

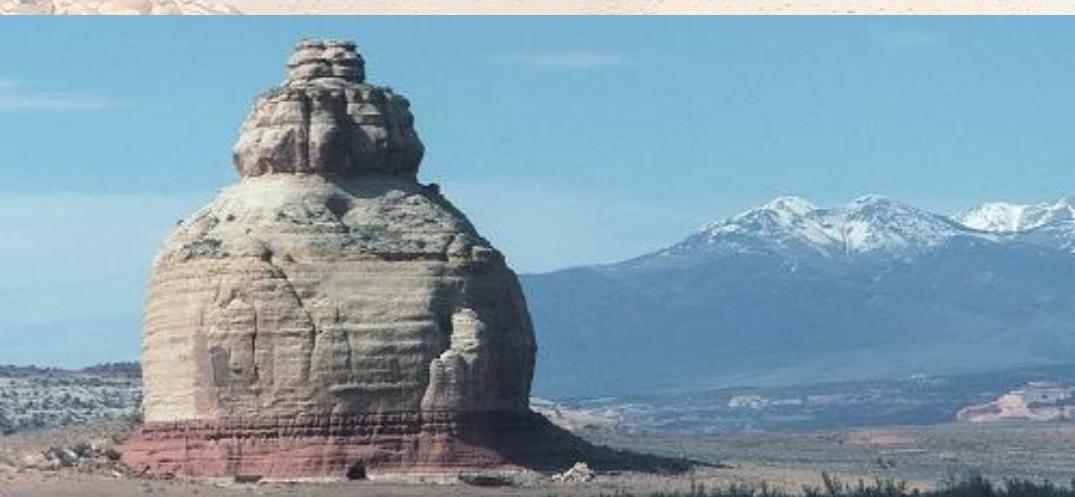
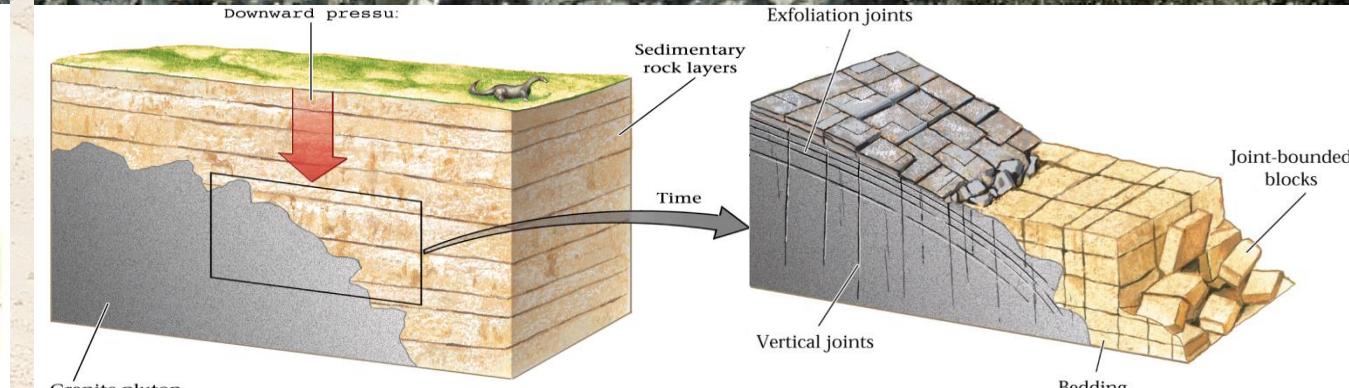
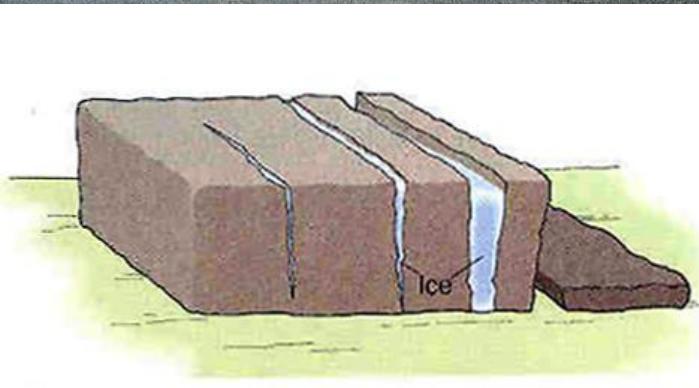
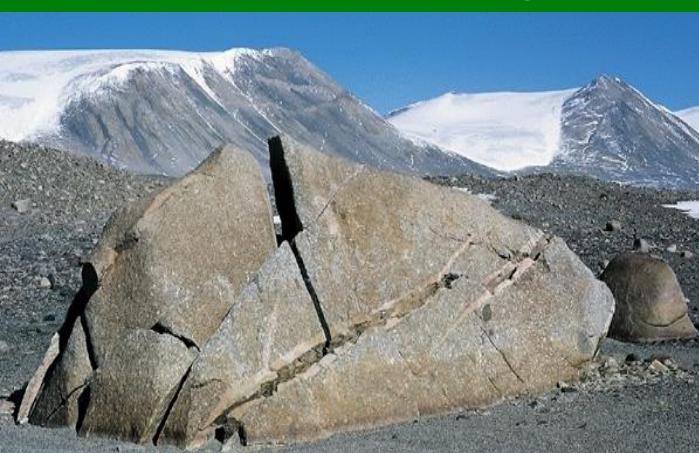
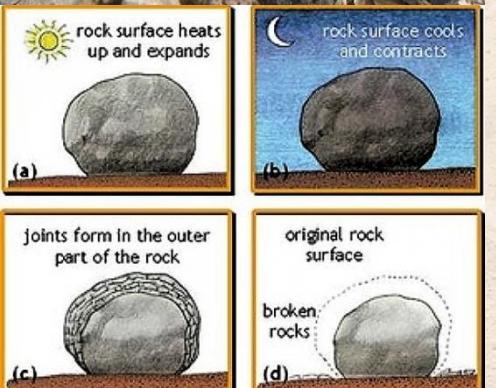
The background image shows a wide, desolate landscape with light brown, sandy soil. In the distance, there are low, rolling hills or mountains under a clear, pale blue sky.

