



Seascape Assessment for the South Marine Plan Areas

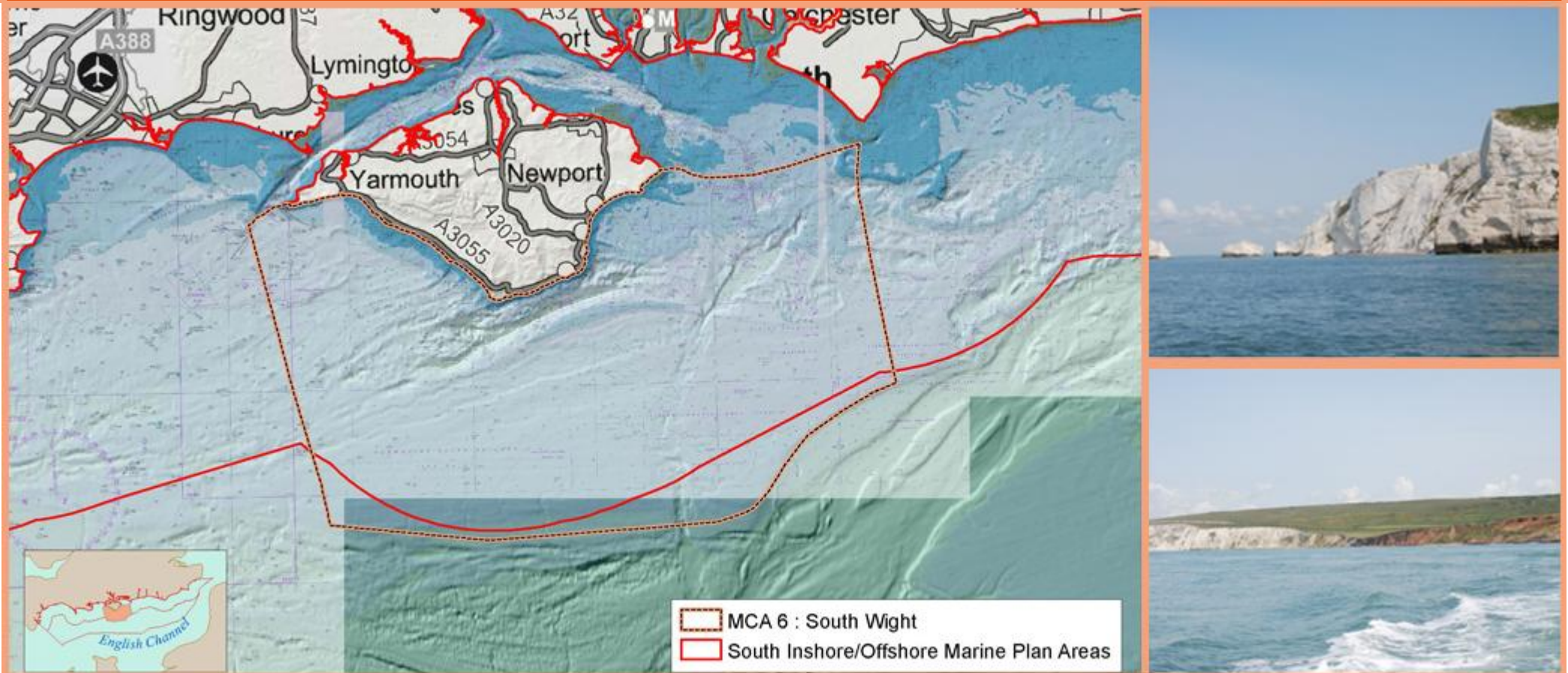
MCA 6: South Wight

Snapshot

Key Characteristics

Description

Visual Resource Mapping



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Location and boundaries

The Marine Character Area (MCA) covers the south coast of the Isle of Wight from the Needles in the west (at the interface with MCA 5) to Foreland in the east, reflecting the change in marine and coastal character between the north and south coasts. The boundary with the Solent also accounts for variations in tidal and sea conditions, and the routes used by sea transport to/from Portsmouth and Southampton. Offshore, the MCA extends eastwards to meet MCA 7 off Selsey Bill, before the rocks and shoals of the Owers that influence conditions in this area. Southwards, the MCA takes in the waters surrounding the island, extending to a maximum of 32 kilometres (17 nautical miles) offshore to the edge of the Wight-Barfleur Reef SAC and the main English Channel shipping lanes. The maximum depth of the MCA at its offshore limits is approximately 45 metres.

