

Location and boundaries

This Marine Character Area (MCA) comprises the coastal waters surrounding Cardigan Bay, stretching from Clarach Bay, north of Aberystwyth to Strumble Head in Pembrokeshire.

- The MCA includes all of Strumble Bank and its associated overfalls.
- Its offshore extent is guided by sediment geology and bathymetry; consistent with the adjacent local seascape character assessments.
- The northern extent loops around the Cynfelyn Patches following logical bathymetry lines. This rocky reef is kept with others as distinctive characteristics of MCA 15: Cardigan Bay (North) & Estuaries.
- It includes all of the local Pembrokeshire Seascape Character Areas (SCAs) 1, 2, 3, 4, 5, 6, 7, 8 and 10.

Key Characteristics

NB: This MCA has strong relationships with adjacent MCAs 15 and 17, which cover the adjacent coastal waters to the north and outers waters of Cardigan Bay respectively. Therefore cross-reference should be made to the profiles for these areas to form a complete picture of the character of Cardigan Bay as a whole.

Key Characteristics
Diverse coastline of exposed rugged cliffs and rocky headlands punctuated by small coves, sheltered sandy bays and also a few sinuous estuaries fringed by mudflats.
Gently shelving seabed reaching a maximum of 30 metres, with Holocene-derived sediments providing some evidence for the legendary lost kingdom of Cantref y Gwaelod.
Overfalls and strong tidal streams associated with exposed rocky headlands, with islets and shallow reefs in the west creating further hazards.
High wave climate associated with the coastline from New Quay northwards , facing the full brunt of weather conditions sweeping in from the Atlantic.
Highly designated stretch of coastline and surrounding waters , with valued sandbanks, reefs and sea caves supporting species such as the bottlenose dolphins.
Rich historic seascape with evidence for occupation and defence since prehistory. These include promontory forts on headlands and Norman castles.
Strong history in maritime trade and shipbuilding , including famous herring and minerals export during the 17 th to 19 th centuries.
The last (abortive) invasion of Britain by the French Republican La Legion Noire occurred at Carregwastad Point.
Rich seas long attracting much fishing activity – otter trawling, set netting, handline fishing, scallop and cockle fishing as well as lobster/crab/prawn potting.
Hubs of activity at Aberystwyth and Fishguard , including commercial fishing and leisure craft. Ferries travelling to and from Fishguard link Swansea and Ireland.
Large parts of the coastal waters within the Aberporth military training area . During periods of live firing, an overriding sense of remoteness is broken.
Parts of the sea near Llannon are licensed for oil and gas exploration .
Much coastal and marine recreation , including leisure sailing, beach angling, sea kayaking and use of Celtic longboats, swimming and beach-based activities, as well as dolphin spotting trips.
The Coast Path provides access for walkers along the cliff tops and headlands , affording expansive views out to sea across Cardigan Bay to Snowdonia National Park, Llŷn AONB and Bardsey Island.
Coastal landmarks visible in landward views include Cemaes and Dinas Heads, fronting a backcloth of coastal hills including Mynydd Carningli.
The lighthouse at Strumble Head forms a strong feature both day and night; the beam sweeping across a dark, empty sky.
Strong sense of remoteness and exposure with wind-sculpted trees and a wave-lashed shore.
Picturesque fishing villages are a tourism draw and reinforce a strong historic sense of place. Fishguard Harbour was the setting for 20 th century film adaptations of <i>Under Milk Wood</i> and <i>Moby Dick</i> .

Natural Influences

This MCA covers the southern coastal waters of Cardigan Bay, backed by a varied coastline stretching from Clarach Bay, Ceridigion to Strumble Head in Pembrokeshire. This includes a series of exposed rugged cliffs and rocky headlands punctuating sinuous estuaries with mudflats, small coves and sheltered sandy bays.

