of the Irish Sea.
- A wild and dramatic headland offering a sense of remoteness and isolation, integral to Pembrokeshire's natural beauty.
- Popular with walkers, photographers, and nature enthusiasts, forming a key location for recreation and appreciation of the surrounding seascape.
- Characterised by sweeping, uninterrupted sea views, with occasional glimpses of distant islands.
- Part of the Pembrokeshire Coast National Park, contributing to its designation due to its scenic and wild qualities.

Sensitivity

- **Susceptibility**

The headland's open, dramatic character and its integration into wide-ranging seascape views make it highly susceptible to visual changes. Its role as a recreational destination and its perceived wildness heighten its sensitivity to even small-scale developments. **Susceptibility is judged to be high.**

- **Value**

This LCA holds very high value due to its contribution to the Pembrokeshire Coast National Park's special qualities, including its dramatic coastal scenery and cultural significance as a natural landmark. The unspoiled character and appeal to visitors add to its importance. **Value is judged to be very high.**

The sensitivity of this landscape to the proposed shellfish farm is judged to be very high.

Magnitude of Effect

- **Scale**

The buoys (300mm to 1.5m) will be visible from elevated viewpoints but appear as minor features within the expansive and dynamic seascape. Their low profile ensures they do not dominate the open views. **The scale of the effect is judged to be low.**

- **Geographical Extent**

Visibility of the shellfish farm is limited to select elevated areas along the headland, such as Carn Perfedd and Trwynhwrddyn, where the sea forms the dominant feature. Inland sections and areas away from the coastal edge remain unaffected. **The geographical extent is judged to be small.**

- **Duration and Reversibility**

The development is long-term but fully reversible. The infrastructure's removal would allow the seascape to return to its original state. **Duration is judged to be long-term, and the effects are reversible.**

The magnitude of effect is judged to be low.

Level of Effect

Given the very high sensitivity of this LCA but the minimal scale and extent of change, the overall level of effect is judged to be **minor**.

Effects on LCA 19 Ramsey Island

Key Characteristics

- A remote and rugged island landscape, defined by towering cliffs, sheltered coves, and rich biodiversity.
- Renowned for its ecological significance, serving as a sanctuary for bird species and marine wildlife.
- Offers a sense of isolation and tranquility, integral to its identity and appeal to visitors.
- Accessed primarily by guided tours or private boats, emphasizing its separation from the mainland.
- Part of the Pembrokeshire Coast National Park, adding to its value and protection.

Sensitivity

- **Susceptibility**

The island's remote character, dramatic cliffs, and ecological importance make it highly susceptible to changes in the surrounding seascape. The visual connection to the open sea and its perceived wildness heighten its sensitivity. **Susceptibility is judged to be very high.**

- **Value**

Ramsey Island's ecological value, as well as its role within the Pembrokeshire Coast National Park and appeal to visitors, contribute significantly to its overall value. Its pristine nature and cultural significance elevate its importance. **Value is judged to be very high.**

The sensitivity of this landscape to the proposed shellfish farm is judged to be very high.

Magnitude of Effect

- **Scale**

The buoys, with a height ranging from 300mm to 1.5m, will be discernible from certain elevated points on the island. However, their low height and dispersed placement ensure they remain minor features within the expansive seascape. **The scale of the effect is judged to be low.**

- **Geographical Extent**

The visibility of the shellfish farm is limited to select coastal viewpoints and areas directly facing the development. The majority of the island's landscape remains unaffected. **The geographical extent is judged to be small.**

- **Duration and Reversibility**

The installation is long-term but fully reversible, ensuring no permanent impact on the landscape. **Duration is judged to be long-term, and the effects are reversible.**

The magnitude of effect is judged to be low.

Level of Effect

Considering the very high sensitivity of Ramsey Island but the minor scale and limited geographical extent of the impact, the overall level of effect is judged to be **minor**.

Effects on SCA 16: Whitesands Bay

Key Characteristics

SCA 16 is defined by its sandy beaches, dynamic tidal flows, and a scenic backdrop of heathland and cliffs, which contribute to its status as one of Pembrokeshire's most popular recreational areas. The bay is framed by the rugged headlands of Carn Llidi to the north and St. David's Head to the west, providing a dramatic contrast to the expansive, gently sloping sands. Whitesands Bay is a hub for recreational activities such as surfing, kayaking, swimming, and beachcombing, drawing both locals and tourists year-round. The coastal path traverses the cliffs above the bay, offering sweeping views over the Irish Sea and the surrounding landscape. The area's aesthetic quality is enhanced by the interplay of light on the water and the frequent presence of wildlife, including seabirds and marine species.

Sensitivity

- **Susceptibility**

Whitesands Bay is highly valued for its recreational use, visual appeal, and connection to the surrounding dramatic coastal landscapes. The openness of the bay and its wide-ranging views over the sea heighten its susceptibility to visual changes, particularly those that could disrupt its tranquil and scenic character. However, the presence of existing maritime activity, including small leisure craft, reduces its susceptibility to small-scale developments. **Susceptibility is judged to be medium to high.**

- **Value**

As part of the Pembrokeshire Coast National Park, the area holds significant value for its natural beauty, ecological importance, and recreational role. Whitesands Bay is a key destination for visitors and a symbol of Pembrokeshire's coastal charm, contributing to the park's designation. **Value is judged to be high.**

The sensitivity of this seascape to the proposed shellfish farm is judged to be high.

Magnitude of Effect

- **Scale**

The shellfish farm, consisting of low-profile buoys (300mm to 1.5m in height), will be located offshore and at a sufficient distance from Whitesands Bay to minimize visual prominence. The buoys will be small and dispersed, appearing as minor elements in the wider seascape. While visible under favorable conditions, their scale ensures they do not disrupt the open and dynamic character of the bay. **The scale of the effect is judged to be low.**

- **Geographical Extent**

Visual impacts will be confined to elevated vantage points, such as the coastal path above Whitesands Bay, where direct line-of-sight to the farm is available. Views from the beach itself are unlikely to be significantly affected due to the intervening landforms and distance to the development. **The geographical extent is judged to be small.**

- **Duration and Reversibility**

The project represents a long-term addition to the seascape, with infrastructure designed to be fully reversible. Once decommissioned, all elements can be removed, restoring the seascape to its original condition. **Duration is judged to be long-term, and the effects are reversible.**

The magnitude of effect is judged to be low.

Level of Effect

While Whitesands Bay is a highly valued and sensitive seascape, the limited scale and extent of the proposed development ensure that its visual impact remains minor. The recreational and scenic qualities of the bay will not be significantly altered, and the wide-ranging views and dynamic character of the area remain intact. The overall level of effect on SCA 16 is judged to be **minor**.

Effects on SCA 17: Ramsey Sound

Key Characteristics

SCA 17 encompasses the narrow stretch of water between Ramsey Island and the mainland, renowned for its dramatic seascape, turbulent currents, and rich biodiversity. The sound is characterised by strong tidal surges, rocky outcrops, and a series of small islands and reefs, contributing to its dynamic and ever-changing visual quality. It is a critical habitat for marine life, including seals, porpoises, and seabirds, and serves as an important ecological corridor. The sound's rugged cliffs and natural features create an immersive sense of wildness, making it a destination for wildlife tours, kayaking, and other recreational activities. The interplay between land and water, combined with the sound's perceived remoteness, enhances its status as a visually and ecologically significant seascape.

