

South Coast Plain



Key Characteristics

- Major urban developments including Portsmouth, Worthing and Brighton linked by the A27/M27 corridor dominate much of the open, intensively farmed, flat, coastal plain.
- Coastal inlets and 'harbours' contain a diverse landscape of narrow tidal creeks, mudflats, shingle beaches, dunes, grazing marshes and paddocks. From the Downs and coastal plain edge there are long views towards the sea and the Isle of Wight beyond.
- Trees are not a dominant feature – there are some small woods and a few windswept individual trees in the farmland or the occasional poplar shelter belt.
- A pattern of large arable fields, defined by low hedgerows, are often interspersed by horticultural glasshouse 'estates' and isolated remnants of coastal heath.
- The complex series of creeks, mudflats and shingle beaches along the coastal edge becomes less apparent to the east with the intensively-farmed plain increasingly dominated by disordered seaside towns and leisure developments.

Landscape Character

The South Coast Plain lies between the dip slope of the, South Downs and the waters of the English Channel, Solent and part of Southampton Water. The Plain stretches from Southampton Water in the west, widening to about 10 miles across to form the Manhood Peninsula and Selsey Bill, before tapering eastwards towards Brighton. The coastline includes several inlets such as Chichester and Langstone Harbours which are particularly distinctive local landscapes.

The flat coastal plain has, in part, an intricately indented shoreline and, although rather exposed to south-westerly winds, temperatures are relatively warm, soils are high quality and the growing season is long. The area is thus intensively farmed and includes a prosperous horticultural industry with glasshouse, development and tourist trade.

The area exhibits one of the longest and most concentrated stretches of shoreline ribbon development in Britain and each coastal town or village has developed almost to the high water mark.

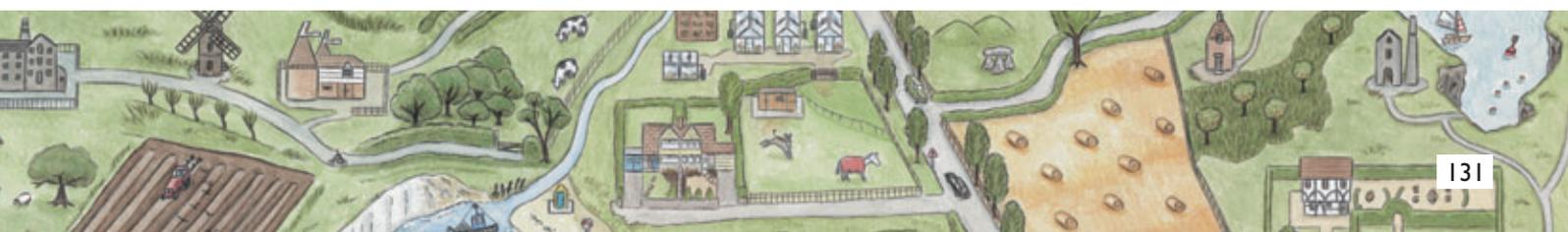
The Plain is broadly divided into the coastal margins which are heavily influenced by the sea, the expansive lower coastal plain which occupies most of the area, and the upper coastal plain. The latter forms the transitional area between the lower plain and the Chalk dip slope of the South Downs to the east and with the South Hampshire Lowlands further west.



JOHN TYLER/COUNTRYSIDE AGENCY

Mud flats and salt marshes with characteristic inlets fringe the undeveloped harbours.

