

Location and boundaries

This Marine Character Area (MCA) is located in North Wales, covering the shallow coastal and inshore waters of Colwyn Bay and the extensive sand banks of Rhyll Flats, Chester Flats and Constable Bank.

- It takes in the full extent of Constable Bank and its associated shallow waters, as marked on the Marine Chart.
- The MCA’s landward boundary extends from the eastern limits of Prestatyn, taking in the coastal settlements of Rhyll, Abergelge and Colwyn Bay as far west as Little Orme’s Head.
- The outer offshore boundary encloses the Rhyll Flats offshore windfarm and separates the shallow waters associated with the banks and flats from the deeper water further offshore (MCA 04).

Key Characteristics

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Low-lying coastline backed by coastal levels associated with the broad mouth of the Vale of Clwyd to the eastern half of the area.
High, exposed, rocky limestone hills and open headlands with intermediate developed bays to the western half of the area. Little Orme and Great Orme headlands form dramatic rugged landmarks.
Long sandy beaches and shingle storm beaches. All the soft coastline is protected by various coastal defences including groynes, rock armour, beach recharging, walls and traditional promenades.
Shallow waters (<20m) with gently shelving beaches and extensive network of offshore sandbank and flats .
Significant peat exposures off Rhyl and at Rhos on Sea attesting to inundated land surfaces dating to the end of the last Ice Age.
Extensive marine sediments of sand and gravel extending from the neighbouring Dee Estuary MCA and forming long, linear sandbanks running roughly parallel to the shore.
Constantly shifting sandbanks with changing depths; hazards marked by numerous buoys , lights and fog horns.
South Hoyle Channel and Inner Passage provided the approaches to Roman port of Chester. The present day navigation channels are maintained regularly by dredging.
Most of the area is included in the Liverpool Bay SPA , designated for its international importance to overwintering populations of red-throated diver and common scoter.
The flats, sand banks, bays and rocky shores are important for biodiversity, extensively designated including SPA, SAC and SSSI .
Wave exposure generally low closer to shore, increasing in more open waters where the sheltering effect of Great Orme's Head (in MCA 03) diminishes.
Developed coastline with many seaside resort towns , notably Llandudno (and pier), Colwyn Bay (and pier), Rhyl and Prestatyn, the latter having many caravan and chalet parks on their fringe. The coast serves as a traditional holiday destination .
Recreational activity includes water sports such as jet skiing and speed boating . Tourist pleasure trips run from the pier at Llandudno, usually heading westwards around Great Orme's Head.
Wales Coast Path and a popular cycleway run the length of the coastline. Collectively, the A55, A548 and main Holyhead to Chester railway line follow close to the coastline.
Concentrations of documented shipwrecks in the approaches to Rhyl and Foryd harbours , also in locations where they were blown ashore from traditional anchorages.
Both Colwyn Bay and Rhyl are popular shore and boat angling areas . Rhyl includes the main harbour along this stretch of coast.
Historic military use of the seascape at Rhyl providing the last coastal fix for aircraft operating out of Hawarden and Sealand.
Rhyl Flats Offshore Wind Farm forms a dominating offshore feature. The moving turbines are supplemented by further turbines beyond (in MCA 29).
Limestone hills form a backdrop , in the east linking to the adjacent slopes of the Clwydian Range AONB. From further out to sea, views reach beyond to the mountains of Snowdonia National Park.

Natural Influences

The Colwyn Bay and Rhyl Flats MCA comprises the north facing bays, wide sandy beaches and shallow sand banks of Colwyn Bay. It extends between the extensive sandy shoreline at Prestatyn in the east, taking in the bays of Penrhyn, Colwyn and Kinmel and Llandudno North Shore and includes the dramatic rocky headlands of Little Orme and Great Orme in the west, the latter bounding the MCA.



The cliffs of Great Orme, flanking the western part of the MCA

In the eastern half of the area, the MCA is backed by low lying coastal levels. The coastline is protected by extensive man-made coastal defences, providing some physical and visual separation between the foreshore and the development behind at Prestatyn, Rhyl and Towyn. The mouth of River Clwyd cuts across the sandy beach between Kinmel Bay and Rhyl. At Prestatyn, land gently rises up and then steepens dramatically to the craggy Clwydian Range peaks of Graig Fawr (153m AOD) and Y Foel (265m). In the west, the Carboniferous limestone headlands of Little Orme (141m) and Great Orme (207m) jut out into the sea but are perhaps more remarkable for their dramatic steep sea cliffs and their open heath and classic exposed limestone ruggedness. Internationally important coastal heathland provides rich habitat for higher plant communities including hoary rock-rose and spiked speedwell. These coastal and upland landscapes provide a dramatic backcloth to the MCA.