Sensitivity

- **Susceptibility**

The sound's wild, unspoiled character and its role as a sanctuary for marine life make it highly susceptible to changes in the seascape. The area is a hub for recreational activities and wildlife observation, where uninterrupted views and a sense of isolation are integral to its appeal. However, existing maritime activity, such as wildlife tours, slightly reduces susceptibility to small-scale developments. **Susceptibility is judged to be very high.**

- **Value**

Ramsey Sound is part of the Pembrokeshire Coast National Park, which enhances its value as a protected seascape. Its ecological importance, scenic beauty, and recreational use further contribute to its significance. The sound is a key part of the region's cultural and natural heritage. **Value is judged to be very high.**

The sensitivity of this seascape to the proposed shellfish farm is judged to be very high.

Magnitude of Effect

- **Scale**

The shellfish farm's low-profile buoys (300mm to 1.5m in height) will be visible from certain points within the sound, particularly from watercraft and elevated coastal viewpoints. However, their small size and dispersed arrangement minimize their prominence. While the buoys may be noticeable under clear conditions, they will not disrupt the dynamic and expansive character of the seascape. **The scale of the effect is judged to be low to moderate.**

- **Geographical Extent**

The visibility of the shellfish farm will be localised to specific areas within the sound, primarily along the mainland coastline and Ramsey Island's eastern edge. Much of the area's rugged cliffs and coves will remain unaffected due to their orientation and the intervening landforms. **The geographical extent is judged to be small.**

- **Duration and Reversibility**

The shellfish farm represents a long-term addition to the seascape, with infrastructure that can be removed, allowing for full restoration of the area. **Duration is judged to be long-term, and the effects are reversible.**

The magnitude of effect is judged to be low to minor to moderate.

Level of Effect

Given the very high sensitivity of Ramsey Sound and the small-scale but visible nature of the shellfish farm, the overall level of effect is judged to be **minor to moderate**. The project introduces minor changes to the seascape that may slightly influence the sense of isolation and wildness experienced by maritime users and wildlife observers. However, the impacts are localised and reversible, ensuring the sound's overall character and ecological value remain intact.

Effects on SCA 18: Ramsey Island Coastal Waters

Key Characteristics

SCA 18 encompasses the waters surrounding Ramsey Island, characterised by their dynamic tidal surges, towering cliffs, and sense of isolation. The area is a sanctuary for marine wildlife, including seals, porpoises, and various seabirds, making it a site of ecological importance. Its rugged coastline, combined with the ever-changing interplay of light, water, and land, creates a visually striking and immersive seascape. The waters here are turbulent and dynamic, shaped by strong tidal currents that add to the wild and untamed character of the area. The combination of the dramatic cliffs and open sea vistas makes it a significant location for recreational boating, wildlife tours, and nature observation. The area's perceived remoteness and pristine natural beauty are integral to its appeal for visitors and locals alike.

Sensitivity

- **Susceptibility**

The unspoiled and isolated nature of Ramsey Island Coastal Waters, coupled with their role as a haven for wildlife and a destination for recreational activities, makes this SCA highly susceptible to changes in the seascape. The strong visual connection between the cliffs, open water, and surrounding islands contributes to its sensitivity. Any introduction of new structures has the potential to alter the perception of wildness and isolation. **Susceptibility is judged to be very high.**

- **Value**

As part of the Pembrokeshire Coast National Park, this SCA holds significant value for its ecological importance, scenic beauty, and recreational use. The area is also culturally and historically significant, adding to its overall value. **Value is judged to be very high.**

The sensitivity of this seascape to the proposed shellfish farm is judged to be very high.

Magnitude of Effect

- **Scale**

The shellfish farm will introduce low-profile buoys (300mm to 1.5m in height) into the coastal waters. These will be visible from certain elevated viewpoints and during recreational activities, such as wildlife tours or boating. However, the buoys' small size and dispersed placement ensure they remain minor features within the expansive and dynamic seascape. While visible under optimal conditions, their presence does not disrupt the broader character of the area. **The scale of the effect is judged to be low to moderate.**

- **Geographical Extent**

The visibility of the shellfish farm will be confined to specific locations within the SCA, including parts of the eastern coastline of Ramsey Island and nearby mainland viewpoints. Much of the surrounding waters and areas further afield will remain unaffected due to the buoys' distance and low profile. **The geographical extent is judged to be small.**

- **Duration and Reversibility**

The development is long-term, but its infrastructure can be removed, ensuring no permanent alteration to the seascape. **Duration is judged to be long-term, and the effects are reversible.**

The magnitude of effect is judged to be low to moderate.

Level of Effect

Considering the very high sensitivity of Ramsey Island Coastal Waters and the limited but visible scale of the shellfish farm, the overall level of effect is judged to be **minor**. The introduction of buoys may slightly alter the perception of isolation and wildness for certain recreational users and wildlife observers. However, these effects are localised and reversible, preserving the seascape's overall character, ecological integrity, and scenic value.

Effects on SCA 19: Bishop and Clerks

Key Characteristics

SCA 19 encompasses a group of rocky islets and surrounding waters located to the west of Ramsey Island. The area is defined by its rugged, remote character and dynamic seascape, shaped by strong tidal currents and wave action. The islets, known as the Bishop and Clerks, are exposed to the full force of the Atlantic Ocean, creating a challenging and dramatic marine environment. The area supports a diverse range of seabirds and marine wildlife, adding to its ecological significance. Views are expansive, extending across the open sea to the horizon, and the area's sense of isolation and natural power make it a notable feature within the Pembrokeshire Coast National Park. The Bishop and Clerks are primarily experienced by maritime users, including recreational boaters, wildlife tour operators, and fishermen, who are drawn to the area for its natural beauty and biodiversity.

Sensitivity

- **Susceptibility**

The Bishop and Clerks' remote and unspoiled nature heightens its susceptibility to visual changes. The strong relationship between the islets, open sea, and dynamic marine conditions makes the area particularly sensitive to developments that may disrupt its wild character. However, the area's exposure to existing maritime activity, including fishing and tourism, slightly reduces its susceptibility.

Susceptibility is judged to be high.

- **Value**

This SCA is of high ecological and scenic value, contributing to the Pembrokeshire Coast National Park's designation. Its biodiversity, dramatic natural features, and appeal to maritime users enhance its significance as a valued landscape and seascape. **Value is judged to be very high.**

The sensitivity of this seascape to the proposed shellfish farm is judged to be high.

Magnitude of Effect

- **Scale**

The shellfish farm's buoys, ranging from 300mm to 1.5m in height, will be visible within the SCA but will appear as minor features within the expansive seascape. Their low profile and dispersed placement minimize their visual prominence, particularly when viewed against the backdrop of the vast open sea. The presence of existing maritime activity further reduces the relative scale of the change. **The scale of the effect is judged to be low.**

- **Geographical Extent**

The visual impact of the shellfish farm will primarily affect areas in close proximity to the development, including certain maritime routes and specific vantage points on the water. The majority of the SCA will remain unaffected, as the buoys will not be prominent from distant locations. **The geographical extent is judged to be small.**

- **Duration and Reversibility**

The installation is long-term but fully reversible, allowing the area to return to its original state upon removal of the infrastructure. **Duration is judged to be long-term, and the effects are reversible.**

The magnitude of effect is judged to be low.