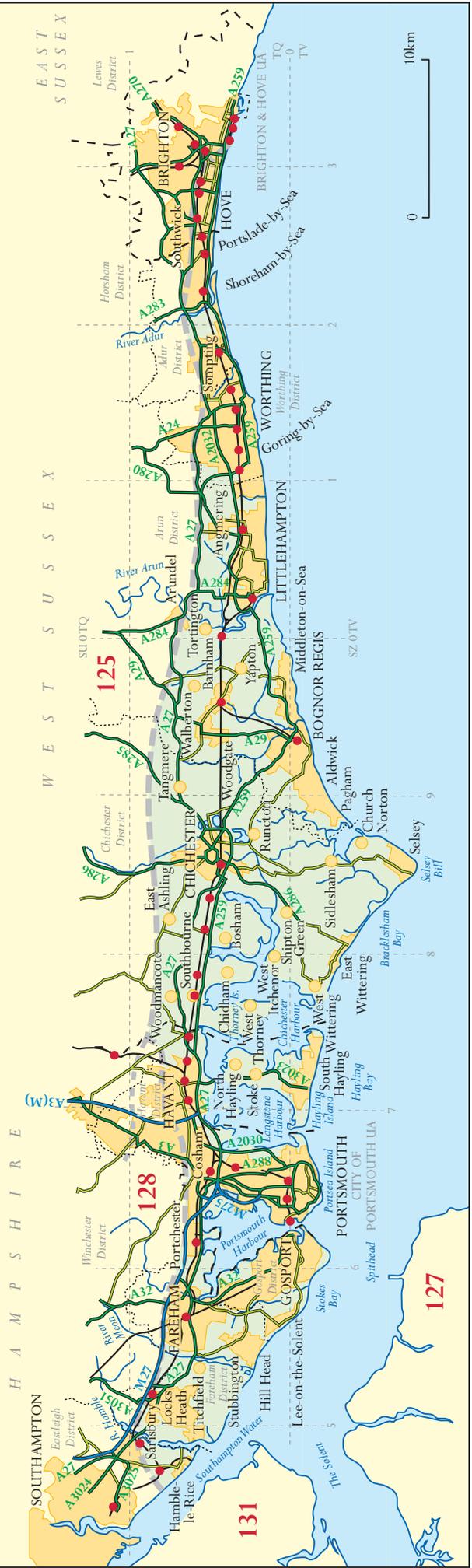
While large parts of the coastal margins have been urbanised by the spread of seaside towns and budget holiday accommodation, the remaining open coastline contains secretive inlets and enclosed harbours. The exposed shoreline is an exhilarating, open, linear landscape of shingle and sand with the great expanse of the sea itself as a backdrop. This shoreline is intermittently indented with inlets and estuaries where broad expanses of sheltered water are edged by an attractive mix of mudflats, marshes, wetland scrub and lowlying fields occasionally interrupted



Character Area 126 South Coast Plain

0-200'
height above sea-level in feet

- Area 126 boundary
- Adjacent Area **131**
- Motorway
- A Road
- B Road
- Railway and station
- County boundary
- Unitary Authority
- District boundary



by small creeks. Chichester Harbour, for example, is one of the largest natural harbours along the South Coast Plain with a diverse, landscape of numerous inlets interspersed with fairly open agricultural peninsulas and wind-sculpted woodlands. Picturesque harbourside settlements are typically clustered around small boatyards and marinas while numerous moored sailing boats dot the harbour edge. Other inlets provide contrast to this scene such as Pagham Harbour which retains an overriding sense of remoteness. This is due in no small way to the extensive tidal mudflats fringed by marsh vegetation and populated by large numbers of migratory birds. In contrast to the relative peace and remoteness of the Sussex harbours, the highly developed and historical Portsmouth Harbour is constantly busy with sailing boats, Cross channel ferries and naval warships.

In the lower plain, the wide scale and treeless farmed landscape is dominated by large arable fields. Views north are contained by the rising dip slope of the Downs, but views seaward are without definition and tend to lack depth and perspective. The urban fringes of the sprawling seaside resorts are pronounced, as is all urban development in this flat landscape. Some smaller-scale landscapes also exist within this part of the Plain such as the quiet hamlets, traditional village centres, pastures, and minor roads. The chalk quarries of Ports Down are notable features and can be seen from some distance, both from the adjoining land and at sea.

