



Seascape Assessment for the South Marine Plan Areas

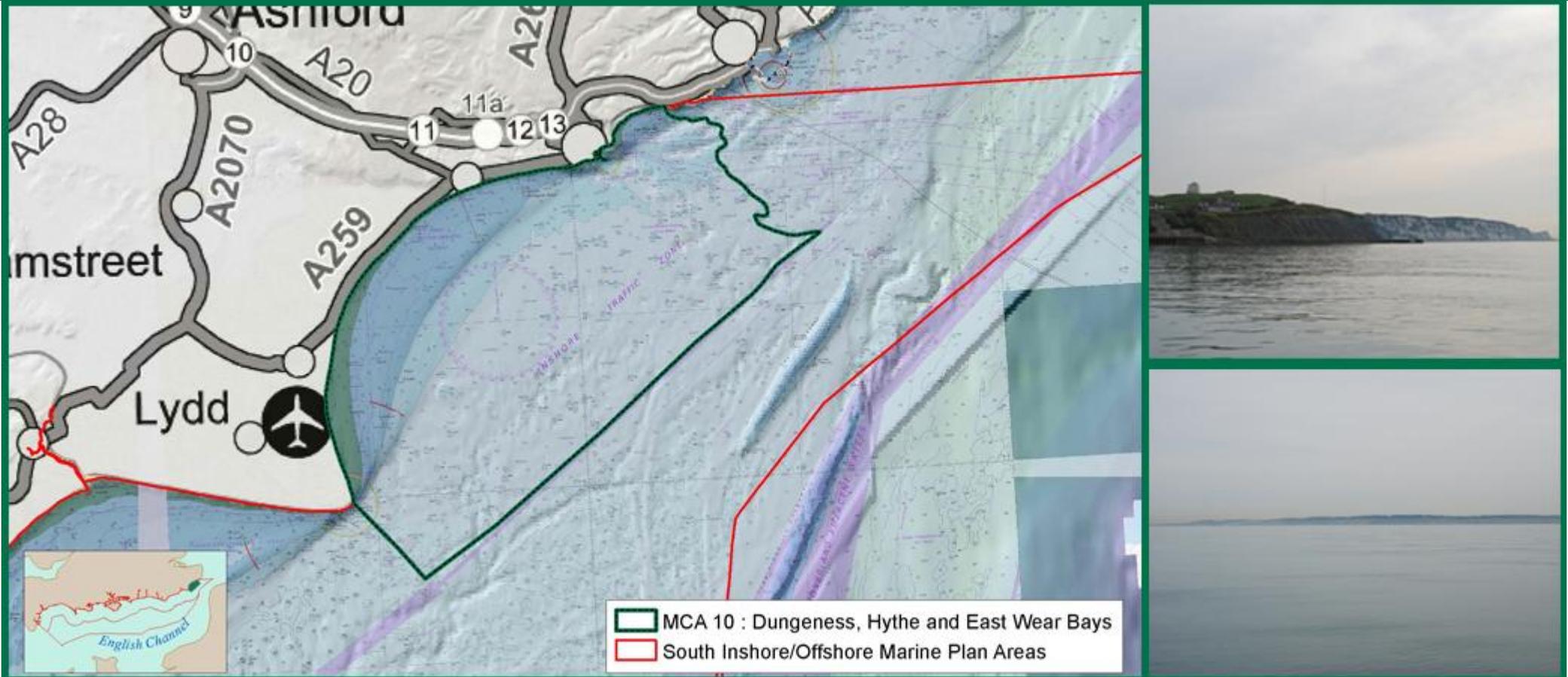
MCA 10: Hythe and East Wear Bays

Snapshot

Key Characteristics

Description

Visual Resource Mapping



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Location and boundaries

The boundaries of the Marine Character Area (MCA) are defined in the south by the low lying shingle foreland of Dungeness and in the north by the change in geology from the mudstones and clays of this MCA to the chalk bedrock of MCA 11 (outcropping at the coast as the White Cliffs of Dover). The seaward boundary of the MCA is broadly consistent with the boundary of the South Inshore Marine Plan Area, representing the 12 nautical mile territorial limit and bathymetry of approximately 30m, and the transition to the main channel shipping lanes of the Dover Strait. The MCA is covered by Shoreline Management Plan area 11: South Foreland to Beachy Head.