Landscape Evolution

Coastal Landscapes

Weathering | Mechanical weathering

GY4027: Landscape Evolution



Weathering | Chemical Weathering

GY4027: Landscape Evolution





Transport and Deposition | Transport Agents

GY4027: Landscape Evolution

Gravity



Water

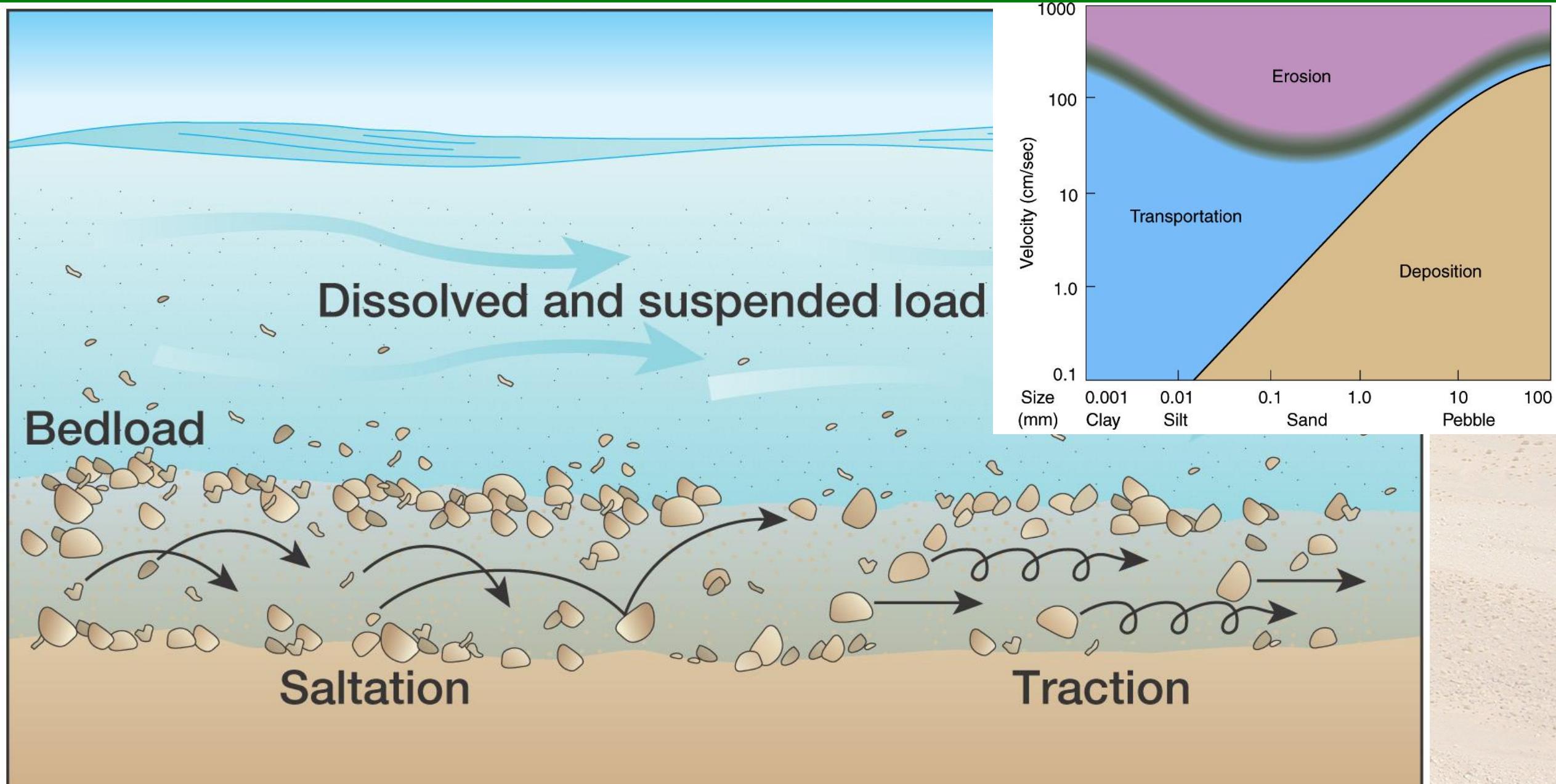


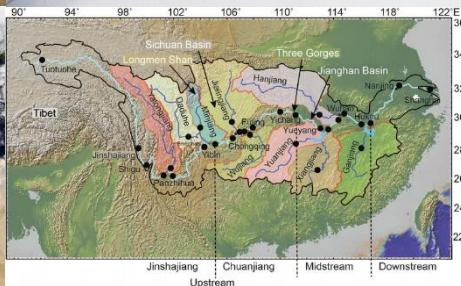
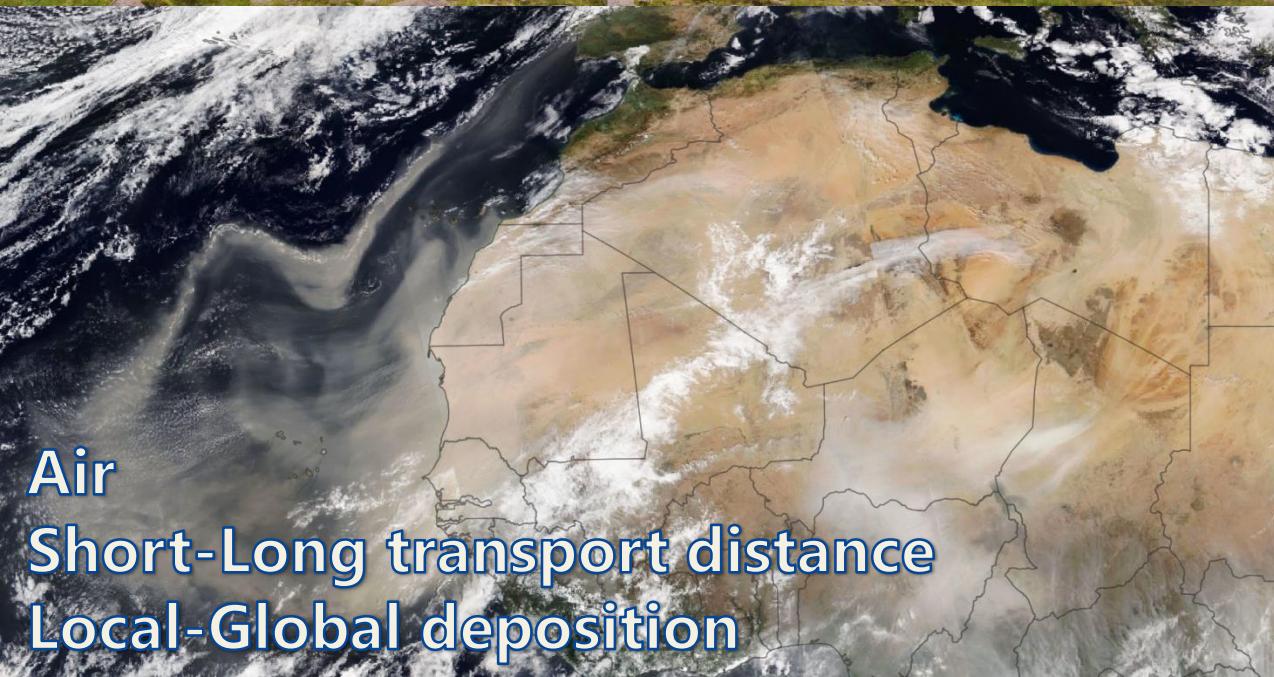
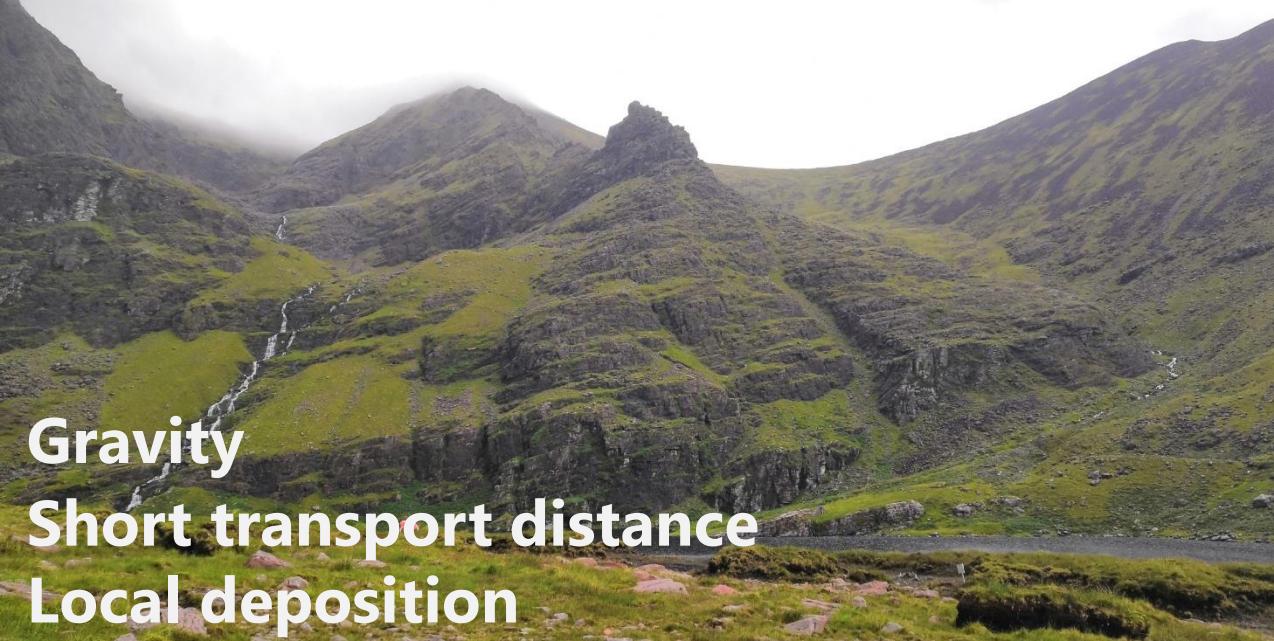
Ice