The MCA extends to an average of between five and 10 kilometres offshore, comprising a gently shelving seabed reaching a maximum of 30 metres, with patches of deeper water off Strumble Head. The solid mudstone/sandstone seabed is topped by Holocene-derived sand, mud and gravel sediments, including Strumble Bank with associated overfalls. Present understanding of changing sea levels since the beginning of the Holocene confirm the premise of the legend of the *Cantref y Gwaelod* (English: Lowland Hundred), the drowned sunken kingdom. Sea levels have risen some 55 metres and the seabed would have been a large tract of fertile land before inundation began some 12,000 years ago.

Today's waters are highly exposed to conditions sweeping in from the Atlantic via the Irish Sea, creating high wave climate and a sea-pounded coastline. A series of rocky islets and reefs off the Pembrokeshire coastline create further hazards to navigation. Occupying a small off-shore island (Ynys Meicel), Strumble Head Lighthouse was constructed in 1908 for the greater safety of sea traffic between Ireland and Fishguard – 60 vessels were lost in the 19th century alone along this notorious coast. The area's small harbours at Fishguard, Aberaeron and Newport provide shelter to the open sea, along with points along the Teifi estuary/river and traditional anchorages in the lee of the main headlands (e.g. Dinas). Even the harbours can, however, be treacherous in heavy north and westerly weather – particularly Cardigan (where the sea breaks heavily on Poppit Sands) and Newquay. Fishguard has straightforward entry in all weather conditions.



Newport © John Briggs

The coastal geology comprises late Ordovician and early Silurian sandstones, siltstones and mudstones. The world-famous Aberystwyth Grits are superbly exposed in the high coastal cliffs extending south west from Aberystwyth, providing some of the best examples of this rock type. Spectacular trending folds and bands of different colours are also displayed here, including characteristic dark silver/grey rocky shores and strangely shaped

stacks and headlands. Traeth Tan y bwlch forms an impressive eight metre high storm beach that was formerly breached by the Ystwyth, prior to diversion of the river into the harbour during the 18th century. The soft cliffs forming the Ceredigion coastline are fast eroding, including around Llanrhystud and Llannon.

The vertical cliff faces are an important and extensive habitat, supporting cliff crevasse and ledge vegetation, providing a blaze of colour in the spring, set against yellow primrose and purple heath violet within wind-clipped cliff top grasslands. Peregrine falcons breed on the cliff faces, along with a host of other seabirds, whilst the cliff tops are home to chough, whinchat and stonechat. The Teifi meets the sea at Cardigan, part of a wider SSSI and SAC-designated river system. The sand flats, vegetated shingle and saltmarsh create valued habitats for a range of wintering wildfowl. The rich natural assets of this coastline and its surrounding waters are reflected in large swathes being nationally or internationally designated for their nature conservation interest. In addition, most of the coast is defined as Heritage Coast, with the section west of Cardigan also within Pembrokeshire Coast National Park.

The coastal waters support a rich fish and shellfish resource, attracting harbour porpoise and bottlenose dolphin, with seals also frequenting the reefs, sea caves and offshore sandbanks. Covering much of the marine area, the Cardigan Bay SAC is of primary importance for its breeding population of bottlenose dolphins – one of the best places in Europe to spot these charismatic animals in the wild. Shallow bays and sheltered headlands provide important feeding areas for adults and calves. Important populations of sea and river lampreys also underpin the international designation.

Cultural/social influences

This part of Cardigan Bay is steeped in history, with traces of human occupation and activity over thousands of years still traceable in the landscape. The adjacent coastline includes the registered Landscapes of Special Historic Interest of Pen Caer: Garn Fawr and Strumble Head, Lower Teifi Valley and Newport and Carningli.

The area is rich in prehistoric domestic and defensive sites along the coastal edge, such as Dinas Island Castell, Cardigan Island defended enclosure, Castell Bach, Pen Dinas Lochtyn and Gaer Wen – all occupying prominent elevated positions overlooking the bay. The 12th century saw the construction of strategically sited castles along the coast linked to the Norman invasion, including at Cardigan and Aberystwyth.

