

Location and boundaries

This Marine Character Area (MCA) covers the outer inshore waters of North Wales, coinciding broadly with the coastline stretching from the outer fringes of the Dee Estuary in the east to north-west Anglesey in the west.

- The outer MCA boundaries follow the Wales Inshore Waters (12 nautical mile) limit.
- The eastern boundary ends at the boundary with English waters, although the MCA is intersected by part of a draft MCA identified for the North West Marine Plan Area in England, as shown on the map above (this relates to the Douglas Oil Field).
- It includes all of Gwynt-y-Môr and North Hoyle offshore wind farms, which dominate character in the east.
- It is characterised by open waters from 10 to 26 metres bathymetry.
- The southern MCA boundary runs to the north of Constable Bank. This marks the transition to the shallows and sand banks that characterise MCA 02.
- The MCA includes the majority of local Anglesey Seascape Character Area 28: North-East of Anglesey.

Key Characteristics

Please note that the MCA is intersected by a draft MCA extending into its Welsh extent from English Waters under the jurisdiction of the Marine Management Organisation. This small area is shown on the map above, and relates to the Douglas Oil Field.

Key Characteristics
An offshore MCA where depth increases gradually from approximately 15m below chart datum near Conwy Bay to over 60m in the north west.
A thin layer of mostly coarse quaternary sediments overlying Carboniferous and Triassic sedimentary bedrock . Finer sand is found in the south east of the MCA.
Includes a significant proportion within the Liverpool Bay SPA and Menai Strait and Conwy Bay SAC .
A rich variety of life on the sea bed and high levels of phytoplankton in the water provides important feeding grounds for sea birds , particularly in the south east. Marine mammals including bottlenose dolphin and grey seal can be sighted.
Moderately strong east-west tidal currents . The strongest currents are found in the south west.
A number of wrecks can be found in the MCA, including collisions owing to busy approaches to the Mersey, wartime losses, and losses from mine-laying activity.
Dominant maritime character is one of transit : recreational vessels entering or leaving the Menai Strait/Conwy Bay, or commercial vessels passing east and west to and from the Mersey and Dee.
Includes the former Mersey Docks and Harbour Board's spoil dumping ground in the northeast corner.
Large fishing boats target demersal fish and scallops offshore with smaller potting boats seen closer to the coast.
Gwynt y Môr offshore wind farm dominates the east of the MCA, and to the north – access is restricted around the Douglas Oil Field (marked by a series of lit buoys and shipping lanes depicted on marine charts).
Commercial shipping seen offshore, including large vessels waiting for Liverpool Pilots to guide them safely into port.
Recreational boats are a feature particularly in the south east of the MCA during the warmer months.
Several wrecks are visited by recreational divers and diving clubs , including the <i>HMS Derbent</i> , <i>Cartagena</i> , <i>Kincorth</i> , <i>Delfina</i> , <i>Cork</i> and <i>Vigsnes</i> . The wreck of the <i>Resurgam</i> is a designated wreck .
The landward view changes considerably throughout the MCA, with rocky headlands, islets and large bays found to the west and the large shallow opening of Conwy Bay to the east, with a backdrop of the mountains of Snowdonia .

Natural Influences

This Marine Character Area (MCA) covers the outer inshore waters of North Wales, coinciding broadly with the coastline stretching from the outer fringes of the Dee Estuary in the east to north-west Anglesey in the west. The depth of the water increases gradually from 10 metres on the fringes of Constable Bank (MCA 02) to around 65 metres in the north-west of the MCA. The seabed consists of a thin layer of mostly coarse sand and gravel Holocene-derived sediments overlying Carboniferous and Triassic sedimentary bedrock. Finer sand and muddier sediment is found in the south east of the MCA where the area begins to transition to the Dee Estuary (MCA 01). The sediments are generally mobile, and form hummocky mounds on the sea floor as a result of wave action.

Part of the Liverpool Bay SPA is found in this MCA, designated its internationally important populations of seaduck, red-throated diver and common scoter which spend the winter here and feed on fish and molluscs living in the sediments on the sea floor. A small area of the Menai Strait and Conwy Bay SAC is also found in the south of the MCA, important for its marine habitats including reefs and sandbanks.

The area provides valued feeding and nursery grounds for numerous species of commercially exploited fish, and is a spawning area for whiting, plaice and Dover sole. It is also a nursery ground for herring. Additionally, cetaceans and grey seals have been sighted in these waters, attracted to the area by the abundant phytoplankton which occur as a result of the high levels of chlorophyll, three times higher than those found in the Irish Sea.

