

Cuckmere Estuary Restoration Project: Environmental Statement

CULTURAL HERITAGE

1. Introduction

- 1.1 This section describes the Cultural Heritage aspects of the Cuckmere Estuary. It provides an assessment of the cultural heritage significance and potential within the study area.
- 1.2 This assessment considers the land on both sides of the river, comprising both that owned by the National Trust and land that is within the scheme, but outside Trust ownership.
- 1.3 Within this section the methodology/approach and background to the whole assessment undertaken to gather data will be described, this will involve both the desk study and the field studies undertaken. The fieldwork comprised a borehole survey and a walkover survey that were both undertaken on the Trust's land. Following this a description of the Cultural Heritage and archaeological features and interest is provided. Evaluation of the Cultural Heritage resources is then given. Assessment of effects and mitigation measures necessary to minimise these effects is provided in the final part of this section.
- 1.4 The basis of this assessment is provided by English Heritage Guidance: Coastal Defence and the Historic Environment, 2003. The outline protocol for archaeological evaluation and mitigation in the coastal zone provided by this guidance, and upon which this assessment is based, is given below:

- **Research and prior recording (desk-based assessment)**

A desk-based assessment of the archaeology of the area affected by the scheme should be undertaken 'in the context of strategy plan formulation or in the context of scheme-specific environment impact assessment'.

- **Impact assessment and archaeological evaluation**

Wherever desk-based assessment has shown that disturbance is likely to cause damage or loss to the archaeological resource, then an impact assessment and field evaluation are required to allow the development of a strategy to mitigate unavoidable impacts. This might involve a variety of techniques to include fieldwalking, earthwork survey, palaeo-environmental analysis, geophysical survey and evaluation excavation.

- **Mitigation strategy – managing change & lessening its impact**

The outcome of the impact assessment will inform the recommended mitigation strategy, whose aim will be to minimise unavoidable damage and to record and observe the process of change during the application of the scheme. In the case of managed realignment, it should also include a programme of post-realignment monitoring of impacts.

- **Archaeological monitoring**

Following completion of the scheme, a programme of archaeological monitoring should be planned to detect sites exposed by scour and erosion.

1.6 Planning Issues

1.6.1 Government planning guidance on the historic environment (*Planning Policy Guidance Note 15* and *Planning Policy Guidance Note 16*)¹ stresses the desirability of protecting historic remains, whether designated or not, and recognise that this should be a material consideration in the planning process. The Environment Act 1995, further requires that there should be a contribution to the conservation of nature and heritage when carrying out flood defence functions under the relevant acts. MAFF's *Flood and Coastal Defence Project Appraisal Guidance*² further supports this approach.

2. Methodology

Background

- 2.1 Cultural Heritage resource includes archaeological remains in a variety of forms dating from prehistoric to modern times. It includes buried remains, individual find spots, former roads and sites indicated by field names. These may include Scheduled Ancient Monuments (SAMs), features in the County Sites and Monuments Records (SMRs), in some areas these are referred to as the Historic Environment Record (HER), or sites identified from documentary sources and fieldwork. Palaeo-environmental deposits are also a component of the archaeological record and include colluvium, peat deposits and buried ground surfaces.³
- 2.2 Cultural Heritage evidence also comprises more recent survivals within the built environment, such as buildings, settlements, hedgerows and land boundaries which all reflect the societies that created and inhabited these historic landscapes.
- 2.3 Historic buildings, landscape features and archaeological sites may all be affected by coastal defence schemes. Impacts may range from intrusion in the landscape setting of features and structures through to complete physical destruction. Amongst the range of coastal historic assets, archaeological remains are particularly vulnerable, as many are situated in the intertidal or subtidal zone or on lengths of undeveloped coastline well suited to managed realignment projects.
- 2.4 These types of Cultural Heritage remains are often poorly recorded, and under-represented in the lists of statutory protection. This is not owing to their insignificance, but more to the limited concentration of research and survey in these areas in the past. Sometimes they have been masked by sediment deposition and their potential is under-regarded.