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

The MCA is characterised by a generally low lying coastline with views to the wooded slopes of the Kent Downs Area of Outstanding Natural Beauty (AONB) behind, and the distinctive chalk and clay cliffs east of Folkestone. The relatively urbanised coastal towns of Folkestone and Hythe lie to the north of the MCA whilst the holiday resorts of Dymchurch and St Mary's Bay front the sandy beaches to the south of Hythe Bay. Dungeness is one of the largest expanses of shingle in the world and supports a large number of rare habitats. The clay/ greensand cliffs east of Folkestone Warren are important for their geology and habitats and form part of the Dover - Folkestone Heritage Coast. There is also a rich maritime history represented through the remaining Martello Towers, and the heritage of the historic Cinque Port of Rye. The power station and lighthouse at Dungeness are landmark features, the power station is visible from far out to sea, appearing as a large grey block. There are frequent views to large ships on the shipping channels through the Dover Strait, and there is often an orange haze on the horizon as a result of shipping pollution. There are views across the Channel to France from Folkestone.

Adjacent National Character Areas (NCAs)

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

- 123: Romney Marshes
- 120: Wealden Greensand
- 119: North Downs

Adjacent nationally protected landscapes

The Kent Downs AONB lies inland of the coast in the northern section of the MCA and meets the coast east of Folkestone at East Wear Bay, also designated part of the Dover-Folkestone Heritage Coast.

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

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- Low lying coastline with wide sandy beaches and a number of small coastal towns.
- Folkestone Warren important for its geological strata showing exposures of chalk and Gault Clay, and wildlife including rare invertebrates, birds and vegetated undercliffs.
- Dungeness is internationally important for its biology and coastal geomorphology. The shingle foreland is the largest and most diverse area of shingle beach in Britain, with dunes, salt marsh and protected by a large number of designations.
- Diverse underwater geology including a subtidal reef system offshore from Folkestone. Soft mud at Hythe Bay supports a large number of species including seapen and burrowing megafauna.
- Complex tides and currents due to the funnelling effect of the Channel, with tidal surges relatively common.
- Approaching the Channel's shortest crossing point, trade and defence dominate the MCA's cultural character, including the historically important 'Cinque Ports' of Romney and Hythe, granted Charter rights in 1260 for defending the coastline against attack.
- Napoleonic War Martello Towers spaced along the length of the coast from Dymchurch to Folkestone, also forming daymarks when viewed from the sea.
- The intensity of shipping in the area, both during peacetime and war periods, has produced many recorded ship wreck sites particularly around Dover and Folkestone.
- Commercial activities including fishing, tourism and sand and gravel extraction. Small fishing fleets operate from Folkestone and Dungeness, with boats also landing on the beach at Hythe.
- Coastal waters relatively quiet compared to the busy large vessel movements in the Channel –views are afforded to busier seascapes – e.g. the Dover Strait, Folkestone Harbour and large cargo vessels.
- Military Danger Area extending offshore west of Hythe. Occasionally at night, orange flares can be seen from the firing ranges. This is a patrolled area and forms a distinctive 'empty' inshore seascape, with fishing and recreational boats absent.
- Offshore, orange smog sometimes visible on the horizon, an indicator of pollution from shipping on the Dover Strait. Fog and low haze are common around Folkestone and Dungeness.
- Coastal development at Folkestone and the seaside towns of Dymchurch and Hythe visible from the sea. The white sea wall at Hythe stands out in landward views.
- Dungeness Power Station (MCA 9) is a key landmark, visible from far out to sea as the low lying coast disappears from view, appearing as a large grey block or huge container ship.
- Wooded slopes and skyline of the Kent Downs AONB important in views from the sea from Hythe Bay, providing a rural contrast and texture against the low-lying coastline.
- Views to France occasionally afforded from the A20 road and from coastal path at Folkestone, and there is night time visibility of the offshore wind farm at Caps.
- Channel Tunnel terminal at Folkestone; the route passing along the coastline before travelling beneath the sea in MCA 11 en route to France. Its presence plays a major contribution to the perceptual character of this area's seascape.
- Wild and tranquil seascape around Dungeness and Folkestone Warren; rare in south-east England. Open access around them makes them important educational and recreational resources.
- Bleak and timeless character of Dungeness and the Romney Marshes inspiring artists and writers; Derek Jarman's cottage at Dungeness is part of a wider artistic community of 'shacks' around the sand dunes.