Please note that the MCA boundaries represent broad zones of transition (not immediate breaks in character). Natural, visual, cultural and socio-economic relationships between adjacent MCAs play a key role in shaping overall character. Therefore individual MCAs should not be considered in isolation.

Overall character

South Wight is a diverse MCA displaying a wide range of coastal landscapes and marine characteristics. The southern coastline of the Isle includes sections of internationally important geology, geomorphology and coastal habitats reflecting some 120 million years of evolution. These include the most important fossils in the world for early dinosaurs, as well as the distinctive slumped and 'gardenesque' Undercliff. The island is surrounded by offshore rocky ledges and reefs which host rich maritime biodiversity as well as the wrecks of numerous vessels that have succumbed to the dangerous waters associated with them. The scenic beauty of the island, and particularly its unrestricted sea views across the Channel, has been appreciated for centuries by eminent writers and artists – as well as the Victorian middle classes who spurred the development of its seaside resorts. The MCA's role in both World Wars as well as famous historic invasion attempts such as the Spanish Armada result in an area steeped in history. Fishing (commercial and recreational), marine transportation and coastal and sea-based recreation (including yachting and diving) are the key human activities which shape the character of South Wight today.

Adjacent National Character Areas (NCAs)

The adjacent coastline includes the following NCAs as defined by Natural England¹:

- 127: Isle of Wight

Adjacent nationally protected landscapes

Apart from the settlements of Ventnor, Shanklin and Sandown, the coastline falls within the Isle of Wight Area of Outstanding Natural Beauty (AONB). In addition, the coastline and coastal waters from the western edge of Ventnor Bay to the Needles forms the majority of the Tennyson Heritage Coast.

¹ <http://www.naturalengland.org.uk/publications/nca/default.aspx>

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- South coast of the Isle of Wight displaying internationally important geological exposures, including fossilised dinosaur remains.
- Large-scale geomorphological features including the high white chalk cliffs in the south-west (terminating at the iconic Needles in MCA 5), the active landslip of the Undercliff, and smaller-scale features including 'chines', sea caves and stacks.
- Complex tidal currents circulating around the island, including a strong tidal race off St Catherine's Point, overfalls and rip tides. Rocky ledges extending half a mile offshore provide further hazards to safe navigation.
- Nationally and internationally important coastal habitats, including maritime grasslands, scrub and fen fringing the River Yar. The whole coastline and surrounding seas are of significant ornithological interest.
- Rich assemblage of marine habitats and species owing to the transition zone between warmer south-western and colder North Sea waters. Cetaceans and basking sharks frequent the area.
- Submerged sea caves, limestone and chalk ledges and offshore rocky reefs providing valued marine habitats for a range of fish and shellfish species, as well as diverse underwater flora.
- Evidence for human occupation stretching back some 80,000 years, before the island was created. Bronze Age round barrows on the chalk ridge are visible from the coast and surrounding seas.
- 18th and 19th century ornamental parks and gardens strongly influencing the character of the Undercliff.
- Associations with the defence of England, and later Britain, including the role of Carisbrooke Castle in defending against the Spanish Armada and observation stations/transmitters serving the two World Wars.
- Historic wrecks from international vessels which foundered off the dangerous coastline, often en-route to British or French ports via the Channel. Some were sunk by gunfire or torpedo attack.
- Distinctive octagonal tower of St.Catherine's Lighthouse providing a guide for vessels navigating in the English Channel and those approaching the Solent.
- Important social, economic and visual relationships with the Solent (MCA 5) to the north and Poole Bay to the west (MCA 4), with many cargo and transport vessels passing through this MCA en-route to Southampton, Portsmouth and Poole.
- Rich seas for commercial and recreational fishing, with catches landed at Bembridge, Portsmouth and Weymouth.
- Extensive dredging of marine gravels in the east and south-west of the MCA providing aggregates for the construction industry.
- Popularity of the Isle of Wight for tourism since the Victorian period, with seaside resorts defining south-eastern coastline in contrast to the remote south-western half of the island.
- Historic centre for yachting, including the annual *Round the Island* race. National Trust access land and a Coastal Path allow walkers to appreciate uninterrupted cliff-top views across the Channel.
- High scenic qualities long appreciated by artists and writers, including Gilpin, JMW Turner and Tennyson (the Tennyson Monument is a prominent navigational feature in the south-west),
- Overriding maritime character with perceptual qualities strongly linked to sea and weather conditions. The Isle features strongly in views from the Channel, with the white chalk cliffs and Needles in the west standing out against the sea.