General approach

- 2.5 This assessment is based on evidence from a number of sources. A large body of information was presented as the results of an archaeological and historic landscape survey that was commissioned by the National Trust and undertaken on its behalf by Dr Nicola Bannister in April 1999.
- 2.6 The survey undertaken by Bannister provides an inventory of all man-made features surviving in the landscape from prehistory to the present. As well as including archaeological features, the survey also covered the following points of research:
- Recording of field boundaries, including ditches, dykes and flint walls
 - Description of the field patterns, including the history of the innings and drainage of the wetlands

¹ *Planning Policy Guidance Note 15* (PPG15): *Planning & the historic environment* (DoE/DNH 1994) and *Planning Policy Guidance Note 16* (PPG16): *Archaeology & Planning* (DoE 1990)

² MAFF2000 *Ministry of Agriculture, Fisheries and Food, Flood and Coastal Defence Project Appraisal Guidance*. MAFF

³ English Heritage 2003 *Coastal Defence & the Historic Environment*

- Assessment of the aesthetic element within the landscape, to include identification of major views into and out of Chyngton Farm and the site of Chyngton medieval village
 - Analysis of field and place names
 - Cultural and social associations and descriptions of the Cuckmere Valley
 - The relationship of Chyngton with the surrounding landscape including the adjacent settlements of Seaford, Sutton, Exceat and West Dean.
- 2.7 The survey uses the National Trust Sites & Monuments Records (SMR) database and numbers, combined with maps at 1:10,000 and 1:2500 scale. The methodology of the 1999 survey is described in Appendix 1.
- 2.8 Further sources consulted included the East Sussex Historic Environment Record (HER) and English Heritage. The information provided by English Heritage took the form of data collected from the MAGIC website⁴ to identify the presence or absence of Scheduled Ancient Monuments, Historic Parks and Gardens, Registered Battlefields and Protected Wrecks (see Baseline Conditions below).
- 2.9 After the survey a further two pieces of fieldwork were undertaken, these comprised a borehole survey (DAS 2004) and an Archaeological and Landscape Survey (ASE 2004). The aim of the borehole survey was to determine the location of any key, significant buried sediments or significant archaeological or palaeoenvironmental horizons that would face threat for the proposed works. The aim of the landscape survey was to build on the information collected by Bannister in 1999 and attempt to identify any further evidence for cultural heritage features in the western section of the study area. The results of both exercises were presented in report form.

Other Data Sources and references:

- English Heritage, 2003. Coastal Defence and the Historic Environment
- Foot William, 2001. Coastal Defence Report for English Heritage on Defence Area 2 – Cuckmere Haven, report for English Heritage on Second World War coastal defence.
- Planning Policy Guidance Note 15 (PPG15): Planning & the historic environment (DoE/DNH 1994) and Planning Policy Guidance Note 16 (PPG16): Archaeology & Planning (DoE 1990)
- MAFF2000 Ministry of Agriculture, Fisheries and Food, Flood and Coastal Defence Project Appraisal Guidance. MAFF

3. Baseline Conditions

Designations

- 3.1 There are no Scheduled Monuments (SAMs), Registered Parks and Gardens, Registered Battlefields, Protected Wreck, Listed Buildings or structures within the study area. A SAM (SAM No. ES435) was identified c 25 m to the east of the site. It is the remains of an army barracks built during the Napoleonic wars (1796-1815).

Chronological Summary of Cultural Heritage in the Study Area

Prehistoric

- 3.2 A number of prehistoric finds have been made in the locality but none are known from within the study area. A Palaeolithic hand axe and unretouched flint flake implement were recovered from South Hill above the west side of the valley, and a hand axe was found at the foot of Hope Gap, following a cliff fall. Further hand axes have been

⁴ MAGIC is a government sponsored web based interactive map resource that contains environmental information. <http://www.magic.gov.uk/website/magic/>

recovered from West Dean and Exceat. As with other dry valleys, there are likely to be Palaeolithic sites buried below the periglacial and colluvial deposits.

- 3.3 A Mesolithic flint core was recovered from the eastern side of the of the study area, adjacent to the tidal pools. Other Mesolithic material has been discovered during field walking in adjacent arable fields to the study area in the 1940s.
- 3.4 On the Downs on the east side of the haven, flint finds have suggested that Neolithic communities were operating here, suggesting the presence of permanent groups using the valley and its hinterland.
- 3.5 Bronze Age artefacts have been found close to the study area on the Eastbourne Road and on South Hill. Again, such populations are likely to have made good use of the Cuckmere river valley.

