

Folkestone & Hythe District Heritage Strategy

Appendix 1: Theme 1d Landscape – The Coastline

PROJECT: Folkestone & Hythe District Heritage Strategy
DOCUMENT NAME: Theme 1(d): District's Coastline

Version	Status	Prepared by	Date
V01	INTERNAL DRAFT	F Clark	18.08.17
Comments – First draft of text. Will need the addition of photographs, figures and maps. Finalise references.			

Version	Status	Prepared by	Date
V02	RETURNED DRAFT	D Whittington	16.11.18
Update back from FHDC			

Version	Status	Prepared by	Date
V03	CONSULTATION DRAFT	F Clark	28.11.18
Comments – Check through and title page inserted.			

Version	Status	Prepared by	Date
V04			

Version	Status	Prepared by	Date
V05			

(1d) District's Coastline

1. Summary

Folkestone & Hythe District contains exceptional coastal landscapes that are of national as well as international importance. These landscapes are incredibly varied and range from the desolate shingle expanses of the Dungeness Peninsula to the dramatic white cliffs and open chalk grassland of the Folkestone Warren along the Heritage Coast. The formation of the coastline is also a varied and often complex story of land reclamation as well as other coastal processes that have resulted in a diverse coastal landscape and rich historic environment. The many heritage assets that lie along the District's coastline reflect several significant historical events and human activities, primarily concerned with the district's military legacy as well as other more local histories such as smuggling, fishing and religious heritage.

2. Introduction

The District's coastline exposes a cross-section through the Cretaceous system of geologies that have already been explored during the previous papers of this theme. It is a dynamic and dramatic landscape that ranges from the shingle expanses of the Dungeness Peninsula, along the low-lying coast of the Hythe embayment and then finally through to the iconic White Cliffs of the Heritage Coast at Folkestone and neighbouring Dover. The relic coastline of the Lympne escarpment also represents an important chapter in the history of the coastlines formation in the district and provides a spur of higher ground from which to enjoy panoramic views across the Romney Marsh and Hythe Bay.

Moving from west to east along the coastline, a series of Cretaceous strata are evident that can be seen to dip beneath successive layers of younger rocks. By contrast, the coastlines of Dungeness and the Romney Marsh are significantly younger and have been formed far more recently by the accumulation of sediment through both natural and man-made action. The coastline today continues to offer many attractive beaches that are very popular with tourists as well as striking coastal landscapes that reflect the varied histories of its formation. There are also several valuable heritage assets along the coastline that provide strong links to important historical events and people, such as the defensive structures that reflect the District's prominent military legacy.

Detailed examinations of each of the character areas that are in part covered by the District's coastline have already been given in the previous papers of this theme and so some aspects will not be repeated in the same level of detail here. However, an outline will be provided for each of the areas of coastline to properly explain its formation and continued function today as a valuable landscape asset.

The Dungeness Peninsula

The coastline of the district from west to east begins at the Dungeness Peninsula which is located in the southwestern part of the Romney Marsh between New Romney, Lydd and Camber (Rother District). The Dungeness Peninsula has continued to evolve over time and represents around 5000 years of coastal evolution. It forms part of a system of barrier beaches that stretch for 40km from Fairlight to Hythe and is one of the more uniquely distinct landscapes within the District.

The Dungeness Peninsula is a cusped foreland, also known as a ness or cusped barrier, and is an important geological feature that is found along some coastlines and lakeshores. It is primarily formed as a result of longshore drift which gradually produces an extension to the shoreline that extends outwards in a triangular shape, giving it its distinctive appearance as at Dungeness. This occurs through the accretion and progradation of sand and shingle which continues to accumulate and, in some cases, then becomes stabilised by the growth of vegetation which subsequently can support valuable flora and fauna species.

The cusped foreland at Dungeness and Rye Harbour is an important example of this type of geological feature and is the largest in Britain as well as supporting internationally and nationally significant wildlife and habitats. In recognition of this, Dungeness is designated as a National Nature Reserve (NNR) and further forms part of the Dungeness, Romney Marsh and Rye Bay Site of Special Scientific Interest (SSSI). It is also part of the Natura 2000 Networking Programme which is a series of sites across the European Union that has been designated as a Special Area of Conservation (SAC) under the Habitats Directive and as a Special Protection Area (SPA) under the Birds Directive. SPAs are classified to help to protect and manage areas that are important for rare and vulnerable birds because they are used for breeding, feeding, wintering and migration. SACs are classified to protect and manage rare and vulnerable animals as well as habitats.

Whilst the Dungeness cusped foreland is not the largest known in the world, it does however have features that set it apart as a rare example of this type of coastal geomorphology. The peninsula is almost entirely made up of flint shingle which makes it unusual and has also resulted in the ongoing creation of extensive surface and buried shingle ridges. These ridges record some 5000 years of coastal and environmental change and can also be directly related to the development of the barrier beach system. The exposed shingle ridges provide a valuable insight into the ongoing evolution of the foreland and the factors that are affecting its growth, such as new coastal defence works, sediment extraction and supply, recycling for beach management and climate change. The continued monitoring and recording of these surface shingle ridges will be important in order to assess the impact of human and environmental activity on coastlines like this and comparing these developments to historical changes.

The buried shingle ridges are also very important as they allow for the mapping of the forelands historic development going back thousands of years. Sediments that occur between the barrier beaches provide palaeo-environmental information that enables a detailed interpretation of environmental conditions at the time of deposition to be created as well as a chronology of coastal evolution. The cusped foreland at Dungeness is also a relatively advanced form of cusped due to much of its shingle being redistributed from barrier beaches which has formed a ness with a particularly acute angle.

Today Dungeness is a private estate and is closely managed by a number of bodies. The Dungeness Estate which includes parts of the coastline is owned and managed by EDF Energy and covers around 468 acres. This is located within the wider Dungeness NNR that is jointly managed by Natural England and the RSPB with the Romney Marsh Countryside Partnership also undertaking some management on

behalf of Natural England. The NNR stretches along the coastline of Dungeness ending at Greatstone where it also takes in the Greatstone Sand Dunes. Within the NNR and SSSI a number of important habitats and wildlife species are supported that are exceptionally sensitive and also rare within this country.

The Romney Marsh

Moving eastwards from Dungeness and Greatstone, the remainder of the Romney Marsh coastline boasts extensive and attractive sandy beaches such as at St Mary's Bay and Dymchurch. It continues to form an especially distinctive landscape within the District and also represents an important chapter in the coastal evolution of the district.