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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 overall character.

Natural influences

The majority of the coastline of the MCA between Hythe and Dungeness is a low lying bay of sand and shingle deposits overlaying soft mud. The bay curves southwards towards the shingle foreland of Dungeness. East of Folkestone at Folkestone Warren, geologically and ecologically important cliffs of chalk and clay rise up behind East Wear Bay. Where the chalk meets the coast at Eagle's Nest the iconic white cliffs of Dover begin, marking the transition to MCA 11.

Folkestone Warren is important for its geology and wildlife including rare invertebrates, fauna – especially on the vegetated undercliffs - and birds, and is protected by designations. Of particular note are the geological strata where chalk overlies Gault Clay, showing excellent representations of the Folkestone Beds. Well-preserved fossils are found here including the remains of turtles and pliosaurs.

The soft Folkestone cliffs are extensively slumped and landslipped as a result of the underlying clay, though coastal defences now limit the removal of slumped material by the sea and have reduced the rate of erosion. There is also an inter-tidal wave-cut platform where geological strata are exposed. The chalk cliffs are important for biodiversity including chalk grassland – now under a grazing management regime – as well as distinctive colonies of seabirds including kittiwakes.

Dungeness is the RSPB's oldest nature reserve and its importance for

biodiversity and geology is reflected in a large number of designations including SSSI. It is the largest cusped foreland in Britain, and forms the integral part of a system of barrier beaches that can be traced from Fairlight to Hythe. It is formed predominantly of flint shingle, and it supports a number of rare plant species including stinking Hawk's-beard, invertebrates such as butterfly and migratory birds.



Cliffs at Folkestone Warren

From the coast the land shelves gently, though water depth drops away quickly at Folkestone and Dungeness, reaching 20m in less than 1km. Tides and currents are relatively complex due to the funnelling effect of the Channel, and tidal surges are relatively common. Dungeness is a tidal watershed point where the two tides – from the Channel and the North Sea – meet. Tides here can be very large. The tidal range increases eastwards due to the narrowing of the Channel towards the Strait. There can be choppy water conditions as a result of the complex underwater topography, or when hard westerly weather moves waves from the Strait sometimes as far as Dungeness.

Generally, south-westerly tidal currents transport sediment eastwards,

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although there is an important reversal at Dungeness where eddies around the foreland cause accretion on the eastern side of Dungeness. Supply of offshore sediment from further along the coast is reducing due to coastal defences to reduce coastal erosion e.g. at Hastings.

Relative sea level is rising around this part of the coast at a faster rate than anywhere else in the UK – which has consequences for development, coastal defences and coastal habitats. Recent coastal sea defences have been constructed between Hythe and Folkestone, comprising rock groynes, beach re-nourishment and a sea wall to protect against erosion at the eastern end and flooding at the western end as well as the sea wall at Dymchurch, visible in views from the sea.