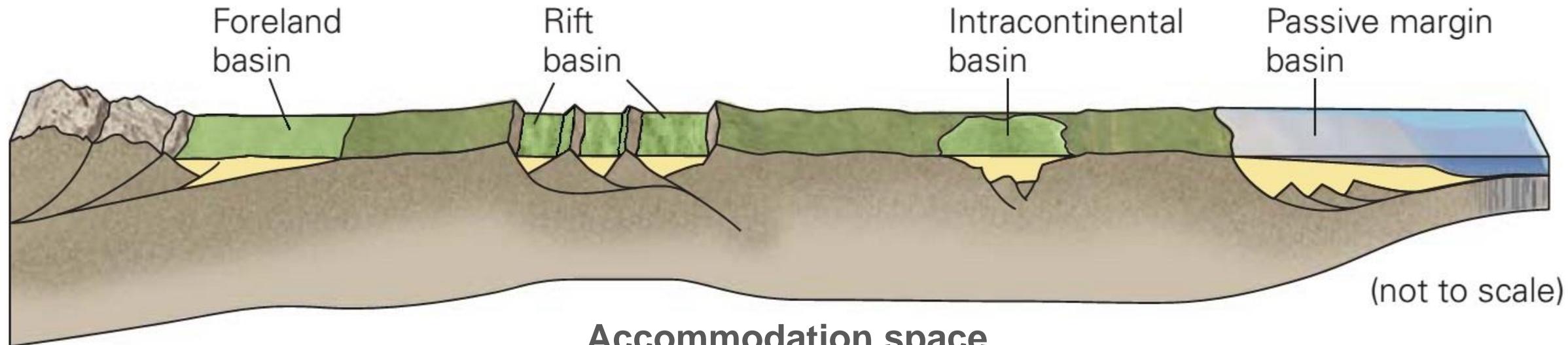


Air









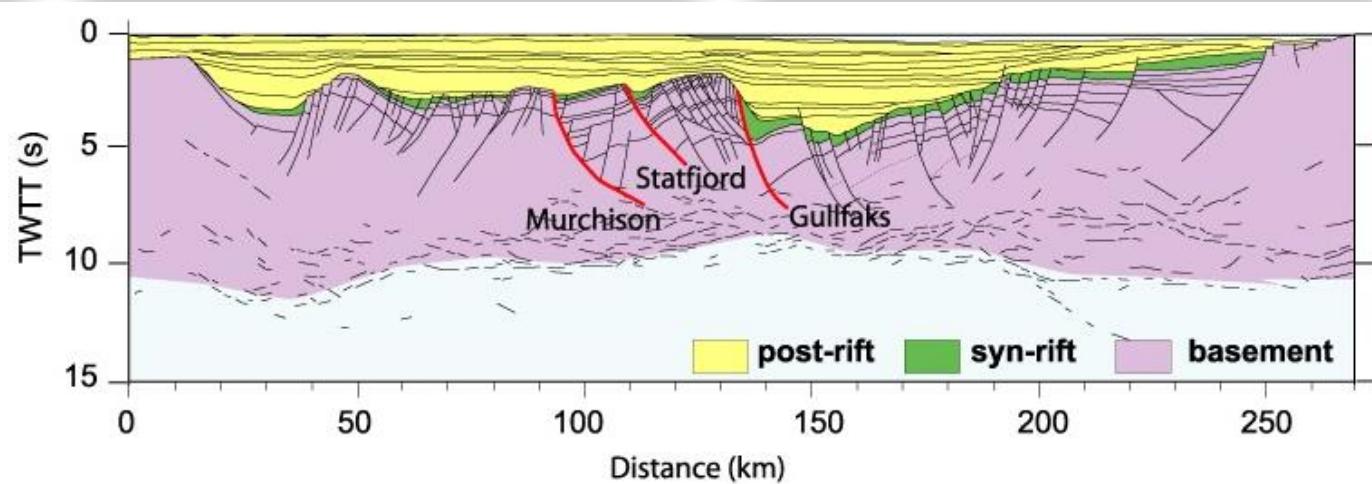
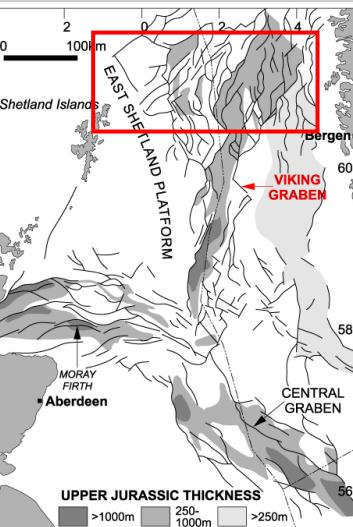
Accommodation space

Weight of the mountain belt pushes down the crust's surface.

Downward slip on faults produces narrow troughs.