There is a maximum tidal range of five to six metres, with the higher range to the east. Moderately strong east-west tidal currents occur in this MCA, with strongest currents found in the south west, influenced by the proximity of the Anglesey coast. In the shallower parts of the MCA to the south, sea conditions can change rapidly.

Cultural/social influences

Wrecks and debris on the seafloor attest to the heavy use of the seas for trade, military use and fishing over many centuries. These include the *Vigsnes*, a steamship sunk after being hit by a torpedo in World War II, and the *Derbent*, which also sank following a torpedo attack by a U-Boat. The designated wreck of the *Resurgam*, one of the first submersibles built in 1879 (and sunk in 1880 off of Rhyl), is found in this area. Many other wrecks resulted from collisions between vessels as a result of the busy nature of this MCA on the approaches to the Mersey. Today the frequent wrecks are popular destinations for recreational divers and diving clubs.

Fishing trawlers targeting commercially important demersal fish and fishing charter boats often venture out to these waters. Fishing activity is conducted by several different means, with scallop dredging, trawling and potting methods used.

This MCA has a strong industrial character; a dredging area for marine aggregates is located in the east of the MCA, and there is also a dumping ground for dredged spoil which has been used since 1874. Douglas Oil field and its associated pipelines (which come ashore at the Point of Ayr in MCA 01) are located in the north eastern corner of the MCA, with further installations characterising the neighbouring waters in England. The overriding influence on this seascape is from the numerous offshore wind turbines. North Hoyle Wind Farm is found in the south east of the MCA and was the first major offshore installation in Wales, completed in 2003. The wind farm is made up of 30 2MW turbines. Gwynt y Môr offshore wind farm was completed at the end of 2014 and is located 18 kilometres from the shore, dominating the eastern half of this MCA. The wind farm has a total of 160 turbines

with a hub height of 98 metres. There is strong intervisibility between the moving turbines and those of adjacent Rhyl Flats wind farm in MCA 02 to the south. Submerged power cables associated with the offshore wind farms cross the sea floor to make landfall and grid connection along the coastline to the south.



Douglas Oil Platform flare and wind farm construction vessel © John Briggs

Large commercial shipping vessels frequently use these waters; vessels can often be seen waiting for Liverpool Pilots to guide them safely into harbour. To the north there is a marine Traffic Separation Scheme which divides the boat traffic into 'lanes'. Smaller recreational boats are not common in these waters, although their presence becomes more frequent in the south and south west of the area (closer to the shore) during the warmer summer months.

Aesthetic and perceptual qualities

From the most northern fringes of the MCA the mainland is visible in the distance in clear weather, creating a sense of remoteness and isolation. Land seen from the water includes North Wales, including the Clwydian Range and the mountains of Snowdonia National Park, the Isle of Man, the Cumbrian Fells, and the Pennines, all providing orientation. However at this distance out to sea, and with the relatively low elevation provided by viewing from ships, low lying land and coastal developments are not visible. However the western part of the MCA includes strong intervisibility with the cliffs and coastal hills of the Anglesey AONB including the distinctive forms of Puffin Island (MCA 03) and Point Lynas (MCA 06), with its prominent lighthouse (and flashing beam). As well as the rising hills above Colwyn Bay. These landmarks provide good reference points for orientation, although the flattening effect of such distant viewing makes it hard to discern headlands from inlets. The MCA itself forms part of the wider open maritime setting for Snowdonia National Park, Anglesey AONB and Clwydian Range and Dee Valley AONB.

In the south-east of the MCA the turbines of Rhyl Flats offshore wind farm can be seen when looking towards the Colwyn Bay (MCA 2). Combined with those found within this MCA (Gwynt y Mor), the moving turbine structures are a prominent seascape characteristic. The cumulative effects of the wind farms, along with the presence of large commercial ships, tankers and the Douglas Oil Field, combine to produce a strongly industrial character with much development-related movement. The red lights on the wind

turbines and lighting from ships also contribute to the sense of a more developed seascape at night. In addition, the effect of night lighting reflecting from cloudy skies is notable from many coastal areas and especially greater Merseyside.

