

From left to right: Diver inspecting the site of Alum Bay. Ventnor Beach in 1900. Reculver Church, Kent (R. McInnes) and a map of the Isle of Wight by A. Brannon in 1862 (R. McInnes).

Archaeology, art and coastal heritage – tools to support coastal management and climate change planning across the Channel Regional Sea

The Arch-Manche project has sought to advance our understanding of the scale and rate of long-term coastal change by addressing sources including archaeology, palaeoenvironmental data, works of art, maps, photographs, as well as historical literature accounts. A unique aspect of this project is the combination of data sources to extract maximum amounts of information. By characterising areas of long-term erosion, coastlines under ongoing stress can be identified. Some areas subject to human intervention have been stabilised while others have not and the effect of hard defences in one area can have a knock-on impact elsewhere. Long-term assessments over broad areas are necessary to recognise cumulative consequences, while an understanding of long-term coastal responses can provide continuity to help predict future trends.

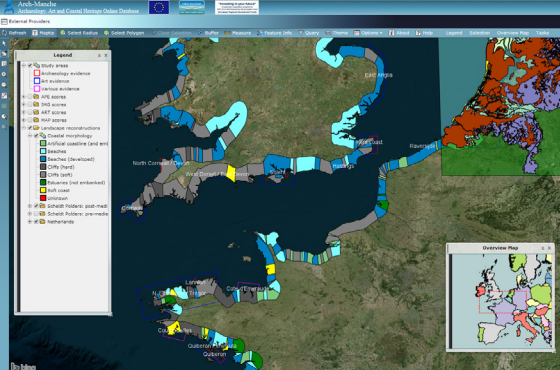
Past coastal planning regimes have suffered from a poor understanding of the ongoing processes and natural trends that are shaping our coastal zone. Consequently, many coastal settlements are becoming vulnerable as the frequency of coastal erosion, flooding and coastal instability events

increase, and the relationship between the land and sea evolves.

In prehistoric times the Channel did not exist but it was an area of low lying land used by early humans. Archaeological traces left in the landscape are common across the region, showing how people adapted to coastal change and a rising sea level. Later historical development includes comparable maritime coastal infrastructure and coastal industries that are represented in the archaeological and artistic record. The evidence can provide high resolution data on coastal change spanning thousands of years. This contribution to our understanding of coastal evolution enhances our appreciation of past change and provides tools to help predict future impacts on coastal communities.

Sea level and coastal change will result in outcomes that are beyond our control. This needs to be recognised by people living along the coast. The records interrogated as part of the project have demonstrated change and shown how people have had to adapt in the past. This is reflected clearly in history and art. This study is important for coastal and marine management as it can support the development of sustainable policies for adapting to future coastal climate change.

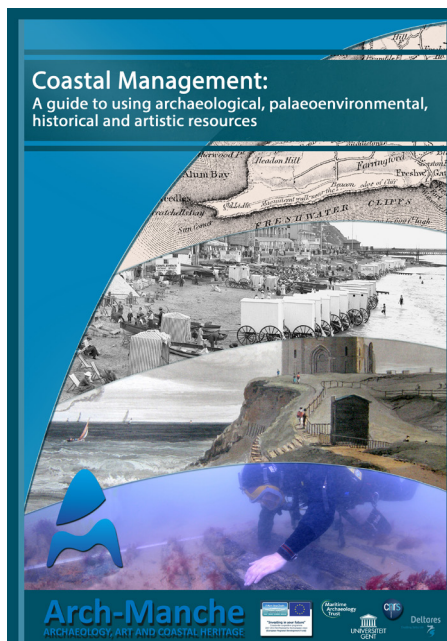
www.archmanche.hwtma.org.uk



Funded by the European Regional Development Fund through the Interreg IVA 2 Seas Programme, the project was led by the Maritime Archaeology Trust (MAT) in the UK, working in partnership with the Centre National de la Recherche Scientifique (CNRS) in France, Ghent University in Belgium, and the research institute Deltares in the Netherlands. The specialist expertise of the partners has enabled a new integrated approach to using data sources from across the Channel-Southern North Sea region. The project has applied its methodology to case study areas which represent a range of different geomorphological situations and coastal frontages facing various coastal management issues.

www.archmanche-geoportal.eu

The Project Guide, for a copy contact:
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Project outputs include:

- Application of project results to different coastal management situations;
- Enhanced understanding of micro and macro scale coastal change;
- Maximising data sources to inform understanding of long-term coastal change;
- Undertaking targeted fieldwork to gather new data to help inform on coastal change;
- Ranking of a large dataset including archaeology, palaeoenvironmental data, art and coastal heritage;
- Delivery of a specialist database and linked GIS analysis to develop understanding of coastal change;
- Availability of online project portal to enable full access to project results.

Freshwater Bay during storms in January 2014, Isle of Wight, UK (courtesy Anna Mustchin).

