

## Location and boundaries

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

- It is contained in the east by the headland of Point Lynas and to the west by Carmel Head.
- The outer (marine) boundary is guided by bathymetry, reaching a maximum of 34m.
- The transition from a schist seabed to a band of limestone-dominated bedrock also informs the outer marine boundary line.
- The overfalls and rough seas associated with the offshore reefs and rocks – as marked on the marine charts – are included within the MCA.
- The MCA includes the local Anglesey Seascape Character Area 8: Amlwch and Cemaes and most of 9: Cemlyn Bay (seaward of the High Water Mark).

## Key Characteristics

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A <b>rocky, high energy</b> north-facing coastline with <b>extensive wave-cut platforms</b> and <b>deeply incised bays</b> .
Marine processes of long-shore drift creating <b>crescent-shaped shingle beach</b> at Cemlyn Bay - a dynamic landform.
<b>Steeply sloping bathymetry</b> , with deep water of up to 25m coming in close to the shore.
Subtidal substrate of <b>bedrock and boulders</b> with some <b>coarse sediment and sand</b> . Exposed rock colonised by marine species including featherstars and sponges.
A range of wetland habitats associated with the brackish water of the <b>Cemlyn Bay lagoon</b> (designated as SSSI, SPA and SAC for its <b>importance for bird life</b> – especially terns).
Other SSSIs at Hen Borth and Cae Gwyn <b>notable for geological interest</b> and <b>plant life</b> .
<b>Tidal rapids and strong currents</b> visible from land in certain conditions, notably around the rocky reef of Harry Furlong's Rocks and around West Mouse.
Despite navigational aids, many <b>ships have been lost</b> on the offshore rocks, especially around the <b>West Mouse</b> .
<b>Fishing activity</b> 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 <b>modern and historic industry</b> visible along the coast including historic brickworks, disused factories and the dominant form of Wylfa power station.
Until recent years, <b>Amlwch Harbour</b> was used for <b>export of copper ore</b> , as well as supporting industries such as <b>shipbuilding</b> .
Coastal headlands including Point Lynas are popular locations for <b>spotting cetaceans</b> . Coast crossed by the <b>Isle of Anglesey Coast Path</b> and large sections are owned by the National Trust.
Popular <b>recreational dive sites</b> include <b>wrecks</b> of <i>Abbotsford</i> near Wylfa power station, <i>Deo Gratis</i> on the Archdeacon Rock and <i>Edith Owen</i> and <i>Fawn</i> on Coal Rock.
Low-lying coast creates <b>strong visual and physical connection between land and sea</b> . 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 <b>lighthouse on Point Lynas</b> , the <b>offshore islands</b> of West Mouse, Middle Mouse and East Mouse and <b>expansive views</b> including the Skerries and the Isle of Man on the horizon.

## Natural Influences

This MCA encompasses the most northern shoreline of Anglesey and the adjacent coastal waters between Carmel Head and Point Lynas. These waters include the rocky islets of West Mouse, Middle Mouse and East Mouse. Apart from Wylfa Head and Cemaes Bay, all of the coastline lies within the Anglesey AONB and is defined as Heritage Coast.

Seaward sloping layers of schist and volcanic tuff, which have been tilted and contorted, form an interesting and characteristic feature along the coast. Relatively low cliffs, comprising rocky outcrops and occasional caves, are defined by prominent headlands such as Point Lynas, Llanlleiana Head, Wylfa Head and Trwyn Cemlyn. These provide relative shelter to arc-shaped bays and coves including Bull Bay, Porth Wen, Cemaes Bay and Cemlyn Bay. The tops of the cliffs demonstrate a hummocky and irregular landform owing to complex historic earth movements and a legacy of glaciation, with small undulations and rocky protrusions. The SSSI-designated cliffs at Hen Borth reveal the internal structure of a drumlin deposited during the Ice Age, approximately 20,000 years ago. The 400 million year old rocks displayed around Llanbadrig are some of the oldest in southern Britain and are of national importance.



*Shingle beach at Cemlyn Bay*

Cemlyn Bay includes a rare brackish lagoon, separated from the sea by a crescent-shaped shingle beach which is formed by longshore drift – the largest example in Wales. The bay, managed as a Wildlife Trust reserve, is designated an SPA, SAC and SSSI in recognition of its important breeding colony of sandwich terns, the only breeding colony in Wales, as well as other wetland birds. It also supports valued maritime grassland and saltmarsh plant communities, including some rare plant species. Changing sea levels do, however, make this habitat increasingly vulnerable.