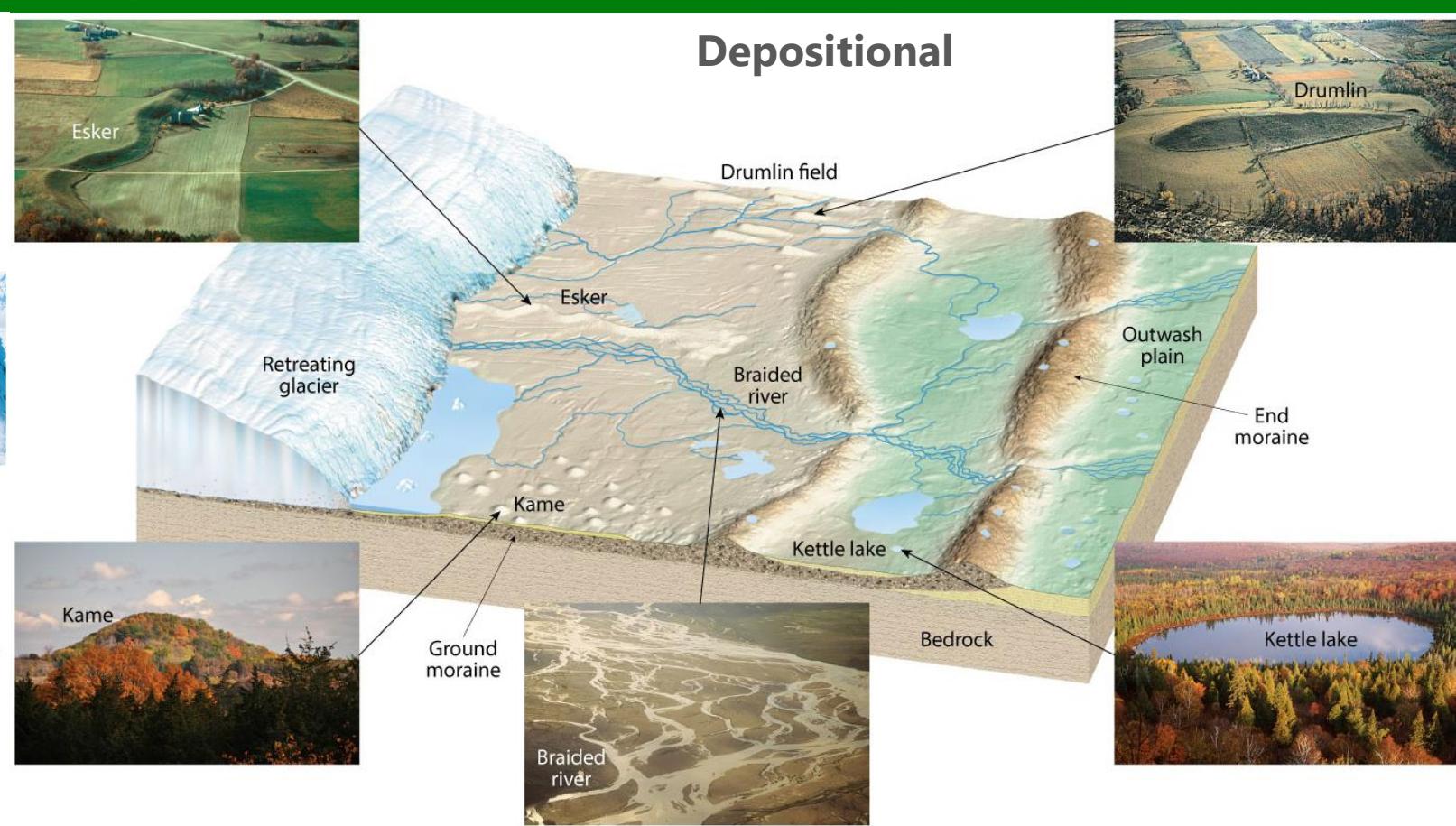
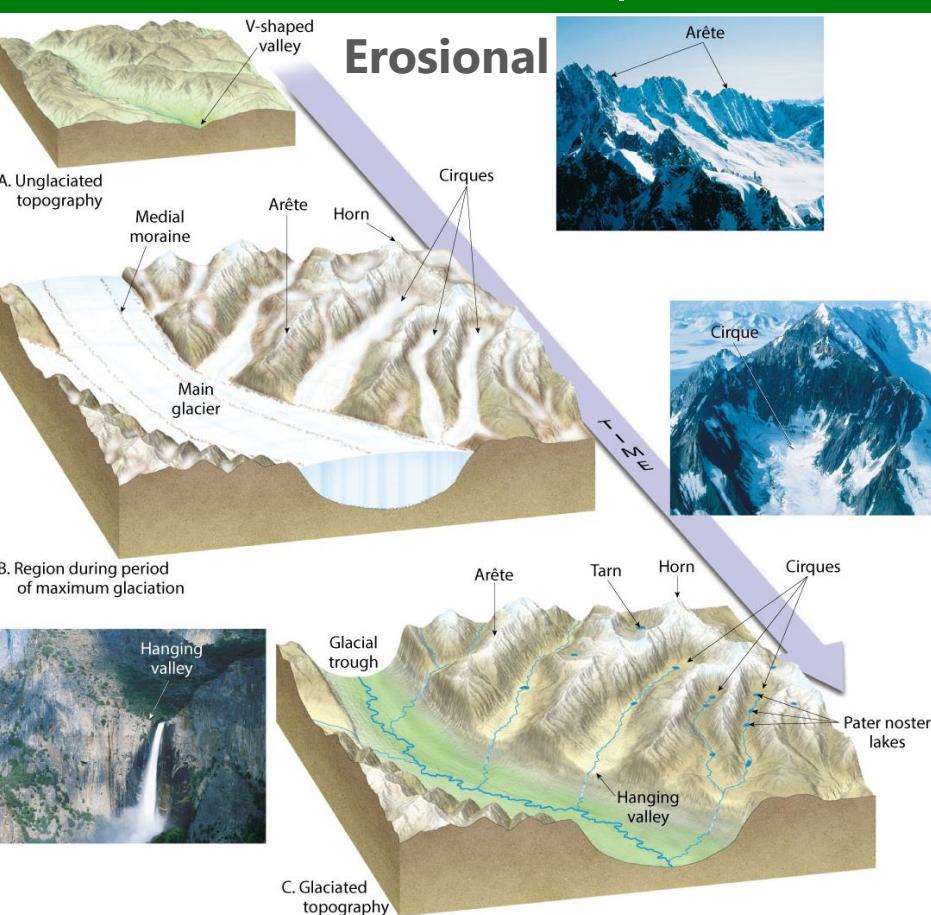
The basin forms in the interior of a continent, perhaps over an old rift.

Subsidence occurs over thinned crust at the edge of an ocean basin.