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For ease of reference, the following description text is arranged under three headings, considering the 'Natural', 'Cultural / social' and 'Aesthetic / perceptual' characteristics of the Marine Character Area. It should be noted, however, that all of these aspects combine and interact with each other to varying degrees to shape character.

Natural influences

The Isle of Wight as a whole is a geological microcosm of south-east England, containing exposures of rock spanning some 120 million years. The south-western coast is world renowned for successions of the Wealden Group and the overlying Lower Greensand Group, containing the richest early Cretaceous dinosaur fauna in the world. The remains occur as associations of disarticulated bones and partial skeletons, often associated with plant beds, and occasionally as nearly complete three-dimensional skeletons. Other reptiles, including turtles, crocodylians and pterosaurs also occur.



Chalk cliffs below Tennyson Down

The coastline of the MCA also includes the famous chalk cliffs at Culver and between Compton Bay and the Needles (the latter within MCA 5) –

containing calcium-rich remains of microscopic marine plants laid down on the floor of a deepening sea. Large-scale geomorphological features of national importance are also associated with this coastline, such as the Isle of Wight monocline – the huge fold that buckled the rocks from the Needles to St Catherine's Point 60 million years ago, the Undercliff (the largest active landslide in Europe) and small scale features such as 'chines', cliffs, sea caves and stacks. The steep coastal slopes of the Wealden and Lower Greensand rocks are subject to continuous slipping and erosion due to the differing strengths and permeability of the various clay, marl, shale and sandstone strata.

The coastline supports a range of nationally and internationally important habitats and species, including vegetated cliffs, species-rich calcareous, acidic and mesotrophic grasslands (variations owing to the underlying geology), scrub, woodland and fens fringing the River Yar at Freshwater. Part of the coastline forms the main English stronghold for the Glanville fritillary butterfly, and the cliffs support internationally important breeding sea bird colonies, as well as peregrine falcons. Offshore waterfowl species, such as the great crested grebe are thought to overwinter in the area, and considerable numbers of divers are likely to pass through the MCA on passage.

The shoreline and coastal waters surrounding the island are internationally protected as part of the South Wight Maritime SAC. Submerged sea caves are home to important algal and mollusc species, and at the eastern limit of the island, the Bembridge Ledges support a great diversity of intertidal marine life. The contrasting mix of exposed and sheltered conditions provided by the marine limestone pavement supports a remarkable range of marine plants and animals such as wild native oyster beds, the brown alga *Peacock's Tail*, shrimps, sea anemones and both species of seahorse. Extending

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offshore include some of the most important subtidal chalk reefs in Britain (representing over 5% of Europe's coastal chalk exposures), also supporting a wide variety of marine life, including rare seaweeds. The rich assemblage of habitats and species associated with the maritime environment surrounding the Isle of Wight is partly because several species reach their eastern limit of distribution along the English Channel at the Isle, which represents a transition zone between warmer south-western and colder North Sea waters. The area frequently attracts bottlenose dolphins and other cetaceans, as well as basking sharks which are sometimes sighted off the Isle. Complex tidal currents circulate around the island, with St Catherine's Point being particularly treacherous in heavy weather owing to rocky ledges extending up to half a mile offshore. A strong tide race, combined with nearby overfalls, eddies and isolated rip tides combine to make seas in this area difficult to predict. Vessels are encouraged to pass around St Catherine's Deep to avoid this area, some three miles from the coast.