The sea bed slopes steeply away from the shore, reaching over 30 metres, with deep water close to the coast as a result of the active erosive processes caused by crashing waves. The sub-tidal substrate of bedrock and boulders includes some coarse sediment and sand. Exposed rock is colonised by animals including featherstars and sponges. Other biodiversity interest includes conger eels found close to West Mouse, and regular sightings of porpoises, seals and dolphins, the cetaceans occasionally venturing into the sheltered

bays of the MCA. This is a high energy marine environment with wave-cut platforms and other coastal erosion features. These include an exposed section of drumlin at Hen Borth, nationally important for geomorphological study.

Harry Furlong's Rocks comprise a jagged rocky reef just awash at low water extending from the western arm of Cemlyn Bay. The tide runs up the Irish Sea to three knots, pivoting around Carmel Head to make a sudden right-angle turn onto the reef. This violent change of direction, over a very uneven surface, adds to the turbulence with tidal races off Carmel Head reaching over six knots at springs. Overfalls when the wind is against the tide can achieve '*a violence of destructive force*'; the area being described as the most serious hazard along this coast (Imray, 2009). Strong, unpredictable tidal streams and overfalls are also associated with a series of other submerged rocks including Coal, Ethel, Archdeacon and Victoria Rocks (in the west) and Lynas Rock in the east, as well as the larger islets of West, Middle and East Mouse. These tidal rapids and strong currents are visible from land in certain conditions.

The offshore hazards are marked by a number of cardinal marks, buoys and flashing navigation lights, the Point Lynas Lighthouse, as well as the distinctive transit marks of the 'White Ladies' on Carmel Head. The Skerries lighthouse in MCA 7 also provides a guide to pilotage through these dangerous waters. The two small coves which comprise Mill Bay provide shelter and safe anchorage for small boats during strong winds, except in northerly weather. The Welsh name for Bull Bay means 'Excellent Shelter' – this bay is another traditional temporary anchorage point along this rough coastline.

## Cultural/social influences

The oldest visible evidence for human occupation along this sparse and wild section of coast is the nationally designated Iron Age hillfort of Dinas Gynfor – sited in a commanding coastal position on Llanlleiana Head (the northerly-most of land in Wales, apart from offshore islets). A legacy of later medieval and post-medieval settlement is visible in the coast's historic harbours and coastal villages with their strong fishing heritage. Today, fishing activity along the rocky coast is mainly potting for crabs, lobsters, prawns and whelks, with recreational angling and charter trips popular. Some hand gathering of periwinkles also takes place along the western section of coast. The strength of the tidal currents along the north coast of Anglesey allow few near shore anchorages, the exception in offshore winds being Henborth and Bull Bay. These traditional anchorages continue to be noted on modern admiralty charts.

Wrecks are common as a legacy of the challenging navigational conditions and use of the sea for maritime trade – linking the ports of Dublin, Holyhead and Liverpool. Some of the wrecks are now popular dive sites, including the *Abbotsford* near Wylfa power station, *Deo Gratis* on the Archdeacon Rock and *Edith Owen* and *Fawn* on Coal Rock.. Wreckage including boilers, iron hull plates and fittings still lie on the seabed, as well as cargoes such as roofing slates. There is also evidence for the remains of a downed military aircraft, known as the *Supermarine Walrus* beneath the waters off Cemlyn Bay. The 18<sup>th</sup> century Grade II Listed Point Lynas lighthouse forms a symbolic historic marker to guide ships through the dangerous seas. Its location was also chosen as a station where ships making for Liverpool could pick up pilots. They originally used a farmhouse as their lookout post; then two oil lamps with metal reflectors were set into a tower sending beams out in two directions. Today's lighthouse was built in 1835; a low castellated structure painted white.

Cemlyn became the first lifeboat station established on Anglesey in 1882, by the '*Anglesey Association for the Preservation of Life from Shipwreck*', an organisation which was taken over by the RNLI in 1885. The lifeboat was transferred to Cemaes in 1872 due to a lack of local crew, but reopened back at Cemlyn in 1887 until closing in 1918. Today the area is

served by the RNLI lifeboat station in Holyhead and the air search and rescue team from RAF Valley.



