

Location and boundaries

This MCA encompasses the waters surrounding the north, west and southern coastline of the Llŷn Peninsula.

- Boundary lines in the south informed by sediment geology and marine charts, indicating areas of rougher water (and shallows) associated with Devil's Ridge, Bastram's Shoal, Caswenan Rock and Bardsey Island.
- This area also coincides with moderate to high-energy wave climate, as opposed to surrounding areas of low energy.
- The distinctive break in bedrock geology along the western and northern peninsula (from mudstone-dominated to slate and siltstone) is used to inform the offshore extent of the SCA, in conjunction with bathymetry. The MCA meets the coastline in the east to be consistent with National Landscape Character Area 4: Llŷn.

Key Characteristics

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A varied AONB-designated coastline of pebble beaches, sandy bays, rugged cliffs and rocky headlands.
Conical, volcanic mountain peaks plummet to the sea along the north coast , including Yr Eifl (564m), Moel-pen-llechog (297m) and Gyrn Goch (492m) near Trefor.
The distinctive wedge-shaped Bardsey Island is located three kilometres from the mainland. The coastline is dotted by other smaller rocky islands and islets.
Sandbanks including Devil's Ridge and Bastram Shoal are associated with shallows and overfalls. Bardsey Sound experiences some of the strongest tidal races in the Irish Sea.
The unusual square Bardsey Island lighthouse , with red and white stripes (1821), guides ships through the dangerous waters.
Majority within the Lleyn Peninsula and the Sarnau SAC , recognised for its reefs and populations of dolphins and seals. The Seacliffs of Lleyn SAC and SPA -designated cliffs are important for seabirds, including chough. The rich wildlife is a draw for visitors.
Rich diversity of archaeological features dating back to the Mesolithic. The whole coastline is included on the Register of Outstanding Historic Landscapes in Wales.
Cultural significance of 'island life' on Bardsey. It was a site of pilgrimage in early medieval times, and is still sustained by lobster potting and traditional methods of farming.
Several wrecks found on the coast of the Peninsula and Bardsey Island, including the <i>Hope</i> , a transatlantic slave trader wrecked on Bardsey in 1787 whilst outward bound to Africa.
The waters in this MCA are mainly used for fishing for shellfish, scuba diving, surfing and angling . Paragliders can also be seen circling on the thermals.
It a notable area for cetacean and bird watching , with a dedicated observatory located on Bardsey Island .
Parts of the area are licenced for oil and gas exploitation , and the southern edges fall within the wider Aberporth military practice area , including an offshore firing range.
The Wales Coast Path follows the edge of the Peninsula, with pockets of common land also offering access opportunities. Many parts are under National Trust ownership .
Strong cultural and historic sense of place , including the strength and dominance of Welsh language traditions.
MCA forms an immediate backdrop to the Llŷn AONB , as well as intervisibility with Anglesey AONB to the north, Snowdonia National Park to the east and the Preseli Hills of Pembrokeshire Coast National Park beyond Cardigan Bay to the south.
The changing colours, light conditions and scenic beauty of the area provide a source of inspiration to many.
Caravan and camping sites on hill slopes, sometimes glimpsed in landward views, are the main signs of modern development and the seascape's strong tourism economy.

Natural Influences

This MCA encompasses the waters surrounding the north, west and southern coastline of the Llŷn Peninsula – stretching from just north of Aberdesach to the headland of Trwyn Cilan. The peninsula itself extends 48 kilometres out from the Welsh mainland in a south westerly direction, displaying a plateau formation with numerous flat-topped hills and conical mountains of volcanic origin. The coastline is varied, with rugged cliffs and wide sandy bays, including Hell’s Mouth, which is named as the south westerly aspect with little shelter results in ‘hellish’ conditions for sailors. There are numerous islands within the waters of this area, most notably Bardsey Island and the twin islands of Ynys Gwylan Fawr and Ynys Gwylan Bach. All of the adjacent coastline and islands are defined as Heritage Coast, and the vast majority falls within the Llŷn AONB. Significant stretches of the coast are at least SSSI-designated on merit of their nationally important geology and nature conservation importance.

