

Wylfa Newydd Project

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App D10-2 - Published sources of seascapes
character**

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1 Introduction

- 1.1.1 Extracts of relevant published sources of seascape character are set out in this appendix in order to provide the full version of source text (verbatim), which is summarised in chapter D10 (landscape and visual) (Application Reference Number: 6.4.10) of this Environmental Statement. Extracts are set out below under the title of the relevant documents and should be read in conjunction with figures D10-12 and D10-13 (Application Reference Number: 6.4.101) of this Environmental Statement.
- 1.1.2 The extracts include descriptions of published national Marine Character Areas (MCAs), regional seascape character units and county seascape character areas (SCAs) within the overarching and detailed study areas defined for the landscape and visual assessment, as illustrated on figure D10-1 (Application Reference Number: 6.4.101) of this Environmental Statement. The overarching study area is based on a 15km offset from the centre of the Power Station, since there is potential for seascape effects within this area, as explained in chapter D10 (Application Reference Number: 6.4.10). The detailed study area extends up to 6km from the centre of the Power Station. This is the area where theoretical intervisibility is principally concentrated during operation of the Power Station and where there is greater potential for significant landscape effects.

2 National Seascape Assessment for Wales

- 2.1.1 The *National Seascape Assessment for Wales, NRW Evidence Report No: 80* [RD1] provides a strategic evidence base for seascapes. The report was commissioned by Natural Resources Wales (NRW) on behalf of the Welsh Government to inform the development of the Welsh National Marine Plan. The assessment builds on the seascape units in the 2009 Assessment summarised below under section D10-2.3, 'Welsh Seascapes and their Sensitivity to Offshore Developments'. It is also consistent with the strategic scale, seascape assessment methods applied by the Marine Management Organisation in England.
- 2.1.2 The report covers all parts of Welsh inshore waters to 12 nautical miles from land. It includes maps for bedrock geology, sediment geology, bathymetry, coastal and inland topography, Landscape Character Areas, protected landscapes, variations in marine habitats, wave energy and water depths, and extent of visibility of the sea from a range of levels and distances inland. The strategic scale assessment identifies 29 national MCAs. The assessment does not include guidelines for future control of development or landscape/seascape management.
- 2.1.3 The Wylfa Newydd Development Area is located within part of MCA 06 North Anglesey Coastal Waters [RD2].
- 2.1.4 The southern part of MCA 05, North-West Anglesey Open Waters [RD3] is located within the overarching study area, with the exception of a small area located within the detailed study area.
- 2.1.5 MCA 07 Holyhead Bay and The Skerries [RD4] is located to the west, partially in the detailed study area, but mostly within the overarching study area. To the east, a small part of MCA 04 North Wales Open Waters [RD5] is located within the overarching study area.
- 2.1.6 In addition, part of MCA 03 Red Wharf and Conwy Bays is located within the overarching study area. This MCA has been scoped out from the assessment due to very limited intervisibility and distance. While parts of MCA 09 Holy Island West and Penrhos Bay, and MCA 11 Caernarfon Bay are located within the south-western part of the overarching study area, these areas are located more than 15km from the centre of the Power Station. As such, MCA 09 and MCA 11 have also been scoped out of the assessment, since it is not considered likely that there would be a significant effect on these MCAs.

2.2 Marine Character Areas

- 2.2.1 The key characteristics of the MCAs are described in individual MCA profiles. Extracts relevant to the assessment of seascape effects of the Power Station and related works, from *Marine Character Areas: MCA 06 North Anglesey Coastal Waters, MCA 04 North Wales Open Waters, MCA 05 North-West Anglesey Open Waters and MCA 07 Holyhead Bay and The Skerries* [RD2 to RD5] are included below.

MCA 06 North Anglesey Coastal Waters

“This MCA covers the north-facing coast of Anglesey and its coastal waters, including the islands of West Mouse, Middle Mouse and East Mouse.”

“Key Characteristics

A **rocky, high energy** north-facing coastline with extensive wave-cut platforms and deeply incised bays.

Marine processes of long-shore drift creating **crescent-shaped shingle beach** at Cemlyn Bay - a dynamic landform.

Steeply sloping bathymetry, with deep water of up to 25m coming in close to the shore.

Subtidal substrate of **bedrock and boulders** with some **coarse sediment and sand**. Exposed rock colonised by marine species including featherstars and sponges. A range of wetland habitats associated with the brackish water of the **Cemlyn Bay lagoon** (designated as SSSI [Site of Special Scientific Interest], [Special Protection Area] and [Special Area of Conservation] for its **importance for bird life** ...

Other SSSIs at Hen Borth and Cae Gwyn **notable for geological interest and plant life**.

Tidal rapids and strong currents visible from land in certain conditions, notably around the rocky reef of Harry Furlong's Rocks and around West Mouse.

Despite navigational aids, many **ships have been lost** on the offshore rocks, especially around the West Mouse.

Fishing activity along the rocky coast is mainly potting for crabs and lobsters, and recreational angling. Recreational charter fishing boats also depart from Amlwch port.

Evidence of both **modern and historic industry** visible along the coast including historic brickworks, disused factories and the dominant form of Wylfa power station.

Until recent years, **Amlwch Harbour** was used for **export of copper ore**, as well as supporting industries such as **shipbuilding**.

Coastal headlands including Point Lynas are popular locations for **spotting cetaceans**. Coast crossed by the Isle of Anglesey Coast Path and large sections are owned by the National Trust.

Popular **recreational dive sites** include **wrecks** of *Abbotsford* near Wylfa power station, *Deo Gratis* on the Archdeacon Rock and *Edith Owen* and *Fawn* on Coal Rock.

Low-lying coast creates **strong visual and physical connection between land and sea**. The box-like, bright form of Wylfa Nuclear Power Station, with associated lighting at night, stands out in stark scale contrast.

