

Class 9b: Coastal landforms and rivers

Ocean erosion

Coastal landforms from erosion

- On newer, more rugged coastlines

Ocean transport

- *Longshore currents*: waves not parallel to shore

Ocean deposition

- Beaches!

Coastal deposition

- On coastlines already worn down

Coastal deposition

Stabilizing the coast

- Harbors or bays may close over, cliffs may fall

Stabilizing the coast

- Unintended consequences

Coral reefs

- The only organic landform

Coral reefs

Coral reefs

- Absorb energy from waves and protect shores

Fluvial basics

- *Fluvial* processes: involving running water

Fluvial basics

- ***Watershed***: all the land that drains into a stream

Fluvial erosion

- Amount of erosion depends on:
 - Speed of river
 - Degree of turbulence
 - Type of bedrock

Fluvial transport

- Material carried by a stream is the stream load
- *Bed load, dissolved load, or suspended load*

Fluvial deposition

- Found all along rivers; especially at mouth