Level of Effect

Considering the high sensitivity of the Bishop and Clerks and the low magnitude of the shellfish farm's impact, the overall level of effect is judged to be **minor**. The buoys will not detract from the area's wild and remote qualities, and their localised presence will not significantly alter the overall character, ecological integrity, or recreational value of the SCA.

Effects on SCA 20: St. Bride's Bay Coastal Waters North

Key Characteristics

SCA 20 encompasses the northern section of St. Bride's Bay coastal waters, characterised by a combination of rugged cliffs, occasional small harbors, and expansive open sea views. This area supports a mix of recreational and maritime activities, including sailing, wildlife observation, and coastal walking. The northern coastal waters are framed by the surrounding cliffs and headlands, which provide sheltered inlets and dramatic seaward perspectives. The visual connection across the bay towards the southern coastal waters and beyond enhances the sense of unity within the broader seascape. The Pembrokeshire Coast Path traverses parts of this SCA, offering elevated viewpoints that highlight the natural beauty and dynamic character of the area.

Sensitivity

- **Susceptibility**

The scenic and recreational value of the northern coastal waters, combined with the presence of small, picturesque harbors and uninterrupted sea views, heightens the area's susceptibility to visual changes. While some maritime infrastructure already exists in the form of small harbors and recreational vessels, the area retains a natural and relatively unspoiled character, which could be affected by additional visible developments. **Susceptibility is judged to be medium to high.**

- **Value**

As part of the Pembrokeshire Coast National Park, this SCA holds significant ecological, recreational, and scenic value. The coastal path and its associated viewpoints contribute to the cultural and tourist appeal of the area, enhancing its overall importance. **Value is judged to be high.**

The sensitivity of this seascape to the proposed shellfish farm is judged to be high.

Magnitude of Effect

- **Scale**

The proposed shellfish farm's buoys (300mm to 1.5m in height) are small and low-profile, ensuring that their presence is minimized in the context of the expansive coastal waters. While visible from some elevated points along the coastal path and cliffs, the buoys will appear as minor, dispersed elements within the wider seascape. Their distance from the coastline and small scale ensure that they do not disrupt key visual connections or dominate the views. **The scale of the effect is judged to be low.**

- **Geographical Extent**

Visibility will primarily be confined to select elevated viewpoints along the Pembrokeshire Coast Path and some specific areas of the coastline with direct sightlines to the shellfish farm. The majority of the northern coastal waters will experience limited or negligible visual intrusion. **The geographical extent is judged to be small.**

- **Duration and Reversibility**

The project represents a long-term change to the seascape, as it will be operational for an extended period. However, all infrastructure can be fully removed, ensuring that the seascape can return to its original state. **Duration is judged to be long-term, and the effects are reversible.**

The magnitude of effect is judged to be low.

Level of Effect

Considering the high sensitivity of the northern St. Bride's Bay coastal waters and the low magnitude of the proposed visual changes, the overall level of effect is judged to be **minor**. The introduction of the shellfish farm will not significantly alter the area's recreational or scenic value. Its presence will be subtle and localised, ensuring that the broader character of the northern St. Bride's Bay coastal waters remains intact as an important component of the Pembrokeshire Coast National Park.

Effects on SCA 24: St. Bride's Bay

Key Characteristics

SCA 24 represents the central expanse of St. Bride's Bay, a large, open bay defined by its sweeping sandy beaches, rugged rocky headlands, and the uninterrupted horizons of the open sea. The coastal landscape surrounding the bay includes a mix of agricultural land, small fishing villages, and recreational hubs, which enhance its cultural and scenic significance. The Pembrokeshire Coast Path provides a unique way to experience the bay, with elevated viewpoints offering expansive vistas. Maritime activity is moderate, with recreational boating, fishing, and other leisure pursuits forming part of the bay's character. St. Bride's Bay is also an important habitat for marine and bird species, contributing to the ecological richness of the region.

Sensitivity

- **Susceptibility**

The bay's expansive openness and its role as a focal point for recreational activities, including sailing and wildlife observation, make it susceptible to changes in the seascape. The strong visual relationship between the coastline and the sea means that alterations within the bay could potentially influence its character. However, the presence of existing maritime activity provides some resilience to small-scale developments. **Susceptibility is judged to be medium to high.**

- **Value**

As part of the Pembrokeshire Coast National Park, St. Bride's Bay holds high value due to its scenic, ecological, and recreational importance. Its visual connectivity, unspoiled beaches, and role as a cultural and natural landmark contribute significantly to the park's special qualities. The bay's contribution to tourism, including its popularity among walkers, sailors, and wildlife enthusiasts, further enhances its value. **Value is judged to be high.**

The sensitivity of this seascape to the proposed shellfish farm is judged to be high.

Magnitude of Effect

- **Scale**

The buoys associated with the shellfish farm, ranging from 300mm for surface markers to 1.5m for corner markers, will appear as small, isolated elements within the bay's vast open waters. Their low profile and muted colors ensure they remain minor features, blending with existing maritime activity. Atmospheric conditions, such as haze and varying light, will often obscure their visibility from shore.

The scale of the effect is judged to be low.

- **Geographical Extent**

Visibility will be confined to areas with clear sightlines to the farm's location. Elevated viewpoints along the Pembrokeshire Coast Path and sections of the coastline facing the farm will have the most direct views. Inland and lower-lying areas will remain unaffected. **The geographical extent is judged to be small.**

- **Duration and Reversibility**

The shellfish farm represents a long-term addition to the bay, but its infrastructure is fully removable, ensuring the seascape can return to its baseline condition. **Duration is judged to be long-term, and the effects are reversible.**

The magnitude of effect is judged to be low.

Level of Effect

Given the high sensitivity of St. Bride's Bay and the low magnitude of effect, the overall level of effect is judged to be **minor**. The shellfish farm will introduce subtle visual changes that are localised and unlikely to detract from the bay's defining characteristics, including its openness, scenic beauty, and role as a recreational hub. The overarching experience of the bay as a vibrant, expansive seascape will remain intact.

Effects on SCA 25: Skomer Island and Marloes Peninsula

Key Characteristics

SCA 25 encompasses Skomer Island, the dramatic Marloes Peninsula, and the surrounding coastal waters. This area is defined by its rugged coastline, high cliffs, and sweeping open views of the Atlantic Ocean. Skomer Island is nationally significant for its seabird colonies, marine habitats, and archaeological features. The Marloes Peninsula, characterised by its panoramic seascapes and dynamic cliffs, is a popular destination for walkers along the Pembrokeshire Coast Path. The strong tidal currents and clear waters support a diverse marine ecosystem, further enhancing the area's ecological value. The relative remoteness and wild character of the seascape contribute to its sense of tranquility and isolation.

Sensitivity

- **Susceptibility**

The unspoiled and wild nature of Skomer Island and the Marloes Peninsula make this area highly susceptible to visual changes. The dramatic cliffs, open sea vistas, and ecological significance of the coastal waters are integral to the area's character. Visitors' appreciation of the landscape is tied to its sense of remoteness and natural beauty, heightening its susceptibility to alterations. **Susceptibility is judged to be high to very high.**

- **Value**

As part of the Pembrokeshire Coast National Park, this SCA holds high value for its contribution to the park's special qualities. Skomer Island is also a designated nature reserve and a Marine Conservation Zone, further emphasizing its ecological and cultural importance. The area's role in tourism, recreation, and wildlife conservation enhances its overall value. **Value is judged to be very high.**

The sensitivity of this seascape to the proposed shellfish farm is judged to be very high.

