**Broad Character: Cultural Topography** 

**Character Type: Cultural Topography (landward)** 

**Regional Perspective: Southern England** 

Compiled by Seazone Solutions Ltd / M A Ltd, January 2011, after comment from D Hooley, English Heritage

#### INTRODUCTION: DEFINING/DISTINGUISHING ATTRIBUTES

This Character Type refers to those aspects of cultural topography whose physical expressions are predominantly landward of Mean High Water. It relates to areas whose characters are not intensively managed, and includes the following Sub-types:

- Cliff
- Dunes
- Lake, pond
- Reservoir
- Watercourse
- Wetland
- Lagoon

There are several stretches of coastal cliff along the Southern England shore, all offering recreation in the form of country walks. Examples include Swanage, Bournemouth, stretches along the New Forest coast, Peacehaven, and Beachy Head, the highest chalk sea cliff in Britain which rises to 162m (530ft) above sea level.



Beachy Head, East Sussex (© Maritime Archaeology Ltd)

Sand dunes are found on the Isle of Wight at Bembridge, but occur more frequently in the east of the region. The most extensive and well developed occur at the mouths of harbours, for example at the entrance to Chichester Harbour (Cox 1997). They can also

be found at Pagham Harbour, Bracklesham Bay, Shoreham Harbour, Littlehampton, Bognor Regis and Camber Sands.

Lakes and ponds are scattered throughout the region. Some are natural whilst others are formed from disused clay pits or disused gravel quarries.

Reservoirs are not common in the region, but can be found scattered throughout it. Examples include Canford Cliffs in Dorset and Fawley and Marchwood in Hampshire, both of which are in the vicinity of Fawley Power Station.

Watercourses exist in the region in the form of rivers, the major ones being Beaulieu River, Southampton Water, the Rivers Hamble, Itchen, Arun and Adur.

Wetlands occur in the form of various marshes throughout the region, as well as watermeadows along the Dorset rivers of Piddle, Avon, Sherford, and Stour. The surviving extent and distribution of wetlands in the region has been affected by human activity, in particular reclamation for industrial expansion eg along Southampton Water,

Few lagoons exist in the region, examples being Widewater Lagoon and Pagham Lagoon in West Sussex.

#### HISTORICAL PROCESSES; COMPONENTS, FEATURES AND VARIABILITY

Clifftops have been utilised since prehistoric times as areas of summer grazing, sources of fuel, military lookouts and navigational aids. These uses continued through the medieval and post-medieval periods and into the first decades of the 20<sup>th</sup> century.

The maritime cliffs of Hampshire are formed from very soft rock which is constantly eroding and represents an important source of sediment to the adjacent coastal habitats. The softness of the cliff tops also provides an important habitat for maritime plants and invertebrates (Hampshire County Council, 2010).



Eroding cliff at Barton-on-Sea, Hampshire (© Hampshire & Wight Trust for Maritime Archaeology)

Distinctive cliffs are useful daymarks for sailors eg the recognisable Seven Sisters and Beachy Head in Sussex, and the Needles, a row of three distinctive stacks of chalk that rise out of the sea off the western extremity of the Isle of Wight, close to Alum Bay. These cliffs and formations have associated lighthouses, increasing their significance as maritime navigational aids.

Some of the cliffs provide valuable building stone, for example the limestone of Portland (Portland Stone) and Purbeck (Purbeck 'marble') which have been quarried since Roman times. This stone has been used in the building of the region's cathedrals such as Chichester and was also transported further by ship or barge to be used in buildings further afield eg St. Paul's Cathedral.

The most extensive and well developed sand dunes of the region occur at the mouths of harbours, for example at Chichester Harbour, Pagham Harbour, Shoreham Harbour, Littlehampton, Bognor Regis and Camber Sands. Due to their location on the edges of sandy beaches in the region, dunes have attracted holiday makers for centuries, and during the second half of the  $20^{\rm th}$  century, caravan and chalet parks as well as golf courses have been established on them. Abandoned military structures can also be found within the dune systems in the region.



Dunes at Littlehampton seafront (© Maritime Archaeology Ltd)

Natural and artificial lakes and ponds are scattered throughout the region. Examples of artificial lakes/ponds include a disused clay pit on the surround of Poole Harbour in Dorset and disused gravel quarries in Hampshire.