Seascape features include the **lighthouse on Point Lynas**, the **offshore islands** of West Mouse, Middle Mouse and East Mouse and **expansive views** including the Skerries and the Isle of Man on the horizon.” [RD2]

MCA 04 North Wales Open Waters

“This Marine Character Area (MCA) covers the outer inshore waters of North Wales, coinciding broadly with the coastline stretching from the outer fringes of the Dee Estuary in the east to north-west Anglesey in the west.”

“Key Characteristics

An **offshore MCA** where **depth increases gradually** from approximately 15m below chart datum near Conwy Bay to over 60m in the north west.

...**Moderately strong east-west tidal currents.** The strongest currents are found in the south-west.

...**Dominant maritime character is one of transit:** ...[including] commercial vessels passing east and west...

Large fishing boats target demersal fish and scallops offshore with **smaller potting boats** seen closer to the coast.

...to the north – access is restricted around the Douglas Oil Field (marked by a series of lit buoys and shipping lanes depicted on marine charts).

Commercial shipping seen offshore, including large vessels waiting for Liverpool Pilots to guide them safely into port.

...The **landward view changes considerably** throughout the MCA, with **rocky headlands, islets and large bays** found to the west...” [RD5]

MCA 05 North-West Anglesey Open Waters

“This [MCA] comprises the outer inshore waters extending from the northern Anglesey coastline to the limits of the Wales Inshore Waters.”

“Key Characteristics

The seabed drops steeply away from the north coast of Anglesey, with water depth greater than 30m bathymetry, increasing to more than 80m in the north-west.

Preserved glacial bedforms found offshore. Fine sediment particles are suspended in the water resulting in a substrate of mostly exposed Precambrian rock and boulders with shallow patches of coarse gravel, pebbles and cobbles...

Strong/very strong tidal currents and wave climate, particularly to the south-west.

A **large number of wrecks**, including from both World Wars, representing a wealth of seafaring heritage...

Lobster and crab potting takes place closer to the shore, with **whelk potting, trawling and scallop dredging** occurring elsewhere.

... **commercial shipping** can be seen passing further offshore.

Recreational boats can also be seen in coastal waters during the warmer months.

The Skerries are prominent seascape features viewed from this MCA, with the **Isle of Man** and **Holyhead Mountain** also visible in clear conditions.

In the south, visual relationships with the adjacent **rocky north coast of Anglesey**, with small bays and inlets, which contribute to character.

The box-like form of **Wylfa Power Station** forms a prominent man-made feature in views to the coast, standing out against a rugged and open coastal scene.” [RD3]

MCA 07 Holyhead Bay and The Skerries

“This [MCA] covers the coastal and inshore waters of Holyhead Bay in western Anglesey, extending northwards to take in the Skerries and their associated seas and submerged rocks/reefs.”

“Key Characteristics

... **AONB-designated** coastline stretching from Carmel Head in the north to Porth Namarch on Holy Island.

The **rocky islets of the Skerries** (with associated rough seas) are found to the north of Carmel Head. The Skerries lighthouse is visible over long distances...

The seabed substrate follows the energy gradient, with **exposed rock** in the north...

The Skerries designated as [Special Protection Area], SSSI and Important Bird Area ...

Nationally important geology exposed in the cliffs – some of the oldest rocks in Wales. Cliffs topped by wind-pruned maritime grasslands and heath, supporting **important sea bird colonies** ...

Extensive SSSI covering intertidal areas, including the Afon Alaw estuary, as well as the seagrass beds, sand and rock found in Beddmanarch Bay.

Very strong tidal currents and wave climate around the Skerries in the north

...

Many wrecks, including the **protected wreck** of the 17th century Royal Yacht *Mary* and the dangerous wreck of the *Castillian*, which sank in 1943 with live ordnance on board...

Waters support a range of recreational activities including sailing, boating, diving and fishing/sightseeing charters. The surrounding beaches are popular tourism destinations.

Seascape setting **dominated by the Skerries** to the north, and by **Holyhead Mountain** to the south.

Coastline traversed by the Isle of Anglesey Coastal Path, with large sections under National Trust ownership.

A strong contrast between remote seas and coasts and the bustling port and marina at **Holyhead**.

Ferries (Holyhead-Dublin) are features on the seaward horizon. **The Wicklow and Mourne Mountains in Ireland** can be visible in clear conditions. The **Isle of Man** is also visible in distant views north from Carmel Head.” [RD4]

3 Welsh Seascapes and their Sensitivity to Offshore Developments

- 3.1.1 Countryside Council for Wales' *Welsh Seascapes and their Sensitivity to Offshore Developments* [RD6] categorises Wales into five broad national seascape units and 50 regional seascape units.
- 3.1.2 The Wylfa Newydd Development Area occupies part of the coastline within the North Wales Coast National Seascapes Unit, and Regional Seascapes Unit 7: Point Lynas to Carmel Head, comprising the north coast of Anglesey.
- 3.1.3 Caernarfon Bay National Seascapes Unit and Regional Seascapes Unit 8: Carmel Head to Holyhead Mountain North Stack, lie within the western part of the overarching study area. The zone of theoretical visibility (ZTV) on figure D10-1 (Application Reference Number: 6.4.101) indicates theoretical intervisibility with these units, with the exception of the area closer to the coastline between Carmel Head and up to and including Church Bay.
- 3.1.4 Regional Seascapes Unit 6: Puffin Island to Point Lynas, which lies within the eastern part of the overarching study area, has been scoped out due to distance and very limited intervisibility with the Power Station and related works within the overarching study area, confirmed by the ZTV (see figure D10-1 (Application Reference Number: 6.4.101)) and site appraisal.
- 3.1.5 Regional Seascapes Unit 11 Penrhyn Mawr to Pen-y-Parc/Maltraeth Bay, which lies within the south-western corner of the overarching study area, has been scoped out of the assessment as it is located more than 15km from the centre of the Power Station and it is therefore not considered likely that there would be a significant effect on this area.