The Romney Marsh has a long and complex history of evolution that began approximately 6000 years ago when various environmental changes triggered the beginning of its formation. Under the influence of longshore drift sand bars and shingle spits began growing across the Rye Bay as well as forming a barrier from Dungeness to as far northwards as Dymchurch. This process resulted in the creation of a salt water lagoon behind the shingle barrier that was open to the sea at Hythe and gradually became mudflats with swamps and vegetation. Over many centuries the Marsh continued to grow and as parts of the land became settled by people, deliberate efforts were made to reclaim and retain land from the sea, perhaps going back as far as the Roman period.

By the early thirteenth century the vast majority of the Romney Marsh Proper as it is known today had been reclaimed through natural accumulation and human action. Extensive networks of drainage ditches were employed to drain and maintain the fertile land that had been created and continue to do so today. The coastline was continuing to extend outwards though parts of the Marsh such as the Denge and Walland Marshes were still primarily comprised of islands that were separated from the mainland. During the thirteenth century, two major structures were built on the Romney Marsh whose primary purpose would be to provide adequate drainage for the Marsh as well as to better protect the reclaimed land and coastline. These were the Rhee Wall and the formal Dymchurch Wall.

The Rhee Wall was the first of these and was constructed during the mid-thirteenth century. It was a watercourse or canal that was situated along the interface between the lower lying lands of the Walland Marsh to the south west and the Romney Marsh Proper to the north east. It originally ran for 7.5 miles between Appledore and New Romney, then one of the Cinque Ports, passing through Snargate, Brenzett and Old Romney. It helped to flush out the rapidly silting harbour at Romney Creek as well as providing a shipping channel that linked the two settlements of Appledore and New Romney. Despite these efforts, the port at New Romney continued to become silted and during the many storms of the thirteenth century became landlocked and subsequently redundant as a port. It continued to be used as a shipping route but eventually fell out of use by the fifteenth century. Despite its eventual redundancy, while in use it did protect the reclaimed marshes to the north from flooding during the storms which devastated the Walland Marsh as well as the ports of Romney to the south during the thirteenth century. Sections of the watercourse that still survive at Snargate today are designated as a Scheduled Monument.

The thirteenth century saw several storms that battered the southern coast of England and caused dramatic changes to its coastline. Significant storms hit in 1236 and between 1250 and 1252, but the most damaging was the Great Storm of 1287. The Great Storm of 1287 hit with such force that whole areas of the southern coast were redrawn and parts of the Romney Marsh coast were completely destroyed. The most dramatically affected were the towns of Rye and New Romney. Prior to the storm New Romney had been a thriving port which sat at the mouth of the River Rother where it ran into the English Channel. The storm caused the port to become completely silted and was thereafter landlocked about a mile from the coast. The amount of sediment that was deposited was so substantial that the land level of the town rose by around 5 inches. This can still be clearly seen at the parish church of St Nicholas where the churches floor is several inches lower than the present street level. It is asserted that the silting of the New Romney port also caused the course of the River Rother to divert away from the town towards Rye where a new channel was created that joined the River Brede and the River Tillingham. A new harbour was subsequently created at Rye where these rivers now flowed into the sea and it later became a Cinque Port.

The consequences of the Great Storm had lasting effects on the Romney Marsh and its coastline. It had caused a substantial amount of shingle to accumulate that created beaches that ran along almost the entire length of the Marshland. Significant damage had also been done to the natural shingle banks that protected much of the coastline at this time which led to the construction of the formal Dymchurch Wall during the late thirteenth century.

Today, approximately half of the Romney Marsh coastline is defended by sea walls and the oldest of these is the Dymchurch Wall. Dymchurch has had a sea wall since the Roman period with the original structure being constructed to protect the harbour at Lympne, *Portus Lemanis*. This barrier had been a natural structure that had proved effective for many centuries. However, the particularly harsh storms of the thirteenth century diminished large amounts of this wall and shingle was carried away mainly north-eastwards filling the Hythe Haven (now Hythe Ranges) and towards Folkestone. Construction of the Dymchurch Wall began in the late thirteenth century and was initially built using local clay and other organic materials such as wood piles and faggots with rock groynes projecting into the sea to hold the shingle. It continued to be an important structure that defended the reclaimed land and coastline of the Romney Marsh and by 1803 was 4 miles long and 20 feet high. Alterations were made around this time such as the inclusion of Kentish Ragstone. More recently in 2011 a new sea wall was built at a cost of £60 million and has been implemented as part of a wider scheme of coastal defence strategy for Folkestone to Cliff End. The new wall provides effective defences against flooding and encroachment of the sea.

By the fourteenth century much of the Walland and Denge Marshes had now been reclaimed using “innings” which is the process of building embankments around the sea-marsh and using low-tide to let the area run dry by means of one-way drains that were set into the new seawall, running off into a network of drainage ditches. These drainage ditches formed an extensive network that criss-crossed the Marsh and allowed for the drainage of water from the rich farmland into the sea via outlets and later into the Royal Military Canal. Land reclamation continued and was completed

later in the fifteenth and sixteenth centuries by which time the Romney Marsh landscape had been divided into areas for sheep grazing and pasture.

The Romney Marsh today is now the largest coastal wetland on the south coast of England covering 100 square miles. It comprises several linked marshes; Romney Marsh Proper that covers the area to the east of the Rhee Wall (a medieval watercourse running from Appledore to New Romney), the Walland Marsh that forms the majority of the area to the west of the Rhee Wall, and the Denge Marsh which covers the area to the south of the Walland Marsh. It is often referred to as *The Fifth Continent* which seems to stem from the words of Thomas Ingoldsby, the pen name of the nineteenth century author and cleric Richard Harris Barham, when he wrote that “*The World, according to the best geographers, is divided into Europe, Asia, Africa, America, and Romney Marsh*”. As such, it is a unique and distinctive part of the District despite its landscape being substantially younger than other parts of the district. Its coastline not only boasts attractive sandy beaches, but also has a rich historic landscape in addition to a unique natural setting. In particular the sandy beaches at Dymchurch, St Mary’s Bay and Greatstone are especially popular and will be explored in more detail in a later paper.

