Location and boundaries

This Marine Character Area (MCA) comprises the coastal waters surrounding the western and southern Gower peninsula, stretching from Burry Holms in the north to The Mumbles in the east (MCA 26).

- Landward boundary extends from Burry Holms tidal island (at the southern estuary mouth of the Loughor) around to Limeslade Bay on the edge of The Mumbles.
- Western offshore extent takes in the majority of the Helwick Channel and includes all of East and West Helwick sandbank, including the associated navigation marks.
- Western offshore boundary partially consistent with the edge of Pembrokeshire local Seascape Character Area 42: Carmarthen Bay.
- Southern boundary with MCA 28: Bristol Channel reflects the transition to the moderate/high wave energy environment associated with the Channel.
### Key Characteristics

<table>
<thead>
<tr>
<th>Key Characteristics</th>
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<tbody>
<tr>
<td><strong>Rugged coastline of cliffs and sandy bays backed by elevated land</strong> at Rhossili Down, Llanmadoc Hill and the prominent Cefn Bryn ridge (180m AOD).</td>
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<tr>
<td><strong>Worms Head forms a thin, strangely profiled peninsula at low tide, becoming an island at high tide.</strong> Combined with the tidal Burry Holmes island to the north, these form dramatic coastal features framing Rhossili Bay.</td>
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<tr>
<td><strong>Coastline displaying cliffs of Carboniferous limestone,</strong> with an inlier of Old Red Sandstone outcropping at Rhossili Bay and southern bays carved into softer shales.</td>
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<tr>
<td><strong>Cliffs traversed by faults and folds, with evidence for past glacial activity</strong> in the form of raised beaches and cliffs. The coastal geomorphology is of national importance.</td>
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<tr>
<td><strong>SAC and SSSI-designated coastline with a range of coastal and maritime habitats,</strong> of particular importance for seabirds and wildfowl. Evidence for prehistoric landscapes in the intertidal zone, including preserved woodland and peat.</td>
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<tr>
<td><strong>Offshore, the seabed comprises a mixture of limestone, mudstone, sandstone and halite overlain by Holocene-derived sands and gravels.</strong></td>
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<tr>
<td><strong>Long, narrow shoal of Helwick Sands extending westwards for over six miles</strong> from Port-Eynon Point – safe passage around this feature is assisted by cardinal buoys.</td>
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<tr>
<td><strong>Strong tidal streams off Worms Head,</strong> combined with the location of Helwick Sands and associated overfalls requires careful navigation, particularly during westerly weather.</td>
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<tr>
<td><strong>Western half of the MCA falls within the Carmarthen Bay &amp; Estuaries European Marine Site,</strong> which recognises the variety of seabed habitats in the area.</td>
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<tr>
<td><strong>Rich marine environment attracting commercial and recreational fishing activity,</strong> including trawling and netting for herring and sprat, squid fishing and whelk potting.</td>
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<tr>
<td><strong>Helwick Sands is licensed for dredging by the aggregates industry,</strong> although dredging does not take place at the current time.</td>
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<tr>
<td><strong>Concentration of wrecks from vessels foundering off the coast,</strong> the area being particularly associated with legends of seafaring, piracy and smuggling.</td>
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<tr>
<td><strong>Internationally important discovery of The Red Lady of Paviland, cliff-top Iron Age promontory forts, Neolithic burial chambers and Bronze Age cairns</strong> provide evidence for a long history of human occupation.</td>
</tr>
<tr>
<td><strong>A popular tourism and recreational destination for a range of activities,</strong> including cliff climbing, wildlife watching, coasteering and walking (via the Wales Coast Path). Significant areas of coastline are under National Trust ownership.</td>
</tr>
<tr>
<td><strong>The exceptional scenic qualities of the coastline led to Gower becoming Britain’s first AONB</strong> in 1956, it is also defined as Heritage Coast.</td>
</tr>
<tr>
<td><strong>The MCA’s iconic coastline gives rise to a number of ‘voted best’ views.</strong> These include wide vistas to Pembrokeshire Coast National Park and across the Bristol Channel (MCA 6) to Exmoor National Park, North Devon AONB and Lundy Island.</td>
</tr>
<tr>
<td><strong>An inspirational seascape,</strong> captured by 19th century landscape painters and in the works of the world-famous local poet, Dylan Thomas.</td>
</tr>
<tr>
<td><strong>A marked change in character between the adjacent developed, urban edge of greater Swansea to the east</strong> (MCA 26), and the more remote, strongly rural and often ‘wild’ qualities of this seascape.</td>
</tr>
</tbody>
</table>
Natural Influences

Gower and Helwick Coastal Waters MCA covers the waters surrounding the Gower peninsula from Burry Holmes tidal island in the north to the edge of The Mumbles in the east. It extends offshore for between six and 10 kilometres (between three and six nautical miles) including the Helwick Channel and Helwick Sands – underwater features which have a significant influence on the character of the marine area in the south west.