The large open Colwyn Bay shelves very gradually north out to the Irish Sea, fronted by a vast expanse of flat sandy beaches constantly fed and modified by Longshore drift, as well as exposed and partially exposed sand banks. This area experiences a low tidal range and low to moderate wave stress. Offshore, the seas become rougher with areas of high wave stress where there are shallow waters over Constable Bank and Rhyl Flats. At low tide part of Rhyl Flats is less than half a metre below the water surface, forming a particular hazard to navigation. The constantly shifting sand creates an intricate network of sandbanks, including Chester Flats, connected to Rhyl Flats by the Tail of Middle Patch, and an extensive area of very shallow water in the east of the MCA.

Coastal waters in the west gradually deepen to approximately 16 metres; Constable Bank cuts across this area reducing the depth along the outer MCA boundary. A yellow and black banded cardinal buoy marks the western extent of the bank at West Constable.

All of the MCA falls within the Liverpool Bay SPA, designated for its large populations of overwintering red throated divers and common scoters which feed in the rich waters around the network of sandbanks. Other biodiversity designations include part of the Menai Strait and Conwy Bay SAC in the west and several SSSIs reflecting the biodiversity importance of the area's extensive intertidal sands (comprising the wide beaches); sand banks, exposed calcareous rocks and limestone reefs also support important populations of shellfish, sponges and worms. The area's importance for its range of birdlife is also reflected in a large proportion designated by the RSPB as an Important Bird Area.

There are significant areas of peat exposures off Rhyl and at Rhos-on-Sea attesting to inundated land surfaces dating to the end of the last Ice Age.

Cultural/social influences

The north coast's rich historic past is acknowledged as a Landscape of Outstanding Historic Interest at Little Orme's Head and Llandudno Bay, the area forming part of a medieval commote of Creuddyn. Evidence of early human habitation and exploitation of the sea's rich natural resources has been proven with the recording of post medieval (and earlier) fishtrap complexes at Rhos-on-Sea and Llandudno, the latter linked to the origins of the settlement as a small fishing village.

More recent maritime history details relatively few wrecks in this seascape compared to neighbouring MCAs – perhaps reflecting its historic character as one of transit. Historic vessels passing through tended to hug the coast to anchor before continuing into the Mersey or the Dee when the tide was right. Documented shipping losses cluster around the approaches to Foryd or Rhyl harbours, as well as the entrance of the Inner Passage heading towards the mouth of the Dee. There are also losses linked to vessels driven ashore from the traditional anchorages such as Abergele Road by north or north-westerly gales. These have included large steamships as well as traditional coasting schooners, sloops, and flats. Local folklore states that a ghost ship, the boat of Prince Madoc a Welsh explorer, was spotted off the coast at Abergele Road. It is claimed that Madoc discovered the Americas 300 years before Christopher Columbus.

The pre-industrial settlement of Rhuddlan is located at the upper tidal extent of the Clwyd, and is the site of Rhuddlan Castle, which was established by Edward I in 1277 along with a new town on the site of earlier settlement. The concentric design of the castle represents an innovative masterpiece of medieval military architecture comparable to the more famous coastal castles further along the coast to the west, also constructed for Edward. The castle retains significant views into the estuary and along the coastal communication routes that served it, and the buried remains of docks and landing bays are likely to be preserved alongside the ruins. The whole site is designated as a Scheduled Monument.

The seascapes of Rhyl were used by the military during WWII with the coastal flats associated with several forced landings and crashes, such as *Boulton Paul Defiant* which belly-landed on the beach in 1941. During the same period the area provided the last coastal fix for aircraft operating out of Hawarden and Sealand.



Llandudno Bay framed by Little Ormes Head

The sandy beaches along this north coast of Wales have long been popular with visitors from the industrial towns of north-west England and from across Wales. The “*little village of Llandudno*” was visited by Daniell and Ayton on their voyage around the Welsh coast in 1814. The coastal towns of Llandudno (known as ‘*The Queen of Resorts*’), Colwyn Bay, Rhyl and Prestatyn provide a wealth of traditional seaside recreational opportunities and attractions including the Grade II Listed Victoria Pier at Colwyn Bay and the Grade II* Llandudno Pier – the longest in Wales, opened in 1877 as a major draw for Victorian holiday-makers. The surrounding coastal waters provide a range of further recreational opportunities, including water sports such as jet skiing and speed boating.