Offshore, strong wave action to the south results in the formation of shoals, sandbanks and deeps, many of which represent navigational hazards. These include the aptly named Devil’s Ridge and Ship Ledge, as well as The Tripods, Caswenan Rock and Bastram Shoal. These features are composed of coarse sediments, with shallows varying dramatically from 30 metres to six metres in depth. Strong tidal streams and overfalls are associated with the various shoals and jutting headland of the peninsula, fully exposed to dominant south-westerly Atlantic swell. Some of the strongest tidal races in the Irish Sea are found in Bardsey Sound, where streams can run up to nine knots – heavy seas and breaking waves are characteristic when the wind direction opposes the tide. The unusual square Bardsey Island lighthouse, with red and white stripes, was constructed in 1821 to guide to vessels in passage through St George’s Channel and the Irish Sea. Its light has a range of 26 nautical miles. The sheltered bays at Aberdaron and Poth Neigwl are traditional anchorage areas offering a modicum of shelter in bad weather.



Bardsey Island

Conversely, the north coast generally experiences less exposed conditions due to the shelter afforded by the elevated land and mountains of the peninsula, rising to a maximum of 564 metres AOD at Yr Eifl. The immediate coastal waters include some sand banks and small rocky islets, but generally the seabed gently shelves to between 20 and 30

metres, with deeper water found in the west. The complex seabed geology reflects that displayed across the peninsula, but generally consists of volcanic mudstone, siltstone and slate bedrock overlain by sandy and gravelly marine sediments. An exception is the area to the south west of the headland at Braich y Pwll, which is devoid of sediment as a result of the high wave action and strong currents experienced in this area.

The majority of the marine and intertidal areas fall within the Lleyn Peninsula and the Sarnau SAC. This European site is of primary importance for its breeding population of bottlenose dolphins – the area's shallow bays and sheltered headlands providing important feeding areas for adults and calves. Grey seals also frequent the reefs, sandbanks and use the shingle and rock 'beaches' at the back of some sea caves as haul-out and pupping areas. Barsey Island is also a popular haul-out site for the seals. Significant sections of the coast also fall within the Seacliffs of Lleyn SAC, the vegetated sea cliffs supporting some of the best remaining examples of coastal and maritime heaths and grasslands on the peninsula. The cliffs in the south-east of the MCA are internationally designated for the vital foraging habitats they provide for the resident populations of chough. Bardsey Island (SSSI, SPA, SAC and NNR) is also of international importance for its breeding seabird colonies, and peregrine falcons are spotted along the cliffs from Aberdaron and Mynydd Mawr.

The ecology of the MCA's reef systems varies according to water depth. Intertidal reefs include specialised communities developing in rock pools, under boulders and within surge gullies (e.g. limpets, hermit crabs and gobies); there are also species-rich examples of nationally important kelp and brown seaweed-dominated communities. Shallow water reefs are dominated by dense kelp communities with an extensive and luxuriant turf of red seaweed species growing amongst and below the kelp. The boulder and cobble reefs off the south coast are characterised by different communities again, including sugar kelp and other brown seaweeds amongst a varied turf of red seaweeds and invertebrate animal species. A wide variety of marine fauna and flora dominate the deeper reefs further offshore, such as sponges, soft corals, sea anemones, sea firs (hydroids), sea mats (bryozoans), sea squirts and associated mobile species.

Cultural/social influences

Llŷn's landscape exhibits a rich diversity of archaeological features ranging from Mesolithic settlements and hunting sites, Neolithic chambered tombs to Bronze Age farmsteads, funerary and ritual sites, Iron Age hill forts and World War II signal stations. The area's proximity to Ireland may have played a formative role in the early settlement of the peninsula. Traditionally this area has been, and remains, a last embattled bastion of Welsh identity and tradition, remote from centres of authority, though well situated on the Celtic seaway between Britain and Ireland. The MCA's entire adjacent coastline falls within the Lleyn and Bardsey Island Landscape of Outstanding Historic Interest owing to its nationally important layers of archaeology and cultural heritage.

Bardsey Island (Ynis Enlli – 'The Island in the Currents') is steeped in legend and documented history. In 1284 the island was visited by Edward I during a journey to celebrate his victory over the Welsh. It is perhaps most strongly associated with the 6th century monastery founded by Tywyn-based St Cadfan; by the 12th century had reputation for sanctity as the burial place for '20,000 saints' – then taken over by Augustinian canons and still attracting pilgrims to this day. In the medieval period three pilgrimages to Bardsey were considered to be of equivalent benefit to the soul as one to Rome. Only the nationally important ruins of the Abbey of St. Mary remain, but the sacredness of the island has given it a special place in the cultural life of Wales. Today, visitors can experience its spirituality by catching a ferry from Aberdaron. An observatory on the island also allows visitors to

enjoy watching the resident seabird and seal colonies, as well as views to dolphins and porpoises swimming through the surrounding seas.