Lympne Escarpment and Hythe

The Lympne Escarpment represents a relic coastline that originally defined the edge of the large saltwater lagoon that had begun to form at the coast here following the accumulation of shingle and sand that marked the beginnings of the Romney Marsh. It highlights an important chapter in the evolution of the districts coastline and is a striking landscape feature within the District that borders the Romney Marsh to the south and runs along through West Hythe and “The Roughs” to the east with the Royal Military Canal at its foot. The site consists of a steep escarpment of Kentish Ragstone which is formed by the Hythe Formation and Lower Greensand. It has been designated as an SSSI primarily for its important flora and geology with its grassland and ash coppice woodland on Kentish Ragstone being some of the best remaining examples in Kent.

Continuing along the coastline to Hythe, the blue-grey Wealden Clay disappears beneath a narrow clay belt and the first of the major Lower Greensand Group. The steep hills that lie behind the town of Hythe and as far as Seabrook are formed from the sandstones of the Hythe Formation and include bands of Kentish Ragstone. During the medieval period it was a busy harbour that was established as an important Cinque Port sitting in between New Romney and Dover. Today Hythe is a small coastal market town on the edge of the Romney Marsh and boasts an attractive pebble beach. A large section of the shoreline comprises the Hythe Ranges military training ground that remains active.

The Folkestone Coastline and Heritage Coast

Moving eastwards from Hythe, the sandy clays of the Sandgate Formation supports Sandgate and then appears in much of the lower cliff face of the Leas at Mill Point. The urban centre of Folkestone then rests almost entirely on the Folkestone Formation with the cliffs either side of Folkestone Harbour being shaped from its Sandstone. The Gault Clay at Folkestone then first appears at the top of the sea cliff beneath the East Cliff Pavilion in Wear Bay Road where it extends eastwards and gradually declines to the foreshore where it is overlain by the Lower Chalk.

The Gault Clay cliffs at Folkestone are a particularly distinctive feature of the coastline here, especially at Copt Point where this geology is clearly viewable. The Gault Clay is divided into Upper and Lower formations and equates to the Middle and Upper Albian stages respectively. The Lower Albian is represented by the Folkestone Formation which comprises the uppermost Lower Greensand. A further thirteen subdivisions are then applied to the Gault Clay placing beds I to VII in the Lower Gault and beds VIII to XIII in the Upper Gault. Fossils are frequently collected *in situ* from the Gault Clay at Copt Point as well as from the Lower Greensand on the foreshore.

Beyond Copt Point are the **Folkestone Warren** and **East Cliff and Warren Country Park** that again form distinctive parts of the coastline at Folkestone. The Folkestone Warren is a key feature of the **Folkestone-Dover Heritage Coast** as well as forming part of the Kent Downs Area of Outstanding Natural Beauty (AONB). The site encompasses a range of marine and terrestrial habitats that are associated with the chalk cliffs, underlying Gault Clay and Lower Greensand. It is also of considerable biological, geological and physiographical interest and is therefore designated as a SSSI as well as forming part of the East Cliff and Warren Country Park which is a Local Nature Reserve.

The Warren's landscape has changed dramatically over the past 100 years and is now one of the most important sites along the Heritage Coast where the iconic white cliffs overlook dramatic landslips of the Chalk and underlying Gault Clay. The Warren has formed through a series of landslips that have taken place over the past 200 years. The last significant landslip was in 1915, since which time the coastline has been stabilised by the sea defences installed to protect the Folkestone – Dover railway line. Photographs of the Warren in 1920 suggest that it was originally predominantly chalk grassland with virtually no trees and many grazing animals. In 1924 however, the Warren was gifted to the Corporation of Folkestone by Lord Radnor with the stipulation that there would be no grazing animals on this area moving forwards. Unfortunately, this has allowed for the growth of shrubs and trees which has led to the loss of much of the open chalk grassland.

Today there are still patches of chalk grassland which are rich in important fauna and flora. A number of plant and animal species are supported here that are of national importance and are also rare within this country. The Warren is particularly rich in insect species with some only being found here such as the Grayling butterfly. There are also several important plant species such as various orchids including the Common Spotted orchid. Groups such as the White Cliffs Countryside Partnership and Kent Downs AONB Unit are continuing work to maintain the chalk grassland areas on the Warren and the important habitats that it creates. Funding through Environmental Stewardship schemes have also been offered to begin a trial grazing scheme which will help in reclaiming the important chalk grassland.

A section of the Folkestone Warren forms part of the East Cliff and Warren Country Park that is also protected as an SSSI and is a Local Nature Reserve. The park takes in the East Cliff, East Wear Bay and part of the Warren and is also valued for its wildlife and dramatic coastal landscape which offers spectacular views across the English Channel and White Cliffs. Today much of the park is open and has been

used for recreational purposes. It is also overlooked by 3 Napoleonic Martello Towers as well as containing the remains of the East Wear Bay Roman Villa and earlier Iron Age quern production site. A number of walking trails pass through the park and link Folkestone to neighbouring Dover along the clifftop such as the Saxon Shore Way and the North Downs Way.

The area of the districts coastline at Folkestone that is designated as a Heritage Coast is the Folkestone-Dover Heritage Coast and is also designated as a SSSI as part of the Folkestone Warren SSSI. The Heritage Coastline here features some of the most iconic landscapes in Kent, the chalk White Cliffs. These cliffs are famous worldwide and have enormous symbolic value as well as historical association. References to the White Cliffs have been recorded as far back as 55 BC when Julius Caesar made reference to them in his account of the attempted invasion of Britain. The White Cliffs have formed through the erosion of the chalk North Downs following the breach of the land bridge around 6000 BC that connected this country to the continent. The cliffs now provide a formidable landscape which can be seen from France on a clear day and is also the first and last sight that many travellers see when crossing the channel.

3. Description of the Heritage Assets

The district boasts exceptional coastal landscapes that are not only of national as well as international renowned, but are also incredibly diverse and range from the desolate shingle expanses of the Dungeness Peninsula in the west through to the striking White Cliffs and Folkestone Warren in the east. A number of attractive, sandy beaches that are popular with day-trippers and holiday-makers are also present along most of the coastline which also offers a rich historic landscape with a number of assets reflecting a strong local heritage. These coastal landscapes have added importance for their biological, geological and physiographical interest, and often provide valuable habitats for rare and unusual flora and fauna species. The above section has provided a background and context for the District's coastline and the below will concentrate on the assets as they survive today.