Coastal Landscapes | Glacial Landscapes

GY4027: Landscape Evolution



Transport - processes

- Water

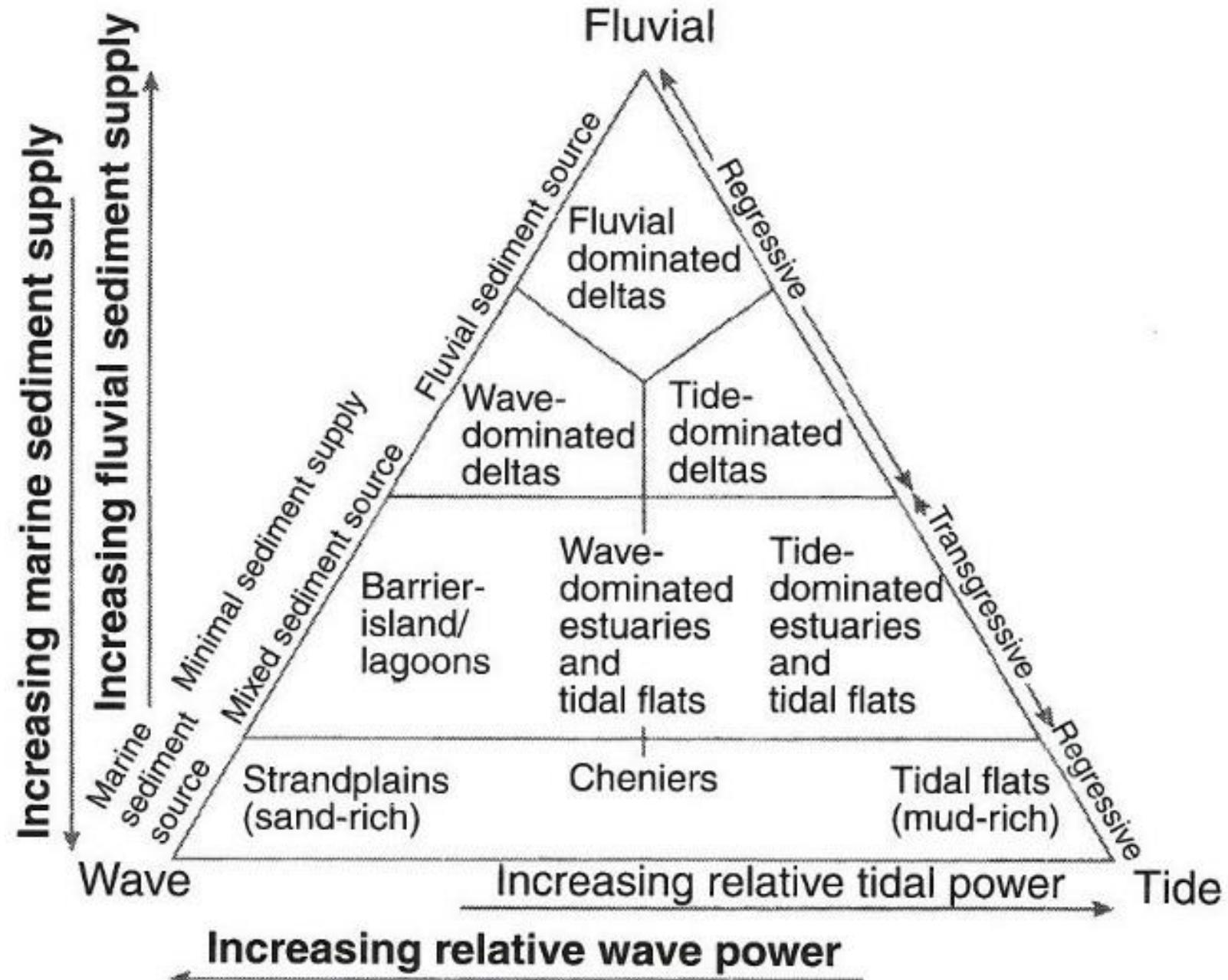


Weathering

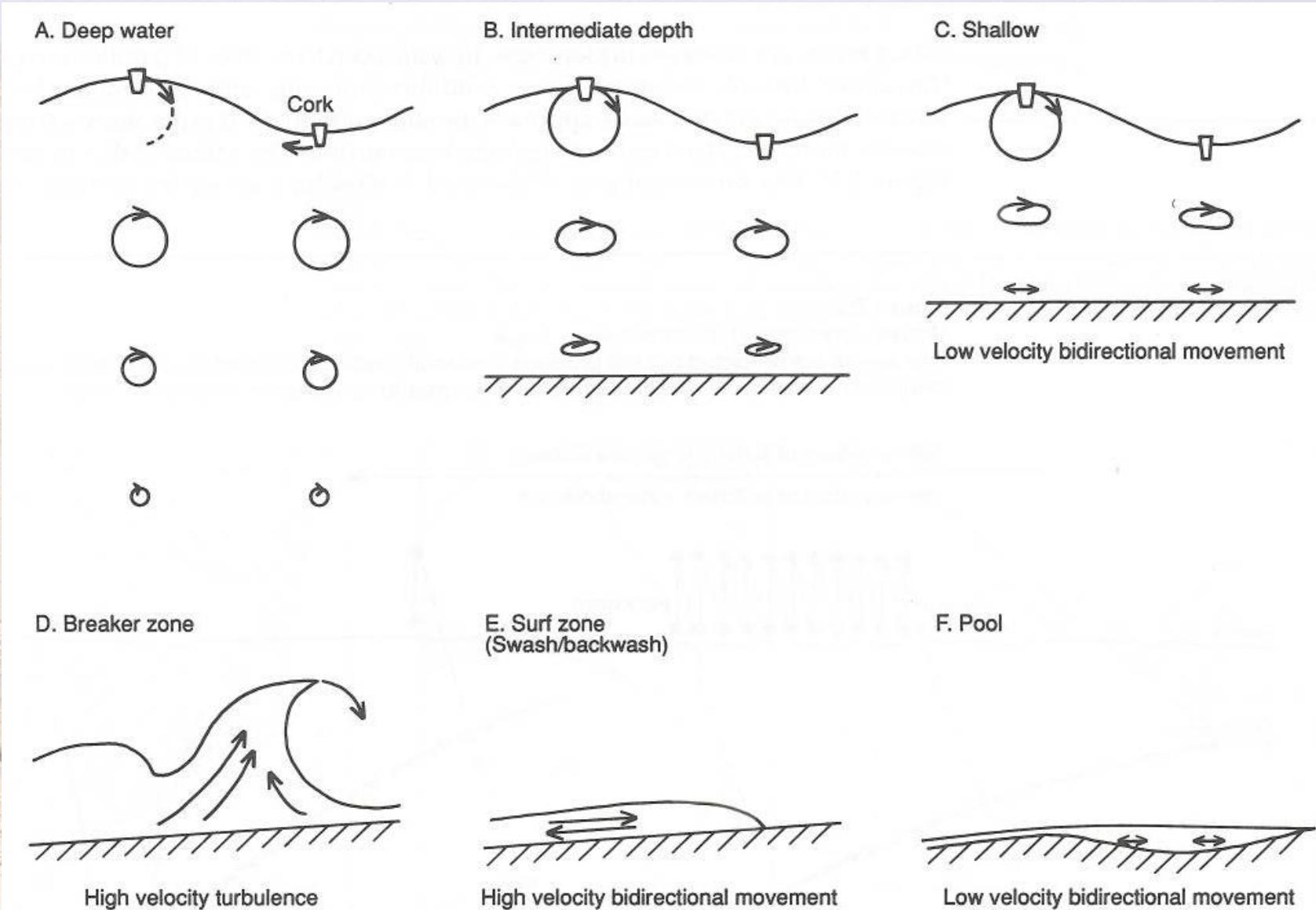
- Mechanical weathering
- Chemical weathering
- Biological weathering