Progressing further offshore from the Isle, the seafloor is largely characterised by thick marine sediments of sand and gravel, laid down since the sea transgressed across the wider area during the Holocene. Pockets of variation occur, creating changes in sea and ecological conditions, including within the area's recommended Marine Conservation Zones (rMCZ). Utopia rMCZ, in the north-east of the MCA, is an area of bedrock and large boulders hosting regionally rare communities of sponges, anthozoans, hydroids and bryozoans. In the south-eastern corner of the MCA, also extending into MCAs 7 and 13, is the Offshore Overfalls rMCZ, characterised by unusual morphological features such as sandwaves, 'megaripples' and large relic glacial deposits forming a series of large bank features in an area of high tidal currents. This has produced an ecologically important area for various fish species, including rays.

The diverse waters and seabed of the MCA are home to an array of fish and shellfish including black sea bream, plaice, smoothhound shark, mackerel, sprat, brown crab, lobster and squid. Cod are seasonally abundant, and may spawn in the area, as are herring, bass, mullet, plaice, dab and sole. Migratory fish found in the area include Atlantic salmon, sea trout and the European eel. As such the area provides rich commercial and recreational fishing grounds (considered more in the next section).

Cultural / social influences

A rise in global sea level after the last glaciation (around 7,000 years ago) flooded the former river valley of the Solent to the north and the future English Channel to the south, cutting the Isle of Wight off from mainland Britain. There is evidence for human occupation on what is now the Isle from well before this event, including flint tools found in gravel deposits from the Palaeolithic period, indicating the presence of humans some 80,000 years ago. The Megalithic Longstone monument at Mottistone, and concentrations of Bronze Age round barrows forming distinctive skyline features along the chalk ridge, provide further evidence of early settlement. Their highly visible location is likely to be strategic, discernible in views from miles around, including from the coast and surrounding seas.

The island became an agricultural centre in the Roman period, with nationally important remains of villas at Newport and Brading. It continued to be dominated by agriculture throughout the Saxon and medieval periods, but it did witness its share of dramatic events. For example, the Norman Carisbrooke Castle played a key role in defending Britain against the Spanish Armada in the late 16th century, and was also where Charles I was imprisoned during the English Civil War before being tried and executed in London.



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Significant landscape change was introduced during the late 18th and 19th centuries by the growth of the 'picturesque' movement and a widespread appreciation of natural beauty, spurred on by the Romantic Movement in the arts. This saw the island's scenic resources being exploited, particularly the dramatic Undercliff, which became the home of wealthy settlers renowned for their gardens. The arrival of Queen Victoria and Albert in 1845, and the development of their new summer palace at Osborne (in the north of the island), stimulated the spread of further villa gardens with exotic and ornamental plants – contributing greatly to the distinctive character of the Undercliff.



Shanklin Chine, with exotic plantings

The island's popularity as a holiday destination burgeoned following both the arrival of the Royals and the railways after the 1860s, spurring the rapid development of resorts on the south-east coast popular with the middle classes: Ventnor, Shanklin and Sandown. Today, the development associated with these towns has an overriding influence on the character of the south-east coastline of the island and views from eastern seaward approaches, providing a stark contrast to the sparsely settled south-west from St Catherine's Head westwards. Tourism is a major contributor to the island's economy today.