To the north and east of the area, the upper coastal plain combines the flat, regular patterns of large fields with the gentle forms and patterns blending into the openness of the lower dip slope of the South Downs. The landscape is varied, incorporating both open arable farmland and low density settlements, with a more well-wooded and semi-enclosed (somewhat suburban) character locally, particularly to the west of Chichester. Hidden, intimate valleys and woods are a distinctive characteristic of the upper coastal plain to the east, such as the valley of Binsted with its steep slopes and winding lane, and the ancient woodlands of the Tortington and Titnore Lane area. The latter are on the southernmost flanks of the Chalk outlier of Highdown Hill which in itself is a unique and prominent feature on the plain.

Even where the plain is enclosed by a mixture of woodlands, the presence of windswept trees and occasional glimpses of the Isle of Wight reflect the generally open and exposed coastal location.

Physical Influences

Geologically, this landscape is part of a broad plain of flinty marine and valley gravels extending several miles inland to the dip slope of the South Downs and the South Hampshire Lowlands. The plain slopes gently southwards towards the coast becoming almost imperceptible; at Hayling Island the

landscape is flat, save for the undulating sand dunes. The continuity of the Plain is interrupted by many streams and rivers which flow to the sea – in the case of the river Hamble through a wooded valley. The superficial gravel deposits give rise to deep and well-drained brown earths which occur widely over much of the area while thinner chalky soils have formed over the distinctive Chalk outlier of Highdown Hill.

The coastal plain comprises essentially two units, a lower plain between 10 and 15 metres AOD and an upper plain between 30 and 40 metres. Each of these plains is underlain by clayey, sands, and gravelly deposits of raised beach, head gravel and brickearth deposits laid down when relative sea levels were higher than at present. The Upper Raised Beach Deposits contain unequivocal evidence of 'Boxgrove Man', his artifacts and an extensive mammalian fauna indicative of pre-Anglian glaciation (>450,000 years ago) age. Boxgrove Man therefore provides evidence for the earliest known human occupation of the British Isles.



IAN MCGOWAN PHOTOGRAPHY

Long linear shingle beaches and sand dunes are dominant features which are enjoyed by residents of the highly developed hinterland.

The wave-cut benches underlying the upper and lower coastal plains are cut into folded Chalk and Tertiary strata preserved in a series of en-echelon synclines and anticlines. One of the latter forms Ports Down which makes a prominent backdrop to the coastal plain in the west.

The lower plain is cut by southward-facing streams, locally termed 'rifes', each of which have dry headwater extensions over the upper plain and on into the Chalk dip slope of the South Downs. Towards the west, the lower coastal plain grades into terrace flats attributed to the 'Solvent river', present in the area during low sea-level events of the Ice Age.

The plain is crossed by rivers such as the Arun, Adur, Hamble and Meon which locally form wide alluvial floodplains. Now flooded, gravel pits comprise some of the largest areas of freshwater in the region. Over the superficial deposits lies a range of fertile soils which combine with the flat terrain and favourable climatic conditions to result in high quality agricultural land.



Picturesque waterside settlements are attractive features of the less developed harbours.

The sand and shingle beaches have been shaped by the complimentary processes of erosion and deposition since the last major change in sea level, forming spits across river mouths and inlets. Loose sand has gradually formed modest sand dune systems in some places. Around Selsey, outcrops of brickearth and chalk have been eroded to form low cliffs. Chichester and Pagham Harbours are submerged shallow valleys, dominated by mudflats built up through the deposition and stabilisation of silt and mud transported by streams.

The three harbours of Chichester, Langstone and Portsmouth are interconnected by narrow channels and together form the largest intertidal area on the south coast.

Historical and Cultural Influences

The coastal area (particularly in and around Langstone Harbour) has disclosed extensive palaeoenvironmental evidence of early exploitation. It was, however, the Neolithic forest clearance and grazing, with the introduction of domestic animals and crops when the climate was warm and the land lightly wooded and accessible, that began to open the landscape.