The waters of the MCA include a number of documented wreck sites which reflect both the dangerous seas, and historic trade to/from Ireland and Liverpool – including by larger vessels using Bardsey as a waymarker. These include, the *Hope*, a transatlantic slave trader wrecked on Bardsey in 1787 whilst outward bound to Africa. The *Ilesha* was also stranded on Bardsey Island in 1915 on a voyage from Liverpool to West Africa.

Today the waters are used for a range of commercial and recreational activities, with the rich waters attracting much traditional fishing activity (including lobster, whelk, prawn and crab potting and set netting) as well as chartered angling trips. The small harbours and landing places along the north coast were thriving fishing communities in centuries past, many specialising in herring. Nefyn was a centre for fishing in the 18th and 19th centuries, with the town's coat of arms bearing three herrings. On the south coast the former fishing village of Aberdaron expanded in the 18th and 19th centuries as a shipbuilding centre and port. Locally mined limestone, lead, jasper and manganese were exported, the ruins of an old pier still visible running out to sea at Porth Simdde.

Parts of the area are also licenced for oil and gas exploitation, and the southern edges fall within the wider Aberporth military practice area, including its offshore firing range. A number of submarine cables and pipelines make landfall at Aber Geirch.

Today tourism and recreation (coastal and marine) are the major drivers of the local economy. Hell's Mouth is a very popular surfing destination and paragliders are frequent features swirling on the thermals above the coast (including the elevated land of Bardsey Island). Scuba diving trips within the waters are also popular, with sub aqua clubs based locally. The Wales Coast Path circumnavigates the peninsula, frequently traversing elevated land with outstanding views out to sea. Pockets of coastal common land and significant swathes under National Trust ownership, including Bardsey Island itself, provide further opportunities for access and enjoyment along this spectacular coastline.

Aesthetic and perceptual qualities

Llŷn's long sense of separation even from the rest of Wales and its remoteness from centres of authority is reflected in its strong cultural and historic sense of place, including the strength and dominance of Welsh language traditions. Reinforcing the cultural sense of remoteness are the natural and physical influences that strongly shape character. Perceptions of a remote and wild seascape are heightened when full exposure to Atlantic swells takes place – with white tipped jagged seas and crashing waves engendering a sense of forboding and danger. The prominent lighthouse on Bardsey Island with its long beam of light creates a strong day and night-time symbol of both maritime heritage and the notoriety of the surrounding seas and coast.

The colours of the natural vegetation sloping dramatically up from the sea create a strong visual impression from a palette that varies according to the season. Some of Llŷn's most memorable characteristics include the purple of the heather on the hills and golden/bronzes of the gorse and bracken on the steep slopes, contrasting with the lush green pastures and blues of the surrounding seas. The white washed vernacular of traditional cottages and farmsteads stand out in views from the sea and along the coast as focal points in an isolated landscape. Caravan and camping sites on hill slopes, as well as coastal golf courses sometimes glimpsed in landward views, are the main signs of modern activity and the seascape's strong tourism economy. Movement and colour within the landscape dramatically changes again with the seasons; the landscape and surrounding seas welcoming an influx of visitors in holiday periods.

One of the main unifying characteristics of the area is its panoramic marine and coastal setting, particularly the spectacular backdrop formed by some of Wales' most iconic landscapes. The MCA is framed by the other-worldly volcanic peaks of the Llŷn AONB

itself, as well as views north towards the Anglesey AONB, east to the mountains of Snowdonia National Park and south across Cardigan Bay to the Preseli Hills of Pembrokeshire Coast National Park. In clear conditions, further visual unity is provided in distant views to the Wicklow Hills in Ireland – including from the old coastguard hut on Mynydd Mawr. The marine area itself provides a strong nautical and maritime setting to the coastline, contributing to the special qualities of the designated landscapes.