Magnitude of Effect

- **Scale**

The buoys associated with the shellfish farm, ranging in height from 300mm for surface markers to 1.5m for corner markers, will be visible in the expansive seascape but will remain minor features within the context of the vast and dynamic waters. Their low height ensures they do not dominate the visual field, even from elevated viewpoints on the cliffs or Skomer Island. The scale of the effect is further mitigated by the distance of the farm from the coastline and the buoy's muted design. **The scale of the effect is judged to be low.**

- **Geographical Extent**

Visibility of the shellfish farm will be confined to certain viewpoints along the Marloes Peninsula and the coastal edges of Skomer Island. Inland areas and lower-lying sections of the coastline will not be affected. The overall extent of visual intrusion is limited to a localised area. **The geographical extent is judged to be small.**

- **Duration and Reversibility**

The development represents a long-term addition to the seascape but is fully reversible, with all infrastructure removable without permanent impact. **Duration is judged to be long-term, and the effects are reversible.**

The magnitude of effect is judged to be low.

Level of Effect

Given the very high sensitivity of Skomer Island and the Marloes Peninsula and the low magnitude of effect, the overall level of effect is judged to be **minor**. The shellfish farm introduces subtle changes that are localised and unlikely to detract from the area's defining characteristics, including its ecological richness, dramatic coastal scenery, and sense of remoteness. The overarching experience of the SCA as a wild and unspoiled landscape will remain intact.

Effects on SCA 26: Skokholm and Gateholm Coastal Waters

Key Characteristics

SCA 26 includes the coastal waters surrounding Skokholm Island, Gateholm, and the western Dale Peninsula. This area is characterised by its rugged sandstone cliffs, rocky foreshores, and flat-topped islands. Skokholm Island is renowned for its seabird sanctuary, supporting a variety of species including puffins, razorbills, and Manx shearwaters, while Gateholm Island features archaeological remnants of early settlements. The surrounding waters are dynamic, shaped by tidal races, strong currents, and waves that emphasize the wild and untamed nature of the seascape. These features contribute to the area's ecological and cultural significance, with its relative remoteness reinforcing a sense of tranquility and isolation.

Sensitivity

- **Susceptibility**

The unspoiled character of Skokholm and Gateholm, combined with their ecological and historical significance, makes this area highly susceptible to visual changes. The dramatic cliffs, dynamic seascapes, and secluded nature of these islands are integral to the area's identity. Visitors, including bird watchers and recreational boaters, value the pristine quality and sense of remoteness, increasing its susceptibility to alterations. **Susceptibility is judged to be high.**

- **Value**

This SCA is of very high value due to its ecological importance, with Skokholm designated as a Special Protection Area (SPA) and a Site of Special Scientific Interest (SSSI). Its role in seabird conservation and its cultural significance, exemplified by Gateholm's archaeological heritage, enhance its importance. The seascape also contributes to the special qualities of the Pembrokeshire Coast National Park, particularly its dramatic scenery and ecological richness. **Value is judged to be very high.**

The sensitivity of this seascape to the proposed shellfish farm is judged to be very high.

Magnitude of Effect

- **Scale**

The shellfish farm will introduce buoys ranging from 300mm to 1.5m in height into the seascape. These elements are minor in scale compared to the expansive and dynamic waters surrounding Skokholm and Gateholm. Their low profile ensures that they do not detract significantly from the dramatic views of the cliffs and islands, particularly from elevated coastal viewpoints. **The scale of the effect is judged to be low.**

- **Geographical Extent**

Visual impacts will be confined to localised areas along the coastline, such as the cliffs of Skokholm and Gateholm, and from specific points on the Dale Peninsula. Inland areas and low-lying sections of the coastline will experience little to no visibility of the shellfish farm. **The geographical extent is judged to be small.**

- **Duration and Reversibility**

The project represents a long-term installation but is fully reversible. The removal of infrastructure will allow the seascape to return to its original state without lasting physical changes. **Duration is judged to be long-term, and the effects are reversible.**

The magnitude of effect is judged to be low.

Level of Effect

Given the very high sensitivity of this seascape and the low magnitude of effect, the overall level of effect is judged to be **minor**. The introduction of the shellfish farm will result in localised visual changes that do not compromise the SCA's defining characteristics, such as its wild and untamed seascape, ecological richness, and cultural significance. The overarching experience of Skokholm and Gateholm as remote and unspoiled landscapes will remain intact.

Effects on SCA 28: West Open Sea

Key Characteristics

SCA 28 encompasses a vast expanse of open, deep waters west of the Pembrokeshire Coast. This seascape is defined by its significant sense of remoteness, exposure to natural forces, and a lack of human presence. The dynamic waters are shaped by tidal currents, wind patterns, and seasonal changes, creating a constantly shifting environment that emphasizes the power and scale of the natural world. The area is largely unmodified by human activity, contributing to its pristine and unspoiled character. This vast, open seascape serves as a backdrop for maritime navigation and forms a critical part of the ecological networks connecting coastal and marine environments.

Sensitivity

- **Susceptibility**

The vast scale and unbroken horizons of the West Open Sea make it relatively less susceptible to small-scale developments, as minor changes are absorbed within its expansive character. However, the area's sense of isolation and naturalness heighten its susceptibility to any visible structures that might disrupt this perception. The importance of the seascape to the wider ecological and cultural context of the Pembrokeshire Coast National Park also adds to its sensitivity. **Susceptibility is judged to be high.**

- **Value**

The West Open Sea holds high value for its ecological significance, serving as an important habitat for marine species and as a migratory route for seabirds and marine mammals. Its role in supporting biodiversity and its contribution to the unspoiled, scenic qualities of the national park enhance its importance. Furthermore, the area's cultural associations with maritime history and navigation add to its value. **Value is judged to be high.**

The sensitivity of this seascape to the proposed shellfish farm is judged to be high.

Magnitude of Effect

- **Scale**

The shellfish farm's buoys, ranging from 300mm to 1.5m in height, are minor elements within this vast and expansive seascape. Given the large scale and uniformity of the open sea, the buoys are unlikely to draw attention or disrupt the perception of remoteness. Even under clear conditions, the small size and low profile of the buoys ensure that they are visually negligible. **The scale of the effect is judged to be negligible.**

- **Geographical Extent**

Visibility of the shellfish farm will be extremely limited, as the expansive and uniform character of the open sea allows minor elements to be absorbed into the broader seascape. The buoys will only be visible from specific maritime routes and certain elevated coastal viewpoints. **The geographical extent is judged to be negligible.**

- **Duration and Reversibility**

The project represents a long-term installation, but its effects are fully reversible. Once removed, the seascape will return to its unaltered state, leaving no lasting physical changes. **Duration is judged to be long-term, and the effects are reversible.**

The magnitude of effect is judged to be negligible.

Level of Effect

Given the high sensitivity of the West Open Sea but the negligible magnitude of effect, the overall level of effect is judged to be **negligible**. The introduction of the shellfish farm will not compromise the defining characteristics of this vast, open seascape. Its sense of remoteness, ecological importance, and unspoiled nature will remain intact, ensuring that the SCA continues to reflect its pristine and dynamic identity.