Dungeness

The coastal landscape at Dungeness is diverse and comprises a number of valuable habitats that includes the shingle ridges and sand dunes as well as several areas that have been modified by human action such as numerous flooded gravel pits and areas of wetland. Dungeness currently represents one of the most extensive examples of a stable vegetated shingle landscape in this country with some 600 species of plant, which is a third of all plants found in the United Kingdom, being found here. It is also home to a number of rare and important animal species such as the Great-Crested Newt, Sussex Emerald Moth and Medicinal Leech which are all incredibly rare in this country.

The shingle ridges along the Dungeness coastline support a range of vegetated shingle communities, and the transitions between these also clearly reflect the geomorphological patterns of the shingle structure. Just inland of the pioneering driftline and false oat-grass grassland communities is the Prostrate Brown which is an unusual plant species that is an important component of vegetation. Moving onto the older shingle ridges more common plants such as Sweet Vernal-Grass and Wood Sage can be found. Important communities of Blackthorn occur in low-lying

areas of Shingle and are rich in epiphytic lichen flora that is dominated by species that are unique to shingle and has its best representation at Dungeness. Other plant species that can be found along the shingle beaches include the endemic Leafhopper and rare Nottingham Catchfly, the latter being particularly important as the food plant of several rare moth species.

Dungeness's vast shingle coastline also contains areas of wetland and man-made flooded pits that are referred to as Open and Fossil Pits. These have been colonised by vegetation and display various stages of classic hydroseral succession ranging from open water and marginal red-swamp through to a form of marsh or fen. They now provide important habitats and refuges for several species of wintering wildfowl such as the Black-Necked Grebe, Goosander and Smew as well as breeding colonies of Gulls and Cormorants. Recent work to extend the reedbed areas has been undertaken by the RSPB who manages the RSPB Dungeness Nature Reserve in order to provide important habitats for more bird species such as the Bearded Tit and Marsh Harrier. Other areas of fen vegetation further provide important habitats for rare species such as the Great-Crested Newt and Medicinal Leech.

Along the coastline at Greatstone a number of sand dunes are included in the SSSI and NNR. These are examples of narrow bay dune systems that consist largely of a successional sequence of foredune to mobile dune and dune scrub habitats. These dunes are also significant as they demonstrate the transition from the vegetated shingle beach of Dungeness to the foredune communities found at Greatstone. They support an important ecosystem of plant and animal life which includes the Brown Tail Moth Caterpillar and Sea Buckthorn plant. As well as this, the flat sandy beach at Greatstone which stretches for over 2 miles is a very popular destination for visitors as well as holiday-makers. The attractive beach offers safe sea bathing and is also popular as a destination for water sports such as kite surfing, kite boarding and sea fishing.

The above features of the Dungeness and Greatstone coastlines have resulted in a unique and distinct coastal landscape within the District as well as in the country. It is also an area that has been sparsely occupied and so has a uniquely open and desolate character which makes it particularly attractive. Views across the shingle expanses at Dungeness and along the flat coastline to as far as Hythe can be enjoyed and also takes in a number of heritage assets that further reflect the local character and historic landscape. At Dungeness this is primarily represented by the fishing, railway and military heritage in built assets such as the lighthouses, Romney, Hythe & Dymchurch Railway, Dungeness Redoubt and Batteries as well as various unique dwellings such as the railway carriage residences and fishermen's cottages. Greatstone also reflects the prominent military legacy through the Greatstone Sound Mirrors as well as many natural assets such as the Greatstone Sand Dunes and Greatstone Lakes that form this attractive coastal landscape.

Romney Marsh

The Romney Marsh coastline not only boasts attractive and extensive sandy beaches, but also has a rich historic landscape that is set within a unique natural setting. Its sandy beaches are long, flat and open which mirrors the open character of the inland areas of the Romney Marsh that makes it so distinct and attractive. Spectacular views along the Romney Marsh coastline and inland towards the

Lympne Escarpment can be enjoyed from any of these beaches and form an important part of its unique appeal. Wide vistas of the Marsh coastline that can also be enjoyed from various vantage points on the higher ground of the North Downs and scarp landscapes are also a special part of this landscape and its local character. The popularity of these beaches is further highlighted by the number of holiday camps that are dotted along its coastline, primarily at Dymchurch, St Mary's Bay and Romney Sands which are explored in a later paper. These beaches further offer opportunities for recreational activity such as sea fishing, kite surfing and land yachting as well as a number of seaside amusements and amenities.

Other aspects along the Romney Marsh coastline illustrate its complex history and in particular highlight the ongoing battle to retain the land. The extensive network of drainage ditches that criss-crosses the Marsh form an important part of the landscape character as well as a vital strategy for draining and maintaining the land which would otherwise be underwater. Outlets at the coast further demonstrate this ongoing battle to drain the Marsh as well as the Royal Military Canal that lies at its inland border. The Dymchurch Sea Wall is another important feature that has protected the coastline for centuries against flooding and encroachment by the sea. Today approximately half of the Romney Marsh coastline is defended by sea walls, and the oldest of these is the Dymchurch Wall that began life as a natural structure during the Roman period. Today it is a formal structure that stretches from Folkestone to Cliff End in East Sussex.

Settlements along the Romney March coastline are on the whole small when compared to other coastal towns within Kent. Some towns are also very recently established such as St Mary's Bay and Dungeness again when compared to others within the county. This is however an important characteristic of the Romney Marsh coast where the landscape is open, flat and often wild where it has been sparsely occupied. This is especially true at Dungeness where the vast shingle expanses are desolate and wild which makes it uniquely attractive. This has also given rise to a number of valuable habitats and wildlife species that are of national as well as international importance being found here. Areas such as the Greatstone Sand Dunes and open grassland of the Marsh can boast rare species such as Medicinal Leeches, Great-Crested Newts and Brown Tail Moth Caterpillar. Important ecosystems of coastal flora have also been allowed to grow such as Sea Buckthorn, Nottingham Catchfly and Blackthorn.

This coastline also constitutes a rich historic landscape which contains a number of valuable heritage assets. The majority of these reflect the coasts prominent military legacy that can be traced back as far as the Roman period. *Portus Lemanis* on the outskirts of the Romney Marsh at Lympne was a Roman shore fort that protected the harbour that once operated here as well as the surrounding land of the Marsh. A number of the defensive structures are later Napoleonic structures such as the Martello Towers and Redoubts which were a national response to the threat posed by a French invasion during the Napoleonic Wars of the early nineteenth century. A number of structures from the World Wars such as the PLUTO bungalows at Dungeness are a further reminder of the coasts role during wartime and play an important role in the local character.