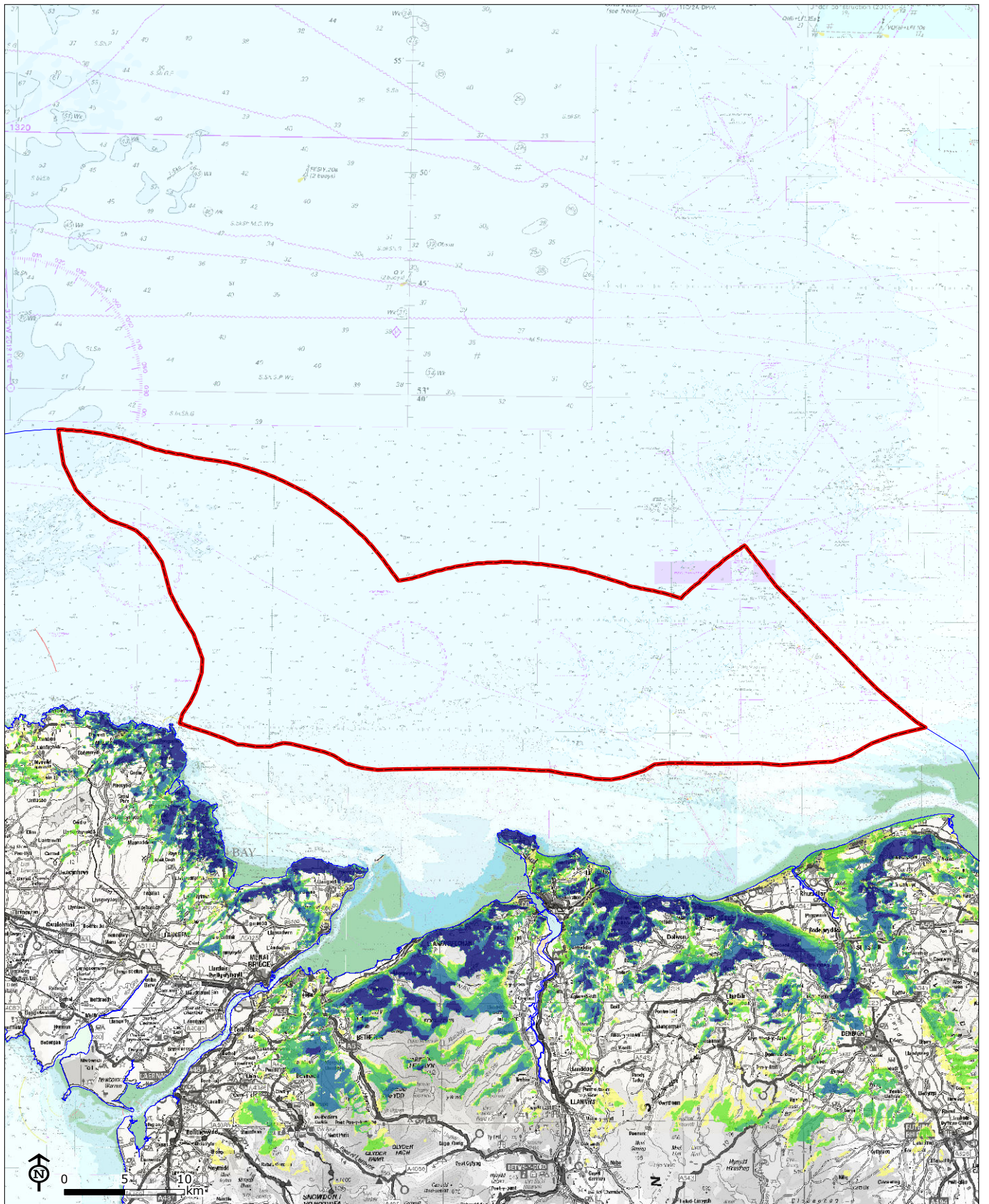


Gwynt y Môr Offshore Windfarm from Great Orme © John Briggs

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.

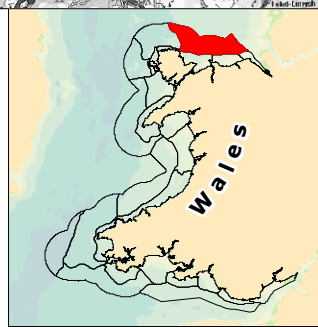
The second map shows sea visible from land, the warmer colours being areas of sea that are visible from more places on land. This comes from a national assessment of Wales so the results do not relate specifically to this MCA, whose boundary is overlaid for location only. The four individual versions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



 04: North Wales Open Waters
 Wales Inshore Marine Plan Area

Land with sea views (Percentile)