The medieval period saw the development of the area's potential for coastal trade and exploitation of its natural marine and mineral resources. Fish traps are periodically exposed at low tide as evidence for early exploitation of the rich marine resources, dating from the medieval period onwards. These include nationally important examples south-west of Aberath once owned by 11th century Cistercian abbey at Strata Florida. The area was renowned for its herring industries during the 16th to early 19th centuries. It was said in 1748 that the inhabitants of Fishguard and Newport between them cured a thousand barrels of herring a year, sold at the quayside and for export to Ireland, Liverpool, Bristol and the Mediterranean. During this period the local ports sustained a successful ship-building industry, Abercastle developed as a port for coastal trade across the Atlantic, and Aberystwyth flourished as an export port for locally mined silver and lead.

Locally sourced limestone for agricultural improvement was also traded by sea in the 18th and 19th centuries. Evidence for this activity includes the remains of coastal limekilns, including a group of six close to Llanrhystud. All these industries, however, declined by the end of the 19th century, although their remains are still strong features of the landscape and fishing is still an important economic activity (commercial and recreational).

This includes otter trawling, set netting, handline fishing, scallop and cockle fishing as well as lobster/crab/prawn potting. Visitors to the area enjoy the wealth of seafood available, with iconic fish restaurants in Aberaeron with distinctive facades, as well as an annual fish festival.

Fishguard is a hub of activity, with commercial fishing and leisure craft coming to and fro, as well as ferries to Swansea and Roslare (Ireland), maintaining the long-standing connections between the two countries. The town's ancient Royal Oak pub saw the signing of surrender following the Last Invasion of Britain in 1797 when the invading French were allegedly duped into believing that the scarlet shawls of womenfolk parading on Strumble Head were the uniforms of a defending British army. The whole story is told by the Fishguard Tapestry, which was created for the much-celebrated 200th anniversary as a deliberate echo of the Bayeux Tapestry, and is on display in a hall near the town centre. The area's long-standing role in national defence continues today with use of the MCA by the military as a coastal and marine practice area. The military base and aerodrome sits on a prominent coastal headland above Aberporth, with the firing area covering much of Cardigan Bay (including MCA 14). Parts of the sea near Llannon are also licensed for oil and gas exploration.

Today, tourism is a major contributor to the local economy, building on the popularity of the area which blossomed during Victorian times (including the resort town of Aberystwyth with its large seafront villas). Visitors are drawn to the former fishing villages by the picture-postcard, tight-knit settlements overlooking their harbours, the sandy beaches and by the boat trips to view the well-known dolphins and seals of Cardigan Bay. A range of coastal and marine activities take place particularly during the summer months, including leisure sailing, chartered sightseeing, fishing and diving trips (including to wrecks in the bay), beach angling, sea kayaking and Celtic longboating – the famous *Celtic Challenge* from Arklow, Ireland to Aberystwyth takes place every two years. Aberystwyth Marina provides 160 berths, with further moorings available in the smaller harbours across the coastline. Plans for a major marina development at Fishguard and Goodwick are afoot to support the ever-growing demand for leisure sailing and boating in this area. The wider area's popularity for sailing is long-standing; Abercastle was the landing site of the first single handed Atlantic sailing (west to east) in 1876. Alfred "Centennial" Johnson made the successful crossing from Gloucester, Massachusetts.

Large parts of the coastline are under National Trust ownership, with the Wales Coast Path and Pembrokeshire Coast Path (with Puffin shuttle bus) facilitating walking access around the coastline.

Aesthetic and perceptual qualities

The character of this area is strongly influenced by its vast scale and openness, with high levels of exposure and feelings of being at the mercy of the elements. Wind-sculpted trees form frequent features which illustrate the strength of the gales whipping up from the sea, particularly in westerly conditions. This exposure contrasts with the shelter and safe havens provided by the small ports, harbours, coves and estuary mouths which punctuate the wild and rocky coastline.