Assets relating to other aspects of local history are also found along the Romney Marsh coastline and largely relate to smuggling, maritime activity and the railway. Many buildings in Dymchurch have strong associations to historic smuggling activity as well as to the *Dr Syn* novels by Russell Thorndike. It is an important part of the local character and is highlighted in the Dymchurch Heritage Trail and events such as the *Day of Syn* which is held at Dymchurch bi-annually. The Romney, Hythe & Dymchurch railway that runs from Hythe to Dungeness is another valuable heritage asset that reflects the railway heritage of this area and still acts as a popular visitor attraction and feature within the coastal landscape. At Dungeness the history of the railway is further represented by the unique railway carriage dwellings that are scattered throughout the Dungeness area. These make an important contribution to the coastal landscape here and its special and often quirky character.

Assets within the coastal landscape that reflect the maritime heritage of the Romney Marsh can be found along the coast but are perhaps most prominent at Dungeness. The sparsely occupied landscape has only recently been settled, but some of its oldest buildings relate to the fishing heritage at Dungeness that goes back many centuries. The landscape is dominated by few buildings, but among these are the lighthouses and Lighthousemen's dwellings. Over the years there have been eight lighthouses at Dungeness, and today two survive; the *Old Lighthouse* and the current lighthouse that is still operational. The *Old Lighthouse* is open to the public and extensive views across the Dungeness Peninsula can be enjoyed from its top platform. A handful of fisherman's cottages are also scattered along the Dungeness coastline and are believed to be some of the earliest residences here.

Overall the Romney Marsh coastline represents a unique natural setting that boasts important habitats and wildlife as well as a rich historic landscape. Its extensive sandy beaches continue to be popular with day-trippers and holiday makers and also provide points from which to enjoy spectacular views across the coastline from Dungeness through to Hythe and across the Channel.

Lympne Escarpment and Hythe

As has already been mentioned, the site consists of a steep escarpment of Kentish Ragstone which is formed by the Hythe Formation and Lower Greensand. It is designated as a SSSI primarily for its important flora and geology with its grassland and woodland being some of the best remaining examples of semi-natural habitats on Ragstone in Kent. There are areas of ash coppice woodland that are the largest remaining examples on Ragstone escarpment and are also believed to have ancient origins. Wet ash-maple is the predominant woodland type here with many other plants that are usually associated with chalk soils. The scarp is also rich in grasses and shrubs and provides panoramic views across the Romney Marsh and out to sea.

The small coastal market town of Hythe boasts an attractive and long pebble beach, a large section of which comprises the Hythe Ranges military training ground that remains active today. Like the coastline of the Romney Marsh, the coast at Hythe is flat and offers opportunities for spectacular views across the Marsh coastline through to Dungeness as well as out to sea and across to Folkestone and the White Cliffs. Hythe also has a rich historic landscape that primarily reflects its military legacy through assets such as the Martello Towers and Hythe Ranges. The Royal Military

Canal also begins at Hythe before it then runs around the border of the Romney Marsh at the foot of the Lympne Escarpment.

Folkestone

The coastal landscape at Folkestone consists of dramatic landforms such as the Folkestone Warren and Copt Point. The Gault Clay cliffs at Copt Point are distinctive and provide an opportunity to clearly view the geologies that make up the coastline here. It is also rich in fossil remains, especially of ammonite species, and has become a popular location for fossil hunting.

Beyond Copt Point the East Cliff and Warren Country Park and Folkestone Warren again form dramatic landscapes that are particularly distinctive and also form part of the renowned Heritage Coast and White Cliffs that are a highly valued landmark. The Folkestone Warren is a key feature of the Folkestone-Dover Heritage Coast as well as forming part of the Kent Downs Area of Outstanding Natural Beauty (AONB). The site encompasses a range of marine and terrestrial habitats that are associated with the chalk cliffs, underlying Gault Clay and Lower Greensand and as such has been designated as a SSSI as well as forming part of a Local Nature Reserve. The cliffs overlook the dramatic landslips of the Chalk and underlying Gault Clay that now form the Warren. The last significant landslip here was in 1915, and since then the landscape has changed dramatically largely due to the loss of much of the open chalk grassland in the absence of grazing animals.

Today there are still patches of chalk grassland which support important fauna and flora that are of national importance. The Warren is particularly rich in insect species with some that are only found here such as the Grayling butterfly. A number of rare plant species also grow here such as various orchids including the Common Spotted orchid. Work is currently underway to reclaim important chalk grassland that once made this landscape so distinctive. It still nonetheless comprises a dramatic landscape that is instantly recognisable as part of the Heritage Coast and that leads into the iconic White Cliffs of Dover. Spectacular views across the Channel and White Cliffs make this a special landscape as well as its important habitats and wildlife.

Part of the Folkestone Warren is included in the East Cliff and Warren Country Park which takes in the East Cliff and East Wear Bay. This area is also valued for its wildlife and dramatic coastal landscape which again offers spectacular views across the Channel and along the District's coastline in both directions. There are also a number of valuable heritage assets here that reflect the coastline's military legacy like other parts of the District's coast. The park is overlooked by three Napoleonic Martello Towers as well as containing the site where the remains of an Iron Age quern stone production site and then Roman Villa are found.

4. Statement of Significance

The coastal landscapes of the district are of **outstanding significance**. They illustrate important coastal geomorphological processes such as the formation of the Dungeness cusped foreland and continue to provide evidence for coastal processes and evolution. Parts of these landscapes have also played roles in significant historical events and in relation to valuable local histories such as the military legacy that is clearly represented throughout the coastline as well as more local heritage

such as smuggling and fishing. Various points along the coastline have also acted as important ports and harbours at points in their history with two within the District being established as Cinque Ports and a further two as *Limbs* to other towns. Evidence of coastal defence dating back to the Roman period is also evident, and a number of important fortifications and structures can be found along the coastline from these early coastal fortifications through to recent World War structures. Evidence along the Romney Marsh coastline for the ongoing maintenance of coastal defences and drainage in order to retain the reclaimed land of the Marsh is also an important feature of the District's coastline and again represent its significant local history.