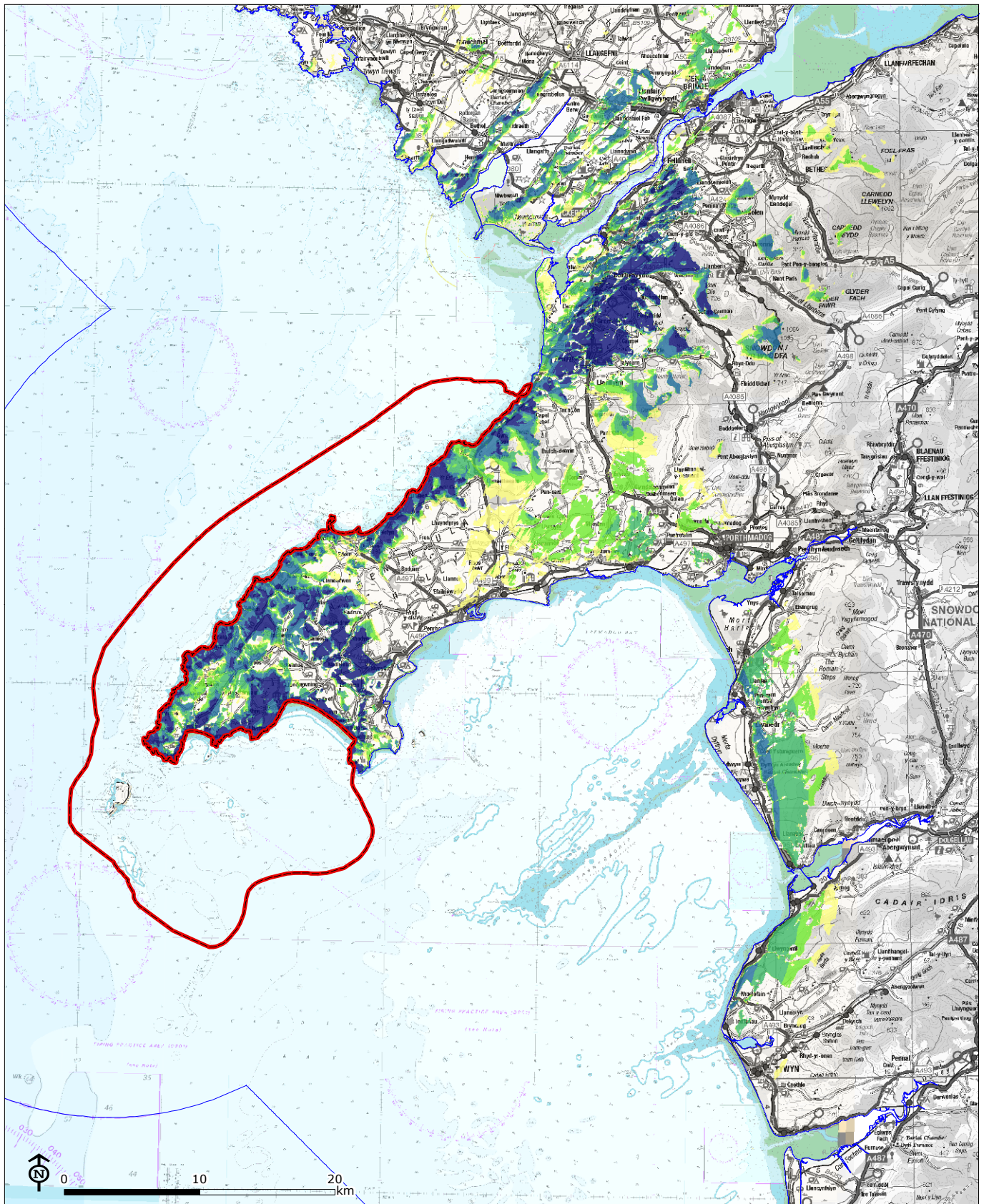
The changing colours, light conditions and scenic beauty of the area provide a source of inspiration to many. The mid-20th century artist Brenda Chamberlain celebrated the unique environment and culture of Bardsey Island in her account of life on the island, *Tide Race*. The now-classic book is vividly illustrated by the artist's own line drawings.

The MCA's overriding sense of exposure and wildness can be broken intermittently by the sounds of fighter jets thundering overhead to and from RAF Valley in Anglesey.

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.