The Romans recognised the agricultural potential of the coastal plain as reflected by their establishment of Chichester between 43 and 61 AD as an important new market town and military centre. Important villa sites, now inland but once on the coast, are still evident as is the Roman fort at Portchester.

By the 10th century, a system of rich agricultural estates

was established to exploit the coastal plain's fertile soils, along with the pasture on the adjacent Downs and the timber and stock rearing of the Wealden fringe further north. By this stage the South Coast Plain would have been developing its reputation as one of the most fertile and intensively cultivated areas of Britain; the prevalence of market gardens and smallholdings on the coastal plain today in Hampshire bears witness to this long history of cultivation.

From 1066, the Norman period saw inland Saxon towns develop outports at New Shoreham and Littlehampton, from which goods could be traded more effectively. Agriculture was prospering and allowed the economy to diversify and the number of market towns to expand.

After an agricultural 'golden age' in the 19th century, cheap imports from America and southern Europe led to a decline in local cereal production and sheep grazing. The establishment of the railways brought new access to the coast and the seaside towns doubled in size by the end of the 19th century. Between 1837 and 1939 large parts of the coastline were built over as the tourist trade grew following the lead of Brighton. This had been prompted by contemporary writings on the health benefits of sea air and bathing. Originally served by paddle steamer from London, Brighton promoted the development of the railway and excursion fares from the capital. As demand increased so the smaller resorts such as Worthing, Littlehampton and Bognor Regis developed along with the rail link in the latter half of the 19th century.

Buildings and Settlement

Within the coastal margins, building materials were traditionally mixed largely reflecting the proximity of the sea for importing raw materials. Timber frames, flint, cob and thatch are all common. The medieval churches around the harbours are of flint and stone. Today, the character of settlement is mixed with traditional harbourside hamlets providing contrast with the recent holiday and residential villages that have sprung up along the shoreline and fringes of villages. Modern marinas and boatyards have also added to the harbour landscape. Urban expansion, industrial paraphernalia and caravan accommodation associated with the edges of seaside towns is prominent along the coastal margins.

On the lower coastal plain, settlements are dominated by suburban villages and the extensive seaside towns between Brighton and the edge of Southampton. Large reflective glasshouses, advertisement signs for farm shops, nurseries and equestrian facilities, golf courses, horse paddocks and industrial and institutional buildings all bring a suburban character, which confuses the definition between the urban centres and their rural hinterland.

The ancient market town and compact cathedral city of Chichester sits at the centre of this character area, with its, distinctive spire forming an important landmark. To the east, numerous villages form a fairly continuous residential sprawl, although this pattern includes some traditional flint hamlets and farm buildings. Along Southampton Water, smallholdings and bungalows are scattered but merge with the increasingly suburban outreaches of Fareham towards the Solent. Several large offices and residential tower blocks and gas holders in the larger towns dominate long-distance views.



PORTSMOUTH COMMERCIAL PORT

The natural harbours have lent themselves to development leading to a thriving maritime trade.

To the north at the base of the Chalk dip slope, settlement is more dispersed. A network of typically-winding secondary and minor roads, usually hedged or wooded, links together small flint villages, isolated dwellings and farm buildings, and the mixed housing styles of village fringes.

Many villages have retained their attractive medieval and late medieval core often arranged around a green or market area and the varied vernacular architecture displays strong relationships with its region.

Land Cover

Along the coastline itself, the vegetation is typified by a scanty covering of low growing, often mat-forming, specialised plants which can tolerate the saline conditions and mineral substrate. The shifting, dry shingle, mud and sands of the shoreline are particularly hostile to the establishment of vegetation and are generally devoid of cover, except where shingle-loving species and sand dune grasses have colonised naturally or by introduction. On the newly-formed ground of the mudflats in the inlets, pioneering intertidal marsh communities have colonised and these demonstrate a well-defined succession of plant types and species towards the land. Although not a dominant characteristic, scrub and small areas of wind-sculpted woodland persist on some coastal fringes, particularly around the sheltered inlets. Oldpark Wood, near Bosham Hoe, is a significant example.