The overriding wild and remote qualities of this seascape are diluted during busy summer months when the coastline and sheltered areas of water are alive with tourism-related activities. Tranquillity is also broken intermittently by aircraft movements and weekly missile testing relating to Aberporth military training area, as well as the tall structures, masts and lights associated with the base itself on the prominent coastal headland above Cribach Bay.

Whitewashed and pastel-coloured cottages perched along the coast form characterful features when viewed from the sea and across the sweeping bay. Their historic character and contribution to the sense of place of the traditional fishing settlements is eroded in parts by the formal lines of modern caravans extending up hillsides. This is particularly noticeable at New Quay and Aberporth. Other well-known landmarks include Cemaes and Dinas Heads, fronting a backcloth of conical hills and rocky crags including Mynydd Carningli in the south-west. Strumble Head Lighthouse (within MCA 18) forms a strong day and night-time feature; the beam sweeping across a dark, empty sky.



Fishguard Harbour

Despite the presence of contemporary land uses and activities, the area retains strong links to its rich and varied maritime history. The coast's traditional harbours remain thriving hubs of activity, including supporting centuries-old fishing industries. The picturesque Lower Fishguard Harbour was the setting for the 1971 film version of Dylan Thomas' *Under Milk Wood*, starring Richard Burton, Elizabeth Taylor and Peter O'Toole. It was also the setting for John Huston's 1956 version of *Moby Dick*. The mock-up of the giant whale succumbed to the rough seas off Fishguard, prompting a famous rescue by the local lifeboat 'White Star'.

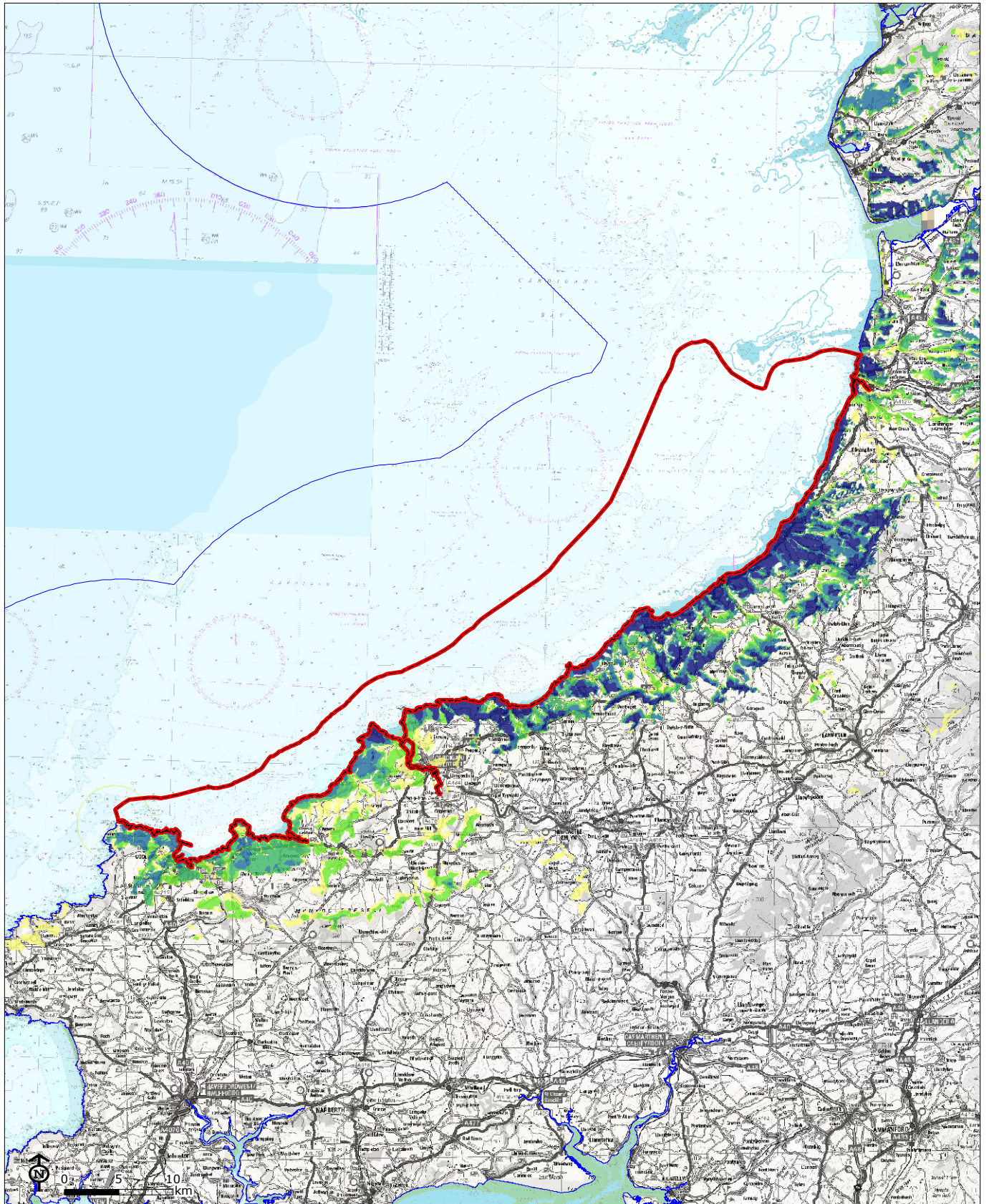
The spectacular coastline has provided the inspiration for other examples art and literature, and continues to do so today. Welsh novelist Allen Raine (pseudonym of Anne Puddicombe) lived in Tresaith in the early 20th century; the detective novels of Malcolm Pryce are set in Aberystwyth; and the recent police detective drama *Y Gwyll* (Hinterland) was filmed along the MCA's coastline.

