

Location and boundaries

This Marine Character Area (MCA) encompasses the waters surrounding the southern coast the Pembrokeshire Peninsula.

- The MCA boundaries are guided by sediment geology and bathymetry, as marked on the Marine Charts.
- All of the MCA is characterised by moderate-low and low wave climate.
- The MCA boundary is largely consistent with the Pembrokeshire local Seascape Character Area 30: Southern Offshore Waters.
- This excludes an area of shallower shoaling seabed in the east, including the Offing Patches, which has been included within adjacent MCA 24 due its relationship with Caldey Island and the island's surrounding waters.

Key Characteristics

Key Characteristics
Large area of sea, 30-100m deep on gravelly sand seabed.
Mudstone and limestone seabed overlain by a veneer of sand and gravel sediment.
Small areas of the Pembrokeshire Marine SAC extend across the northern MCA boundary. The area is protected for its diverse habitats , including rocky reefs.
A small section of the Carmarthen Bay and Estuaries SAC (and wider European Marine Site) covers the MCA in the east – which includes recognition of a diverse seabed .
Relatively calm waters offshore with low wave energy strengthening towards the coastline.
There are numerous wrecks dispersed across the area including the HMS Marjoram, HMS Tormentor and the Ionian SS.
Ferries, commercial vessels and fishing boats use these waters.
Inter-visibility with the southern Pembrokeshire coastline to the north and east , with the MCA itself forming the setting to views from the Pembrokeshire Coast Path along the edge of MCA 22.
The outer open waters forms part of the busy sea route of the Bristol Channel linking south Wales with the English south west coast .
Open sea area with a simple, consistent and unified marine character at a vast scale and a significant sense of openness, remoteness and exposure.
The area's qualities are determined almost entirely by the natural forces of water , through swell and waves, and wind .

Natural Influences

This Marine Character Area comprises the open waters located between approximately 10 and 25 kilometres from the South Pembrokeshire peninsula. It extends west from the outer limits of Carmarthen Bay (MCA 24), just off Caldey Island taking in moderately deep waters and submerged faults across the central part of the area. The western extent of the MCA extends up to the deeper waters of MCA 20: Irish Sea Offshore MCA (20), some 42km from the nearest coastline.

The MCA is characterised by its varied offshore bedrock geology; the majority of the area consists of a variety of mudstone composites. Holocene-derived marine sediments cover the sea floor with a thick band of sand splitting the area into three distinct zones. To the west there is a large area of slightly gravelly sand which defines the northern boundary of the MCA. In the east sediments are more varied with a mixture of muddy sands and slightly gravelly sand.

Water depth is relatively shallow in the east at approximately 30-40 metres, with a shallower area in the east associated with the outer fringes of the Offing Patches shoal (MCA 24). Depth gradually increases as the sea floor slopes east to west, reaching a maximum depth of just under 90 metres on the border with MCA 20. A fragmented submerged fault runs east to west, plunging from approximately 45 metres in depth to the north, to 55 metres to the south.

Very small parts of the inner waters, on the boundary with MCA 22, fall within the wider Pembrokeshire Marine SAC. This site is internationally important for its range of marine habitats (including rocky reefs) and the variety of plant and animal species they support, including grey seals.

Rough sea conditions with high waves are characteristic of the area west of the submerged fault. Generally tidal currents run east and west with relatively low wave climate, apart from at a small area along the boundaries between MCA 22 and MCA 19 where there is a shoaling sea floor. Tidal power and flow is generally low but increases nearer the coast.

Cultural/social influences

Scattered wrecks on the sea floor provide an insight into historic use of these busy waters off the south coast of Wales, including cargo and other trading vessels and wrecks from the two World Wars. The *Sovereign* and the *SS Highgate* both sank in 1890 after colliding, resulting in a loss of eight lives. The *Ionian* struck a mine two miles west from St Govan's Head in 1917 and sunk.

Shipping and the movement of vessels remains important to the character of these open waters and their association with the busy Bristol Channel sea route adjacent to the east (MCA 28). Commercial vessels use the designated shipping channels as they approach the Milford Haven Waterway; the Port of Milford Haven controls this area in the north-eastern corner of the MCA. Other craft including motor and sailing cruisers navigate along the heavily used recreational cruising routes which pass Cadley Island (just to the east in MCA 24), a popular destination for tourists. The MOD firing ranges at Castlemartin and Manorbier extend out into the eastern half of the area.



Container vessel on the horizon

Fishing in the waters closer to the shore comprises of set nets, drift lining, light otter trawling with heavy beam and rockhopper trawling offshore in deeper waters.

There are limited offshore installations with only the presence of submarine cables crossing the southern edge of the MCA running east to west linking Oxwich, Wales and Brean, England with Ireland.

Aesthetic and perceptual qualities

The rugged coastline of Pembrokeshire Coast National Park (backing MCA 22) forms a dramatic backdrop to the eastern half of the MCA – including the outlines of prominent limestone headlands such as St Goran’s Head and Stackpole Head. The structures and associated lights from coastal development, including the tall refinery chimneys and flares at Milford Haven (MCA 21), can diminish an overriding sense of remoteness. These qualities can also be diminished during live firing from the MOD bases at Castlemartin and Manorbier, whilst the sounds and movements of the sea form dominating naturalistic factors for the majority of the time. The southern and western extents of the MCA have limited visibility with the adjacent coastlines; mainly influenced by the movement of large vessels approaching Milford Haven and travelling along the Bristol Channel (MCA 28). When marine transport is absent a pervading sense of isolation, exposure and wildness takes over.