Evidential Value

The coastal landscapes of the district have outstanding evidential value. At Dungeness, there are important opportunities for the evolving shingle ridges and associated deposited sediment to continue revealing evidence of coastal evolution and environmental change. Both the surface and buried ridges provide a detailed record of coastal processes going back around 5000 years, and some sequences have been particularly well preserved. The presence of palaeo-environmental information from deposits further builds a detailed picture of historic environmental conditions and can be used as an essential comparison for modern day conditions. Ongoing studies and recording of the shingle ridges at Dungeness will be important in order to build a better understanding of coastal and environmental change in response to modern factors such as human action. It has been noted that in recent years the progression of the foreland has slowed due to external factors that include coastal defence works, sediment supply, recycling for beach management and climate change. Comparisons to historic conditions will enable conclusions to be made about human impacts on coastal processes and landscapes.

Other parts of the coastline such as the Folkestone Warren are also important for their geology and physiographic features and so will be important in revealing further information about coastal processes and the evolution of our ancient coastline. Better understandings of various coastal geomorphological processes may also be obtained from ongoing study and conservation of these important landscapes.

Survey, analysis and archaeological investigation of some of the historical features along the coastline would further add to understandings of coastal evolution across the district. Along the Romney Marsh coastline, archaeological investigation of the drainage ditches, structures and earthworks such as the remains of the Rhee Wall and Royal Military Canal may not only reveal further information about the construction and use of these structures, but also about their role in the evolution and ongoing maintenance of the Romney Marsh through effective drainage and sea defence. There is also the potential for archaeological evidence of the early medieval port at Romney which would again enhance understandings about the function and development of this early port as well as the coastline here and its communities.

The Gault Clay cliff face at Copt Point in Folkestone continues to produce fossil evidence of prehistoric life, primarily ammonite species, and may continue to provide specimens in the future. There is also the continued potential for archaeological discoveries from particular lithostratigraphic units such as the Gault Clay at Folkestone and the Chalk along the Downs at the eastern point of the District.

Historical Value

The historic value of the District's coastline is significant for natural history as well as for historic events and associations to past people. Many parts of the coastline provide important evidence for the historic evolution of the coastline as well as for coastal processes such as coastal erosion and longshore drift that are essential to coastal formation and its ongoing development. Further studies of various features along parts of the coastline such as the shingle ridges at Dungeness will also continue to reveal more information on historic coastal and environmental conditions as well as providing valuable comparisons to modern conditions. Other features of the coastal landscape, such as the sea walls and drainage ditches along the Romney Marsh, also reveal important information about the more recent evolution of parts of the District's coastline and historic efforts to retain and protect reclaimed land going as far back as the Roman period.

Associations to historic events and people are particularly strong along the coastline through various heritage assets and sites. Perhaps the strongest associations relate to the military legacy that is evident along the entire length of the coastline through structures and fortifications that go back to the Roman period. Sites such as *Portus Lemanis* which once protected the harbour at Lympne and the Roman Villa site at East Wear Bay in Folkestone clearly illustrate early efforts to defend and manage the coast of the district. This becomes even more evident through structures such as the Napoleonic Martello Towers, Redoubts and the Royal Military Canal that were responses to the threat of a French invasion during the Napoleonic Wars of the early nineteenth century. Kent's proximity to the continent has consistently placed it on the frontline throughout human history and a number of defence strategies have been employed over the years that still survive along the District's coastal landscape.

Various heritage assets along the coast further illustrate local histories that are important to the sense of place such as the smuggling heritage that is especially evident on the Romney Marsh and in coastal towns such as Dymchurch. Other distinct local histories include the fishing heritage at Dungeness and the railway heritage along the coast that is still represented by the Romney, Hythe & Dymchurch railway that has become an iconic feature in the landscape between Hythe and Dungeness.

Aesthetic Value

The coastline has enormous aesthetic value with a number of renowned and iconic features. It is also a varied and diverse landscape that offers a number of dramatic and striking vistas that create a unique sensory experience. The White Cliffs and Folkestone Warren is a dramatic and visible landmark that leaves a lasting impression and are also the first and last thing that travellers see when they cross the channel. Other landscapes such as the Denge beach and shingle expanses at Dungeness are also striking as well as being uniquely open and sparse. The low-lying land of the Romney Marsh that is criss-crossed by an extensive network of drainage ditches provides a rich historic and natural landscape that is especially attractive for people to visit, enjoy and appreciate. The long, sandy beaches of the Romney Marsh coast are also particularly attractive and are very popular with day-trippers and holiday-makers as a result.

Throughout the coastal landscape there are also a number of vantage points that contribute to the significant potential for views and vistas that makes this landscape so special and iconic. Views from the Kent Downs across the coast at Folkestone and the surrounding areas can be enjoyed as well as views across the Romney Marsh from the relic coastline of the Lympne Escarpment. These views and vistas give this landscape significant aesthetic value.

Communal Value

Many features of the coastal landscape instil a strong sense of place for local people as well as for visitors. This is perhaps especially true at Dungeness, along the Romney Marsh coast and at Folkestone where landscapes are particularly distinctive. There are also a number of ways that the local communities engage with and work to conserve their local landscapes which demonstrates a strong sense of ownership and sense of place. Many of the coastal landscapes are exceptionally sensitive to external factors such as coastal erosion, visitor pressures and climate change and local communities have expressed strong feelings for their preservation and maintenance. The potential to continue instilling a strong sense of place and ownership by local communities is high for the coastal landscapes.

5. Vulnerabilities

The coastal landscapes of the district are vulnerable to both natural and human influences. Perhaps the most prominent of these are natural factors such as climate change and coastal processes that resulted in the formation and evolution of these landscapes to begin with. Some areas of the coastline are particularly vulnerable to coastal erosion, and the effects of this process can already be seen in areas such as East Wear Bay at Folkestone where parts of the cliff edge are being lost. This is a further issue as this is the site of the remains of the East Wear Bay Roman Villa and earlier Iron Age quern stone production site that will gradually be lost as the cliff edge erodes. Work is being done to record as much of the site as is possible before it is lost.

Parts of the coastline such as Dungeness are exceptionally sensitive to natural influences and are vulnerable to the coastal processes that ultimately formed them in the first instance. The Dungeness cusped foreland was formed by longshore drift and the accumulation of shingle and sand to form the distinctive ness. It has since been stabilised by vegetation but it remains at risk of erosion by the same coastal processes that created it in the first place. Climate change may also impact coastal processes and sea levels which again will have an effect perhaps more so on parts of the coastline that are more sensitive.