3.2 Regional Seascapes

Regional Seascapes Unit 7: Point Lynas to Carmel Head Seascapes Unit

- 3.2.1 The key characteristics of the Regional Seascapes Unit 7: Point Lynas to Carmel Head are described in the *Welsh Seascapes and their Sensitivity to Offshore Developments* [RD6] as follows.

“Fine grain, rocky, north facing convex coast of many small bays and headlands with low cliffs and only one small sandy beach. [Cemaes]

Undulating, glaciated, old rock coastal plateau supporting pastoral farming with areas of semi-natural vegetation.

Few settlements, but the area contains a number of wind farms inland and Wylfa nuclear power station on the coast.

Exposed northern aspect with open sea and long views.

Key cultural associations: the history of trade and shipping over many centuries and Wylfa nuclear power station.”
- 3.2.2 It is noted that “The area is mainly dark with a limited concentration of light at Wylfa and around Amlwch.” [RD6]

3.2.3 The visual and sensory qualities of Regional Seascapes Unit 7: Point Lynas to Carmel Head are described as:

"[Experienced through] Coastal path, beach, settlements and minor roads.

Intervisibility [of land and sea] is mainly limited to the coastal strip and from a few high points inland such as Parys Mountain and Mynydd y Garn.

[Key views to the sea and along the coast from] Anglesey coastal path, Point Lynas, Cemaes beach, Dinas Gynfor hillfort, Parys Mountain, Mynydd Eilian and from parts of Amlwch and other settlements.

[Key views to land from occasional] sailing boats and leisure craft. [and]

Ferry and commercial shipping on route to/from the Port of Liverpool...

The area is generally remote, fairly tranquil and only significantly disturbed by views of the nuclear power station, the wind farms and Amlwch and the chemical works. The rocky landscape reinforces the wild character of the coast.

Medium-small [sense of scale]

Open

Moderately simple [diversity]

Very exposed" [RD6]

3.2.4 Amongst key cultural associations, it is noted that "*Wylfa nuclear power station dominates the modern seascape*". It is also suggested that the seascape sensitivity level for developments placed only a short distance offshore is low-moderate, with the caveat that:

"Development just offshore could be located to relate to existing coastal industrial features, but elsewhere the coast is undeveloped and the introduction of new structures would detract from this character." [RD6]

Regional Seascapes Unit 8: Carmel Head to Holyhead Mountain North Stack

3.2.5 The key characteristics of the Regional Seascapes Unit 8: Carmel Head to Holyhead Mountain North Stack, relevant to the assessment of the Power Station and related works, are described in the *Welsh Seascapes and their Sensitivity to Offshore Developments* [RD6] as follows.

"Holy Island to the west and Anglesey to the east separated by the Alaw estuary.

Holyhead Mountain is the dominant landform with rocky cliffs around North Stack. On a smaller scale Carmel Head has cliffs with rocky slopes rising steeply. Elsewhere, there is a small scale indented coast with low cliffs and rocky platforms with a few sandy coves.

Holyhead is a busy ferry port, with a large harbour and protective seawall. The tall chimney stack of the Rio Tinto aluminium smelter is prominent to the south of Holyhead.

Elsewhere, the hinterland and coast is generally rural with minor leisure uses.

The west facing coastline is exposed but partly sheltered by Holy Island to the west and south.

Views across to and from respective landforms.

Principal cultural associations are with the town and port of Holyhead and its links with Ireland.”

3.2.6 It is noted that:

“Holyhead forms a concentration of light with the north east coast being relatively dark. Except at junctions, the A55 Expressway remains unlit. Where it crosses the estuary it runs behind the high wall of the Stanley Embankment, so light from traffic remains subdued.” [RD6]

The visual and sensory qualities of Regional Seascape Unit 8: Carmel Head to Holyhead Mountain North Stack are described as:

“[Experienced through] Anglesey Coastal Path, railway and road crossing the Alaw estuary, Holyhead settlement and docks, minor beaches to the east. Scenic views from ferries entering/leaving port...

Intervisibility [of land and sea] is mainly limited to the coastal strip and from a few high points such as Holyhead Mountain and Mynydd y Garn.

[Key views to the sea and along the coast from] Anglesey Coastal Path, Holyhead Mountain, railway and road crossing the Alaw estuary, Penrhos Coastal Park, minor beaches to the east. In very clear weather from Mynydd y Garn, it is possible to see... the Isle of Man, albeit faintly and at great distance.

[Key views to land from] Holyhead/the Irish ferries and from leisure boats, especially to the distinctive rocky Holyhead Mountain and its cliffs and lighthouses.

Medium [sense of scale] - slightly enclosed by landform.

Moderately open

Diverse - urban and rural, smooth and rocky, flat and hilly, broad and narrow inter-tidal.

Very exposed on west facing coast and exposed on north or east facing coasts.” [RD6]

4 North Anglesey Heritage Coast

4.1.1 Following a review of published sources, no documented landscape characteristics have been found for the North Anglesey Heritage Coast.

5 Anglesey and Snowdonia Seascape Character Assessment

5.1.1 The *Anglesey and Snowdonia Seascape Character Assessment* [RD7] identifies seascape character types and describes 36 county SCAs.

