Historic Environment Forum

Heritage responds -Taking positive action on climate change

## Case study

## Changing minds changing coasts: Mapping coastal change 1920-2020

CITiZAN Museum of London Archaeology

A citizen-science-based eco-archaeological project mapping dramatic changes to the Essex coast on Mersea Island from 1920 to 2020, using the coastal community's observations, memories, photographs and maps.

The project looks not just at where and when changes took place, but 'why?'. It considers the often negative interaction of human activities on natural processes relating to coastal change, climate change and relative sea level rise over the last century. We now know what happened in the past, so can ask what might happen to that coast in the next century? Can we change that future? This project mapped 100 years of dramatic coastal change. Using photos, postcards and memories held within the local community MOLA learned more about not just where and when such changes took place, but why they happened. Combining 350 images, several hours of interviews and a series of historical maps, local volunteers created a striking story of Mersea Island's transformation between 1920-2020.

Information collected was arranged into twenty-year periods: 1920-40; 1940-60; 1960-80, and 1980-2000, then analysed against key indicators: Topography, Saltmarsh, Archaeological features, High Waterlines, Culture and Biodiversity. This added colour and detail to the maps while redrawing Mersea's coastlines and changing habitats. Many factors contributed to Mersea Island's changing coast, with an alarming negative interaction between human activities and natural processes. But the loss of eel grass proved pivotal, since it increased the speed of erosion over the last 50 years.

**Location:** On Mersea Island, from MOLA offices and remote laptops.

Team: CITiZAN (Coastal and Intertidal Zone Archaeological Network) is a national communitybased organisation running several regional programmes including the Mersea Island Discovery Programme. Supported by the National Lottery Heritage Fund, administered by Museum of London Archaeology.

Funding: Undertaken with grant from Natural Environment Research Council

This historical coastal mapping project has shown us what happened in the past century and has documented the accelerating rate of change. As a consequence, we can now ask what might happen to that coast in the next century? And how might we adapt or change that future?

This successful pilot project is now being reworked as a major national project, to study four more English coastal locations with differing topographies and differing coastal communities.

Image:

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