

# Coastal Management

**A brief overview of hard and soft coastal management techniques**

## Soft Engineering



Sand Dunes at Formby Point  
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Dune stabilisation at Menie May 2010  
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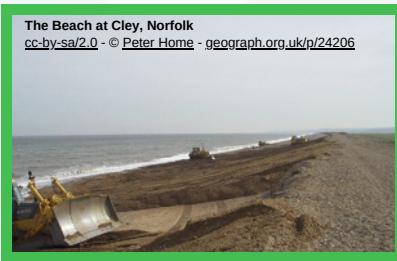
Image: The Flood Hub

### Dune Fencing

Built seaward of these natural barriers, fencing inhibits trampling by beach users allowing sand to settle and dune size to increase.



Ship to shore  
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The Beach at Cley, Norfolk  
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Medmerry Managed Realignment Scheme  
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### Beach Nourishment

Material is dredged from the sea bed and pumped to shore along with large amounts of water to replenish eroded material.

### Beach Reprofiling

This involves the reshaping of the beach by moving material from areas of accretion to areas which have eroded.

### Managed Realignment

Managed realignment is the planned breach or relocation of sea defences to allow previously defended land to flood.

## Hard Engineering



Sea wall - below Highcliffe Castle Golf Club  
cc-by-sa/2.0 - © Fernweh - [geograph.org.uk/p/782406](http://geograph.org.uk/p/782406)



### Revetments

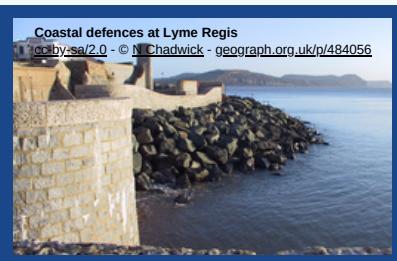
Angled, stepped structure can be constructed from wood or concrete, to reduce erosion and wave energy.



Dovercourt groynes  
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### Sea Walls

Deflect wave energy and stop the waves from high tides and storm surges reaching inland.



Coastal defences at Lyme Regis  
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North Breakwater at Fishguard Harbour  
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### Gabions

Cages filled with rocks slow erosion and reduce wave energy.

### Riprap / Rock Armour

Boulders or pre cast concrete blocks placed on the shore line dissipate wave energy, and slow erosion.

### Breakwaters

Offshore structures usually made from concrete or large boulders which dissipate wave energy before it reaches the shore.