The marine area is backed by a rugged AONB and Heritage Coast-designated coastline, rising up to elevated land at Rhossili Down, Llanmadoc Hill and the prominent Cefn Bryn ridge (180m AOD). The cliffs are formed from Carboniferous limestone, with an inlier of Old Red Sandstone outcropping at Rhossili Bay. To the south-west, Worms Head forms a thin, strangely profiled peninsula at low tide, becoming an island at high tide – similar to Burry Holmes tidal island to the north. Rock pools and causeways revealed on an ebbing tide are home to a rich and constantly changing colony of creatures, including lobsters in the deeper waters. Seals and porpoises are also common visitors to the waters surrounding Worms Head.

Views out to the Bristol Channel from the southern Gower coast

The cliffs are traversed by faults and folds, with evidence for past glacial activity in the form of raised beaches and cliffs. Submerged prehistoric landscapes including forest/peat deposits and human footprints are found in the intertidal zone, including at Port Eynon. Much of the south coast is nationally designated for its geomorphological and physiographic interest, as well as its wildlife value. Significant areas are within the wider Limestone Coast of South West Wales SAC, supporting several species-rich plant communities and rare plants, with cliff edges backed by a mosaic of coastal grassland and heath. South facing sandy bays, including Port-Eynon and Oxwich Bays, are carved into softer shales. Oxwich Bay SSSI and NNR is valued for its diverse habitats including sand dunes, saltmarsh, reed bed, open water, semi-natural grasslands and heathland, with the wetlands supporting overwintering wildfowl populations. The coastal cliffs host important seabird nesting sites, and the west of the MCA, including Rhossili Bay, is of international
importance for its overwintering and passage bird populations, particularly for the common scoter (within the wider Carmarthen Bay SPA).

Rhossili Bay

Offshore, the seabed comprises a mixture of limestone, mudstone, sandstone and halite bedrock overlain by Holocene-derived sands and gravels. The diverse geology gives rise to a variety of seabed habitats supporting a range of benthic species (including important fish nursery grounds), of international importance as part of the wider Carmarthen Bay & Estuaries European Marine Site. The variations in sea bed topography and wave exposure also provide challenges to marine navigation. A particular hazard is the narrow shoal of Helwick Sands, which extends westwards for over six miles from Port-Eynon Point. The changing depths and overfalls associated with this feature, combined with the strong tidal streams circulating around Worms Head, create a particularly dangerous area of sea – especially in westerly weather. A former lightship which was used to mark its western extremity is now a static exhibit at Cardiff Bay. Today, the location of the shoal is marked by white flashing cardinal buoys and a fog signal/bell at East Helwick, as well as the Mumbles Head lighthouse to the east. Nevertheless, navigation through the Helwick Pass is not recommended at night (Imray, 2008).

Quickly moving tides can lead to incidences of visitors to the area becoming stranded on Worms Head, when the causeway linking back to Rhossili Head is submerged – cutting off their return route. After being closed for many years, the old coastguard station on Rhossili Head re-opened in 2007 and is run by the National Coastwatch Institute. Funding and volunteer time to run this facility was secured to respond to the very real dangers associated with the popular National Trust-owned section of coastline and its adjacent unpredictable seas.

Cultural/social influences

This is a rich cultural landscape with many layers of archaeological and historical evidence creating a strong sense of time depth. The western and northern coastlines fall within the wider Gower Landscape of Outstanding Historic Interest in Wales. The area includes evidence for human occupation over 30,000 years ago, proven by the discovery of The
Red Lady of Paviland in 1823 – a nearly complete Upper Paleolithic-era human male skeleton dyed in red ochre, discovered in Goat’s Hole Cave. One of the oldest ceremonial burials of a modern human discovered anywhere in Western Europe, excavations also yielded more than 4,000 flints, teeth and bones, seashell necklaces and other ceremonial jewellery. Further analysis of the remains showed that fish made up a significant proportion of the man’s diet. The finds support evidence to reconstruct past environmental conditions – then a vast polar plain, with the Bristol Channel just being a shallow river which meandered through the very rich hunting ground of Paviland.