Appendix 4 Assessment of Effects on Views

Viewpoint 1 (VP1) - Assessment of Effects on Views

Receptor Type: Recreational / Walkers

Distance to Farm Site: 98m northeast of the nearest Carn ar Wig site boundary

Grid Reference: X 171976.103, Y 224122.074

Figure Number: 4

Direction of View: South West

Baseline Description

This viewpoint is located along an elevated coastal path near Ramsey Sound, within 260m of an existing shellfish farm and approximately 1150m from the lifeboat station and numerous small boat moorings to the north. The surrounding area is characterised by dramatic cliffs, rugged coastal features, and sweeping views across Ramsey Sound and the wider seascape. The coastal path is a popular route for recreational walkers, who are likely to stop and appreciate the uninterrupted natural scenery. The proximity to small-scale marine activity, such as moored boats and the lifeboat station, introduces a degree of human influence to the setting.

Receptor Sensitivity

The walkers using this coastal path are highly sensitive to visual changes due to their focus on the seascape and scenic qualities of the area. The protected designation of the Pembrokeshire Coast National Park adds further value to the viewpoint. However, the presence of existing marine activities, such as the lifeboat station and boat moorings, reduces the overall susceptibility of the landscape to minor developments.

Sensitivity is judged to be very high.

Magnitude of Effect

- **Scale**

The proposed shellfish farm's buoys (300mm to 1.5m in height) will be highly visible due to their proximity to VP1. The additional visual elements introduced by the new farm will combine with existing marine activities, such as the lifeboat station and moored boats, but will not overwhelm the expansive and rugged seascape. **Scale is judged to be low to moderate.**

- **Geographical Extent**

The visual impact is concentrated within the immediate vicinity of Ramsey Sound, particularly for walkers on elevated sections of the path. Beyond this localised area, the natural topography and distance will significantly reduce visibility. **Geographical extent is judged to be small to moderate.**

- **Duration and Reversibility**

The effects are long-term but fully reversible upon the decommissioning of the shellfish farm. **Duration is long-term, and the effects are reversible.**

Magnitude of Effect: Judged to be **low to moderate**.

Level of Effect

Given the very high sensitivity of walkers and the low to moderate magnitude of effect, the overall level of effect on VP1 is judged to be **minor to moderate**. While the shellfish farm introduces new elements into the seascape, its proximity to existing marine activity reduces the overall impact, and the expansive views and natural coastal features remain dominant.

Viewpoint 2 (VP2) - Assessment of Effects on Views

Receptor Type: Recreational / Walkers

Distance to Farm Site: 185m south of the nearest Carn ar Wig site boundary

Grid Reference: X 171662.697, Y 223800.856

Figure Number: 4

Direction of View: North East

Baseline Description

VP2 is located along the coastal path near St. Bride's Bay, offering north-eastward views directly through the proposed shellfish farm, towards the existing farm, and further towards the RNLI lifeboat station and approximately 20 small boat moorings to the north. The foreground consists of rocky cliffs leading to Ramsey Sound, while the mid-ground and background reveal a mix of dynamic seascape features and human infrastructure.

This view is valued for its dramatic seascape, characterised by tidal flows, rugged coastline, and expansive views of the surrounding cliffs. The presence of existing marine infrastructure, such as the lifeboat station, moorings, and the current shellfish farm, introduces human elements into an otherwise natural and scenic environment. The pathway is frequented by walkers who come to enjoy the panoramic views, making visual quality an essential aspect of this location.

Receptor Sensitivity

Walkers on the coastal path are highly sensitive to visual changes in the seascape, as their activity is primarily focused on engaging with its scenic and tranquil qualities. The direct line-of-sight through the proposed farm towards the existing farm and lifeboat infrastructure heightens the potential for visual intrusion. However, the existing human presence within the seascape reduces the susceptibility to additional changes.

Sensitivity is judged to be high.

Magnitude of Effect

- **Scale**

The proposed shellfish farm will introduce low-profile buoys (300mm to 1.5m in height) into the immediate foreground of the view, aligning with the existing farm and marine infrastructure. While the addition of new visual elements will be noticeable, the alignment and scale of the development ensure it does not overwhelm the rugged and expansive character of the seascape. **Scale is judged to be low.**

- **Geographical Extent**

The visual impact is concentrated along the immediate coastal path and cliffside views, with limited effects on inland or less elevated areas. The alignment of the farms and the proximity to other infrastructure slightly extend the perceived geographical impact. **Geographical extent is judged to be moderate.**

- **Duration and Reversibility**

The development represents a long-term visual change during its operational phase but is entirely reversible, with infrastructure removable without lasting physical alterations. **Duration is long-term, and the effects are reversible.**

Magnitude of Effect: Judged to be low.

Level of Effect

Given the high sensitivity of walkers and the low magnitude of effect, the overall level of effect on VP2 is judged to be **minor**. The proposed farm will be noticeable in conjunction with existing marine activities but will not significantly detract from the scenic and recreational value of the view. The low profile and alignment with other marine infrastructure ensure the seascape remains the dominant feature.

Viewpoint 3 (VP3) - Assessment of Effects on Views

Receptor Type: Boat tour passengers, wildlife enthusiasts, and tourists on Ramsey Island

Distance to Farm Site: 1150m west of the nearest Carn ar Wig site boundary

Grid Reference: X 170604.371, Y 223777.015

Figure Number: 4

Direction of View: East

Baseline Description

VP3 is located on Ramsey Island, a key location for wildlife enthusiasts and tourists, offering elevated views across Ramsey Sound and eastward toward the proposed shellfish farm site. The view encompasses the existing shellfish farm, RNLI lifeboat station, and approximately 20 small boat moorings, though these elements are at a greater distance compared to the proposed development.

The foreground is characterised by Ramsey Island's rugged cliffs and rich vegetation, transitioning into the mid-ground seascape dominated by the dynamic waters of the Sound. In the background, the mainland's dramatic cliffs and coastal edge frame the view. The visual context blends the natural wildness of Ramsey Island with the maritime activities visible across the Sound, providing an engaging yet tranquil panorama.

Receptor Sensitivity

Recreational users of Ramsey Island, including tourists and wildlife enthusiasts, are highly sensitive to visual changes. Their activities are often centred on appreciating the natural and scenic qualities of the island and surrounding seascape. The presence of existing marine infrastructure, such as the lifeboat station, moorings, and existing farm, reduces susceptibility to the proposed changes.

Sensitivity is judged to be high.

Magnitude of Effect

- **Scale**
The proposed shellfish farm's low-profile buoys (300mm to 1.5m in height) will introduce a new visual element into the mid-ground of the view. However, the scale of change is mitigated by the farm's alignment with existing infrastructure in the background, including the RNLI station, moorings, and the current farm. These elements collectively blend into the wider seascape, minimizing the contrast introduced by the new development.
- **Scale is judged to be low.**
- **Geographical Extent**
The visual impact is confined primarily to the eastern views across Ramsey Sound from elevated or unobstructed locations on Ramsey Island. Inland and westward-facing areas remain unaffected.
Geographical extent is judged to be small.
- **Duration and Reversibility**
The development is long-term, operational for the project's duration, but fully reversible. Infrastructure removal would restore the seascape to its baseline condition. **Duration is long-term, and the effects are reversible.**

Magnitude of Effect: Judged to be low.

Level of Effect

The overall level of effect on VP3 is judged to be **minor**. While the proposed farm will add a noticeable feature to the seascape, its alignment with existing marine infrastructure ensures it does not dominate the view. The wild and tranquil qualities of Ramsey Island and its surrounding seascape remain largely unaffected.