Reservoirs are fairly rare in the region, but examples can be found near Canford Cliffs in Dorset as well as in Fawley and Marchwood in Hampshire. The latter are both in the vicinity of Fawley Power Station, and are used to supply it with the large amount of water it requires.

Watercourses exist in the region in the form of rivers such as the Beaulieu River, Southampton Water, the Rivers Hamble, Itchen, Arun and Adur, and the Cuckmere Estuary in Sussex. These have been used for food, water, transport and protection for millennia, as well as being utilised to facilitate industry and settlements. The latter can, however, have detrimental effects on freshwater supplies, such as sewage contamination. Rivers continue to be popular for recreational purposes such as boating and angling.



**Cuckmere Estuary (© Maritime Archaeology Ltd)** 

Wetlands such as marshes are seen throughout the region, and can be used for grazing. Watermeadows (areas of grassland subject to controlled irrigation to increase agricultural productivity) are found along the Piddle, Avon, Sherford, and Stour rivers in Dorset as well as further inland in Hampshire. They were mainly in use from the  $16^{\rm th}$  to  $20^{\rm th}$  centuries as grazing land but are now largely disused, although they are often considered important wetland wildlife habitats. The surviving extent and distribution of wetlands in the region has been affected by human activity, in particular reclamation for industrial expansion eg along Southampton Water.

Few lagoons exist in the region. One example is Widewater Lagoon in Lancing, which has special status as a unique Saline Lagoon, and is one of the areas subject to an Action Plan by the Sussex Biodiversity Partnership (www.lancing-nature.bn15.net/widewater/lagoon1.html). Pagham Lagoon used to be the outlet to Pagham Harbour in the late 1800s and was formed when the migration of the shingle spits sealed the outfall to the sea. The site is now a Site of Special Scientific Interest (SSSI), Special Area of Conservation (SAC), Special Protection Area (SPA) and a Ramsar site. (www.sdcg.org.uk).



Pagham Lagoon (© Maritime Archaeology Ltd)

# **VALUES AND PERCEPTIONS**

Many of the components of this Character Type are valued for their recreational opportunities. The cliff paths and the beaches at the base of cliffs attract walkers, holiday makers, and, in the west of the region, fossil hunters. They are often perceived as tranquil areas. High cliffs may be fenced for safety reasons, which, for some, affects their appreciation of the unspoilt qualities of the coast as do eroded paths leading from car parks on to the coast paths which are often up steep slopes (LDA Design, 2010).



Cliffs at Eastbourne, used by walkers and holiday makers (© Maritime Archaeology Ltd)

Rivers, ponds, lakes and also reservoirs are valued for recreational watersports including fishing, boating, windsurfing and bathing.

This Character Type is also highly valued ecologically due to its biodiversity, and many of the wetlands and lagoons in the region are designated as Sites of Special Scientific Interest, Special Area of Conservation and Special Protection Area. These also attract tourists and wildlife enthusiasts.

#### RESEARCH, AMENITY AND EDUCATION

In terms of amenity, cliffs in the Southern England region are frequently visited by walkers and hikers, contributing their part to public perceptions of landscape and seascape. There is potential to enhance the understanding, appreciation and enjoyment of the heritage encountered by these visitors. One example is the Countryside Centre located at the top of Beachy Head which includes the Downland Experience walk, and the Sussex Gallery containing photographs and pictures by local artists (www.beachyhead.org.uk/countryside\_centre.html).



Beachy Head, East Sussex, a popular recreational area for walkers (© Maritime Archaeology Ltd)

Dunes are used for recreational purposes mainly due to their association with sandy beaches; they are also utilised for golf courses and holiday camps or caravan sites. There is potential for encouraging the appreciation of the dunes, their flora and some of the historic features that they contain from both amenity and educational perspectives. Dunes can be perceived as having a stimulating wildness which may be disrupted by housing and golf course developments. Public perception seems to have forgotten their relationship with local economies and the dune systems' history which is often linked to the marine environment.

A greater understanding of the dynamic nature of the dune landscape may be facilitated through public interpretation, via on-site boards and displays in museums and visitor centres (Petts & Gerrard 2006).

There is a potential for research and documentation within this Character Type. Archaeological sites are often buried under dune systems giving them a high archaeological potential and time-depth. Dunes are likely to contain well preserved and stratified prehistoric and historical remains. The study of the formation of dunes and their link to the marine environment and regional climate history can provide an important contribution to the understanding of past human activities (Petts & Gerrard 2006). Further study of the more recent use of dunes by farming communities would also be beneficial (Val Baker et al 2007).