Nationally important cliff-top Iron Age promontory forts (including prominent examples on both Worm’s Head and Burry Holmes), Neolithic burial chambers and Bronze Age cairns provide further evidence for a long history of human occupation along the coastline. The natural resources of the area – particularly limestone from the cliffs – have been exploited for centuries, with small ports serving cross-channel trade from at least the Middle Ages into the 19th century (today traces of their now redundant infrastructure remain). The 17th century remains of The Salthouse, on the prominent Port-Eynon Point, produced salt from seawater using the most up-to-date technology of the time.

The area is strongly associated with tales and legends of seafaring, smuggling and piracy, not least the infamous activities of the ‘Rhossili Wreckers’ – who lured unsuspecting ships caught in troubled seas to be smashed against the rocks to acquire their valuable cargo.


A concentration of shipping losses are found at Oxwich Point, the entrance to Helwick Passage and at Port Eynon (e.g. the steamship Agnes Jack which was engaged in the Swansea copper trade and ran aground in 1883), on Helwick Sands themselves, and on Rhossili Beach – including the well-known and much photographed wreck of the barque Helvetia driven ashore in 1887 after striking Helwick Sands. One of the earliest recorded wrecks is that of the Shepton Mallet – driven ashore in 1731 on the rocks below Pilton, her cargo detailed as: ‘72 hogshead of sugar, 19 tierces [wine containers], 19 barrels and 81 bagges of cotton and 204 elephants’ teeth’. Much of the cargo was salvaged by locals (National Coastguard Institution, 2015).

Today, a range of activities continue to capitalise on the seascape’s natural assets, the nationally important scenic qualities of the coastal landscape being a particular tourism
Large sections of the coastline are under National Trust ownership and provide open access (e.g. Rhossili Down), with the entire coast circumnavigated by the Wales Coast Path as well as a number of popular bridleways offering access to horse riders and cyclists. The cliffs are popular for climbing, abseiling, coasteering and bird/wildlife watching. The peninsula’s overall popularity as a tourism destination is supported by a number of coastal caravan/camping sites and associated facilities.

The coastal waters of the MCA have long been a fishing hotspot – both commercially and recreationally, including trawling and netting for herring and sprat, squid fishing and whelk potting. Helwick Sands is licensed for dredging by the aggregates industry, although dredging does not take place at the current time following public concerns about the impact of the activity on sand supply to the Gower’s beaches.

**Aesthetic and perceptual qualities**

Gower’s exceptional scenic qualities led to it becoming Britain’s first Area of Outstanding Natural Beauty (AONB) in 1956. Its varied and spectacular coastline is recognised through its further designation as Heritage Coast, and a strong maritime character pervades. A marked change in character between the adjacent developed, urban edge of greater Swansea to the east (MCA 3), and the more remote, strongly rural and often ‘wild’ qualities of that define this largely undeveloped seascape.

The MCA’s iconic, open and elevated coastline gives rise to a number of ‘voted best’ views. These include wide vistas to the South Wales valleys and across the Bristol Channel (MCA 28) to Exmoor National Park, the North Devon AONB and Lundy Island. Panoramas are also afforded westwards across Carmarthen Bay (MCA 24) to Pembrokeshire Coast National Park (MCA 22), and east from Oxwich Point across Swansea Bay, with distant glimpses of development and industry at Port Talbot and Porthcawl (MCA 26).

*‘Three Cliffs Bay, The Gower’ by Alfred Parkman, 1910 (© Crown Estate, 2013)*

The spectacular and varied coastal landscapes have long provided inspiration for artists and writers, including late 19th and early 20th century watercolour painters such as George Haydock Dodgson, Edward Duncan (e.g. ‘Wreckers at work in Rhosilly Bay’, 1890) and Alfred Parkman. Dylan Thomas also drew inspiration from taking walks along the Gower cliffs, “taking my devils for an airing” as he put it. Two of his best loved short stories, ‘Extraordinary Little Cough’ and ‘Who Do You Wish Was With Us?’ are set in Rhossili.
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.
Relative Visibility of the Sea Surface from Viewers on Land

MCA 25: Gower and Helwick Coastal Waters

Visibility of sea from land (percentile)

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