**'Entrance to Amlwch Harbour, Anglesey' by William Daniell, captured between 1814 and 1825 (© Crown Estate, 2013).**

Amlwch is strongly associated with the renowned copper mining industry of Parys Mountain. With origins in the 17<sup>th</sup> century, the site became the largest copper mine in Wales and Britain. The port at Amlwch was used for export of copper ore, as well as supporting industries such as shipbuilding. Copper was made into copper sheathing for Royal Navy ships venturing into tropical waters to prevent attack by torredo worm, and proved to play an essential part in assisting the establishment of the British Empire. The Amlwch and Parys Mountain Landscape of Outstanding Historic Interest stretches inland from Amlwch, the nationally important industrial workings on Parys Mountain forming a distinctive elevated backdrop to landward views from the sea. Other historic brickworks and disused factories along the coast are left as a legacy for a productive industrial past.

A particularly dominating built feature within the MCA is the Wylfa Nuclear Power Station standing on the prominent Wylfa headland – its location on the coast providing a cooling source for its operation. Wylfa houses two 490 MW nuclear reactors, constructed from 1963 and operational in 1971 – making it the world's oldest operating nuclear power station by date of construction. The current power station is in the process of being decommissioned with the remaining reactor set to close in December 2015. There are plans to develop a new nuclear power station on the site to secure first generation in the early 2020s. Views inland to wind turbines on Anglesey combine with Wylfa to create the impression of the 'Energy Island' – a public/private sector programme aiming to put the area at the forefront of energy research, development, production and servicing. The whole MCA is also licensed for oil and gas exploration.

Today the MCA and its adjacent coastline is a popular destination for tourism and recreation. All of the coastline is linked by the Isle of Anglesey Coast Path and large sections are owned by the National Trust. Wildlife watching from the coastal headlands is popular, including birdwatching and porpoise, seal and dolphin spotting. Bull Bay is home to Trireme Ynys Mon Rowing Club, a sea rowing club associated with the Welsh Sea Rowing Association. Sea kayaking, chartered fishing trips and scuba diving are also popular marine recreation activities. The area hosts a number of annual events, such as Amlwch fishing festival and the Amlwch Viking festival, where longboats re-enact famous battles. Bull Bay Golf Course overlooks the bay from the west. Established in 1913, creator Herbert Fowler designed the course to fit in with the existing landscape, using the

natural features and developing the course within valleys and plateaux to incorporate it into its coastal setting.

## Aesthetic and perceptual qualities

The rocky coast and seascape has a wild quality, particularly in northerly conditions, whilst expansive seaward views towards the Isle of Man create a sense of distance and remoteness. On clear days ships are visible on the horizon within the offshore waters of MCAs 5 and 6, travelling between Dublin and Liverpool. The headland behind Llanbadrig Point includes a wooden bench where the Dalai Lama allegedly sat, declaring it to be *'the most peaceful place on earth'*. The smooth, rolling landform of the Anglesey core contrasts with the rocky, incised coastline which forms the immediate backdrop to this MCA. Its low-lying nature creates strong visual and physical connections between land and sea.

The perceived character of this MCA is constantly changing, as a result of seasons, weather and activities. Stormy conditions see winds lash the open coast and waves pound the low rocky cliffs. The rough seas around the offshore rocks and islets, particularly the notorious Harry Furlong's reef, produce much white water and turbulent currents. This sense of real danger and isolation stands in contrast to the relative peacefulness and refuge provided by the more sheltered bays. The historic Point Lynas lighthouse and views to the Skerries Lighthouse (MCA 7) serve as permanent historical reminders of the difficult navigational conditions that have challenged mariners travelling through these seas for centuries. The offshore rocks and three Mouse islands feature in views from the coast out to sea, conversely framing landward views to enhance the AONB's maritime setting.

A pervading sense of remoteness and tranquillity is interrupted dramatically by the imposing bulk of Wylfa Power Station. This stark development stands box-like as a major built feature in a coastline largely devoid of modern influence; a prominent feature in views from both coast and sea. Associated lighting at night means it is an ever present large scale structure in a seascape known for its wild and naturalistic qualities.

