

Case Study

Archaeology On The Edge: Understanding the Impact of Coastal Erosion on Heritage (Phase I)

Background

Heritage Coasts were established to protect and conserve the best stretches of undeveloped coast in England. The Sussex Heritage Coast was the first to be defined.

The archaeology of the Sussex Heritage Coast tells a story of thousands of years of human occupation along this dramatic coastline, stretching from Splash Point in Seaford along the iconic Seven Sisters chalk cliffs to Eastbourne.

From evidence of Mesolithic hunter-gatherers to 20th century military remains, many of these sites and monuments are at risk from coastal erosion which continues at the rate of around 0.5 metres each year along this natural, undefended coastline.

Given this rate of loss, it was crucial to understand the heritage at risk, to help guide appropriate measures to ensure preservation where possible, or managed loss – where we ensure we have recorded and studied a site or monument before inevitable loss to the sea.

The impact of coastal erosion was recognised by the Sussex Heritage Coast Group – comprising a range of partners collaborating across wildlife, landscape, tourism, recreation, heritage and community priorities – who commissioned a research report to outline key priorities for heritage.



The project

The research report by Oxford Archaeology was funded by a £6,500 grant by South Downs National Park. Oxford Archaeology were asked to focus on the following priorities:

- Review and collate existing heritage information to identify gaps in the baseline information;
- Identify the rate and focus of erosion using the National Coastal Erosion Risk Mapping (NCERM);
- Identify sites within 200m of the coastline;
- Prioritise at risk assets based upon their significance and threat level; and
- Recommend mitigation strategies for different categories of heritage assets.

Oxford Archaeology undertook data analysis as well as site visits in order to respond to the project criteria. The findings of the research report are intended to shape a strategy comprising a range of mitigation approaches to ensure that sites are recorded, monitored and where practical, excavated, in order to understand their significance before they are lost.

The report outlined heritage assets at risk by anticipated timescales for coastal erosion impact specified as short term (0-20 years); medium term (0-50 years); and long term (50-100 years), and whether a heritage asset would be lost wholly or in part using estimated percentages against anticipated erosion rates.

“In order to mitigate the loss of these heritage assets, a long term programme of archaeological research, investigation and recording is recommended... [and] it is anticipated that key partners and volunteer groups would play an essential part in delivering this work.”

Oxford Archaeology

The outcome

Despite the concentration of nationally, regionally and locally significant archaeological remains recorded along this coastline, the research report found that limited archaeological excavation and recording has been carried out. As a result, the coastline also has the potential to contain significant, previously unidentified archaeological remains which could provide further insight into past land use and human activity within this iconic but fragile landscape.

An assessment of National Coastal Erosion Risk Mapping (NCERM) data, maintained by the Environment Agency, suggests that without any active intervention this coastline could erode in some areas, by as much as 200m, over the next 100 years. **Without active intervention this could result in the destruction of up to 149 known heritage assets, as well as any previously unrecorded archaeological remains present in this area.** A review of known heritage assets within the coastal erosion zone has identified 11 nationally significant heritage assets which could be impacted by coastal erosion within the next 100 years, 10 of which are likely to be affected to some degree by coastal erosion in the next 20 years.

As a stark reminder that coastal erosion is not a new challenge, the report highlighted the fact the Belle Tout Lighthouse had already been moved from the cliff edge by 17m in 1999.

The future

The South Downs National Park will work with partners as part of the Sussex Heritage Coast Group to develop a Phase 2 project responding to the outcomes and recommendations of the Phase 1 report.

We will explore where technology can support recording and monitoring of sites and monuments, and where communities can provide support to ensure we monitor and record these fragile and vulnerable sites.

We will also plan how we can engage the public with challenges around managed heritage loss, and how to engage with (and accept) this challenge.

For further information on the Sussex Heritage Coast Strategy and Action Plan, see:

<https://www.southdowns.gov.uk/discover/landscape-geology/sussex-heritage-coast/>

For a news report on the relocation of the Belle Tout Lighthouse in 1999, see:

<https://www.youtube.com/watch?v=KVMq97i9juo>

The South Downs National Park Partnership Management Plan (PMP) 2020-2025 sets out a shared vision for how we all would like the National Park to be in the future. It includes 10 long-term outcomes, and provides a framework for communities, landowners, charities, businesses and public bodies to work together to make this vision and these outcomes a reality.

This project successfully achieved the following PMP outcomes:

Outcome 4 Cultural heritage of the National Park is enhanced and widely understood and enjoyed: 4.1 Increase conservation, awareness, access to and understanding of South Downs cultural heritage.

Outcome 2 There is increased resilience within the landscape for its natural resources, habitats and species to adapt to the impacts of climate change and other pressures

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