Rhyl boasts the main harbour along this stretch of coast, however, access is limited due to the tides (drying heights of six metres) as well as the wreck of the sailing ship *Ottowa* which lies buried beneath the sand and mud obstructing the channel. A small harbouring area has also been created with the help of a breakwater at Rhos-on-sea. North Rhyl anchorage is situated within the Outer Passage offshore. Small charter boats can be seen strung along the South Hoyle Channel fishing in the shallow waters for whiting, plaice and dab. Inner Passage and South Hoyle Channel are used by craft approaching Welsh Channel and the Dee Estuary (MCA 01). Fishing activity is extensive throughout the MCA with the deeper waters being identified as an area for light otter trawling and light beam trawling. The network of shallower channels is used by fisherman with set nets. Waters off Llandudno are used for lobster and crab potting, whilst the shelving beaches are exploited by people hand gathering mussels and periwinkles. Llandudno Bay, Rhos Point and Llanddulas are also popular for beach net fishing.

The 25 turbines of Rhyl Flats Offshore Wind Farm are situated approximately five miles off the coast, covering nearly four square miles within the shallow waters around Constable Bank and Rhyl Flats. To help mariners negotiate the turbines and shallow water the wind farm is marked by several buoys and horns. Submarine power cables cross the MCA linking the offshore windfarms to the land, connecting the electricity generated to the National Grid.

The Wales Coast Path hugs the shoreline following the extensive promenade coastal defence at Llandudno, Rhos-on-sea, Colwyn Bay, Pensarn, Towyn, Rhyl and Prestatyn.

The A55, A548 and main Holyhead to Chester railway line also collectively follow close to the coastline.

Aesthetic and perceptual qualities

Development has a strong influence on the character of this MCA. In views from the sea, tall structures appear above the coastal defences; church spires, aerial masts, and Rhyl's iconic 240 feet high Sky Tower, all feature in views back to shore. Views of the impressive Grade I Listed 19th century Gwrych Castle nestled on the wooded slopes above Abergele can also be gained from the sea, adding a contrasting sense of time depth behind the more modern developments and infrastructure below. The rising hills of the Clwydian Range and Dee Valley AONB feature as a dramatic backdrop to the south-east of the MCA, whilst views to the imposing mountains of Snowdonia National Park – often shrouded in low cloud/mist – feature to the south-west.

The area's long-standing popularity as a holiday destination results in a busy seascape with activities along the coast and out to sea creating much movement and colour. The lithograph below from 1850 captures this scene particularly effectively. The coastline is brought to life particularly in the summer months, whilst the scene can be dramatically different in mid-winter, with facilities closed down and beaches relatively empty with natural influences, notably bracing winds, replacing human activity.



