

**Joint DEFRA/EA Flood and Coastal Erosion
Risk Management R&D Programme**

**Beach lowering in front of coastal structures
Research Scoping Study
R&D Technical Report FD1916/TR**

by the Environment Agency (DEFRA)

Soil improvement to increase bearing capacity and reduce scour potential. An example of this, which is in use at a few sites, is beach drainage (Shaw, 2003). Early studies showed a link between beach water table level and the rate of erosion (Emery and Foster, 1948, Grant, 1948). Later tests showed a link between an artificially lowered water table and increased beach stability and in some cases accretion (Vesterby, 2000, Turner and Leatherman, 1997). In the UK there have been three beach drainage installations: a full scale trial at Holme-Next-The-Sea (Norfolk), a commercial system at Towan (Cornwall) and an experimental system at Branksome Chine (Dorset).