During the Second World War the island was frequently bombed. With its proximity to France, it had a number of observation stations and transmitters, and was the starting-point for one of the earlier *Operation Pluto* pipelines to feed fuel to the Normandy landings. Offshore, evidence of casualties from both World Wars are present. World War I casualties include the trawler *HMS Apley* which foundered in 1917 whilst on minesweeping duties, and the *SS Mendi*, which collided with another vessel off St Catherine's Point whilst transporting South African military labourers in 1917, sinking with the loss of all 607 troops and 29 crew². World War II casualties include the *HMS Crestflower* – which was bombed by German aircraft also while on minesweeping duties in 1940, and a number of D-Day casualties. St Catherine's Deep is thought to be an explosives dumping ground, with a concentration of wrecks in this area now popular for recreational dives.



The popular coastal resort of Shanklin

The treacherous sea conditions off the Isle of Wight, owing to the presence of overfalls, strong tidal streams and exposure to the full force of prevailing south-westerlies sweeping up the Channel, is depicted in the large number of other wrecks from as far back as the 14th century. Many are cargo vessels en-route to/from ports on either side of the

² <http://www.wrecksite.eu/wreck.aspx?1271>

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Channel (including Southampton, Bristol and Calais) carrying a range of global products illustrating the importance of the wider marine area as an international trade route; salt, coal, chalk, timber, fruit, cork and wine being some examples. As well as the dangerous sea conditions, attacks by torpedo or gunfire were frequently responsible for the casualties, particularly during the World War years.



St Catherine's lighthouse

St Catherine's lighthouse, constructed in 1840, has a main light which is visible for up to 30 nautical miles in clear weather. It stands where a light has been in place to warn shipping since 1323. The beam is the third most powerful light in the Trinity House Service, providing a guide to shipping in the Channel as well as vessels approaching the Solent. Constructed in 1840, the 27 metre white octagonal lighthouse is a prominent landmark appearing in views from along the coast and the sea. Also providing guidance through and around these hazardous waters is the Needles Lighthouse (within MCA 5), with its two white, two red and one green sector lights.

Today the seas of the MCA, particularly routes in and out of the Solent, retain their importance for international maritime trade, supplemented

by recreational uses owing to the popularity of the wider area for sailing, including the annual *Round the Island* race. Passenger ferries and cruise ships also pass through the MCA, allowing passengers glimpses of the Isle of Wight's distinctive coastline en-route to dock at Southampton, Portsmouth or Weymouth.

The wide range of fish and shellfish species present in the waters, and associated with the rocky ledges and wrecks of the seabed, provide a valued resource for commercial netters and trawlers, as well as recreational anglers. Catches are landed at the main fishing ports of Bembridge, Portsmouth, Poole and Weymouth. The thick marine sand and gravel sediments to the east and south-west of the Isle of Wight are also exploited through dredging under licence from The Crown Estate.



Fishing boat and extensive views into the English Channel

Aesthetic and perceptual qualities

The spectacular coastline and long-distance coastal and sea views associated with South Wight have provided inspiration for writers and artists over the centuries. William Gilpin noted in 1798³ the scenic value of the views out from the island: '*...the island does not depend on its home scenery. Its views over the Channel and the Hampshire coast are its pride*'.

³ In his book: *Observations on the Western Parts of England, Relative Chiefly to Picturesque Beauty: To which are Added, a Few Remarks on the Picturesque Beauties of the Isle of Wight.*

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JMW Turner also visited the Isle of Wight at the end of the 18th century; his sketchbook of 1795 containing watercolours of Freshwater Bay and other local scenes. By the early 19th century the Isle of Wight was becoming a popular place to visit particularly by well-to-do visitors. Jane Austen in *Mansfield Park* notes the enthusiasm of one of her characters 'she thinks of nothing but the Isle of Wight, and she calls it the Island as if there is no other island in the world'.

Lord Tennyson moved to Farringford at Freshwater in 1853. He often walked on High Down (now Tennyson Down), which is crowned by a 147 metre high memorial cross visible from the surrounding seas and the Solent (MCA 5). He is said to have composed the *Charge of the Light Brigade* while walking on this part of the island. The presence of Tennyson in Freshwater drew statesmen, scientists, painters, writers and artists to the area including Lewis Carroll, Charles Darwin, Charles Dickens and Sir Arthur Sullivan. In the 20th century D H Lawrence holidayed in Freshwater and later wrote *The Trespasser*, partly set in Freshwater Bay. In J B Priestley's *English Journey* (1934) he wrote of the Isle of Wight:

'It is the English south country in miniature – Lilliputian downs and all – with an island quality added, a lightening of the horizon in whichever direction you look...'