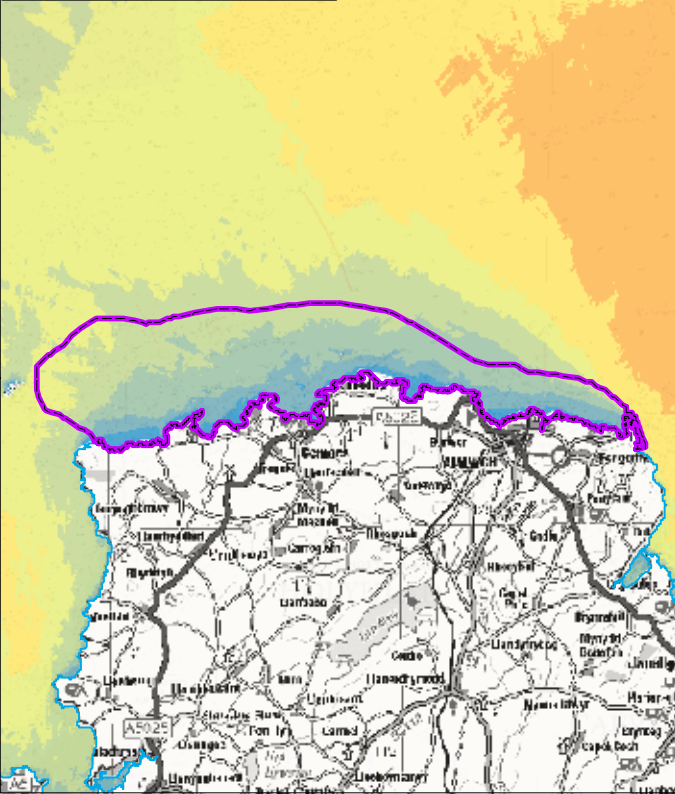
*The Visual Resource Maps (VRM) that follow provide a more detailed spatial representation of the visibility of this MCA from the surrounding land in Wales. Please refer to the technical report for an explanation of how these maps were generated and how they should be interpreted.*

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

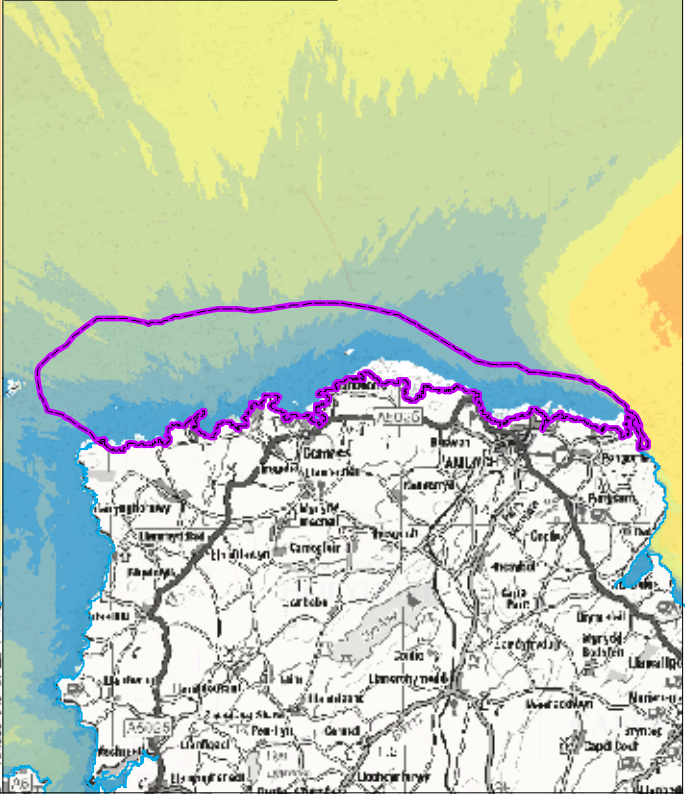
*The second map shows sea visible from land, the warmer colours being areas of sea that are visible from more places on land. This comes from a national assessment of Wales so the results do not relate specifically to this MCA, whose boundary is overlaid for location only. The four individual versions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



