

The Holderness Coast retreats at an average rate of about two metres a year. This battle between land and sea forces decisions about whether to manage the coast through either hard or soft engineering.

Hard engineering has been used at Hornsea. The seawall and rock armour absorb wave energy whilst the groynes trap sediment to build up the beach.

Soft engineering has been used here at Mapleton.

Reprofiling changed the angle of the cliffs and planting vegetation helped to stabilise them in other places

Beach nourishment replenishes sand to build beaches and reduce wave impact. Unlike its neighbour, Great Cowden has no defences, leaving collapsing cliffs and land at risk.

At Easington gas terminal hard engineering rock armour is used to protect national infrastructure, over farmland and homes elsewhere.

Hard engineering like seawalls, groynes and rock armour gives strong but expensive protection and can shift problems along the coast.

Soft engineering like beach nourishment and cliff reprofiling work with nature but can be temporary fixes

Managing coasts is complex. Decision makers need to consider the most sustainable approach. Let nature take its course or protect key sites, often at the cost of others.