Today, large sections of the coastline are owned by the National Trust and the entire stretch is circumnavigated by a Coastal Path (including the Tennyson Trail in the west, allowing visitors to re-trace the writer's steps). Far-reaching views are afforded from the cliffs and the adjacent elevated chalk ridge across the English Channel as far as the eye can see, with the varied coastline itself forming a recognisable feature in views from the sea, including the stark high white cliffs in the west (terminating at the iconic Needles with their red-and-white lighthouse) to

the distinctive slumping and wooded Undercliff. Gently rounded downland summits form the landward horizon in views from the sea, with telecommunications masts (e.g. on St Catherine's Point) protruding into a characteristically undeveloped skyline punctuated by the rugged shapes of ancient burial mounds.



Views to St Catherine's Bay and the Channel beyond

The perceptual qualities experienced along the coastline of Isle vary markedly between the largely undeveloped south-west and the sprawling coastal resorts fringing much of the coastline in the south-east. The influence of the sea and the weather, however, dominates, having a dramatic effect on perceptions of the seascape. Full exposure to the storms and gales coming off the Channel, with associated crashing waves, quickly puts the small island at the mercy of a wild and unforgiving sea. A sense of eeriness pervades in dark, foggy conditions, when sweeping looms of light penetrate through the mist from the island's lighthouses. Conversely, on a calm, clear summer's day the sounds of seabirds and gentle lapping of the waves transform the seascape into a haven of tranquillity.

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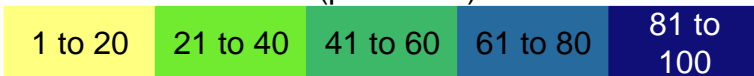
Land with views of MCA 6



South Inshore/South Offshore marine plan areas

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Land with sea views (percentile)



- Durlston Head, Studland and the southern edge of Portsdown have extensive views of the MCA.
- Extensive views also afforded from elevated land within the South Downs (5-10km inland) and the southern half of the Isle of Wight, including Tennyson Down.
- Views are afforded to the MCA from inland locations including Kithurst Hill (including sections of the South Downs Way), small areas between Ringwood and Lyndhurst and at Verwood, and Staplers on the Isle of Wight.
- Some views can be obtained from between 5-10km inland west of Horndean, large areas at Barton on Sea and smaller areas at Bournemouth and the Isle of Purbeck.
- Some views to the MCA can also be obtained over 10km inland along the northern extents of the elevated South Downs.
- The coast from Kimmeridge (Dorset AONB) to Otterwood (New Forest National Park) has limited views of the MCA.
- Thornhill to Cissbury Ring (South Downs National Park), and Totland to East Cowes within the Isle of Wight AONB also have limited visibility of the MCA.

