

Our Natural Coast

Richard Caldow

Maritime Adviser

Presentation structure



- Why is our coast like it is?
- What natural assets do we have on our coast?
- What issues arise from coastal management?
- •What do we need from this review?

Why is our coast like it is?



Underlying geology

Why is our coast like it is?





Why is our coast like it is?

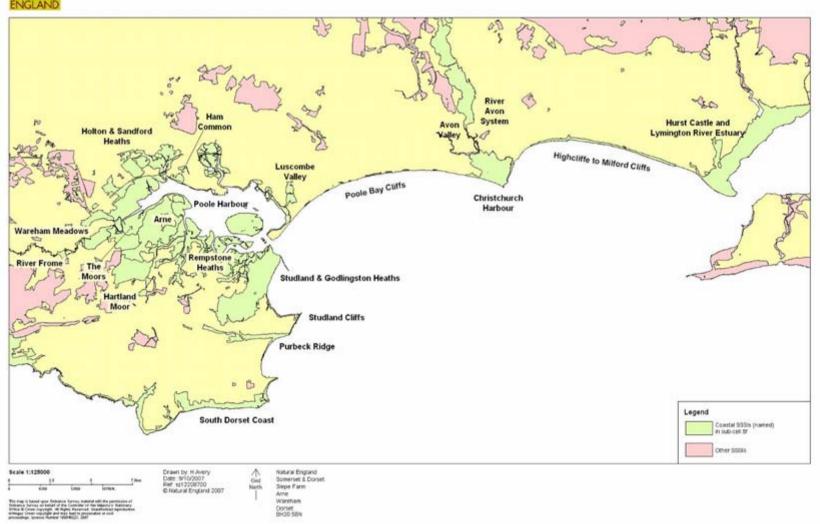








SMP 2: Hurst Spit - Durlston Sites of Special Scientific Interest



NATURAL ENGLAND

- 20 Sites of Special Scientific Interest
- 4 Special Protection Areas
- 4 Ramsar sites
- 5 Special Areas of Conservation
- 7 National Nature Reserves
- 10 (at least) Local Nature Reserves

PLUS.....

 Areas of Outstanding Natural Beauty (AONB), Heritage Coasts, World Heritage Site (Jurassic Coast), National Parks, Sites of Nature Conservation Interest (SNCI), Regionally Important Geological Sites (RIGS), Sensitive Marine Areas, Voluntary Marine Nature Reserves, Geological Conservation Review Sites, Wildlife Trust Reserves, Other reserves (eg RSPB)

National and International legislation



Purbeck Ridge (East)

Geology Rare plants Scarce coastal habitats

Studland Cliffs
Geology
Geomorphology
Coastal grassland

Poole Harbour

Variety of coastal habitats

> 20,000 birds Scarce invertebrates







Coastal defences that are no longer economically justifiable





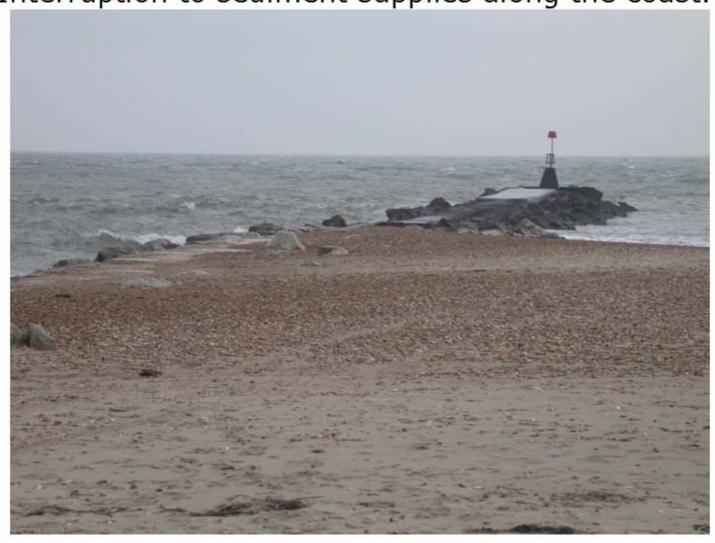


Development in inappropriate locations





Interruption to sediment supplies along the coast.





Coastal squeeze against hard defences





Stabilised cliffs adversely affecting special interest features





Damage to fragile coastal habitats eg vegetated shingle communities



Freshwater & brackish habitats protected behind coastal defences



Wareham Meadows

Brownsea Lagoon



SSSI Name	Habitat	Issue	Units in unfavourable condition
Highcliffe to Milford Cliffs	Soft cliffs	Inappropriate coastal management	4
Hurst Castle & Lymington River	Intertidal with saltmarsh & shingle	Coastal squeeze	4
Poole Bay Cliffs	Cliff exposures with coastal grass & heath	Earth science features obscured by scrub on stabilised slopes	5
Poole Harbour	Grazing marsh	Inappropriate coastal management	1
Studland & Godlingston Heath	Dune heath & woodland	Coastal squeeze	1
Wareham Meadows	Marshy grassland	Inappropriate water levels (due to tidal banks)	2

What do we need from this review?



- More strategic, long term and holistic assessment of coastal defence structures and schemes
- Coastal management that works with coastal processes and maintains their functionality and dynamics
- A coastline that is naturally more resilient and better able to adapt to future change
- More recognition of the need to appraise adaptation options (both for habitats and humanity) in favour of maintaining status quo (it may be cheaper)
- Greater exploration of soft engineering solutions

What do we need from this review?



- •Coastal erosion risk management schemes that maximise their contribution to the natural environment
- Acceptance that climate change and sea level rise will inevitably involve loss of some coastal habitats in current location
- Identify opportunities to reverse/offset unfavourable condition of SSSI sites caused by coastal defences
- Deliver managed realignment schemes that will create habitat to compensate for that being lost from sites of national and international importance