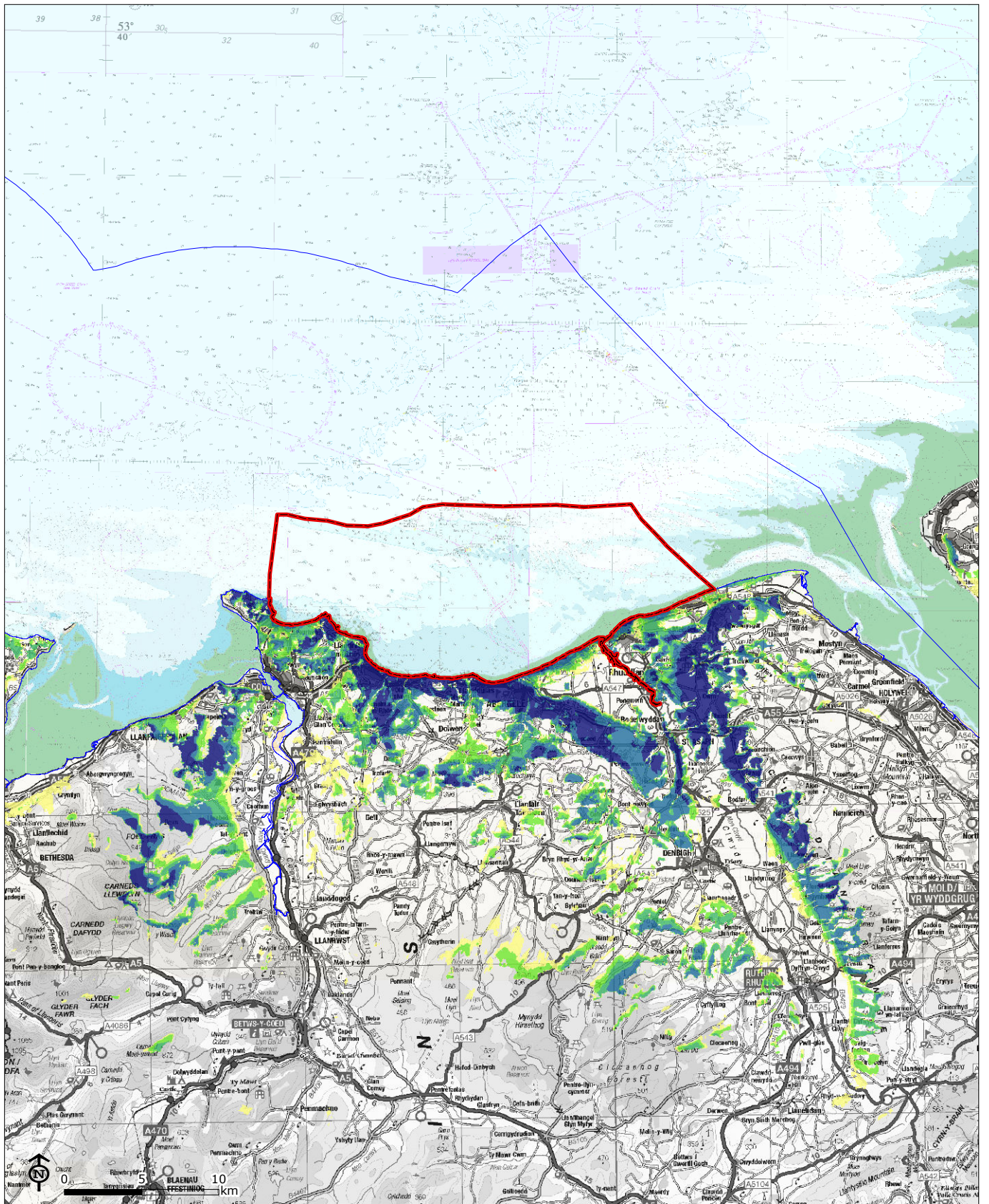
'Rhyl from the sea'; a lithograph c.1850, (© Crown Estate, 2013).

The 25 offshore turbines (134 metres to blade tip) which make up the Rhyl Flats Wind Farm often dominate offshore views, seen in conjunction with further offshore turbines at Gwynt-y-Mor Wind Farm and North Hoyle Wind Farm to the east. The visual distinction between individual offshore wind farm developments is blurred as turbine fields overlap. These further add to the developed northern coast and define the character of the waters at the outer extent of the MCA. The presence of the turbines reduces the overall sense of tranquillity and remoteness but does not affect the feeling of exposure associated with the vast open sandy beaches.

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.

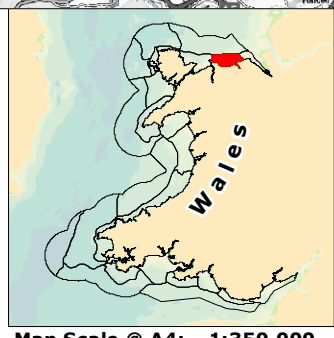
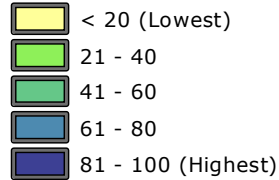
The first map shows land with views to this MCA, the darker shading indicating land where from which more of this MCA is visible.

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.



 02: Colwyn Bay and Rhyl Flats
 Wales Inshore Marine Plan Area

Land with sea views (Percentile)