The seabed is characterised by soft sediment which has a rich biodiversity, with large numbers of species including spoonworm, burrowing shrimps and molluscs. Future management of the Hythe Bay area would potentially involve reduced trawling. Closer to Folkestone the seabed is characterised by large depressions topped by exposed rock ledges and a gently sloping boulder-strewn platform. The diverse sea bed supports rare marine habitats and species including sponges, coral and sea squirts attached to rock ledges.

The sloping foreshore between Copt Point and Folkestone Warren has varied intertidal habitats; the exposed greensand forms rock pools important for faunal diversity including seaweed and locally rare algae. Offshore, there is a unique subtidal reef system with a complex geology, supporting rare marine biodiversity and rich fishing grounds. The Greatstone dunes on the eastern side of Dungeness are a relatively rare example of dunes in the south-east of England, and contain many rare species and plants. The patterns of shingle ridges which form Dungeness provide a historical record of the evolution of the

landform and the changing sea levels through time. The active dynamic coastal processes are still ongoing and evolving. Historic land reclamation at Romney Marshes has formed arable land and grazing marsh.

Cultural / social influences

The coast has a rich maritime history. The towns of Romney and Hythe were historically important as 'Cinque Ports'. They supplied the King with ships and crew, defending the coastline for a certain number of days each year, defending the Sussex and Kent coast from attack and in return they received privileges such as exemption from taxes, free trading rights and the legal right to hold their own courts. The towns of Lydd and Folkestone were later added to the Confederation of Cinque Ports as supporting ports – 'limbs' of the original ports. The port at Hythe has since silted up due to the sea receding over hundreds of years. The historic harbour and town is now some half a mile inland of the current coastline at Hythe.

Martello Towers are another key feature of the coastline. There were once over 100 Martello Towers built between the east coast in Suffolk and the south coast at Sussex in the Napoleonic period to defend the coast against possible invasion from France. Martello Towers survive at Folkestone, Hythe and Dymchurch – this location having had a vital strategic role, being so close to France. Martello Towers were also later used to guard against smuggling.

There are a large number of wrecks in this MCA, demonstrating the intensity of shipping in the area – both in peacetime and war – at the shortest crossing point of the Channel. For example, the passenger liner *Pomerania* which collided with another vessel on its journey between New York and Hamburg in 1878, a World War I German



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submarine, and the *HMS Brazen*, which sank after German bomb damage in 1940.

Other coastal heritage features include an Iron Age urnfield and Roman Villa at East Wear Bay, sound mirrors used in the World War II near Dungeness and the Battle of Britain memorial at Capel-le-Ferne. Folkestone Warren has an important geological history as the testing ground for many of the early geological principles such as using fossils a means of correlating rock sections. The geology in the rocks has been extensively studied, partially because of the fact that the railway line was constructed across the rocks which are prone to land slipping. The cliffs are now heavily supported by coastal defences.



Dymchurch beach and wall, with a Martello Tower to the right

There is a small harbour at Folkestone, previously operating as a ferry and cargo port. Small fishing fleets operate from Folkestone and Dungeness, with boats also landing on the beach at Hythe and Dungeness. Fishing includes trawling and fixed nets (e.g. sole, bass, turbot) as well as lobster potting, shellfish harvesting (primarily scallop dredging), whelking and crabs. There is also recreational angling and

fishing at Hythe and Dungeness.

The military danger area west of Hythe adjoins a relatively undeveloped section of coastline in military use. A number of sub-marine cables extend from Copt Point, crossing the Channel to make landfall at Sangatte, west of Calais. The power station, black and white striped lighthouse and airstrip at Dungeness are key features visible in views from the sea.



Fishing boats on the beach at Dungeness

Aesthetic and perceptual qualities

The key landmarks of the MCA are the Dungeness Nuclear Power Station and lighthouses at Dungeness point, and the chalk/ clay cliffs at Folkestone, as well as key views to the iconic white cliffs of Dover in MCA 11. The power station stands out, visible from far out to sea as the low lying coast disappears from view, appearing as a large grey block or huge container ship, sometimes even appearing as separated from the rest of the land.

