# 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
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| * 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
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| * **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
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| **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)
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| * **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
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| **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
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| * **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!*
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| **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
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| * **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
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| * 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
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