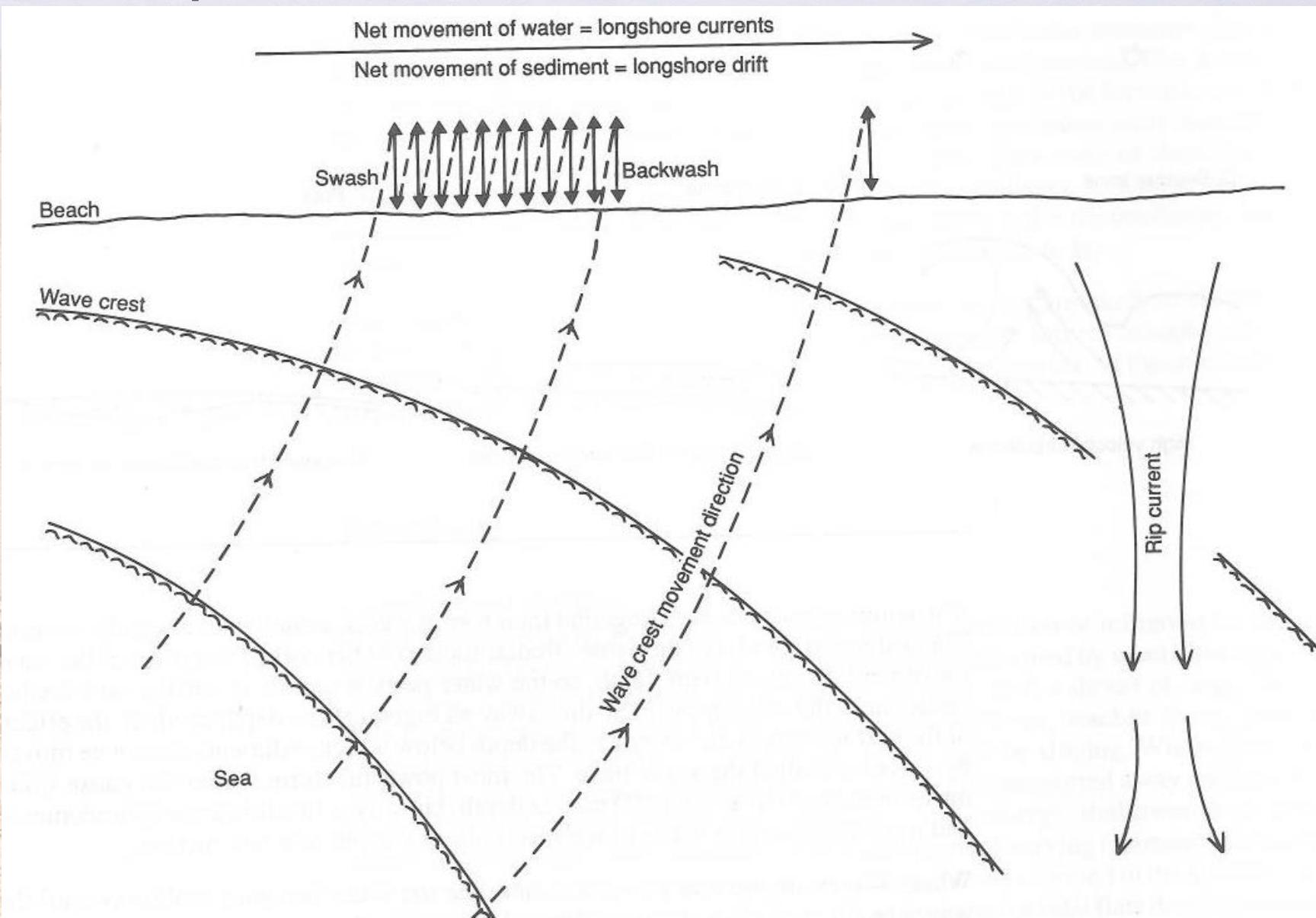
How do coastal landscapes form?