The MCA forms a strong maritime setting to the Pembrokeshire Coast National Park to the north, as well as acting as a distant backdrop to views from Lundy Island and the North Devon coast (including North Devon AONB and Exmoor National Park). Caldey Island Bay creates a characterful seascape feature in the east, marking the entry into Carmarthen Bay (MCA 24). Views to Gower AONB, including the distinctive form of Worm’s Head (MCA 25), also feature in eastward vistas to frame this open marine area.

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.

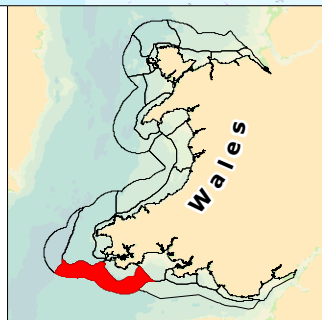
The second map shows sea visible from land, the warmer colours being areas of sea that are visible from more places on land. This comes from a national assessment of Wales so the results do not relate specifically to this MCA, whose boundary is overlaid for location only. The four individual versions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



- 23: South Pembrokeshire Open Waters
- Wales Inshore Marine Plan Area

Land with sea views (Percentile)

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



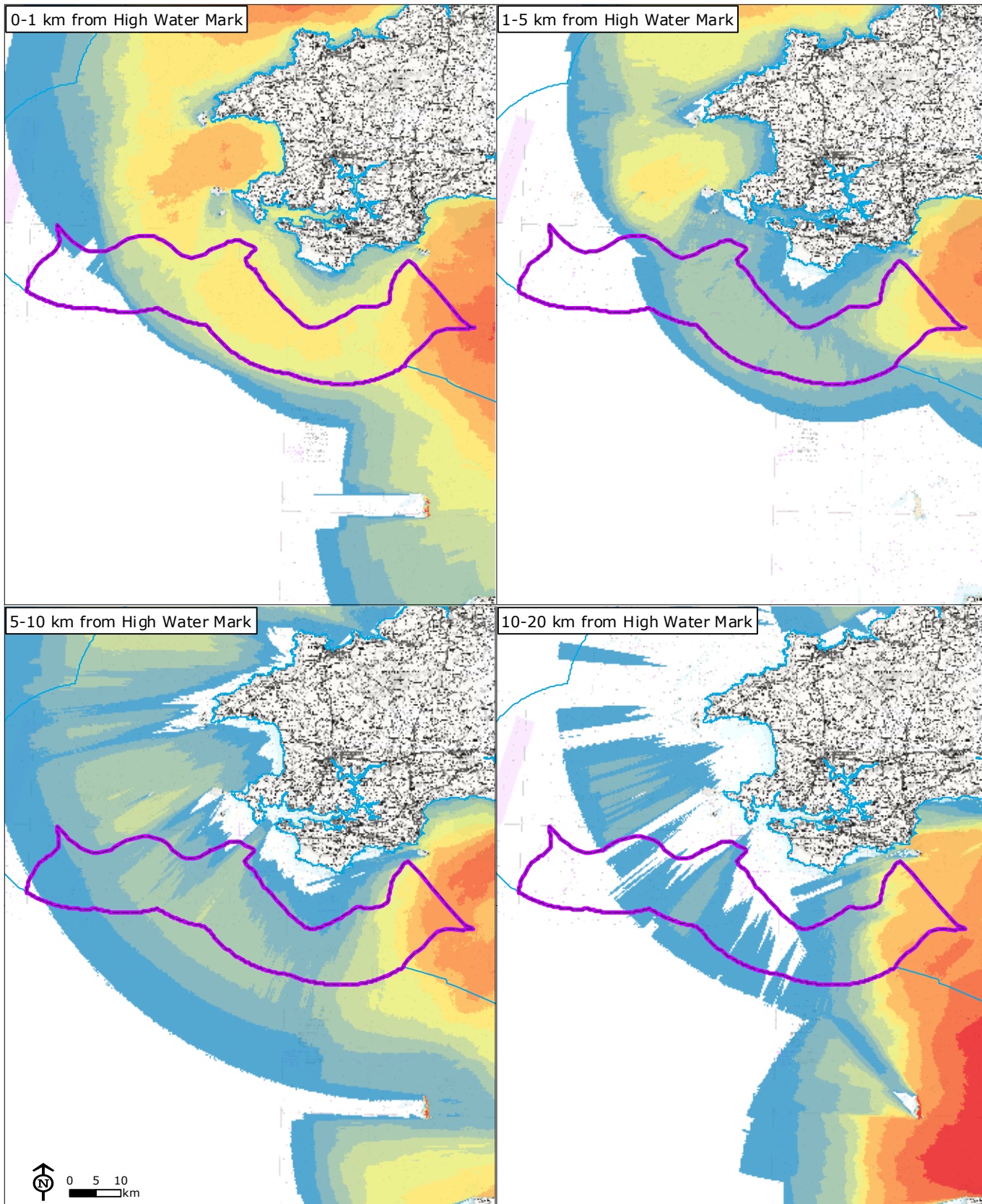
Wales National Seascape Assessment

**Land with Views of:
MCA 23: South Pembrokeshire Open Waters**

Source: LUC, NRW, OceanWise



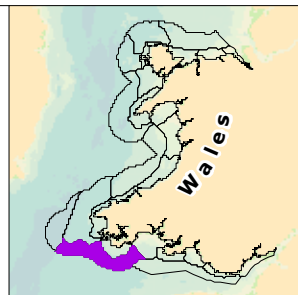
Map Scale @ A4: 1:550,000



- 23: South Pembrokeshire Open Waters
- 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 23: South Pembrokeshire Open Waters



Map Scale @ A4: 1:1,090,000