Viewpoint 4 (VP4) - Assessment of Effects on Views

Receptor Type: Maritime users, including recreational boaters and wildlife tour operators

Distance to Farm Site: 215m northwest of the nearest Carn ar Wig site boundary

Approximate Elevation: At sea level

Grid Reference: X 171650.076, Y 224221.720

Figure Number: 4

Direction of View: Southeast

Baseline Description

VP4 represents a maritime viewpoint from within Ramsey Sound, offering close-proximity views of the proposed shellfish farm. The existing shellfish farm, located further south, is also visible in the background, along with the RNLI lifeboat station and small boat moorings near St. Justinian. The immediate view is dominated by the dynamic waters of Ramsey Sound, bordered by the rugged cliffs of the mainland to the southeast and Ramsey Island to the west.

Recreational boaters and wildlife tour operators use this area frequently, creating a sense of human activity within a predominantly natural and untamed seascape. The visual context combines the wild, dramatic qualities of Ramsey Sound with intermittent maritime infrastructure and activity.

Receptor Sensitivity

Maritime users, including wildlife tour operators and recreational boaters, are moderately sensitive to changes in the seascape. While they are likely to value the natural and dynamic qualities of the Sound, their familiarity with existing marine infrastructure reduces susceptibility to additional developments.

Sensitivity is judged to be High.

Magnitude of Effect

- **Scale**

The proposed shellfish farm, consisting of buoys 300mm to 1.5m in height, will be clearly visible from VP4. Its proximity ensures that the new infrastructure becomes a prominent feature in the view.

However, the scale of change is mitigated by its visual alignment with the existing farm, lifeboat station, and moorings further south. The low profile of the buoys and the dynamic nature of the surrounding waters further reduce the perceived prominence of the development. **Scale is judged to be moderate.**

- **Geographical Extent**

The visibility of the proposed farm is concentrated within the immediate vicinity of the site, with effects limited to views from boats navigating Ramsey Sound. Views beyond this localised area will be less affected due to the reduced prominence of the buoys at greater distances. **Geographical extent is judged to be small.**

- **Duration and Reversibility**

The development represents a long-term but fully reversible addition to the seascape. Removal of the infrastructure would restore the area to its original condition. **Duration is judged to be long-term, and the effects are reversible.**

Magnitude of Effect: Judged to be **low to moderate**.

Level of Effect

The overall level of effect on VP4 is judged to be **minor to moderate**. While the proposed shellfish farm will introduce a visible new feature into the immediate seascape, its alignment with existing marine infrastructure ensures it does not detract significantly from the character of Ramsey Sound. The wild and dramatic qualities of the seascape remain largely intact, with the development viewed as part of the broader context of human activity in the area.

Viewpoint 5 (VP5) - Assessment of Effects on Views

Receptor Type: Walkers and recreational users along the coastal path in the north of St. Brides Bay.

Distance to Farm Site: 440m east of the nearest Porthlysgi site boundary

Grid Reference: X 173092.858, Y 223384.931

Figure Number: 4

Direction of View: West

Baseline Description

VP5 is located on an elevated section of the Pembrokeshire Coast Path in the northern parts of St. Brides Bay, providing expansive views across the Porthlysgi site and the surrounding seascape. From this viewpoint, the proposed shellfish farm will be visible in the nearshore waters, with no existing maritime infrastructure or development visible to mitigate its prominence. The foreground features rugged cliffs, characteristic of the Pembrokeshire Coast National Park, while the horizon showcases the vast and uninterrupted sea. The view is primarily experienced by walkers and recreational users who value the natural beauty and remoteness of the seascape. The absence of any other human-made structures in the immediate view heightens the sensitivity of the landscape to change.

Receptor Sensitivity

Walkers and recreational users along the coastal path are highly sensitive to changes in the seascape. The National Park designation adds significant value to the view, and the absence of existing infrastructure in the immediate area amplifies its susceptibility to new visual elements. **Sensitivity is judged to be very high.**

Magnitude of Effect

- **Scale**
The shellfish farm will introduce visible elements into a previously undisturbed seascape. The buoys, with heights ranging from 300mm to 1.5m, will form a series of small, dispersed features on the water's surface. While the low profile minimizes their impact, the lack of other visible infrastructure increases their prominence. **Scale is judged to be moderate.**
- **Geographical Extent**
The visual impact will primarily affect the nearshore seascape visible from this viewpoint, extending to the boundaries of the proposed farm. The impact diminishes with distance and does not extend to the broader seascape. **Geographical extent is judged to be small.**
- **Duration and Reversibility**
The development represents a long-term but fully reversible addition to the seascape. Infrastructure removal will restore the view to its original state. **Duration is judged to be long-term, and the effects are reversible.**

Magnitude of Effect: Judged to be **moderate**.

Level of Effect

Considering the very high sensitivity of the viewpoint and the moderate magnitude of effect, the overall level of effect on VP5 is judged to be **minor to moderate**. The introduction of the shellfish farm will alter the visual experience of the nearshore waters, but its low-profile design ensures it does not dominate the wider seascape. The dramatic interaction of land and sea remains the focal point for viewers from this location.

Viewpoint 6 (VP6) - Assessment of Effects on Views

Receptor Type: Walkers, beachgoers, and wildlife observers

Distance to Farm Site: 560m northeast of the nearest Porthlysgi site boundary, overlooking Porthlysgi beach

Grid Reference: X 173147.422, Y 223698.195

Figure Number: 4

Direction of View: Southwest

Baseline Description

VP6 is situated on an elevated section of the coastal path, offering extensive views across the seascape to the southwest. The foreground features the rugged coastal cliffs and sandy cove of Porthlysgi beach, transitioning into the open waters of St. Bride's Bay. This location is popular with walkers and wildlife observers who value the natural and unspoiled quality of the setting.

In addition to the natural features, the baseline view occasionally includes large oil tankers and cargo ships traveling to and from Milford Haven Waterway. These vessels introduce transient, human-made elements into the horizon but do not dominate the seascape. Their movement contrasts with the relatively static and natural coastal features.

Receptor Sensitivity

Walkers and beachgoers in this location are highly sensitive to changes in the seascape, as the visual quality and sense of remoteness are integral to the experience. However, the presence of intermittent shipping traffic reduces the overall susceptibility to small-scale changes in the seascape.

Sensitivity is judged to be very high.

Magnitude of Effect

- **Scale**

The proposed shellfish farm will add a localised network of buoys to the seascape, visible as discrete and small-scale elements (300mm to 1.5m in height). These features will occupy a limited area of the nearshore waters and will not compete with the visual prominence of larger vessels seen on the horizon. The farm's modest scale minimizes its visual intrusion within the broader seascape. **Scale is judged to be low.**

- **Geographical Extent**

The buoys will be confined to the immediate vicinity of the Porthlysgi site, affecting a localised portion of the nearshore waters. Views toward the open sea, including the occasional presence of shipping vessels, will remain unaffected. **Geographical extent is judged to be small.**

- **Duration and Reversibility**

The shellfish farm represents a long-term project but is fully reversible. Removal of the infrastructure would restore the seascape to its original condition. **Duration is judged to be long-term, and the effects are reversible.**

Magnitude of Effect: Judged to be **low to medium**

Level of Effect

Given the very high sensitivity of the receptor and the low magnitude of effect, the overall level of effect on VP6 is judged to be **minor to moderate**. While the proposed farm will introduce localised visual changes, these are mitigated by the modest scale of the development and the broader seascape context, which includes intermittent views of large ships.