This Character Type is highly valued from cultural, ecological and recreational perspectives. Improved provision of information, on-site, available at information centres and online, could be further used to convey these aspects more effectively, especially if aligned with the better coastal access provision to result from the marine and Coastal Access Act 2009.

### **CONDITION AND FORCES FOR CHANGE**

This Character Type experiences both natural and human forces for change. These

include the gradual erosion by natural forces, residential and recreational development and the effect of increased tourism and visitors to these locations, all of which could damage the potential historical and archaeological remains.

Erosion is occurring at cliff locations throughout the region, for example at Milford and Barton on Sea The coastline is very popular with walkers which can cause considerable erosion. Increased recreational pressure could also disturb cliff top habitats or breeding bird colonies, especially where these species are sensitive to disturbance (LDA Design, 2010).

Wave action contributes towards the erosion of cliffs around Beachy Head, by undermining the lower cliffs which in turn undermines the upper parts which eventually collapse.

Climate change may increase the intensity or frequency of storms in the future which could result in coastal squeeze. The loss of beaches that may be protecting the cliff base from wave action could lead to accelerated cliff erosion (LDA Design, 2010).

Dune systems are complex and dynamic entities prone to instability and sudden large-scale shifts. This can have significant impacts on the surrounding environment as well as important consequences for recognising, dating, and conserving historic features within these areas (e.g. Petts & Gerrard 2006). The main threats to dunes in the region are:

- Recreation pressures on dunes can cause erosion and a loss of plant communities in certain areas
- Overgrazing by stock can reduce the species diversity of dune grasslands and lead to erosion. Alternatively, a lack of grazing may result in the invasion of scrub species and coarse grasses at the expense of the distinctive dune flora.
- Stabilization at the back of dunes caused by agriculture, golf course management and road construction can prevent the natural landward movement of dunes. If sea levels rise this could result in dune systems being squeezed out and lost.
- Loss of areas of dune to developments, such as roads and golf courses, and because of agricultural improvements.

#### RARITY AND VULNERABILITY

The erosion of some of these features (as is discussed above) can result in them becoming more dangerous and therefore less accessible to the general public. English Heritage has highlighted a number of considerations involved in managing these areas, including agriculture, coastal defence, tourism, transport, public and private property interests and ecology, as well as the monument itself (http://www.helm.org.uk/upload/pdf/Shoreline-Management-Plan-Review.pdf).

Where cliffs are actively receding, regular checks for stability may result in footpaths having to be rerouted further back for safety reasons. In other areas re-routings may be minor and temporary to assist with repairs to erosion and regeneration of grass and vegetation.

Dunes are generally rich in buried prehistoric and historical archaeological remains. These are usually well-preserved since dunes offer a non-acidic environment. They are also specialised habitats supporting internationally important vegetation types and are key habitats of conservation concern in the UK Biodiversity Action Plan (Cox 97). The sandy beach at Studland is associated with the only significant and extensive sand dunes in Dorset which supports dune heath and dune wetland, a relatively rare habitat in southern central England (LDA Design, 2010).

# **PUBLISHED SOURCES**

Cox, J, 1997 South Coast Plain and Hampshire Lowlands Natural Area Profile

Hampshire County Council, 2010, Hampshire County Integrated Character Assessment 2 Status: Draft March 2010 South East New Forest Coastal Plain

LDA Design, 2010 Dorset Coast: Landscape and Seascape Character Assessment

Petts D, Gerrard C. 2006. Shared Vision. The North East Regional Research Framework for the Historic Environment. Durham: Durham County Council

Surtees, Dr John (1997). Beachy Head. Seaford: SB Publications

Tapper B, Johns C. 2008. *England's Historic Seascapes. Consolidating the National Method. Final Report*, Historic Environment Service Cornwall County Council on behalf of English Heritage, Cornwall

#### **WEBSITES**

www.beachyhead.org.uk/countryside\_centre.html www.helm.org.uk/upload/pdf/Shoreline-Management-Plan-Review.pdf www.lancing-nature.bn15.net/widewater/lagoon1.html www.glaucus.org.uk/Brackish2004.htm www.sdcg.org.uk www.dorsetforyou.com/C-SCOPE www.hants.gov.uk