The coastline at Folkestone where the Kent Downs AONB meets the coast is part of the Dover – Folkestone Heritage Coast. The distinctive

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chalk/ Gault Clay soft cliffs transition to the famous white cliffs of Dover in MCA 11. East Cliff & Warren Country Park is located here, and the North Downs Way & Saxon Shore Way long distance route provides open views to sea.

Occasionally there are views of France, which can be very clear, and there is night time visibility of the offshore wind farm at Caps. Views of ships making the short crossing across the Channel are frequent, particularly from around Folkestone, though these are less frequent towards Dungeness, where the seascape has a more tranquil character. The wooded slopes and skyline of the AONB are important in views from the sea, appearing behind the sandy/ shingle beaches of Hythe Bay. At the southern end of the MCA, the Romney Marshes provides a flat backdrop to the shingle bars of Dungeness.

Dungeness is reputed to be the largest area of shingle in Europe, and the UK's only official desert. It has a remote, wild character, and is sometimes described as 'the sixth continent'. The dynamic coastline has a feeling of constant evolution, exposure and submission to nature's elements. The cliffs at Folkestone are also changing as a result of erosion and landslip. The rate of erosion has reduced as a result of coastal defences, though erosion still continues.

The juxtaposition of industrial man-made elements with the land and sea is also a key feature of the MCA. For instance the power station at Dungeness, gravel extraction, military uses and urban development at Folkestone are in close proximity to fragile and rare habitats and geological features including the shingle beach and dunes of Dungeness and the distinctive soft, eroding cliffs of Folkestone Warren. At Hythe and Dymchurch the stark white sea walls stand out in views from the sea behind the beaches.



Wooded slopes behind the beach at Hythe

There is open access across much of Dungeness and the cliffs at Folkestone Warren which have access to the cliff base. Here, the area retains a rare feeling of wilderness in south-east England and exposure to the elements. This is interrupted intermittently by overflying aircraft in the west using Lydd Airport.

Atmospheric conditions are changeable here, partly as a result of weather sweeping in from the North Sea. The meeting of the tides at Dungeness can create worse than average visibility and uneasy seas. There is sometimes an orange haze visible on the horizon as a result of sulphurous emissions from shipping –making the air thick and brown.

The bleak and timeless character of Dungeness and the Romney Marshes has drawn in artists and writers, for example Derek Jarman's cottage and garden at Dungeness is part of a wider artistic community of 'shacks' on the shingle. The famous painting 'Landing of the Belgian Refugees' by Fredo Franzoni – a renowned artist from Belgium and himself one of the refugees - depicts the moment in 1914 where 64,000 Belgians fleeing the German invasion at the start of World War I, sought



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refuge and shelter in Folkestone.



Landing of the Belgian Refugees, Fredo Franzoni, 1915²

² photo credit: Folkestone Library – History Resource Centre (image from BBC Your Paintings)
http://www.bbc.co.uk/arts/yourpaintings/paintings/search/belongs_to/folkestone-museum-509_collections