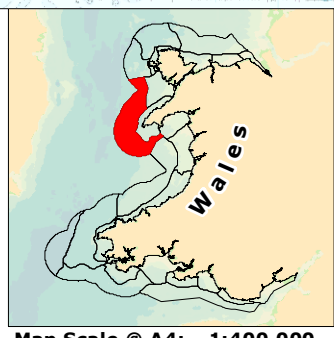
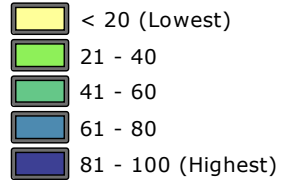
The first map shows land with views to this MCA, the darker shading indicating land where from which more of this MCA is visible.

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.



- 13: Llŷn and Bardsey Island
- Wales Inshore Marine Plan Area

Land with sea views (Percentile)



Wales National Seascape Assessment

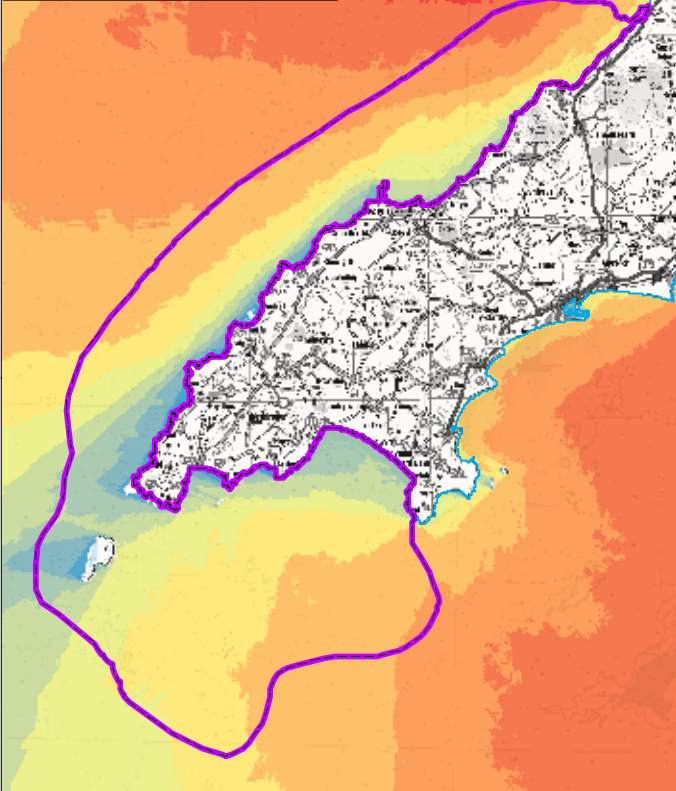
**Land with Views of:
MCA 13: Llŷn and Bardsey Island**