5.2 Seascape character types

5.2.1 The seascape character types (SCTs) identified in the *Anglesey and Snowdonia Seascape Character Assessment* [RD7] are described in Part 2, Section 6, and extracts from the key characteristics of SCTs within or adjacent to the Wylfa Newydd Development Area are summarised below:

- SCT t1 – Beach: "...shoreline landform composed mainly of loose particles of sand, shingle and/or rounded pebbles, deposited by wave or current action..."
- SCT t4 – Cliffs and cliff tops: "... usually have highly complex forms... Associated formations can include deep coves, points, caves, rock stacks and arches... Where the coastal bedrock is particularly resistant to erosion, a flat and rocky wave-cut platform is formed in front of the cliff. Where the bedrock is softer a beach is formed with little or no scree at the base of the cliff... Cliff tops can be exposed rock, sometimes covered with lichen, or can be vegetated with coastal heath or grassland... Some are also used for rock climbing pursuits."
- SCT t5 – Coastal heath/grassland: "... occurs in pockets or as remnants of a much wider coverage... important and rare mosaic of heathland communities, much of which is dominated by mixtures of western gorse, heathers and grasses. The type of vegetation is closely related to the underlying geology."
- SCT t6 – Rocky islets: "... relatively small, and as they are usually aligned with a headland... They usually appear as steep and rocky landforms, fully surrounded by the sea, with sparse vegetation."
- SCT t7C – Farmland (regular enclosures): "... characterised by larger, more regular-shaped... fields, mainly given over to pasture (improved and semi-improved grassland) with occasional arable/cereal production. Enclosures tend to be hedgerows or dry stone walls (constructed from locally-available stone), or to utilise modern materials/techniques such as post and wire fencing."
- SCT t14 – Industrial/business park: "... power stations (Wylfa)... characterised, in the main, by large structures, including warehouses, office buildings and plant buildings, and have associated infrastructure such as hardstanding, access/circulation roads, car parking areas and street/flood lighting..."
- SCT i1 – Intertidal shingle: "... Relatively exposed shores characterised by pebble, cobble, shingle, gravel and coarse sand beaches."

- SCT i2 – Intertidal sand: "... Beaches comprising clean coarse, medium or fine-grained sands or muddy sands, with shells and stones occasionally found on the surface."
- SCT i4 – Intertidal rock: "...habitat of bedrock, boulders and cobbles which can experience enormous variation in exposure..."
- SCT i6 – Saltmarsh: "... sandy or muddy sediment types and is periodically covered by spring high tides. A sinuous pattern of narrow channels run through the low-lying salt marsh. Vegetation is variable, ranging from salt-tolerant mud-dominated species closest to the channel through to grasses and reeds on the driest areas."
- SCT m2a – Shelf sea rock - shallow water, high energy: "... well lit, shallow habitats less than 20m deep where high levels of wave and tidal current energy prevent significant deposition of finer grained sediment, leaving solid bedrock or stable boulders."
- SCT m2b – Shelf sea rock - shallow water, moderate energy: "... bedrock and stable boulders in shallow, well lit waters with moderate levels of exposure to current and wave energy, limiting the amount of fine sediment deposition."
- SCT m2c – Shelf sea rock - deep water, high energy: "... hard substrate, high energy and poor light levels. Patches of coarse and mixed sediment may be present sporadically but the high energy environment prevents fine sediment being deposited."
- SCT m9 – Macrophyte bed: "... Areas of bedrock and boulders in deep water with poor light levels and moderate exposure to wave and current energy..."

5.3 Seascape character areas

5.3.1 The SCTs are grouped into SCAs. There are twelve county SCAs identified within the overarching study area for the landscape and visual impact assessment as set out in chapter D10 (Application Reference Number: 6.4.10). However, four of these are located more than 15km from the centre of the Power Station and it is therefore not considered likely that there would be a significant effect on these areas. As such, SCA 12 Inland Sea, SCA 14 Rhoscolyn, SCA 15 Rhosneigr and 31 West of Anglesey have been scoped out of the assessment.

5.3.2 The ZTV on figure D10-1 (Application Reference Number: 6.4.101) indicates that the remaining eight SCAs within the overarching and detailed study areas would have intervisibility with the Main Construction of the Power Station. The summary descriptions, key characteristics and information about sensitivity relevant to the assessment of effects related to the Power Station and related works are set out below for these SCAs, since there is potential for landscape effects to occur within these areas. More detail is included for SCA 8: Cemlyn Bay and SCA 9: Amlwch and Cemaes, which encompass the seascape within the Wylfa Newydd Development Area.

SCA 7: Dulas Bay

5.3.3 Dulas Bay SCA comprises the coastal hinterland and waters between Point Lynas to the north and Moelfre to the south, on the eastern coast of Anglesey. The bay is east facing and the ZTV on figure D10-1 (Application Reference Number: 6.4.101) and site visits indicate that there is limited intervisibility with the Wylfa Newydd Development Area, principally concentrated on high ground at Mynydd Eillian and with no intervisibility offshore.

5.3.4 The SCA summary description states that:

“This SCA is bounded by headlands at north and south of a rocky coast, with beaches at Dulas Bay and Lligwy Bay... The southern part of the SCA contains a variety of historic landscape features from prehistoric times onwards, and is also the location of several caravan parks...” [RD7]

- Relevant key characteristics include:
- “Landform has relatively smooth profile, and comprises ridges separating deeper valleys... Coastline includes rocky headlands (with wave-cut platforms) and small sandy beaches...”
- Predominant land use is improved farmland, with strong estate influence in its management. Also woodland and caravan parks (in south of SCA)...
- Settlement and development largely limited to Dulas village and estate, although the southern part of the SCA contains several caravan parks.
- A relatively open, smooth landscape with a rolling landform...
- Northward landscape setting formed by the hills to the east of Penysarn. Inland, the farmland continues and forms a backdrop...” [RD7]

5.3.5 The factors that increase the sensitivity of SCA 7: Dulas Bay include:

“Headlands have a natural, rocky coastline with rocky intertidal areas and pebble beaches...”

Very little existing built development in northern part of SCA resulting in undeveloped character...

Users of Wales Coast Path are sensitive receptors...

Higher levels of tranquillity in northern part of SCA... ” [RD7]

5.3.6 The factors that decrease the sensitivity of SCA 7: Dulas Bay include “...caravan parks in south of SCA” and reduced tranquillity due to it being a “busy holiday destination” [RD7].

SCA 8: Amlwch and Cemaes

5.3.7 The Amlwch and Cemaes SCA comprises the coastal hinterland and waters between Wylfa Head to the west and Point Lynas to the east in the north of Anglesey. The eastern part of the Wylfa Newydd Development Area is located within this area.

