

AQA Geography A-level

Coastal Systems and Landscapes Glossary of Definitions



Coasts Glossary - AQA Geography A-Level

Abrasion - A form of erosion where loose material 'sandpapers' the walls and floors of the river, cliff or glacier. Also known as attrition.

Backshore - The upper beach closest to the land, including any cliffs or sand dunes.

Beach Morphology - The surface shape of the beach.

Coastal Recession - The retreat of a coastline due to erosion, sea-level rise or submergence.

Concordant Coast - A coastline where bands of alternate geology run parallel to the coast.

Corrasion - A form of erosion when breaking waves fling material (rocks, sediment, shells. etc) at a cliff face, physically knocking off material.

Corrosion - The acid in seawater and some types of seaweed attacks particular rock minerals, causing erosion and weakening.

Dalmatian Coast - A concordant coastline with several river valleys running perpendicular to the coast. They become flooded to produce parallel long islands and long inlets.

DEFRA's 1:1 Cost-Benefit Analysis - The evaluation of a coastal town's economic value compared to the cost of the management required. Costs are tangible and intangible and can be economic or other costs such as a visual impact.

Discordant Coast - A coastline where bands of alternate geology run perpendicular to the shore.

Dynamic Equilibrium - Where a natural system tries to achieve a balance by making constant changes in response to a constantly changing system.

Emergent Coast - A coastline that is advancing relative to the sea level at the time.

Eustatic - Global changes to sea levels.

Fetch - The distance the wave travels before it reaches the coastline. Distance to the nearest land mass in the direction in which the wave travels.

Fjord - Long narrow inlet deeper in the middle section than at the mouth, created when sea levels rise relative to the land, flooding coastal glacial valleys.

Foreshore - The lower part of the beach covered twice a day at high tide (the part of the beach that receives the most regular wave action).

Freeze Thaw - A form of physical sub-aerial weathering where water freezes in the cracks of a rock, expands and enlarges the crack, therefore weakens the rock.



Geology - The structure and arrangement of a rock.

Glacial Erosion - The removal of loose material by glacier ice, involving plucking, abrasion, crushing and basal meltwater. (necessary in the formation of Fjords).

Grading - The layering of sediments based on their size.

High-energy Environment - A coast where wave action is predominantly large destructive waves, causing much erosion.

Hydraulic Action - The pressure of compressed air forced into cracks in a rock face will cause the rock to weaken and break apart.

Integrated Coastal Zone Management (ICZM) - Large sections of coastline (often sediment cells) are managed with one integrated strategy and management occurs between different political boundaries.

Impermeable - A rock that does not allow rainwater to pass through.

Isostatic - A change in local coastline or land height relative to sea level.

Littoral Cell - A section of the coast, within which involves much sediment movement. A littoral cell is not a closed system.

Longshore Drift - The transportation of sediment along a beach. Longshore Drift is determined by the direction of the prevailing wind.

Low-energy Environment - A coast where wave action is predominantly small constructive waves, causing deposition and leading to beach accretion.

Mass Movement - The falling or movement of rock, often due to Gravity.

Nearshore - The area before the shore where the wave steepness and breaks before they reach the shore and then reform before breaking on the beach. It extends from the low-tide zone and then out to sea.

Permeable - A rock that allows rainwater to pass through it.

Plant Succession - Change to a plant community due to growing conditions adapting (eg. sand dunes and salt marshes).

Ria - Narrow winding inlet which is deepest at the mouth, formed when sea levels rise causing coastal valleys to flood.



Saltation - Smaller sediment bounces along the sea bed, being pushed by currents. The sediment is too heavy to be picked up by the flow of the water.

Sediment Cell - Sections of the coast bordered by prominent headlands. Within these sections, the movement of sediment is almost contained and the flows of sediment should act in dynamic equilibrium.

Sediment Budget - Use data of inputs, outputs, stores and transfers to assess the gains and losses of sediment within a sediment cell.

SMP - Identifies all of the activities, both natural and human which occur within the coastline area of each sediment cell and then recommends a combination of four actions for each stretch of that coastline: Hold the Line, Advance the Line, Managed Realignment and No Active Intervention.

Subaerial Processes - The combination of mass movement and weathering that affects the coastal land above sea.

Submergent Coast - A coast that is sinking relative to the sea level of the time.

Till - Deposits of angular rock fragments in a finer medium.

Wave Quarrying - When air is trapped and compressed against a cliff which causes rock fragments to break off the cliff over time.