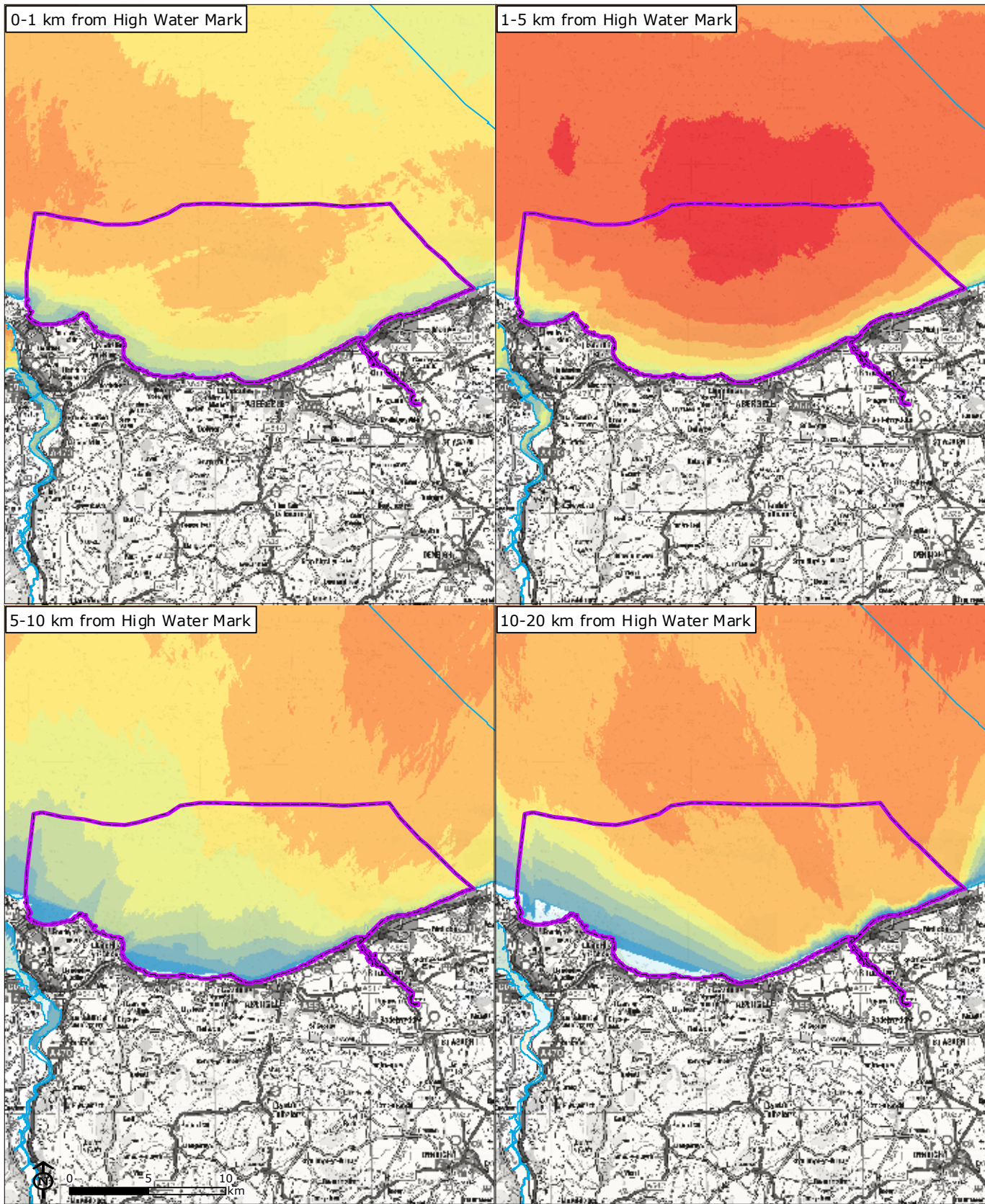
Wales National Seascape Assessment

Land with Views of:
MCA 02: Colwyn Bay and Rhyl Flats

Source: LUC, NRW, OceanWise



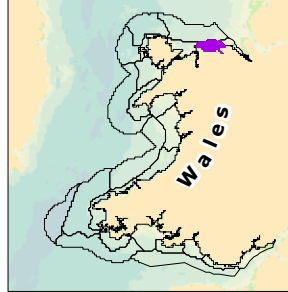
Map Scale @ A4: 1:350,000



02: Colwyn Bay and Rhyl Flats
 Wales Inshore Marine Plan Area

Visibility of sea from land (percentile)

<p> <10 (Lowest)</p> <p> 11-20</p> <p> 21-30</p> <p> 31-40</p> <p> 41-50</p>	<p> 51-60</p> <p> 61-70</p> <p> 71-80</p> <p> 81-90</p> <p> 91-100 (Highest)</p>
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Wales National Seascape Assessment

Relative Visibility of the Sea Surface from Viewers on Land
MCA 02: Colwyn Bay and Rhyl Flats



Map Scale @ A4: 1:350,000