Roman (AD43-410)

- 3.6 Evidence for Romano-British settlement in the locality comes from extensive finds and excavations on Seaford Head where an enclosure and burials have been identified. At the mouth of the haven and within the study area, there have been finds of a Roman urn and a possible Roman salt pan that indicate a community presence in the valley, perhaps a farmstead or small village.

Anglo-Saxon (AD410-1066)

- 3.7 The place name of Chyngton is thought to be of Saxon origin. There may have been an early-medieval farm or a small village here. Neither Chyngton nor Seaford are Domesday villages.

Medieval (AD1066-1499)

- 3.8 Although not mentioned in 1086, Chyngton is likely to have been a pre-Saxon estate that evolved into a medieval manorial settlement and grange with its chapel. Medieval evidence for land use is derived largely from the documentary record and how it may be seen to relate to the surviving historic landscape, in particular to the survival of a possible medieval dyke system within the valley bottom.
- 3.9 The manor of *Chyntynges* was granted to Michelham Priory in the thirteenth century and would have been a valuable endowment for the priory. Located on the west side of the Cuckmere, there would have been access to a water transport route from the coast to the priory. It was also close to the medieval port at Cuckmere Haven with valuable sheep walks on the Downs and the potential for land reclamation from the salt marsh.
- 3.10 In addition to the monastic grange, there was a small, bustling port at the mouth of Cuckmere haven in the medieval period. There was also a short-lived enterprise to create a new town (*Poynings Town*) to the west and just up-slope of the haven at the site now known as *Walls Brow*. The division of land holdings and proportions of land-use are described in the medieval documents but are not easy to trace in the modern landscape that survives. Some apparent medieval stonework survives in the fabric of Chyngton Farm, suggesting it may have formed the original grange of Michelham Priory.
- 3.11 Most important for this assessment is the survival of records relating to the medieval monastic management of the *innings* or *brooks* on Cuckmere Levels. No direct references were found of the creation of those, but it is probable that work began in the medieval period at a similar time as the levels at Pevensy. The priors of Michelham were often appointed on the commissions of sewers for Pevensy – a

useful experience for the management of the much smaller levels of Cuckmere. The monastic documents contain many references to the effects of storm and sea surges on the flood plain at the haven mouth, and references to embankments show that the river was already being controlled in order that the adjacent land could be managed or farmed.

- 3.12 From the archive evidence, it has been possible to identify a number of boundaries or dykes of medieval origin. :
- The main east-west embankment with shrubs
 - Those bounding the western side, including the Outbrook Bank
 - The eastern embankment
 - Internal ditches or dykes that follow the same alignment as those on the 1664 map.

Post-medieval (AD 1500-1799) and Modern (AD 1800-present)

- 3.13 The dissolution of Michelham Priory and gradual shrinking of the manorial settlement at Chinting reduced the busy medieval village and port to a large farm in the Tudor period.
- 3.14 References continue to the management of the land for farming and of the river for fishing and drainage. The Cuckmere Levels had its own Water Court⁵, which records problems with silting and choking of the river mouth, flooding, scouring and direction of flow. The catalogue of difficulties continued until the mid-nineteenth century when the New Cut was proposed and finally took place. It appears from map evidence that no further major 'improvements' have been made to the Lower Levels of the Cuckmere since that time, apart from clearance of shingle banks and repairs to the embankments.
- 3.15 The Landscape survey identified five main site types (see below), which date to the 17th to 19th centuries. These feature types comprise Embankments and Innings, ponds, water meadows and military installations. The embankments may be of medieval origin, however, it was not possible to prove this during the landscape survey.
- 3.16 Cuckmere Haven, being one of the few inlets along the chalk cliffs, was historically an important strategic point in the defence of the coastline. A system of coastguard stations for the defence against French incursion was established as early as 1295. Sixteenth-century records describe the need for military defences to control the coast, and in 1804, an army barracks was located on the east side of the haven mouth (SAM ES435). These six small buildings were demolished in 1814 and replaced in c1822 with the coastguard station at the mouth of the estuary. The barracks are noted on the 1813 Ordnance Survey Map 1" Series. Analysis of historic maps identifies the presence of buildings at Foxhole in 1724 (County Map of Sussex). These are named as Foxhole Farm on the 1825 map.
- 3.17 During the Second World War, the area of the Cuckmere valley south of Exceat to the mouth of the haven was used at various times as a decoy protecting Newhaven harbour, as a departure point for cross-Channel cables (post D-Day) and as an artillery and coastal assault training area.
- 3.18 In 1940/41 it was extensively fortified against enemy landings and the surviving defence works today provide a good example of 'coastal crust' fortification. To the west lay the coastal batteries at Newhaven, from where the southern branch of the GHQ Line also began its route towards London.