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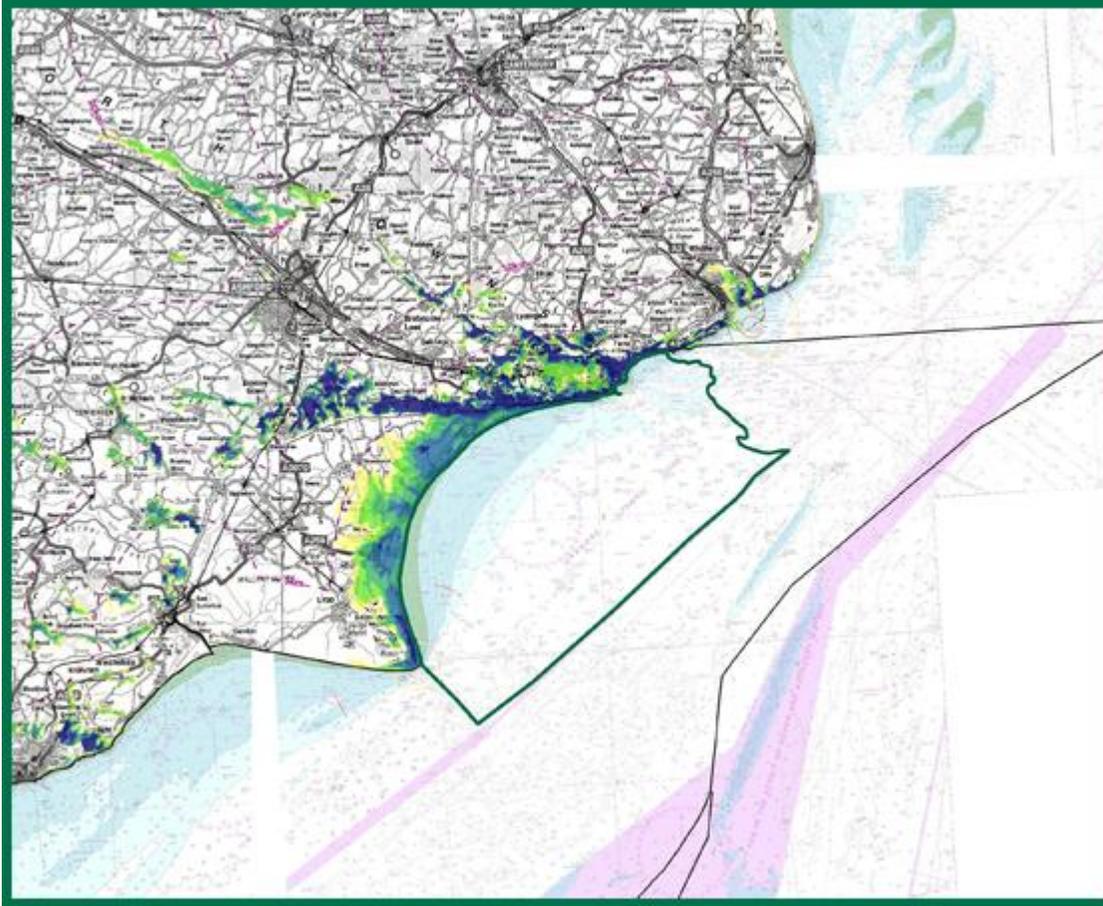
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Land with views of MCA 10



South Inshore/South Offshore marine plan areas

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Land with sea views (percentile)

1 to 20

21 to 40

41 to 60

61 to 80

81 to
100

- Extensive views can be gained from locations around Dover, (including areas of the Dover-Folkestone Heritage Coast and the Kent Downs AONB) and around Folkestone, including sections of the North Downs Way.
- Extensive sea views are also experienced at Fairlight, Guestling Green, the eastern side of Dungeness headland, and along a narrow stretch between Folkestone and Hamstreet.
- Other locations with extensive sea views are Kenardington, Tenterden, Leight Green, Stone in Oxney, around Rye and Beckley Furnace (within the High Weald AONB).
- Locations east of Hastings, at Broad Oak, Wittersham Benenden, Broad Tenterden, Shirkoak, Charing and large areas between Dungeness and Folkestone have some views of this MCA.
- Whilst sea views can be obtained from the eastern edge of Hastings to St Margaret's at Cliffe (within the South Foreland Heritage Coast), these are less extensive than from other areas.