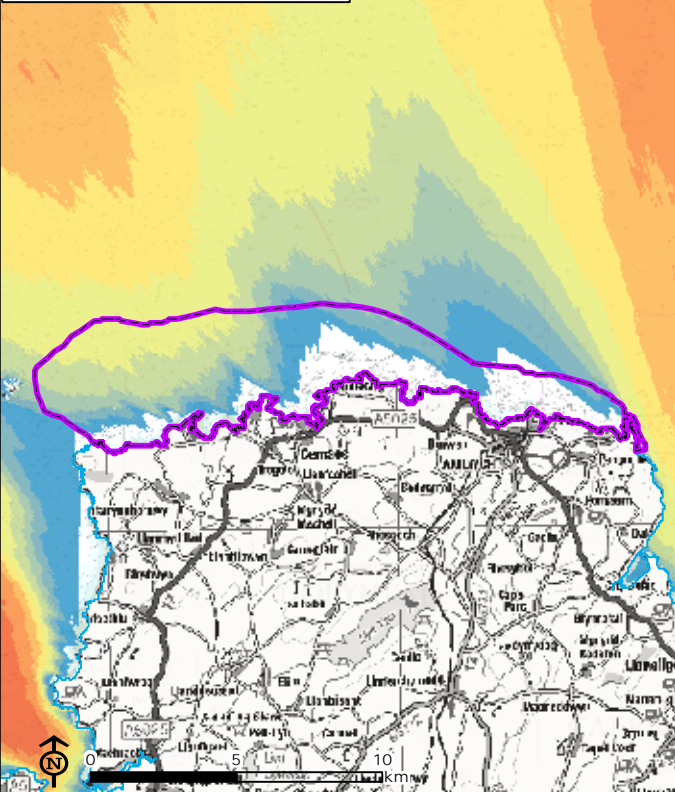
0-1 km from High Water Mark



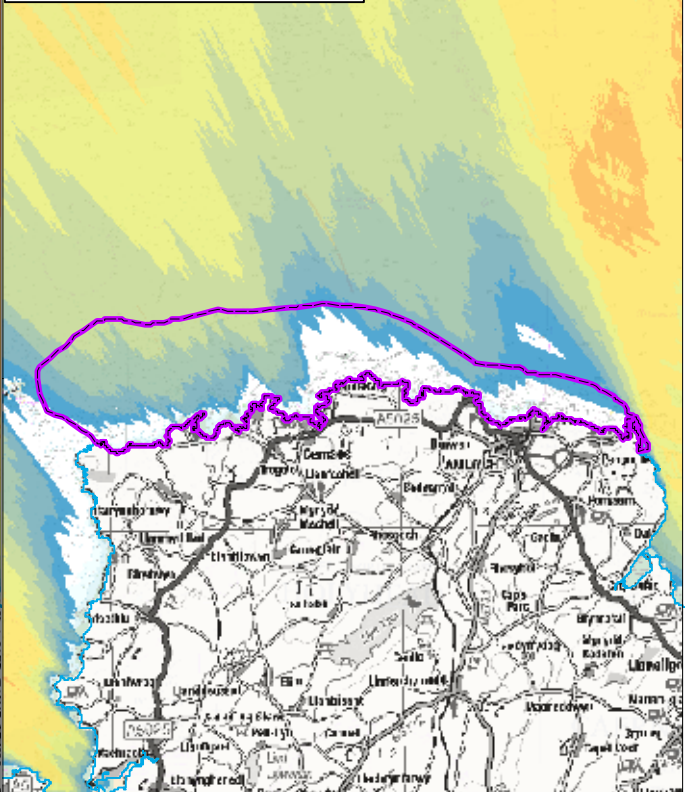
1-5 km from High Water Mark



5-10 km from High Water Mark



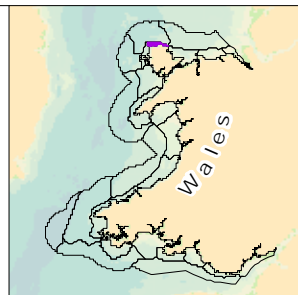
10-20 km from High Water Mark



- 06: North Anglesey Coastal 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 06: North Anglesey Coastal Waters



Map Scale @ A4: 1:260,000

CB: EB: Goosen\_V LUC/LON 6262-00\_022\_VRM\_Maps\_DDP\_Sea\_Visibility\_ 27/05/2015