Source: LUC, NRW, OceanWise

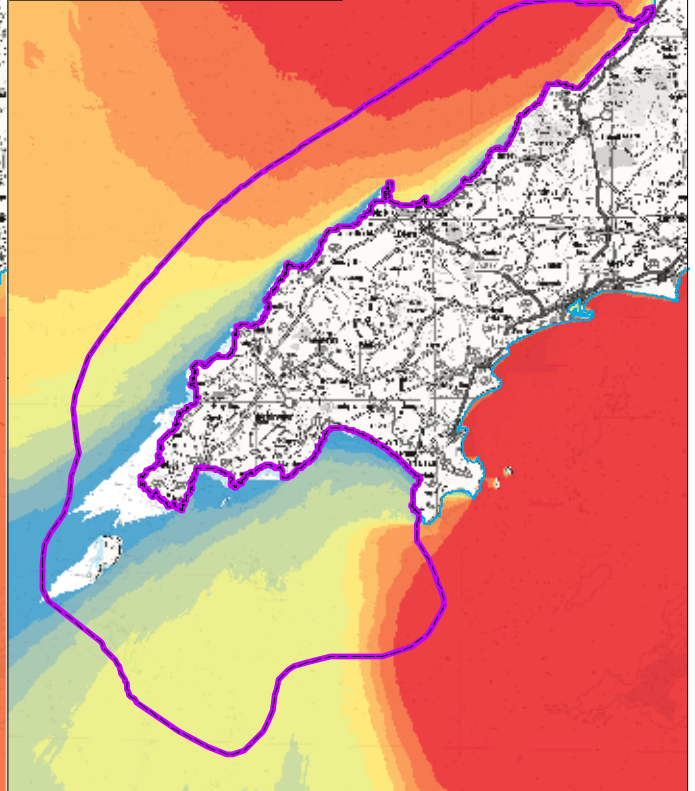


Map Scale @ A4: 1:400,000

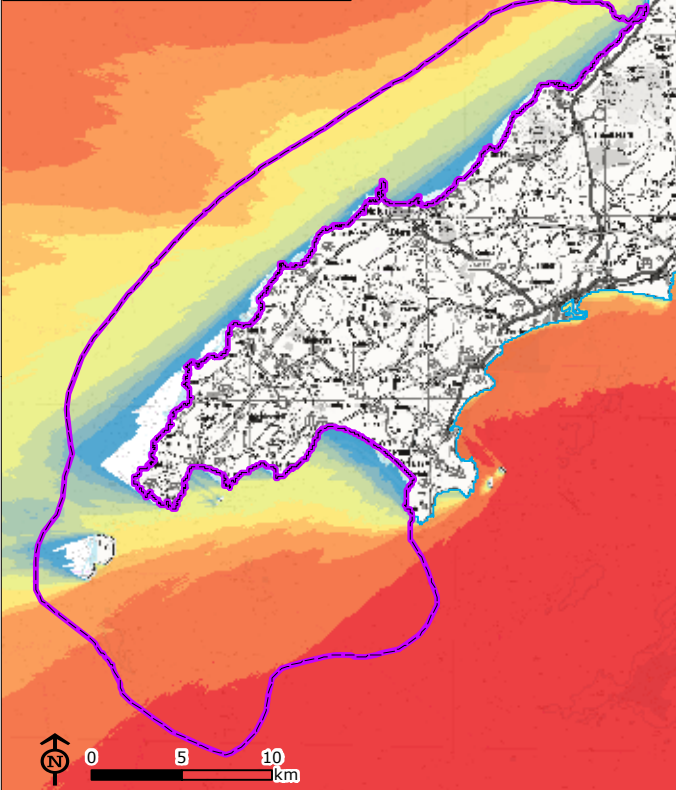
0-1 km from High Water Mark



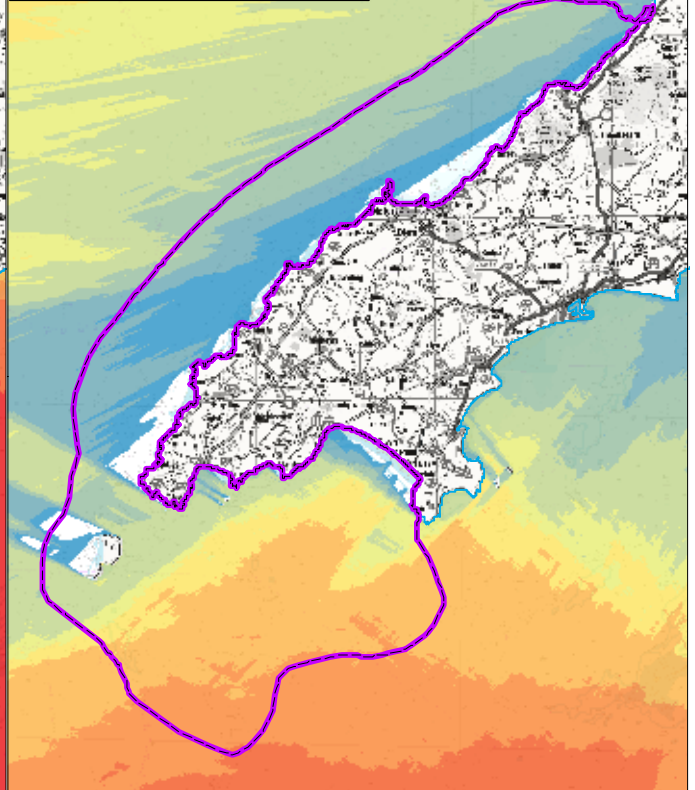
1-5 km from High Water Mark





5-10 km from High Water Mark












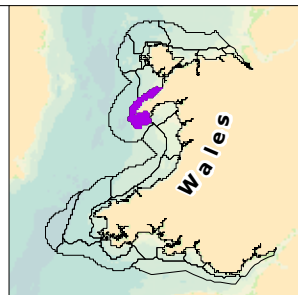
10-20 km from High Water Mark



-  13: Llŷn and Bardsey Island
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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 13: Llŷn and Bardsey Island



Map Scale @ A4: 1:420,000