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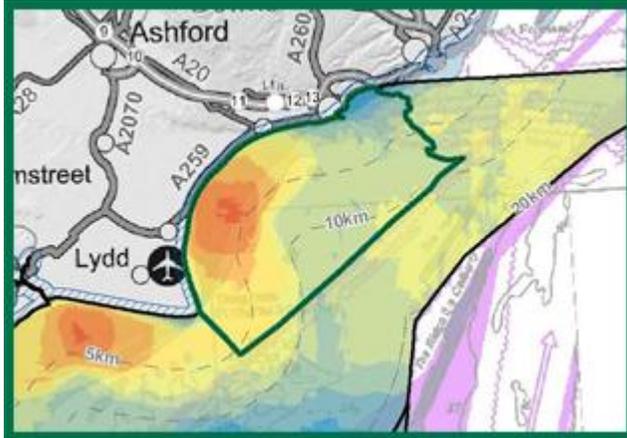
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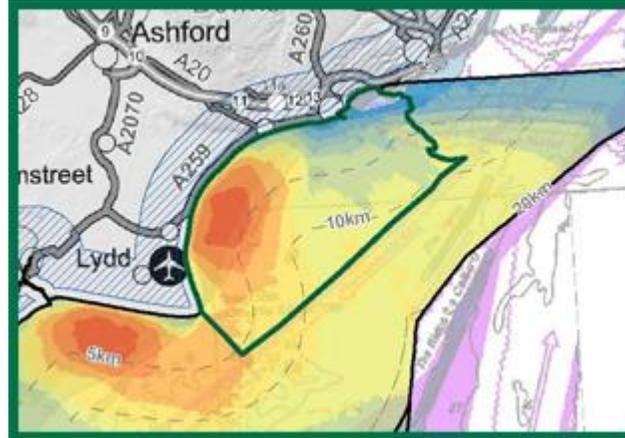
Visual Resource Mapping

Visibility of sea from land

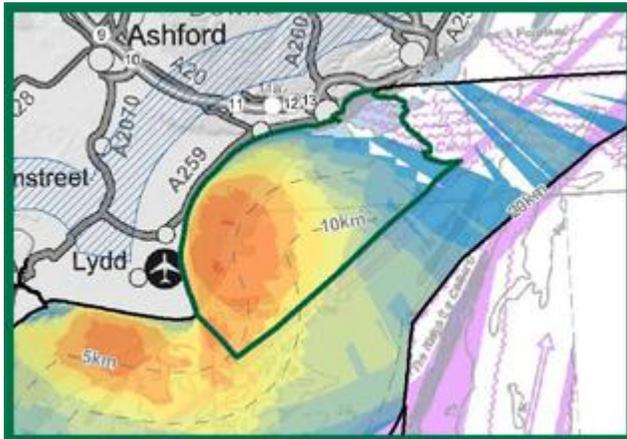
Relative visibility of the sea surface from viewers on land