The open, sweeping nature of the bay affords long-distance views, including to Snowdonia National Park, the Llŷn AONB and Bardsey Island, with particularly strong visual and functional relationships with MCAs 14, 15, 17, 18 and 19.

The Visual Resource Maps (VRM) that follow provide a more detailed spatial representation of the visibility of this MCA from the surrounding land in Wales. Please refer to the technical report for an explanation of how these maps were generated and how they should be interpreted.

The first map shows land with views to this MCA, the darker shading indicating land where from which more of this MCA is visible.

The second map shows sea visible from land, the warmer colours being areas of sea that are visible from more places on land. This comes from a national assessment of Wales so the results do not relate specifically to this MCA, whose boundary is overlaid for location only. The four individual versions show how the results vary depending on how far inland hypothetical viewers are located.



- 16: Cardigan Bay (south)
- Wales Inshore Marine Plan Area

Land with sea views (Percentile)

- < 20 (Lowest)
- 21 - 40
- 41 - 60
- 61 - 80
- 81 - 100 (Highest)



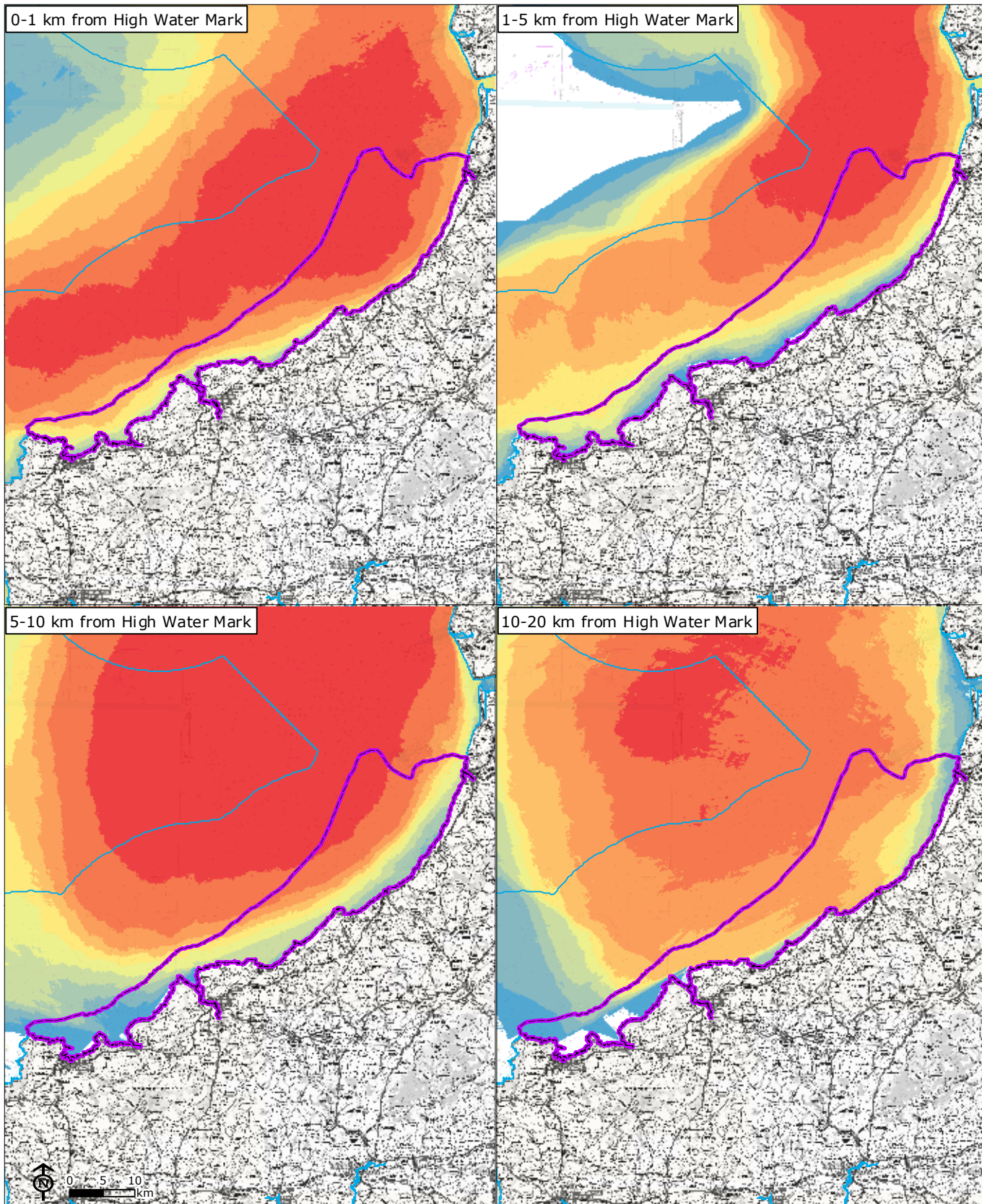
Wales National Seascape Assessment



Land with Views of:
MCA 16: Cardigan Bay (south)

Source: LUC, NRW, OceanWise













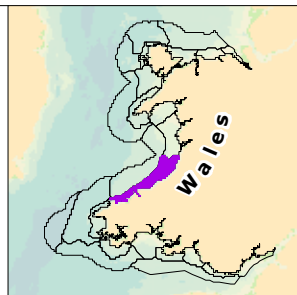
Map Scale @ A4: 1:500,000



-  16: Cardigan Bay (south)
-  Wales Inshore Marine Plan Area

Visibility of sea from land (percentile)

 <10 (Lowest)	 51-60
 11-20	 61-70
 21-30	 71-80
 31-40	 81-90
 41-50	 91-100 (Highest)



Wales National Seascape Assessment

Relative Visibility of the Sea Surface from Viewers on Land
MCA 16: Cardigan Bay (south)



Map Scale @ A4: 1:850,000