5.3.8 The SCA summary description states that:

“Much of this area has an industrial feel due to its long association with copper mining and associated industries and export. There are several historic harbours and settlements, including Amlwch, Cemaes and Llaneilian, but there is less tourist development than on many parts of the Anglesey Coast. Coastal views are dominated by the rocky shoreline, white water and rocks, with the [island] of ... Middle Mouse lying off the coast... At the eastern end of the SCA is Point Lynas lighthouse on its long, flat headland. The immediate coastal area ... has many textures and shades of colour on seaward slopes arising from heather, bracken, brambles and underlying rocks, which contrast with the shingly bays. Views inland are dominated by the distinctive profiles of Parys Mountain and Mynydd Eilian.” [RD7]

5.3.9 Key characteristics of the Amlwch and Cemaes SCA of relevance to the Wylfa Newydd Development Area and surroundings are described as follows:

- “A geologically-varied stretch of coast...
- A relatively low coastal plateau with occasional hills, particularly in the west of the SCA. Steeply sloping bathymetry, with deep water coming in close to the shore.
- North-facing coast comprising low, rocky headlands (including Point Lynas and Wylfa Head) and deeply incised pebbly bays.
- An exposed and high-energy north-facing coast with active erosive processes.
- An historic and continuing tradition of industrial land uses, including mining (specifically copper), mineral working and electricity production. Sea uses include potting and recreational fishing.
- A mosaic of habitats, including rhos pasture, coastal heath, cliffs and rocky intertidal areas.
- Many onshore historic and cultural features, including harbours (fishing and links to copper industry) industrial and religious sites.
- A relatively settled area, including... nucleated villages... [such as] Cemaes (... with historic harbours)... and scattered farms.
- A rough-textured landscape with strong seasonal colour. Despite the long tradition of settlement in the area, parts still feel remote. This SCA has a working quality, with less tourist development than many other SCAs.
- Landward landscape setting of eastern part dominated by distinctive outline of Parys Mountain. Extensive windfarms occur inland of the western part of the SCA.
- Seascapes setting includes the lighthouse on Point Lynas, the offshore islands of Middle Mouse... and expansive views with the Isle of Man on the horizon.” [RD7]

5.3.10 Cultural influences and sites of the Amlwch and Cemaes SCA of relevance to the Wylfa Newydd Development Area and surroundings include:

- “...Numerous historic harbours, often associated with fishing industry.

- Legendary association of St Patrick with Llanbadrig, who was reputedly shipwrecked off the coast here, and founded the church in thankfulness for his survival....
- Ancient religious sites including holy well at Ffynnon [Eilian] and fifth century church at Llanbadrig.
- Western part of [SCA] dominated by mass of Wylfa ... power station.
- Conservation Areas at ... Cemaes...
- Designated Heritage Coast between Cemaes and Point Lynas...
- Fishing activity along the rocky coast is mainly potting for crabs and lobsters, and recreational angling...
- Largely within Anglesey Coast AONB [not including Wylfa Newydd Development Area]." [RD7]

5.3.11 Perceptual qualities of the Amlwch and Cemaes SCA of relevance to the Wylfa Newydd Development Area and surroundings include:

- "A small-medium scale landscape, but flat topography gives it a relatively open feel and occasional panoramic views.
- A complex and diverse landscape, with a mosaic of different land uses and a long history of settlement.
- Generally rough in texture (due to coastal heath, rhos pasture and crenellated form of rocky coastline) with seasonal colour from bracken and gorse.
- Away from settlements, landscape feels remote and relatively wild, particularly in areas of coastal heath...
- Rocky coast and seascape also has wild quality, particularly in [northerly] conditions. Views towards the Isle of Man create a sense of distance and remoteness.
- Parys Mountain forms the landward setting to the eastern part of the SCA..." [RD7]

5.3.12 The Power Station is identified as one of the direct forces for change within the SCA. Other examples of forces for change include expansion of settlements, changes in agricultural management and coastal erosion.

5.3.13 The factors that increase the sensitivity of SCA 8: Amlwch and Cemaes include:

"A crenulated coastal edge of cliffs and small pebbly bays separated by rocky headlands, with a wild and strongly natural quality and associated habitats..."

Historic character of settlements and harbours.

Users of Wales Coast Path are sensitive receptors.

Despite industrial features, much of coastline is natural, with a wild quality.

SCA visible in views from surrounding hills including Parys Mountain and Mynydd Eilian.

Away from settlements, coastal access by vehicle is difficult, resulting in few people and a sense of remoteness and wildness.” [RD7]

5.3.14 The factors that decrease the sensitivity of SCA 8: Amlwch and Cemaes include:

“Existing nucleated villages of Cemaes ...

Large-scale industrial structures including ... Wylfa nuclear power station on the coast near Cemaes.

Existing wind farms inland affect the landward setting of the SCA.

Concentration of people/visitors at developed coastal sites, e.g. Wylfa power station ...” [RD7]

SCA 9: Cemlyn Bay

5.3.15 The Cemlyn Bay SCA comprises the coastal hinterland between Wylfa Head to the east and Carmel Head in the west, as well as the open sea beyond, in the north of Anglesey. It encompasses the western part of the Wylfa Newydd Development Area.