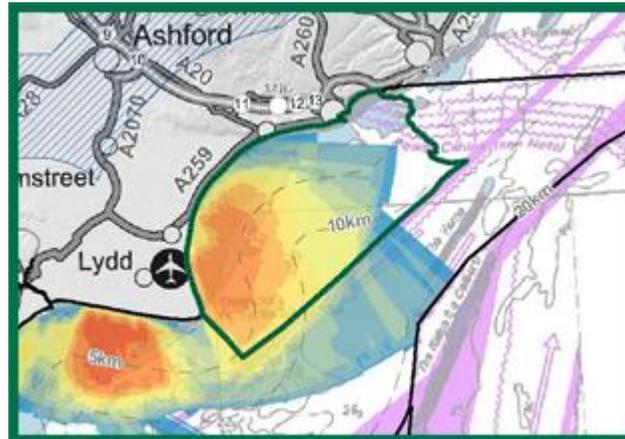
0-1km from the High Water Mark



1-5km from the High Water Mark



5-10km from the High Water Mark



10-20km from the High Water Mark

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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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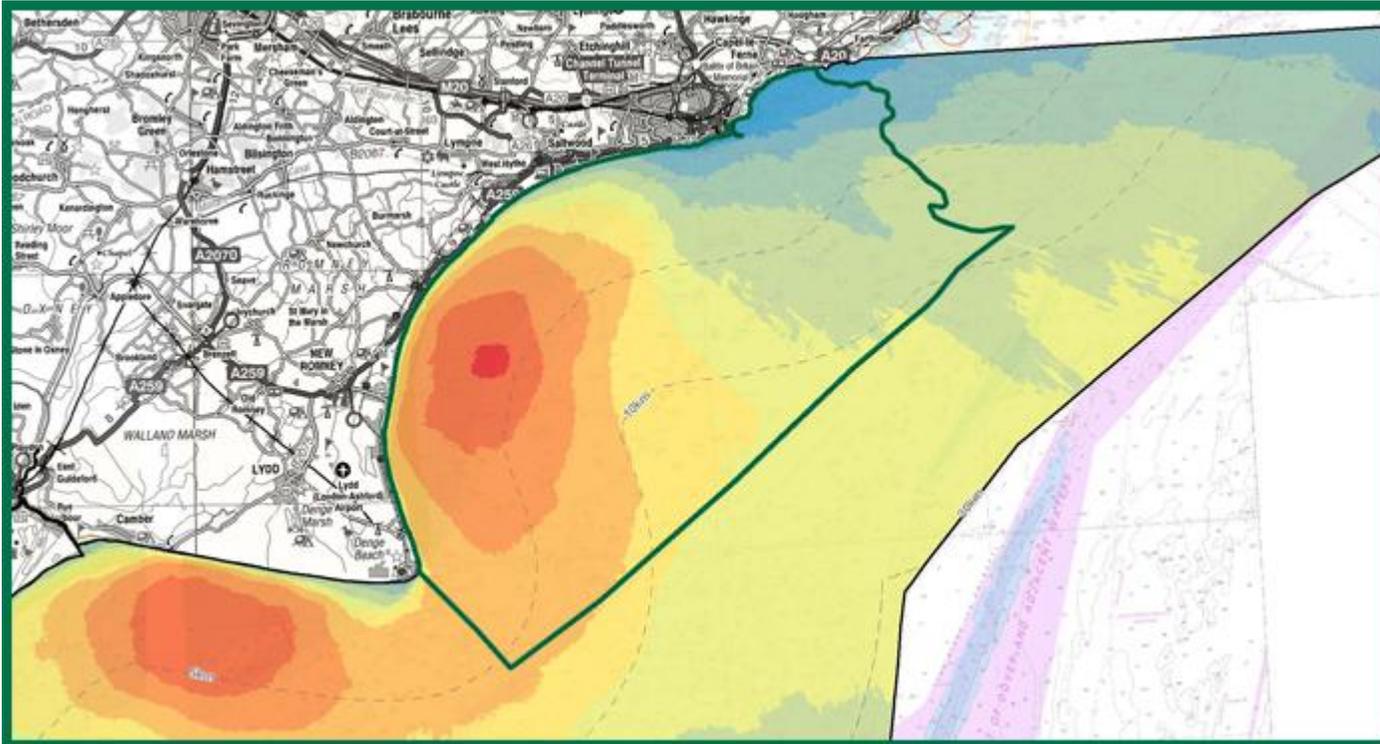
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Visibility of sea from land

Relative visibility of the sea surface from viewers on land



- The western half of the MCA is more visible from land than the east.
- The most visible part of the MCA can be found just offshore of Roar Bank.
- Visibility increases quickly towards this point from the coastline at New Romney, and then very gradually decreases towards the English Channel and the MCA's southern boundary.
- The south western corner of the MCA can be seen from a relatively high number of locations on land.
- Visibility steadily decreases from the west to the east, with the lowest visibility from the land being within East Wear Bay.

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)