⁵ Water Courts were responsible for the allocation of water before the 1988 Water Act

- 3.19 A total of 37 military sites are identified as part of this system within the valley. Some of these were only located by documentary reference, not being traceable through fieldwork. A small number fall outside the immediate study area, but their importance as a survival should be assessed together as comprising in their original form essentially one complete defensive complex.

Results of the borehole survey and Archaeological and Historical Landscape Survey

- 3.20 The borehole survey was conducted prior to the landscape survey. The borehole survey identified five main stratigraphic units, Units 1 and 2 were interpreted as topsoil and sediments associated with low estuarine flooding. Unit 3 was interpreted as similar to Unit 2, in that it was deposited by a low energy estuarine tidally fluxed depositional regime. The archaeological potential for Units 2 and 3 was interpreted as low to moderate. Units 4 and 5 appeared to be broadly similar, but exhibit evidence to that their depositional processes were a result of variable action, indicating both low and high energy deposition processes. Based on the evidence, the higher energy process would suggest that if archaeological remains were present it is unlikely that they would be *in situ*.

The Landscape Survey identified five main categories of site,

- Medieval/early post-medieval Innings
- Medieval/early post-medieval embankments/sea-walls
- Post-medieval ponds
- Post-medieval water meadows
- Second World War anti-invasion defences

These sites were rated as of moderate significance, with the exception of water meadows which were felt to be of low significance. The results of the survey are noted in the post medieval section above. The date of the site types was not fully established during the work. Much of the dating is based on the fact that features appear on some of the early cartographic sources. Based on this the features identified have been given post medieval date ranges.

Recommendation: Evaluation – fieldwalking survey of the study area & limited evaluation trenching –

A further level of fieldwork is required on the eastern area of the valley. This fieldwalking survey should focus on the eastern side of the valley and would check the existing data from both the 1999 survey and from the English Heritage survey of Second World War defences at Cuckmere. Impacts should be re-assessed and new information from the field walking exercise added. In addition, there may be evidence to be gathered from a field study of the creeks where features previously not identified may survive that relates to earlier use - fish traps, weirs, sunken boats, etc.

4 Significance of cultural heritage in the Study Area (i.e. evaluation)

- 4.1 The proposed scheme comprises a landscape that is very likely to have been used by prehistoric people. There is good evidence for prehistoric activity in the immediate area, and although no discrete sites have been identified within the limitation of the study area, it would have formed part of the hinterland for the landscape in which populations existed and exploited the marine resources along the coast.
- 4.2 Anglo-Saxon and medieval landuse within the Cuckmere valley area focused on farming and coastal exploitation and defence. Trade would have taken place from the port at the river mouth, and inland, the downs carried the sheepwalks, and the open

fields or 'laines' formed the arable. The records of Michelham Priory and later, post-medieval documents give good insight to the activities associated with managing the dykes and sewers of the developing innings of the lower Cuckmere. The 1999 survey identified the survival of some significant medieval earthen banks that form part of the network of brooks and innings, and they are all likely to contain substantial historic fabric relating to their original construction and subsequent modifications.

- 4.3 Much of the archaeological and historic landscape significance in the post-medieval period rests on the survival of a system of military coastal defence from the Second World War. Physical features from this do survive in the study area, and they will be affected by the scheme. Whilst not scheduled, a recent English Heritage survey (Foot William 2001) regarded the complex as being of national significance.

