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