5.3.16 The SCA summary description states that:

“This SCA contains a considerable variety of coastal habitats, varying from the rock pools of the east to the unusual coastal features of Cemlyn Bay itself. Cemlyn Bay is divided by a crescent-shaped shingle bar formed by longshore drift, but the inner area has not been tidal since the 1930s. It provides ideal breeding grounds for varieties of terns and is a nature reserve of international importance, becoming very noisy in the summer! The inland landscape is also distinctive with rolling drumlin fields; their gentle slopes contrasting with the straight lines of the stone walls which cross them. This is relatively low-lying coast, and the drumlin fields appear as egg-shaped mounds on the horizon when viewed from the sea. Off the coast are rocky islands including Harry Furlough's Rocks and West Mouse, reflecting the rocky character of the seabed... The rich variety of the local geology is illustrated at Trwyn Cemlyn to the west of Cemlyn Bay with its extensive range of multi-coloured pebbles overlying metamorphic rocks. To the east the landscape is dominated by the square shapes of the Wylfa power station in the adjacent SCA [8]” [RD7]

5.3.17 Key characteristics of the Cemlyn Bay SCA of relevance to the Wylfa Newydd Development Area and surroundings include:

- “...Low-lying coast dominated inland by the egg-shaped hills of a glacial drumlin field, which can be seen clearly from the sea.
- A rocky, high energy coastline with extensive wave-cut platforms and deeply incised bays. Surface rocks include West Mouse and Harry Furlough's rocks.
- Rare coastal brackish lagoon at Cemlyn Bay, separated from the sea by a crescent-shaped shingle beach formed by longshore drift.
- Land use dominated by pastoral farming, often in regular-shaped fields. Sea uses include potting and recreational angling.

- Cemlyn Bay contains a variety of wetland habitats and is a bird reserve. Also extensive areas of rocky intertidal habitats.
- Onshore historic and cultural features include numerous historic farmsteads, and the lifeboat memorial.
- Settlement limited to scattered farms. Fields with straight, walled boundaries are superimposed on the rounded drumlin landforms. Tourist infrastructure limited to car parks at Cemlyn Bay.
- A peaceful, tranquil area with little visible development apart from the large power station to the east (SCA 8). Smooth, rolling landform contrasts with the rocky, incised coastline.
- Landscape setting of rounded drumlin fields extends for a considerable distance inland.
- Low-lying coast creates strong visual and physical connection between land and seascape. Seascape includes West Mouse island, views westwards towards the Skerries, and northwards towards the Isle of Man.” [RD7]

5.3.18 Cultural influences and sites of the Amlwch and Cemaes SCA of relevance to the Wylfa Newydd Development Area and surroundings include:

- “Lifeboat memorial erected to commemorate the establishment of the first lifeboat on Anglesey, launched from Cemlyn in 1828.
- Designated Heritage Coast.
- Nature Reserve popular with visitors.
- Evidence of coastal activities supporting farming communities, e.g. former lime kiln and corn mill at Porth-y-pistyll.
- Fishing activity limited to potting and recreational angling in this rocky, high energy SCA.
- Seven rocky pinnacles and reefs dominate the seascape as navigational hazards...
- Despite navigational aids, many ships were lost on the rocks in this SCA...
- Popular recreational dive sites include wrecks of Abbotsford near Wylfa power station...
- Within Anglesey Coast AONB.” [RD7]

5.3.19 Perceptual qualities of the Cemlyn Bay SCA of relevance to the Wylfa Newydd Development Area and surroundings include:

- “A generally open landscape, with little vegetation or sense of enclosure. From some viewpoints, drumlins frame views of the sea. Expansive views northwards towards the Isle of Man have a sense of distance and remoteness.
- A simple landscape of rounded hills, fields and rocky shoreline. Cemlyn Bay beach and lagoon add diversity and interest.

- A variety of forms and textures, including straight walls, smooth rounded hills and jagged coastline. Colours dominated by the grey of the walls and green of the fields.
- Light settlement and few roads create some sense of remoteness, though this is reduced by the presence of Wylfa Power Station (SCA 8) in views. Few factors detract from the tranquillity of the area, although visitor numbers in summer can reduce sense of tranquillity.” [RD7]

5.3.20 Forces for change identified, include the Power Station and related works, and its potential “*impact on the character, views and tranquillity of this SCA.*” Other examples of forces for change include infrastructure and landing sites for marine turbines, changes in agricultural management and coastal processes.

5.3.21 The factors that increase the sensitivity of SCA 9: Cemlyn Bay are described as:

“Unique crescent-shaped shingle beach with lagoon behind and high conservation values.

Open sea views northwards, with the Skerries visible to the north-west.

A crenellated, rocky coastline with low headlands, rocky intertidal areas and pebble beaches.

Within the SCA, settlement limited to a few scattered farms, resulting in an undeveloped character.

Drumlin fields continue inland and create inland backdrop.

Users of Wales Coast Path and visitors to Cemlyn Bay Nature Reserve are sensitive receptors.

Few factors to detract from tranquillity.” [RD7]

5.3.22 The factors that decrease the sensitivity of SCA 9: Cemlyn Bay are described as:

“Large, square shape of Wylfa power station (SCA 8) visible in views eastwards.

Seasonal increases in visitor numbers, and in noise from birds.” [RD7]

SCA 10: Carmel Head to Penrhyn

5.3.23 The Carmel Head to Penrhyn SCA is located to the west of the Wylfa Newydd Development Area, on the north-west coast of Anglesey between the two headlands from which the area takes its name. Intervisibility with the Wylfa Newydd Development Area is generally limited to Carmel Head and the sea to the north-west, encompassing the Skerries. The ZTV on figure D10-1 (Application Reference Number: 6.4.101), however, indicates theoretical intervisibility from offshore areas to the west in this SCA.

5.3.24 The summary description states that:

“Carmel Head has spectacular coastal scenery with islets, cliffs, caves, beaches and wave-cut platforms. A strong tidal race runs between Carmel Head and The Skerries and this is a dangerous coast, with numerous wrecks

offshore. The White Ladies markers which line up with the marker on West Mouse lead the eye to the Coal Rocks... In the north of the SCA, the steep hill and ridge of Mynydd y Garn provides the landward setting... Within the SCA there is a variety of habitats including rocky shores, coastal heath and forestry, with farming inland..." [RD7]

