# CROWDED COASTS SPECIFICATION 2011

A closer look at how physical and human issues influence lives and can be managed. Crowded Coasts reveals how increasing development is testing our ability to manage these valued environments.

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| **Why is the coastal zone so favoured for development?** | | |
| **What you need to know:** | **Other details:** | **Examples:** |
| * How physical factors create variety in a range of different coastal environments | * Range of natural factors that influence coastal environments and their value, e.g. geology, geomorphology and ecosystems | * Lancashire Coastal Plain, Blackpool, Benidorm (Spain), Boscombe, Jurassic (Dorset) Coast, Bournemouth, Southampton Waters, Swanage |
| * The factors which have led to exponential population growth in some coastal environments | * Flat land, soil fertility, equable climate, biodiversity * Potential for fishing, recreation/tourism, industrial and port development and accessibility | * Lancashire Coastal Plain, Blackpool, Benidorm (Spain), Boscombe * Coastalisation in Australia, Spain’s Costa Geriatrica(!), Florida, Bournemouth * Butlers Model |
| * **Fieldwork and research** to show how these factors have shaped the development and growth of contrasting crowded coasts over time | * Growth and development of contrasting crowded coasts | * Swanage * Blackpool/Bournemouth * Southampton Waters * Dorset Coast * Thames Gateway |
| **How do various coastal developments create competition and conflict? How can these pressures be resolved?** | | |
| * How development lead to patterns of zoning coastal areas and how competition for space puts pressure on coastal environments | * Land use in a resort * The need for planning control as the available land decreases and rate of development intensifies | * Bournemouth, Blackpool, Brighton and Hove * Dorset (Jurassic) Coast * Coral Reefs (e.g. Mombasa or Great Barrier Reef), Mangroves (e.g. Kenya), Salt Marshes (e.g. Blackwater or Thames Estuaries or Southampton Waters), Sand Dunes (e.g. Studland) * Boscombe * Land Reclamation (Tokyo Bay, Netherlands) |
| * **Fieldwork and research** into the pressures on the coast when development and conservation meet head on | * The overuse of resources, pollution, other developments * The destruction of high-value coastal habitats * Analysing impacts of fishing, aquaculture, marine and beach pollution and tourism * Assessing value of and level of destruction in, e.g. sand dunes, salt marshes, SSSIs | * Swanage/Studland * *See above and below!* |

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| * There are economic benefits and environmental costs to coastal development which influence the success of the development equation and involve the views of stakeholders and their conflicting needs | * Assess the beneficial economic impacts of development against the environmental costs (using Cost-Benefit Analysis (CBA) and Environmental Impact Assessment (EIA)) * Examining the views and objectives of interested parties (conflict matrices and values analysis) | * Dibden Bay Container Port scheme proposal * Fawley Oil Refinery * Southampton Docks |
| **How is coastal development increasingly at risk from and vulnerable to physical processes?** | | |
| * The growing level of coastal development faces increasing risks from coastal erosion and flooding | * Rapid coastal erosion along vulnerable coasts * Impact of rising sea levels in areas of dense population and high value installations, particularly those that may be subject to tsunamis and storm surges | * Holderness Coast erosion (or Dorset Coast) * Storm Surges(e.g. East Coast, 1953)/Flooding in Thames Estuary (Thames Gateway development), Netherlands * Indonesia/Sri Lanka for Tsunami risk * Grand Isle, Louisiana (Hurricane Katrina), Venice, The Sundarbans (India and Bangladesh), Cotonou (Benin), Maldives, Egypt |
| * **Fieldwork and research** into rates of coastal retreat **or** degree of coastal flood risk and the resulting impacts on developments and people at a small scale | * Investigate pace and impacts of erosion **or** flooding | * Swanage * *See above!* |
| **How is coastal management adapting to new ideas and situations?** | | |
| * How the spectrum of coastal management strategies (hard engineering to ‘do nothing’) has evolved into Shoreline Management Planning | * Range of coastal defences available, both traditional and modern, and how various options relate to what is feasible, cost-effective and appropriate | * Swanage * Holderness- erosion processes and coastal management * Studland Sand Dune Reserve * Thames Barrier- London * SMP: UK, Isle of Wight, Mumbai |
| * **Fieldwork and research** into success of coastal defence schemes and value of strategies used to manage a high value coastal environment | * Success of coastal defences along a small stretch of coastline * Conservation and management of a fragile or outstanding coastline | * Swanage coast |
| * Management strategies for the future include sustainable and integrated approaches such as coastal realignment and Shoreline Management Plans (SMPs and ICZM) | * Assess the value of sustainable and ecological approaches | * Blackwater Estuary (Abbots Hall Farm Coastal Realignment), Hornsea Managed Retreat, Dorset Managed Retreat * Isle of Wight SMP, Mumbai CRZ * Thames Estuary |