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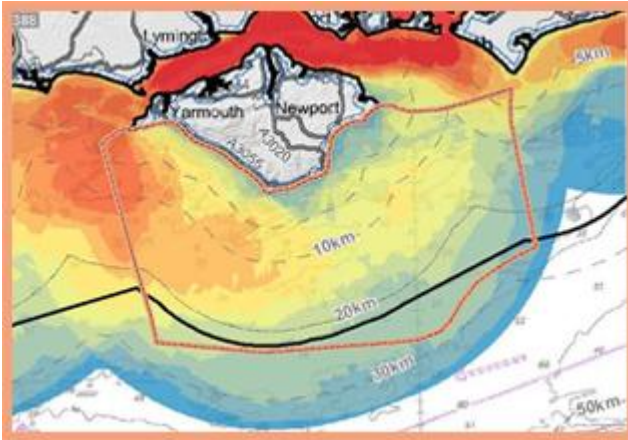
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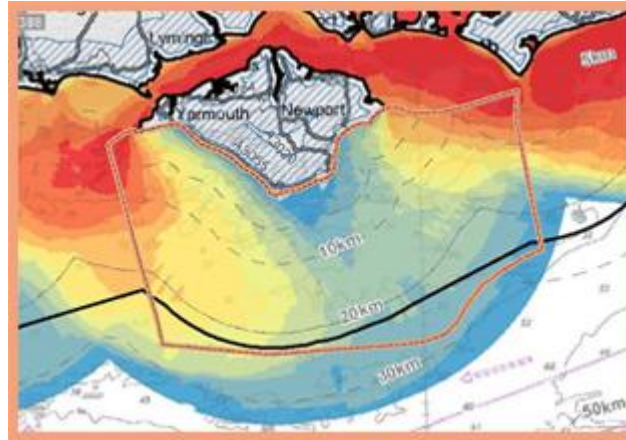
Visual Resource Mapping

Visibility of sea from land

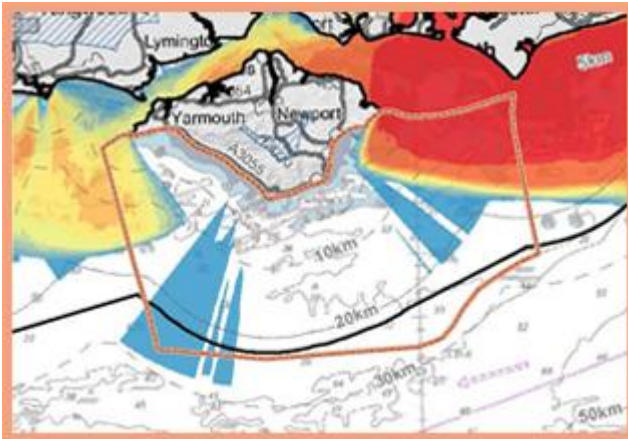
Relative visibility of the sea surface from viewers on land



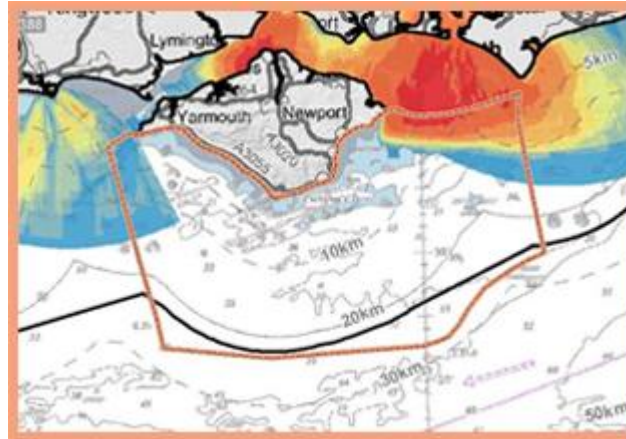
0-1km from the High Water Mark



1-5km from the High Water Mark



5-10km from the High Water Mark



10-20km from the High Water Mark

South Inshore/South Offshore marine plan areas

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Location of viewers

Visibility of sea from land (percentile)

1 to 10	11 to 20	21 to 30	31 to 40	41 to 50
51 to 60	61 to 70	71 to 80	81 to 90	91 to 100