Summary of Archaeological potential within the Study Area

- 4.4 To date, no detailed examination of the valley deposits has been undertaken in the Cuckmere Valley, but there is good potential for buried alluvial deposits here, which might provide valuable environmental evidence relating to past settlement and land use.
- 4.5 The absence of finds material probably reflects the nature of land-use in the river valley. Continuous cultivation of the upland chalk in prehistoric and Roman periods would have led to soil wash, with the build-up of colluvial material in the valley and silt deposition in the haven mouth. These conditions within the floodplain make the subsequent chance discovery of archaeological sites unlikely, but they have a high potential for good preservation and analysis of palaeo-environmental deposits.
- 4.6 Often water-logged, organic features such as wood, can lie preserved within the alluvium, and there is a strong potential for this in the Cuckmere floodplain. Jetties, wharves, fish traps boats and other structures from all periods can survive. Stratified alluvial deposits can be dated using a range of techniques, including Radio carbon dating.
- 4.7 In such situations, much of the archaeology preserved is a unique record of marine and coastal land use. Marine incursion also preserves in detail land-based activities that are otherwise destroyed by farming and development on inland sites.
- 4.8 The Lower Cuckmere has the potential for archaeological remains from prehistoric and historic periods, and especially for the medieval port and coastal land-use. The lack of twentieth-century development means that much of the archaeological potential is relatively undisturbed.

Cultural significance

- 4.9 The Sussex Downs have a strong cultural association with England and a particular sense of place and belonging. The view of the Seven Sisters from Cuckmere Haven and Hope Gap is one of the most famous and photogenic in southern England and holds a special place in English literature and art. Richard Jefferies celebrated it in his essay 'The Breeze on Beachy Head' and Rudyard Kipling's 'A Smuggler's Song' describes the running of contraband through the small downland villages and farms of the locality. Painters, both professional and amateur, draw inspiration from the scene.
- 4.10 This cultural resonance was reinforced by literature produced during the First, and particularly Second World Wars, to encourage the nation to defend the country against invasion. The characteristic profiles of the chalk cliffs both here and in Kent were the first sights of land that many of the airmen and soldiers saw after returning from damaging bombing raids, reconnaissance trips and fighting at the Front.

Cuckmere Haven was a strategic and easily recognised point on the coastline with an almost iconic cultural significance.

5 Assessment and mitigation of effects

Pre-construction

5.1

The Palaeo-environmental resource

5.2 The floodplain of the River Cuckmere has been identified as having high potential for the preservation of palaeo-environments (see baseline section 3.5 – 3.8). It may, through re-flooding and the creation of saltmarsh and mudflat, reduce the potential for future palaeo-environmental analysis of the valley floor. Increased flooding of this area will diminish the opportunity for such research and may substantially alter the composition and survival of underlying deposits.

5.5 A programme of palaeo-environmental investigation should take place within the valley floor to evaluate the deposits. It might also indicate the existence of palaeo-channels. This investigation should cover the full extent of the valley floor within the study area. A large percentage of the study area has been examined as part of the 2004 borehole survey, however, this did not include the eastern side of the study area.

5.6 The palaeo-environmental investigation should take place before the scheme is implemented, and is likely to take approximately three months.

Archaeological and historic environment resource

5.7 The impact of the scheme on the cultural heritage resource and the historic environment is uncertain. The presence of medieval features, and possible remains within the valley bottom (see 3.11 - 3.15), would indicate that the impact is likely to be moderate adverse. The scheme would defiantly have a negative impact upon the remains of a system of medieval 'innings' or dykes. The impact upon the historic environment would also rate as moderate adverse as it may cause damage or loss to World War II military installations, which would threaten the integrity of the landscape.

5.8 The County Archaeologist, Andrew Woodcock, has suggested that further pre-planning work should be undertaken on the eastern side of the valley. This is to mirror the work undertaken on the western side, and to comprise a walkover survey and borehole work.

Construction

5.9 Where identified significant archaeological material, features or fabric are likely to be damaged, compromised or removed, there must be a provision for an agreed scheme of works to mitigate the actions. The scheme details are not yet sufficiently specific to anticipate all of these, but some portions of historic bank will certainly be affected. Breaches in historic banks within the innings will require archaeological recording, as will any other archaeological feature threatened by the scheme.

5.10 Preservation by record, where loss is inevitable. Evaluation and/or watching briefs must be provided on any breaches of historic banks, and on any other archaeological feature affected by the scheme. There may be a need for further palaeo-environmental sampling from buried ground surfaces within/below the banks.

Post-construction

- 5.11 After the project has been completed there is a risk that cultural heritage remains may be damaged by scour or erosion. Following guidance from English Heritage, there should be a programme of archaeological monitoring to follow completion of the scheme and assess any negative impacts.