5.3.25 Relevant key characteristics include:

- "Low cliffs with occasional sandy bays and deep wave-cut platforms/reefs. Bathymetry is relatively shallow, and marine energy high-moderate. Other coastal features include caves and natural arch.
- Inland, the land rises gradually away from the coast, with distinctive egg-shaped drumlins forming the horizon when viewed from the sea.
- Carmel Head and the Skerries are the turning point for the coastline of [north]-west Wales. The majority of the SCA is a [west]-facing coast...
- Land uses include agriculture; open grazing on coastal heath, forestry and tourism. Sea uses include trawling, netting and potting.
- Extensive rocky and sandy intertidal habitats. Also rocky cliffs, coastal heath and woodland.
- Onshore historic and cultural features include the chimney and beacons on Carmel Head, and the windmill above [Church Bay] which was a landmark for shipping.
- Offshore historic and cultural features include the Skerries lighthouse, and shipping markers.
- Settlement limited to hamlet at Swtan (Church Bay) and scattered farms...
- A relatively large scale and open landscape and seascape, although headlands provide some sense of containment to bays. Rough texture of rocky shoreline contrasts with the smooth profile of farmland.
- Rugged profile of Mynydd y Garn dominates the landward setting in the north of the SCA. Elsewhere, farming continues inland...
- Seascape setting dominated by the Skerries to the north... Ferries (Holyhead-Dublin) are features to seaward. Isle of Man is visible on the horizon in views north from Carmel Head." [RD7]

5.3.26 The factors that increase the sensitivity of SCA 10: Carmel Head to Penrhyn include:

"Rich diversity of coastal features (caves, arch, wave-cut platforms, etc.) and associated habitats..."

Open views seawards, with views north framed by Carmel Head and the Skerries...

Very little existing built development, within SCA, resulting in undeveloped character...

Mynydd y Garn and drumlin fields create backdrop when viewed from the sea.

Users of Wales Coast Path are sensitive receptors.

SCA seen from sea by ferry passengers etc.

Coastline relatively inaccessible by vehicle, so some sections of coastline have few people and senses of remoteness, wildness and tranquillity." [RD7]

The factors that decrease the sensitivity of SCA 10: Carmel Head to Penrhyn include views "*offshore [that] often contain shipping going to/from Holyhead.*" [RD7]

SCA 11: Holyhead

5.3.27 Holyhead SCA is centred on the town which gives the area its name, on the western coast of Anglesey. There is no intervisibility with the Wylfa Newydd Development Area due to intervening high ground. The ZTV on figure D10-1 (Application Reference Number: 6.4.101), however, indicates theoretical intervisibility from most of this SCA.

5.3.28 The summary description states that:

"This SCA is characterised by its relatively high level of development (in the Holyhead and Valley areas) and the influence of Holyhead Port. It has many centuries of maritime history, the earliest evidence of which is a Roman fort. Today, views of the port are dominated by the long breakwaters, large ships (including the Dublin and Dun Laoghaire ferries), cranes, walkways, and many colours and sizes of smaller craft. It is a settled and busy environment, and at night its coloured lights become apparent... The chimney of the aluminium smelter is a prominent local landmark." [RD7]

5.3.29 Relevant key characteristics include:

- "Landform generally low-lying, and marine areas relatively shallow with extensive intertidal areas and rocky islands. Large areas of intertidal sands in the Traeth Y Gribin area.
- Wave and tidal patterns modified by harbour breakwaters and A5/A55 causeway across the Inland Sea.
- Extensive harbour, port, town and industrial land uses in western part of [SCA]; farmland and estuary in eastern part. Bay used by many different types of shipping.
- Extensive Intertidal habitats around shoreline, including the Aber Alaw estuary.
- Numerous onshore historic and cultural features reflecting the area's long history of transport, defence and trade. The chimney of the aluminium works is a prominent local landmark.
- Offshore historic and cultural features associated with development of the port, harbour and marina, including breakwaters, lighthouses, beacons and other infrastructure.
- A well-settled and developed area with extensive commercial, industrial, residential and leisure development resulting from the importance of Holyhead as a trading and ferry port.

- A complex and busy area, both on land and at sea, visually enclosed by the surrounding headlands and therefore relatively inward-looking...
- Seascape setting strongly influenced by harbour infrastructure (breakwaters, navigation lights etc) and shipping. Skerries visible in the distance on northern horizon.” [RD7]

5.3.30 The factors that increase the sensitivity of SCA 11: Holyhead include:

“Views out to sea from bays framed by surrounding headlands and breakwaters.

Character of historic harbour and associated buildings and transport routes.

SCA often experienced from the sea, as well as from land...

Much of the coastline on the Anglesey side is relatively undeveloped, and with extensive inter-tidal areas, is more tranquil.” [RD7]

5.3.31 The factors that decrease the sensitivity of SCA 11: Holyhead include:

“Presence of existing development and port infrastructure, including breakwaters.

Industrial character of parts of SCA, due to scale of port development and presence of large aluminium smelting works.

Marinas, esplanade, sailing club etc. give parts of the SCA a recreational character.

Views seaward often contain boats of many types and sizes.

Settlements contain developed areas, busy all year round and especially in summer.” [RD7]

SCA 28: North-east of Anglesey

5.3.32 The North-east of Anglesey SCA lies offshore from the north-east of Anglesey. There is limited intervisibility with the Wylfa Newydd Development Area. The ZTV on figure D10-1 (Application Reference Number: 6.4.101), however, indicates theoretical intervisibility from the northern part of this SCA.

5.3.33 The summary description states that:

“The water depth is generally 15 – 50m, and the seabed slopes gently offshore. The SCA is used for commercial fishing including scallop dredging and trawling, and also as a waiting area for large vessels waiting for pilot boats into Liverpool ports. These large vessels are a characteristic feature of this SCA... Moving northwards, the coastline of Anglesey becomes difficult to see...”

5.3.34 Relevant key characteristics include:

- “Depth increases gradually from approximately 15m below chart datum near Conwy Bay to over 50m in the north west.
- Moderately strong tidal currents and wave height, greatest in the west...
- Commercial shipping seen offshore, including large vessels waiting for Liverpool Pilots.