As sea levels rise, the rate of coastal erosion is likely to increase and the southern coast may be particularly vulnerable to more frequent storms as a result of climate change. Any rises in sea level will be a particular problem for the Romney Marsh which lies below sea level and is continually maintained through effective drainage and sea defence strategies. The coast of the Marsh will be increasingly vulnerable to flooding and encroachment by the sea if sea walls and drainage are unable to manage. Today approximately half of the Romney Marsh coastline is defended by sea walls, and the ongoing maintenance of these defences will be essential to protecting the coast and its coastal towns. Other parts of the coast such as at the

Folkestone Warren have also been stabilised by sea defences in order to protect against coastal erosion.

Climate change could have adverse effects on the District's coastal habitats and wildlife that in many instances are incredibly rare and fragile. Landscapes such as the Folkestone Warren and Dungeness NNR boast species that are only found in these areas of the country as well as other important species that are protected by various designations. These natural assets are vulnerable to climate change that may cause changes to their habitats and so efforts should be made to continue natural conservation and management of these important habitats and their supported wildlife.

The district's coastal landscape is also vulnerable to a number of human actions including development work, criminal activity and visitor pressure. Development proposals will have substantial effects on the landscape character if they impact on the local setting which is largely characterised by its flat and open spaces. This is especially true in low-lying areas such as the Romney Marsh and Dungeness, whilst other areas of the coastline further offer vantage points from which to enjoy extensive views across the coastal landscape and Marsh which would again be negatively impacted if developments detracted from these panoramic views.

The development of infrastructure is a factor that has already impacted areas of the coast at Folkestone where the Channel Tunnel, M20 and railway line to Dover have been installed. These have had an adverse effect on some of the views that were previously enjoyed from vantage points such as the Folkestone Downs and Folkestone Warren. Care needs to be taken especially when considering special landmarks such as Dungeness and the Folkestone Warren to avoid development that will tarnish the landscape and alter its unique character.

Visitor pressure is a prominent vulnerability, especially for areas like Dungeness and the Folkestone Warren that are exceptionally sensitive landscapes and contain delicate habitats and wildlife. Achieving a positive balance between sustainable tourism and natural conservation is an ongoing battle and consistently puts various landscapes at risk. Large visitor numbers may result in unintentional damage to the landscape through actions such as littering, uncontrolled dogs, deviating from designated pathways and criminal activity. A lack of understanding regarding the sensitive landscapes may also cause unintentional damage and is another vulnerability that applies to this theme. Various initiatives and programmes are working to increase public understanding and awareness of the coastal landscape and its delicate features which will be important in promoting the ongoing protection and conservation of these spaces.

Other vulnerabilities can arise from recreational pressures. This is especially evident at Capel-le-Ferne by the Folkestone Warren where there is a caravan site. Whilst this caters for the local tourism industry, it also detracts from views of the distinctive Heritage Coast at Folkestone which is highly valued and recognised as a landmark next to the White Cliffs of Dover when crossing the Channel. Views and vistas are an important element of the coastal landscape and so altering these with development or recreational sites may detract and diminish this. Much of the character of large

parts of the District's coastline is unique for their openness and wildness which would be negatively impacted if development or recreational pressure encroached.

Criminal activity is a final vulnerability that needs to be considered in relation to this theme. Some areas of the coastline are at risk of being impacted by criminal activity which will diminish the local landscape character. At the Folkestone Warren for example, there are problems with fly-tipping, unauthorised camping and littering. These actions will detract from the attractive natural landscape of the Warren and discourage people from visiting and enjoying this space. At Dungeness there are also problems with trespassing onto private properties and unauthorised activity on the private estate such as illegal photoshoots and filming. Again this will detract from the local landscape character and may discourage people from visiting and enjoying the area.

6. Opportunities

There are a number of opportunities that relate to the assets from this theme. The coastal landscapes offer important opportunities for reconnecting with the natural environment and also to instil a strong sense of place and ownership as a result. The landscape is also a means through which people from the local communities can connect to one another which will again raise the sense of place and overall quality of life. Being outdoors and engaging with the landscape has important benefits for health and wellbeing, both physical and mental, and is becoming more significant where non-medical interventions for conditions such as depression and weight management are concerned. This also links into the recreational offering along the coast such as seaside amusements, walking routes and water sports where activities can improve health and also provide a means to engage with the landscape.

There are a number of trails that incorporate sections of the coast such as the Dymchurch Heritage Trail and North Downs Way. These trails are important opportunities as above to connect with the landscape as well as to raise awareness of its historic aspects. The creation of new trails and heritage packages could present opportunities to raise awareness of an area and to attract more visitors in addition to people from the local communities. Opportunities for community led research and interpretation may offer valuable opportunities to encourage a sense of ownership and to empower local people to make decisions about their own heritage and historic landscape.

There are also valuable opportunities to continue studying and recording sections of the coastline in order to better understand various coastal processes as well as to monitor the ongoing evolution of the District's coast. This is especially evident at Dungeness where the continued progression of the cusped foreland will provide important information regarding coastal evolution as well as environmental change. It is also important to note that some factors in recent years have slowed the development of the cusped foreland, including new sea defences and shingle extraction. As such, continued study will provide further opportunities to compare historic environmental and coastal data to modern patterns and to better understand the repercussions of human action on coastlines like this.

A number of initiatives within the district are creating opportunities to engage with the historic and natural environment, such as the WCCP and *Fifth Continent* scheme.

Various activities and events that these bodies run encourage active participation in the conservation and management of areas along the District's coastline. This is exceptionally important in preserving the significantly important habitats and wildlife that are supported along the coastline as well as empowering local communities to take ownership over their own landscape and heritage. Many of these activities will also help to enhance the natural beauty and biodiversity of the coastal landscapes whilst also managing better public access and awareness.

7. Current Activities

There are a number of activities and initiatives that relate to the District's coastline and allow people to engage with and enjoy this landscape. In Dungeness the EDF B Power Station offers regular guided tours of the station and also provides a visitor centre which is accessible to all who wish to visit. This is a valuable opportunity to not only engage with a prominent asset in the built landscape of Dungeness, but also to learn about EDF's role in the management of the Dungeness Estate and its delicate coastal environments. Consultants working with EDF are currently in the process of producing a Management Plan for the Dungeness Estate which will look at effective conservation and management of the biodiversity and sensitive landscapes at Dungeness. A wider Sustainable Access Strategy (SAS) for Rye, Dungeness and the Romney Marsh is also underway and will look at maintaining ongoing conservation of the unique landscapes here whilst also coping with large visitor numbers and ongoing tourism to Dungeness.