Viewpoint 7 (VP7) - Assessment of Effects on Views

Receptor Type: Maritime users (recreational boaters and fishermen)

Distance to Farm Site: 200m southwest of the nearest Porthlysgi site boundary

Approximate Elevation: Sea level

Grid Reference: X 171667.528, Y 221310.461

Figure Number: 4

Direction of View: North-Northeast

Baseline Description

VP7 represents a maritime viewpoint from a location offshore, facing inland toward the rugged coastline of Porthlysgi. The view is characterised by dramatic cliffs and coastal vegetation, creating a strong visual relationship between the land and sea. The inland view also encompasses areas of pastureland and scattered traditional farmsteads, contributing to a sense of rural tranquility.

The visual baseline is predominantly natural, with occasional human activity such as recreational walkers visible along the coastal path. No major maritime infrastructure is visible in this area, and the view remains largely unspoiled.

Receptor Sensitivity

Maritime users, including recreational boaters and fishermen, are moderately sensitive to visual changes. Their focus is often on the surrounding seascape and inland views, particularly for navigational or recreational purposes.

Sensitivity is judged to be high.

Magnitude of Effect

- **Scale**

The proposed shellfish farm will introduce a grid of low-profile buoys (300mm to 1.5m in height) into the nearshore waters. From this viewpoint, the buoys will be clearly visible, forming a new focal point in the immediate foreground. However, the inland view will remain largely unaffected, with the farm blending into the wider maritime context. **Scale is judged to be low to moderate.**

- **Geographical Extent**

The visual impact is limited to the immediate vicinity of the farm, with effects confined to a narrow section of the inland-facing view. The broader visual setting, including the surrounding cliffs and pastures, remains dominant. **Geographical extent is judged to be small.**

- **Duration and Reversibility**

The development represents a long-term but fully reversible change. The buoys and associated infrastructure can be removed without leaving a permanent visual impact on the seascape. **Duration is judged to be long-term, and the effects are reversible.**

Magnitude of Effect: Judged to be **low to moderate**.

Level of Effect

Considering the high sensitivity of maritime users and the low to moderate magnitude of effect, the overall level of effect on VP7 is judged to be **minor to moderate**. The shellfish farm introduces a localised visual change, but the inland view retains its natural and rural character.

Appendix 5 Assessment of Effects on Special Qualities of the National Park

Effects on Special Quality: Dramatic Coastal Scenery

Key Characteristics

- Rugged cliffs, sandy beaches, and headlands provide uninterrupted, panoramic views of the Irish Sea and surrounding landscapes, forming a defining visual and sensory experience of the Pembrokeshire Coast National Park (PCNP).
- This quality is characterised by the interplay of natural landforms, including prominent geological features like Carn Llidi and Ramsey Island, and expansive open seascapes that enhance the perception of grandeur and natural beauty.
- The combination of unspoiled landforms and vast horizons contributes to the sense of remoteness and tranquility that visitors value.
- Elevated viewpoints, such as St. David's Head and Carn Llidi, offer sweeping views that connect land and sea, heightening their scenic and aesthetic significance.

Sensitivity

- **Susceptibility**

The dramatic coastal scenery is highly susceptible to visual change due to its reliance on uninterrupted and harmonious views. Even small-scale developments can detract from the balance between natural landforms and the open sea, particularly in areas where panoramic views are a defining characteristic. Elevated viewpoints with long sightlines, such as Ramsey Island and St. David's Head, are especially sensitive to any visual additions. **Susceptibility is judged to be very high.**

- **Value**

This special quality is fundamental to the PCNP's designation and identity. Its exceptional aesthetic and recreational value make it a cornerstone of the park's appeal to visitors, residents, and conservationists. Its prominence in the national and international perception of the PCNP further reinforces its importance. **Value is judged to be very high.**

The sensitivity of this special quality to the proposed shellfish farm is judged to be very high.

Magnitude of Effect

- **Scale**

The shellfish farm will introduce small-scale infrastructure into the seascape, consisting of low-profile buoys (300mm above water with corner markers of 1.5m). While these elements may be visible from elevated viewpoints, they are unlikely to dominate the seascape due to their limited height, spacing, and design. From most ground-level viewpoints along the Pembrokeshire Coast Path, the buoys will be indistinguishable, maintaining the integrity of the dramatic coastal features. **Scale is judged to be low.**

- **Geographical Extent**

The visual impacts of the shellfish farm will be concentrated in specific areas with direct sightlines to the site, such as the elevated viewpoints of Carn Llidi and Ramsey Island. Inland areas and lower-lying sections of the coastline will experience minimal or no visibility due to natural screening and the distance of the farm from the coast. **Geographical extent is judged to be small.**

- **Duration and Reversibility**

The shellfish farm represents a long-term development that will persist for the duration of its operational period. However, its fully reversible nature ensures that the seascape could return to its original condition upon the removal of infrastructure. **Duration is judged to be long-term, and effects are reversible.**

Magnitude of Effect is judged to be low.

Level of Effect

Considering the very high sensitivity of the dramatic coastal scenery and the low magnitude of effect, the overall level of effect is judged to be **minor**. While localised and temporary visual changes may occur, these will not detract significantly from the grandeur, harmony, or aesthetic appeal of the PCNP's dramatic coastal scenery.

Effects on Special Quality: Land and Sea in Constantly Changing Combinations

Key Characteristics

- This special quality reflects the dynamic and evolving interplay between the Pembrokeshire coastline and the surrounding sea, characterised by a seamless integration of cliffs, bays, beaches, and open water.
- Tides, waves, and shifting light and weather patterns create a constantly changing visual and sensory experience, which is particularly notable from elevated viewpoints like Ramsey Island and St. David's Head.
- This dynamic quality is integral to the perception of the seascape as vibrant and alive, contributing to the park's sense of uniqueness and its appeal to visitors.
- The constant movement of water and light reinforces the sense of natural rhythm and timelessness that defines the PCNP's coastal experience.

Sensitivity

- **Susceptibility**

The dynamic relationship between land and sea is highly susceptible to changes that interrupt or diminish the perceived fluidity and openness of the seascape. Man-made additions, even small-scale and dispersed ones, may appear incongruous within this ever-changing natural environment, particularly when viewed from elevated locations with broad vistas. **Susceptibility is judged to be very high.**

- **Value**

The dynamic interaction of land and sea contributes significantly to the PCNP's identity and appeal. It underpins the park's recreational, ecological, and aesthetic value, forming a central component of its designation as a National Park. **Value is judged to be very high.**

The sensitivity of this special quality to the proposed shellfish farm is judged to be very high.

Magnitude of Effect

- **Scale**

The shellfish farm introduces small-scale infrastructure, including low-profile buoys (300mm above water with corner markers of 1.5m), which may momentarily alter the visual dynamic of the open seascape. However, the buoys' size and muted design ensure they remain subordinate features, blending into the existing maritime context of fishing boats, leisure craft, and kayaks. Natural forces such as waves, tides, and changing weather will continue to dominate the seascape, limiting the perceived impact of the infrastructure. **Scale is judged to be low.**

- **Geographical Extent**

Effects will be confined to areas with direct visibility of the shellfish farm, particularly elevated viewpoints such as Ramsey Island and Carn Llidi. Lower-lying or inland areas are unlikely to perceive the buoys due to distance and screening by natural landforms. **Geographical extent is judged to be small.**

- **Duration and Reversibility**

The farm represents a long-term addition to the seascape, but its infrastructure is fully removable, ensuring that the original dynamic interplay between land and sea can be restored. **Duration is judged to be long-term, and effects are reversible.**

Magnitude of Effect is judged to be low.