Semi-natural communities occur almost as 'islands' within the arable land which project into the peninsulas from the lower coastal plain. This is a fertile area which supports intensive arable farming and horticulture, with some dairy, beef and poultry. Areas of medium-quality agricultural land where soils are shallow, stony and poorly drained, often support good quality permanent grassland such as the Arun floodplain.

The thicker gravel deposits support a mixture of high and medium quality soils which are intensively farmed where the soils are flintier. The area also supports mixed farming, including pig rearing, with horse paddocks and grazing on the poorer land.

The lower coastal plain, particularly in the west, is typically a homogeneous landscape of large open fields with few trees or hedgerows. Drainage ditches, wire fences or low banks are more usual as field boundaries. The sense of exposure within this open landscape is heightened by the odd stunted and windswept oak that stands along the lines of former hedges. A small number of isolated coastal heaths and woodlands occur on the open plain, with shelter belts of pine, oak or poplar shielding buildings from exposure to the wind.

In the upper coastal plain, tree cover varies. There is a strong network of small and medium-sized broadleaf woodlands, including some which are ancient and semi-natural, well-linked by hedgerows and garden exotics to provide an enclosed field framework. The landscape pattern comprises coniferous plantations, some ancient woodland, and a strong frame of small fields, woods and hedgerows. This quite high degree of vegetation cover is especially notable in contrast to the relatively treeless open lower coastal plain. In many places

woodland accentuates the prominence of elevated towns, as in the case of Arundel where the well-wooded landscape separates the town from the suburban villages to the west.

The Changing Countryside

- Mineral extraction, landfill and flooded gravel pits.
- Small villages engulfed by the expansion of urban coastal developments.
- Possible, pressure for new service areas along A27/M27 in the future.
- Ribbon development, holiday camps and caravan parks.
- Pressures for recreational uses and marina/harbour developments along the coast.
- Development of large modern glasshouses.
- Construction of rock islands as coastal protection measures immediately off the coast have a major visual influence.
- Coastal dredging operations may exacerbate erosion of the coastal edge resulting in the loss of distinctive landscape features such as coastal marshes.
- Future changes in sea level may become an important issue given that the South Coast Plain's flat low-lying nature makes it particularly vulnerable to rises in relative sea level.
- Loss of hedges and hedgerow trees owing to field enlargement.
- Recent significant loss of tree cover due to Dutch Elm disease and storm damage.

Shaping the Future

- The conservation of woodlands and new planting should be considered where appropriate.
- There are opportunities for the reversion of arable fields to grazing pasture.
- The conservation of wetlands – including those of the intertidal zone – is important to the area.
- There is scope for further restoration of field hedges and hedgerow trees under appropriate agri-environmental land management schemes.

- Coastal zoning and management would balance nature conservation, landscape and recreational interests.



Fertile soils are intensively farmed, with a prosperous market garden and horticultural trade reflecting the relatively warm temperatures and long growing season.

Selected References

- Millward R and Robinson, A (1973), *South-east England – The Channel Coastlands*, Macmillan, London.
- Dipper S (1995), *Landscape Assessment of East Sussex – Section 1*, West Sussex Counts, Council, West Sussex.
- Hampshire County Council (1993), *The Hampshire Landscape*, Hampshire Counts Council, Hampshire.
- Hinton D A and Insole, A N (1988), *Ordnance Survey, Historical Guides: Hampshire and the Isle of Wight*, George Philip, London.
- Countryside Commission (1992), *The Chichester Harbour Landscape CCP 381*, Countryside Commission, Cheltenham.
- Brandon P (1970), *The Sussex Landscape*, Hodder and Stoughton, London.
- Langstone Harbour Board – Langstone Harbour Management Plan – February 1977.

Glossary

AOD: Above Ordnance Datum

en-echelon: arranged in a stepped formation in parallel lines

substrate: surface on which organism grows