A number of public events and activities are also held at Dungeness and the surrounding areas such as Greatstone that showcase the coastal landscape as well as promoting its sensitivities and ways of continuing conservation measures. The Old Lighthouse in Dungeness is regularly open to the public and offers opportunities to take in spectacular views across the Denge beach, wider Dungeness area and along the Romney Marsh coastline. The Romney, Hythe & Dymchurch Railway that runs between Hythe and Dungeness along the coastline also regularly holds events that attract visitors to the area and allows them to enjoy this special heritage asset as well as the coastal landscape that it passes through.

The RSPB manage the RSPB Dungeness Nature Reserve and regularly hold family events and activities that not only attract people to the area but also raise awareness about the exceptionally sensitive wildlife and habitats that are found at Dungeness and along its shingle coastline. They are also the custodians for the Greatstone Sound Mirrors and run open days at certain pints throughout the year which provide access to these important heritage assets.

The Romney Marsh *Fifth Continent* Landscape partnership Scheme (LPS) is offering important opportunities for community involvement in project work that will facilitate the restoration and enhancement of the Marsh's built, natural and cultural heritage. One project within this wider scheme, the *Shingle on the Cusp* project, aims to conduct a detailed study of the Dungeness shingle and then to implement further shingle restoration projects. This will be important work in the management and conservation of the unique shingle expanses at Dungeness that is so important to its local landscape character as well as for its geological and biological interest. Other projects as part of the *Fifth Continent* scheme that will be important for the District's

landscape include the *Green Lands for Bumblebees* which will promote the importance of the habitats at Dungeness for bumblebees.

The Hunt for Romney Port is another project as part of the *Fifth Continent* scheme that will also have significance for the assets included in this theme. Documentary evidence for the early medieval port of “Romney” exists but as yet archaeological evidence is lacking in order to clarify exactly where it was and how the coastline and its communities developed at this time. This project will look to encourage communal involvement in the hunt for the Romney Port which would greatly enhance understandings of this part of the historic coastline of the Romney Marsh.

Along the Romney Marsh coastline, there are a number of attractive sandy beaches such as Dymchurch and St Mary’s Bay that are popular with day-trippers and holiday-makers. A number of events and activities that highlight the coastal heritage in these areas, particularly of smuggling, are held throughout the year. In Dymchurch the *Day of Syn* is a bi-annual event that celebrates the local smuggling heritage and the association to the Dr Syn novels by Russel Thorndike. It started life as a day of celebration but is now held over the August bank holiday weekend and includes battle re-enactments between smugglers and Revenue Men, a court trial, historical demonstrations, Morris dancing and other musical entertainment. The event is organised by volunteers and is free to attend but helps to support local shops and charities. The last *Day of Syn* was held last year (2016) and the next will be in 2018.

The recreational provision along the coast at these seaside resorts is also important for the local tourism and leisure offering. A number of seaside amusements are open to the public as well as activities such as kite surfing, sea fishing and land yachting. The sandy beaches along the Romney Marsh coastline also offer safe sea bathing. Moving further eastwards along the coast, other recreational activities such as walking and camping are provided for. The North Downs Way and Saxon Shore Way walking routes ensure that members of the public can enjoy these landscapes as well as gaining spectacular views across the coast from certain vantage points along these routes.

Along the coast at Folkestone, the Kent Downs AONB Unit and White Cliffs Countryside Partnership (WCCP) hold a number of events and activities that are important for the biodiversity and ongoing conservation of the coastal landscapes here. The Kent Downs AONB Unit runs a number of events throughout the year that include study days, workshops and guided walks. These events offer important opportunities to engage with the various assets relating to the coastal landscape as well as encouraging a better understanding of the area and what is involved in its conservation and ongoing management.

The WCCP organises regular events and activities such as guided walks across the Downs area and children’s events (the Green Gang) in the Folkestone Downs. Collaborations with other initiatives such as the Green Gym scheme offers further opportunities to become involved in the natural conservation of the Downs and Folkestone Warren. Activities include habitat management and clearing footpaths to encourage new wildlife and improve public access. These are important for the ongoing maintenance of the unique coastal landscapes here as well as preserving its striking aesthetic value. Fossil hunting along the foreshore at Copt Point in

Folkestone is also a popular activity, particularly as fossils are well preserved and fairly frequent within the Gault Clay and Lower Greensand in this area.

8. Sources Used & Additional Information

Kent County Council, 2004: Lawson, T. & Killingray, D. (eds.), 2004: *An Historical Atlas of Kent*. Chichester: Phillimore.

Kent Downs AONB Unit, 2nd Revised April 2004: *Management Plan 2014-2019*. Kent Downs AONB Unit.

<http://theromneymarsh.net/history>

<http://theromneymarsh.net/timeline>

<http://theromneymarsh.net/dymchurchwall>

<http://www.kentdowns.org.uk/uploads/documents/MARSHLAND.pdf>

http://archaeologydataservice.ac.uk/archiveDS/archiveDownload?t=arch-459-1/dissemination/pdf/New_Romney.pdf

<https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=S2000533&SiteName=romn>

http://www.sssi.naturalengland.org.uk/citation/citation_photo/2000533.pdf

<https://www.rspb.org.uk/reserves-and-events/find-a-reserve/reserves-a-z/reserves-by-name/d/dungeness/work.aspx>

<http://www.dungeness-nnr.co.uk/history.php>

http://www.dungeness-nnr.co.uk/pdf/Dungeness_Leaflet.pdf

<http://theromneymarsh.net/dungeness>

<http://theromneymarsh.net/dungenesshistory>

<https://www.folkestone-hythe.gov.uk/>

<https://designatedsites.naturalengland.org.uk/sitedetail.aspx?SiteCode=S1000156&>

<https://designatedsites.naturalengland.org.uk/sitedetail.aspx?SiteCode=S1000156&SiteName=escarpment&countyCode=&responsiblePerson=&unitId=1006141&SeaArea=&IFCArea=>

<https://necmsi.esdm.co.uk/PDFsForWeb/Citation/1000156.pdf>