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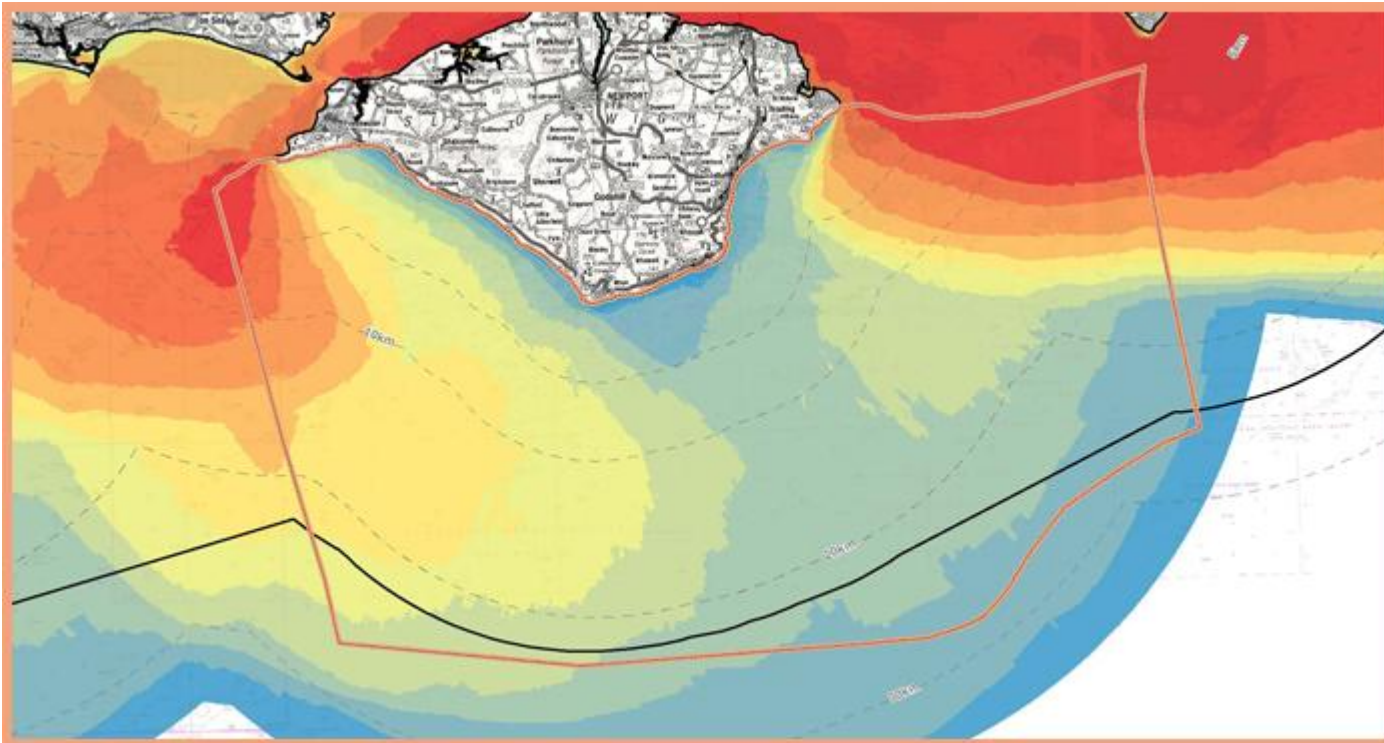
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Visibility of sea from land

Relative visibility of the sea surface from viewers on land

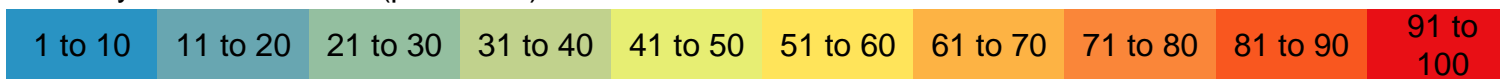


Up to 20km from the High Water Mark

South Inshore/South Offshore marine plan areas

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Visibility of sea from land (percentile)



- The north western and north eastern parts of the MCA are the most visible sections of the MCA.
- Visibility of the MCA from land gradually reduces towards the middle of the MCA.
- Visibility reduces more gradually in the west with a large area that can be seen from quite a few locations on land.
- The Isle of Wight creates a shadow effect from the island's southern coastline, preventing views from the mainland. Whilst the sea to the south of the Isle of Wight is visible from land, the extent to which it is visible is relatively low compared to the rest of the south marine plan areas.
- St Catherine's Deep is relatively hidden from view.
- The southernmost section of the MCA is more than 20km offshore and visibility of this section is likely to be affected by atmospheric conditions for much of the year.

