

Southwold Beach Analysis

Review of management options

Southwold, Suffolk, UK



Southern end of the WDC Easton Marsh frontage, looking north from the Pier.
[date: 15 August 2015]

Client: Waveney District Council

Services provided:

- Comprehensive analysis of beach profile monitoring
- review of coastal processes
- assessment of potential donor site for beach recycling
- technical appraisal of improvement that could be gained from beach recycling
- identification of other options to reduce beach volatility and improve overall beach retention.

Southwold is increasingly becoming a headland on the east coast – to the north the undefended cliffs continue to retreat whilst to the south the beach is held by the Harbour North Wall. The beach at Southwold widens southwards as it approaches the Denes – an area of dunes north of the Harbour. Following the completion of the 2006 coastal defence works at Southwold, the beach has continued to be volatile, particularly around the Pier and to the north of the Pier. Waveney District Council (WDC), commissioned ENBE to review the coastal processes affecting Southwold and to identify options that could be undertaken to reduce and manage beach volatility. In particular, the feasibility of beach recycling was to be examined.

ENBE undertook an in-depth review of existing information relating to coastal processes and analysed the shoreline monitoring data. Trends were identified and interpretation provided, relating back to the underlying coastal processes.

The existing standard of protection (against wave overtopping failure) and time to failure of the existing defences was reviewed. Alternative sites for beach material extraction were considered, with the most appropriate donor site for beach recycling identified (the Denes) and analysis undertaken to review the impact of material extraction. The improvement that this “imported” material would have on the receiving location was also assessed. Other options to address beach volatility and retention were identified and discussed.

Further to undertaking a comprehensive analysis of beach behaviour, the report provides WDC with practical advice on beach management measures and their effectiveness in dealing with specific concerns.