5 CONCLUSIONS

- 6.1 There is a generally low level of discrete archaeological features and find spots in the study area, but this is deemed to be the result of absence of archaeological analysis within the floodplain of the valley rather than necessarily a true reflection of the situation.
- 6.2 The potential for palaeo-environmental evidence within the alluvial deposits of the floodplain is mixed. Survey work on the western side has not revealed the presence of this type of activity, but nor has it identified its absence. In addition, there may be archaeological features within the river margins and banks that have not previously been identified, especially in the eastern side of the study area where no survey work has been undertaken.
- 6.3 The continuity of human use from the early medieval period to the modern day is well reflected in the historic landscape and in documentary evidence. This includes the development of field patterns, flooded meadows, ponds, embankments and other coastal features relating to agriculture, drainage and military activity. In particular, the medieval and post-medieval management of the brooks and innings is well recorded. Part of the network of banks that survives within the innings is likely to be medieval in origin.
- 6.4 Post-medieval developments within the valley include the engineering of the New Cut in 1846, the evolution of the coast-guard as a protection of this important haven against the French, and the military activities of the Napoleonic and First and Second World Wars.
- 6.5 In summary, the scheme proposals for phase 1 will inevitably cause loss and damage to significant archaeological features within this historic landscape, among which are the remains of a system of medieval 'innings' or dykes. It may also, through re-flooding and the creation of saltmarsh and mudflat, reduce the potential for future palaeo-environmental analysis of the valley floor. It may also damage and alter underlying deposits. It may also have an adverse effect on the continued good survival of a complex of Second World War military defences.
- 6.6 The changed management that is envisaged by the partnership agencies to the Cuckmere Estuary Restoration Project may be seen against a context of historic land use that demonstrates it to be part of a continuing and evolving pattern.
- 6.7 Whilst change is inevitable, it needs to be carefully managed to avoid disturbance to potential archaeological remains. Where damage or loss to the archaeological asset is unavoidable, then measures must be taken to at least gain the fullest understanding and record of the resource beforehand, assess its significance and make every effort to minimise its scale and impact. This assessment should be seen as the first stage in assessing the impacts of the scheme on the cultural heritage and should be used to guide further specialist survey, evaluation, recording and monitoring.
- 6.8 The negative impact of the scheme on the cultural heritage resource will be greatly reduced if evaluation surveys are well planned and the mitigation measures take place as recommended. If this happens, it will provide real benefits and gains to the historic environment that might have become losses through natural processes.

APPENDIX 1

Methodology of 1999 survey prepared by Dr N.Bannister for the National Trust's Chyngton Farm property

Archive research

- Detailed inventory of map archives was made, both primary and secondary sources
- Further archives were analysed (sale particulars, estate surveys, terriers and other forms of written description) that gave evidence on the landscape of Chyngton
- Material was collected from a number of sources, including East Sussex Records Office & local studies library; the Public Record Office; East Sussex County SMR and National Monuments Record (NMR), Swindon; local archaeological and local history societies.
- Aerial photos from 1940s to present day were consulted at county and national levels (East Sussex County Council & NMR).

Field work

- The whole NT property was walked and all features recorded on 1:10,000 base map with details of earthwork features sketch-plotted at 1:2500 scale. A photographic record was made for most archaeological features and indexed on the National Trust SMR.
- Field boundaries were recorded and findings summarised on 1:10,000 scale base maps. Significant historic boundaries were entered individually on the NT SMR database.
- A schedule of the buildings on the estate was prepared, and all information entered on the NT SMR database.

Synthesis of survey results

- A sequence of paper maps showing land use change was produced at 1:10,000 scale, showing how the landscape of Chyngton Farm has altered over the centuries. Areas of specific historic landscape character were identified.
- From the SMR database a synthesis of the results was made, with further cross reference with archive material.

Survey product

The final report includes:

- An inventory of all known man-made landscape features on the NT property
- A complete bibliography and inventory of the related archive material
- An historical analysis showing the features and processes of landscape change and continuity
- An evaluation of past land use and the resulting landscape structure
- A summary statement of the significance of historic, archaeological and landscape components of the property
- Identification of areas of archaeological potential and potential for further research/analysis
- Recommendations for future management based on the survey results.