- Large fishing boats target demersal fish and scallops offshore with smaller potting boats seen closer to the coast...
- The landscape view changes considerably throughout the SCA, with rocky headlands, islets and large bays found to the west... Further out to sea the land becomes barely visible but commercial ships are a common sight.” [RD7]

5.3.35 The factors that increase the sensitivity of SCA 28: North-east of Anglesey include the existing “use as a *fishing ground*”, while factors that decrease the sensitivity include views “*to offshore wind farms outside the SCA*” and presence “*of large ships*” within the SCA. [RD7]

SCA 29: North of Anglesey

5.3.36 The North of Anglesey SCA lies offshore from the north of Anglesey. Intervisibility with the Wylfa Newydd Development Area is high due to flat sea surface.

5.3.37 The summary description states that:

“This is a relatively deep sea environment, scoured by the tidal currents which flow parallel to the coast. The majority of the SCA comprises deep water, high energy environment, with coarse sediments on the sea bed...

The SCA is used for commercial and recreational fishing and for commercial shipping lanes offshore. There are many wrecks reflecting its important use as a shipping route. From close to shore, the northern coast of Anglesey is visible as a series of headlands and bays. However, the coast is relatively low-lying and recedes from view fairly quickly. Some higher peaks (e.g. Snowdonia) remain visible on the horizon...” [RD7]

5.3.38 Relevant key characteristics include:

- “...Water depth of 30 – 80m below chart datum...
- A large number of wrecks can be found in this SCA...
- Potting takes place close to the shore with trawling and scallop dredging occurring further out.
- Commercial shipping lanes offshore, recreational boats can be seen close to the shore in the warmer months.
- In the south the SCA boundary comes close to the land with views of the rocky north coast of Anglesey with small bays and inlets...
- The Skerries are a prominent feature to the south-west of this SCA. Further offshore the coastline becomes less distinctive...
- Evidence of both modern and historic industry visible along the coast.” [RD7]

Perceptual qualities noted include views “*of past and present industry [including] Wylfa power station...*” and, amongst forces for change noted, it is suggested that potential “*new industrial development at Wylfa would impact views to the land*” [RD7].

5.3.39 The factors that increase the sensitivity of SCA 29: North of Anglesey include:

“Use as fishing ground

Relatively close to shore, therefore visible in views from coast.”

5.3.40 The factors that decrease the sensitivity of SCA 29: North of Anglesey include:

“Distant views to offshore windfarms to the east of the SCA.

Northern coast of Anglesey relatively low-lying, therefore becomes less prominent in views from sea to land.” [RD7]

SCA 30: North-west of Anglesey

5.3.41 The offshore area north-west of Anglesey is defined as SCA 30: North-west of Anglesey. Intervisibility with the Wylfa Newydd Development Area is high due to flat sea surface.

5.3.42 The summary description describes the area as:

“A deep water environment...

The southern part of the SCA is used as the route for Holyhead-Dublin ferries, and by ships entering the port of Holyhead... The skerries [Skerries] and their lighthouse are prominent features to the east of the SCA, and the Isle of Man is visible on the northern horizon in clear conditions. The lights and breakwaters of Holyhead Harbour are visible to the south-east...”

5.3.43 Relevant key characteristics include:

- “Very strong tidal currents govern much of the natural environment in this SCA.
- Sediment is suspended in the water leaving a substrate of mostly exposed Precambrian rock and boulders with patches of coarse gravel, pebbles and cobbles.
- Sand scouring of the sea bed limits the epifauna present in the more tide swept areas.
- High turbidity due to suspended particulate matter.
- Deep water with an undulating sea bed relief (30 – 100+ m)...
- Many wrecks can be found in this SCA, reflecting its importance and dangers for shipping over centuries...
- The Skerries are a prominent natural feature to the south-east while Holyhead Mountain can be seen to the south...
- The presence of ferries are signs of significant human activity to the south-east of this SCA, while commercial shipping can be seen passing further offshore.
- Fishing is generally limited to longlining and potting on the rocky sea bed.” [RD7]

5.3.44 The factors noted that increase the sensitivity of SCA 30: North-west of Anglesey include “SCA experienced by relatively large numbers of people (ferry passengers).” [RD7]

5.3.45 The factors that decrease the sensitivity of SCA 30: North-west of Anglesey include:

“Much of SCA fairly far out from coast, and therefore less visible from land.

Lights and infrastructure of Holyhead Port.

Numbers of vessels using this area, including Holyhead-Dublin ferries.” [RD7]

6 References

Table 6-1 Summary of References

ID	Reference
RD1	Land Use Consultants. 2015. <i>National Seascape Assessment for Wales: NRW Evidence Report No: 80</i> . Natural Resources Wales. [Online]. [Accessed: 21 February 2017]. Available from: https://www.naturalresources.wales/media/675207/mca-00-technical-report-summary-method-appendix.pdf .
RD2	Land Use Consultants. 2015. <i>Marine Character Areas: MCA 06 North Anglesey Coastal Waters</i> . Natural Resources Wales. [Online]. [Accessed: 21 February 2017] Available from: https://www.naturalresources.wales/media/674484/mca-06-north-anglesey-coastal-waters_final.pdf .
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RD5	Land Use Consultants. 2015. <i>Marine Character Areas: MCA 04 North Wales Open Waters</i> . Natural Resources Wales. [Online]. [Accessed: 17 May 2017] Available from: https://naturalresources.wales/media/674482/mca-04-north-wales-open-waters_final.pdf .
RD6	Briggs, J. and White, S. 2009. <i>Welsh Seascapes and their Sensitivity to Offshore Developments</i> . Countryside Council for Wales. Hard copy available from: NRW Library Maes y Ffynnon, Bangor (barcode 47154).
RD7	Fiona Fyfe Associates with Countryside and SEACAMS (University of Bangor). 2013. <i>Anglesey and Snowdonia Seascape Character Assessment Final Report: Anglesey Seascape Character Assessment</i> . Natural Resources Wales, Snowdonia National Park, the Isle of Anglesey Area of Outstanding Natural Beauty and Isle of Anglesey County Council. Available from: NRW Library Maes y Ffynnon, Bangor (barcode 45891).