

This is the Holderness Coast in north-east England. It's one of the fastest eroding coastlines in Europe. But what is erosion and how does it work?

Coastal erosion is the breaking down of materials through the action of waves. Let's have a look at three erosional processes.

Firstly, let's look at hydraulic action. This is when the sheer power of the waves crashing against the cliff forces air into the rock. Over time, this pressure forces the rock to break apart.

Secondly, we have abrasion. This is when waves pick up bits of rock and sand and throw it at the cliff, acting like natural sandpaper. to wear away at the cliff base.

Thirdly, we have attrition when rocks and pebbles smash into each other within the waves. they break into smaller, rounder pieces.

These fragments can cause even more erosion when they're thrown against cliffs. These processes wear away the coast. but the rate of erosion isn't always the same.

Geology and human activity make a difference. For example, the chalk cliffs at Flamborough Head erode more slowly than the soft boulder clay at Great Cowden. Human activity like the sea defences at Mapleton slows the rate of erosion.

So coastal erosion is determined by natural processes, geology and human activity.

From chalk headlands to crumbling clay cliffs, the coastline is always changing.