Level of Effect

Given the very high sensitivity of this special quality and the low magnitude of effect, the overall level of effect is judged to be **minor**. While small-scale, localised changes may occur, the fundamental dynamic between land and sea will remain dominant and unaltered, preserving this defining aspect of the PCNP's character.

Effects on Special Quality: Tranquility and Wildness

Key Characteristics

- The Pembrokeshire Coast National Park is renowned for its sense of remoteness, tranquillity, and wildness, offering visitors an escape from modern infrastructure and urbanised environments.
- Areas like Ramsey Island, St. David's Head, and Whitesands Bay exemplify this quality, characterised by open, undeveloped seascapes and the absence of intrusive structures or activity.
- The soundscape, dominated by natural elements such as waves, wind, and wildlife, further enhances this quality, fostering a deep sense of peace and connection to nature.
- Visitors to these locations seek solitude and immersion in an unspoiled natural environment, where the wild character of the seascape is a central aspect of the experience.

Sensitivity

- **Susceptibility**

Tranquility and wildness are highly susceptible to changes that introduce visible structures or modern activity into otherwise unspoiled areas. The presence of man-made elements may subtly diminish the perception of remoteness, particularly in calm weather when the shellfish farm's buoys are more visible. **Susceptibility is judged to be very high.**

- **Value**

This quality is intrinsic to the PCNP's designation and identity, forming a cornerstone of its appeal to visitors seeking refuge from the stresses of modern life. The park's international reputation as a tranquil and wild destination underscores its value. **Value is judged to be very high.**

The sensitivity of this special quality to the proposed shellfish farm is judged to be very high.

Magnitude of Effect

- **Scale**

The buoys, although visible in certain conditions, are low-profile and muted in appearance, ensuring they do not dominate the seascape or disrupt its overall wild character. Existing marine activity, including fishing boats, kayaks, and leisure craft, provides a degree of context, reducing the perceived incongruity of the farm's infrastructure. **Scale is judged to be low to moderate.**

- **Geographical Extent**

Effects are localised to specific viewpoints with clear sightlines to the farm, such as Ramsey Island Coastal Waters and elevated coastal paths. Inland and sheltered areas remain unaffected.

Geographical extent is judged to be small.

- **Duration and Reversibility**

The farm is a long-term addition but fully reversible. Upon removal, the area's sense of wildness and tranquility can be restored without lasting physical alterations. **Duration is judged to be long-term, and effects are reversible.**

Magnitude of Effect is judged to be low to moderate.

Level of Effect

Given the very high sensitivity of this special quality and the low to moderate magnitude of effect, the overall level of effect is judged to be **minor**. While some visitors may perceive a subtle reduction in wildness, the tranquillity and remoteness of the PCNP will remain largely intact.

Effects on Special Quality: Cultural Landscapes

Key Characteristics

- The Pembrokeshire Coast National Park is steeped in cultural heritage, encompassing traditional field patterns, historic coastal villages, ancient monuments, and maritime relics.
- Prominent cultural features include chapels, standing stones, ruined castles, and remnants of fishing and farming practices that reflect centuries of human interaction with the landscape and seascape.
- The unique cultural identity of the park arises from the harmonious relationship between human activity and the natural environment, which is celebrated through tourism, local traditions, and historical preservation efforts.
- This special quality provides a strong sense of place, fostering connections between the landscape's past and its current role as a cherished national treasure.

Sensitivity

- **Susceptibility**
Cultural landscapes are susceptible to changes that might visually compete with or disrupt the integrity of historic and traditional elements. Developments that alter the visual context of key cultural assets, such as historic coastal villages or archaeological sites, can diminish the sense of place. **Susceptibility is judged to be high.**
- **Value**
The park's cultural landscapes are integral to its designation and identity, celebrated for their historical, architectural, and communal significance. The long-standing maritime traditions of fishing and seafaring are particularly relevant, tying the present-day seascape to the region's cultural narrative. **Value is judged to be very high.**

The sensitivity of this special quality to the proposed shellfish farm is judged to be high.

Magnitude of Effect

- **Scale**
The shellfish farm aligns with the park's maritime heritage, reflecting Pembrokeshire's long history of sustainable marine resource use. The low-profile buoys are unlikely to visually dominate or detract from key cultural features, such as traditional villages or historical landmarks. Their subtle presence may even be interpreted as a continuation of the region's productive relationship with the sea. **Scale is judged to be low.**
- **Geographical Extent**
Visual impacts are confined to a small number of coastal areas with direct line-of-sight to the farm. Key cultural landmarks, such as St. David's Cathedral and nearby coastal settlements, remain largely unaffected. **Geographical extent is judged to be small.**
- **Duration and Reversibility**
The farm's infrastructure is temporary and fully reversible, ensuring that its presence does not result in lasting physical changes to the cultural landscape. **Duration is judged to be long-term, and effects are reversible.**

Magnitude of Effect is judged to be low.

Level of Effect

Given the high sensitivity of this special quality and the low magnitude of effect, the overall level of effect is judged to be **minor**. The shellfish farm complements the cultural identity of the PCNP, contributing a modern yet subtle layer to its evolving relationship with the sea while preserving its historic and cultural integrity.

Summary of Effects on Special Qualities

Key Findings

- The proposed shellfish farm introduces small-scale, dispersed infrastructure into the seascape, with low-profile buoys (300mm to 1.5m height) designed to minimise visual and environmental intrusion.
- The assessment of key special qualities—**dramatic coastal scenery, land and sea in constantly changing combinations, tranquility and wildness, and cultural landscapes**—reveals that while localised impacts may occur, the overall integrity and value of these qualities remain intact.

Conclusions

- **Dramatic Coastal Scenery:** Minor localised impacts may arise from the visibility of the buoys in areas of close proximity, particularly from elevated viewpoints. However, the robust and dramatic features of the park's coastal scenery will continue to dominate. The magnitude of effect is low, with a **minor** overall level of effect.
- **Land and Sea in Constantly Changing Combinations:** The dynamic nature of the seascape ensures that the farm remains a subordinate feature, with visual impacts softened by natural forces. The magnitude of effect is low, with a **minor** overall level of effect.
- **Tranquility and Wildness:** While some visitors may perceive a reduction in wildness from areas such as Ramsey Island Coastal Waters, the muted design and reversible nature of the farm mitigate these effects. The magnitude of effect is low to moderate, with a **minor to moderate** overall level of effect.
- **Cultural Landscapes:** The farm aligns with Pembrokeshire's maritime traditions and does not disrupt key cultural landmarks or settings. Its presence reflects the region's evolving productive seascape. The magnitude of effect is low, with a **minor** overall level of effect.

Overall Judgement

The shellfish farm's effects on the Pembrokeshire Coast National Park are considered **minor** overall. While subtle, localised changes may occur, particularly in areas with strong visual connections to the sea, the development's design and context ensure that the park's defining special qualities are preserved.

Figures