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



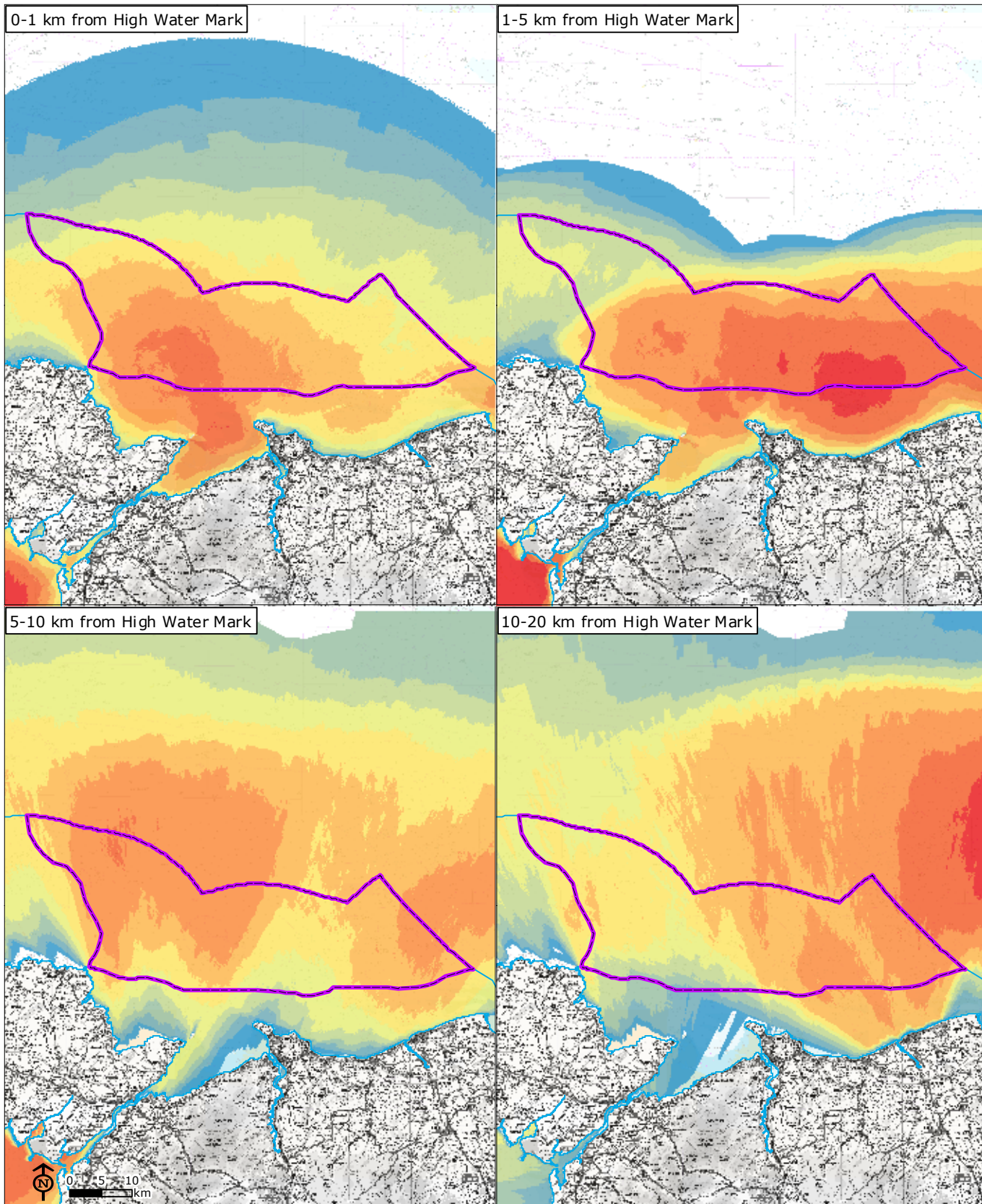
Wales National Seascape Assessment



**Land with Views of:
MCA 04: North Wales
Open Waters**

Source: LUC, NRW, OceanWise













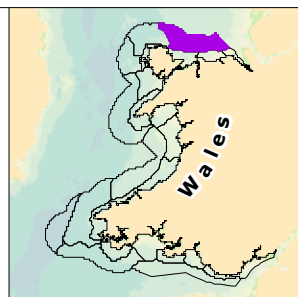
Map Scale @ A4: 1:450,000



-  04: North Wales 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 04: North Wales Open Waters



Map Scale @ A4: 1:880,000