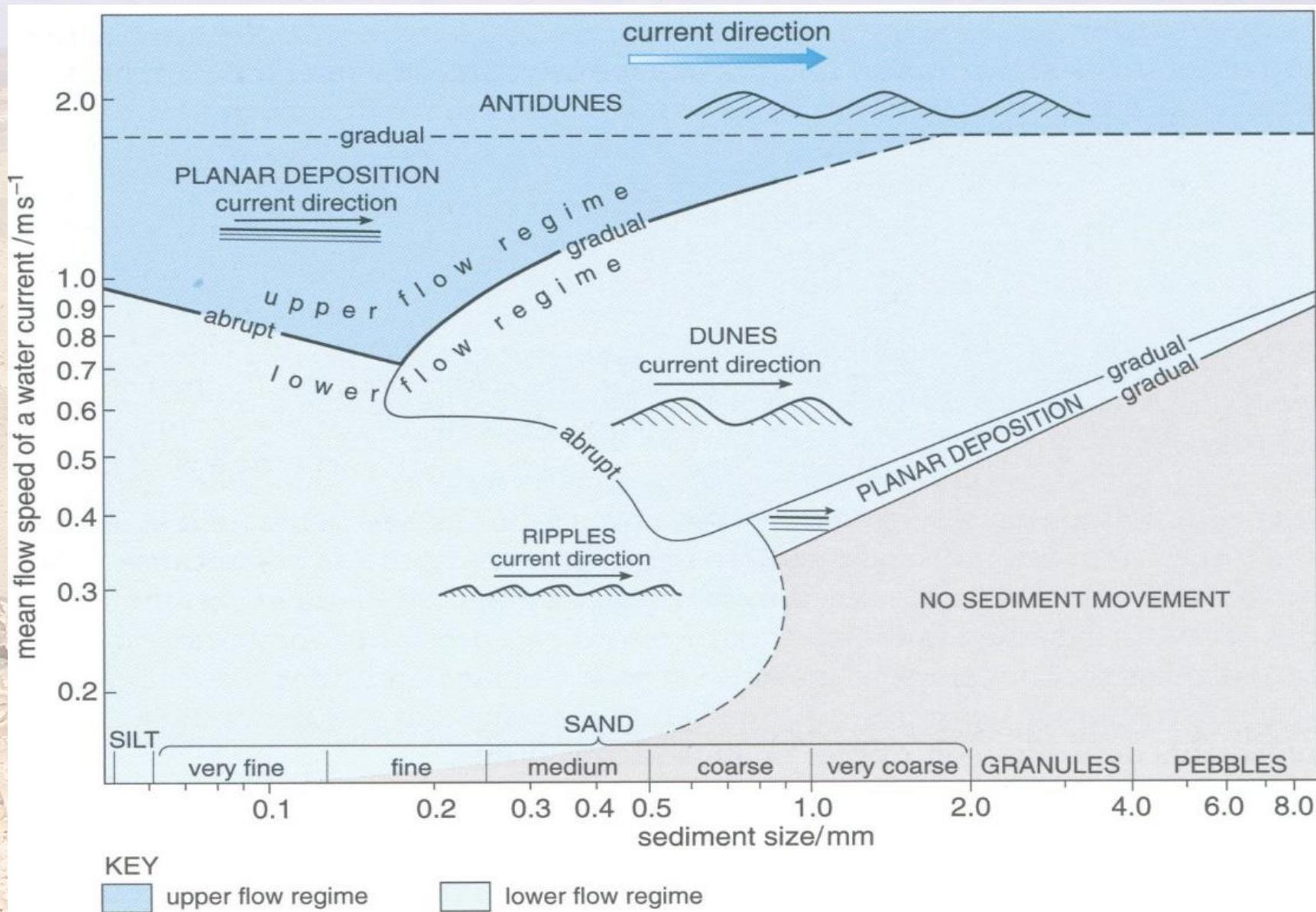
How do coastal landscapes form?



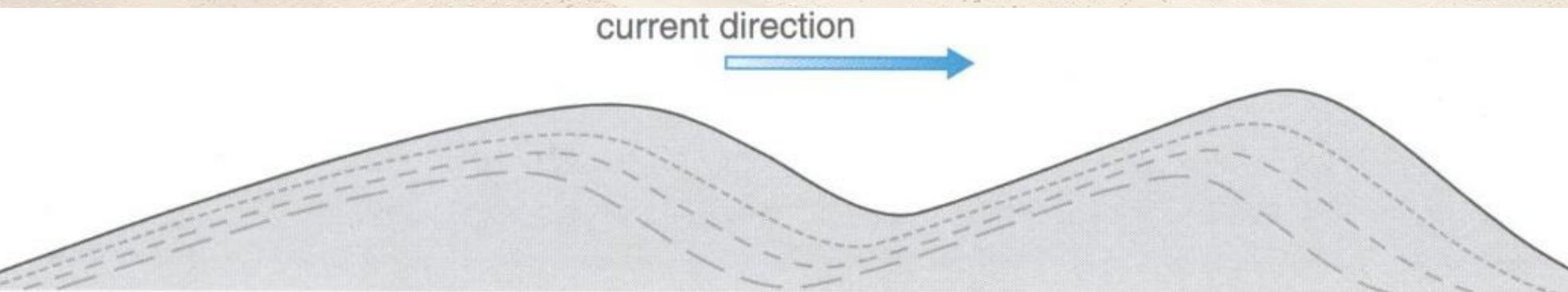
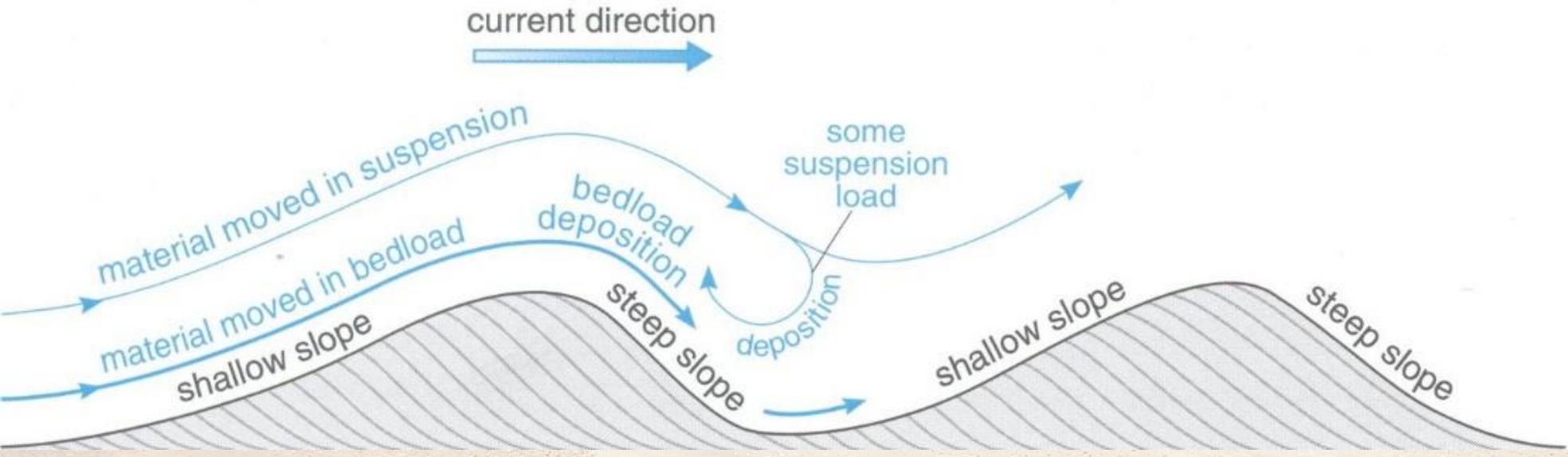
How do coastal landscapes form?



How do coastal landscapes form?



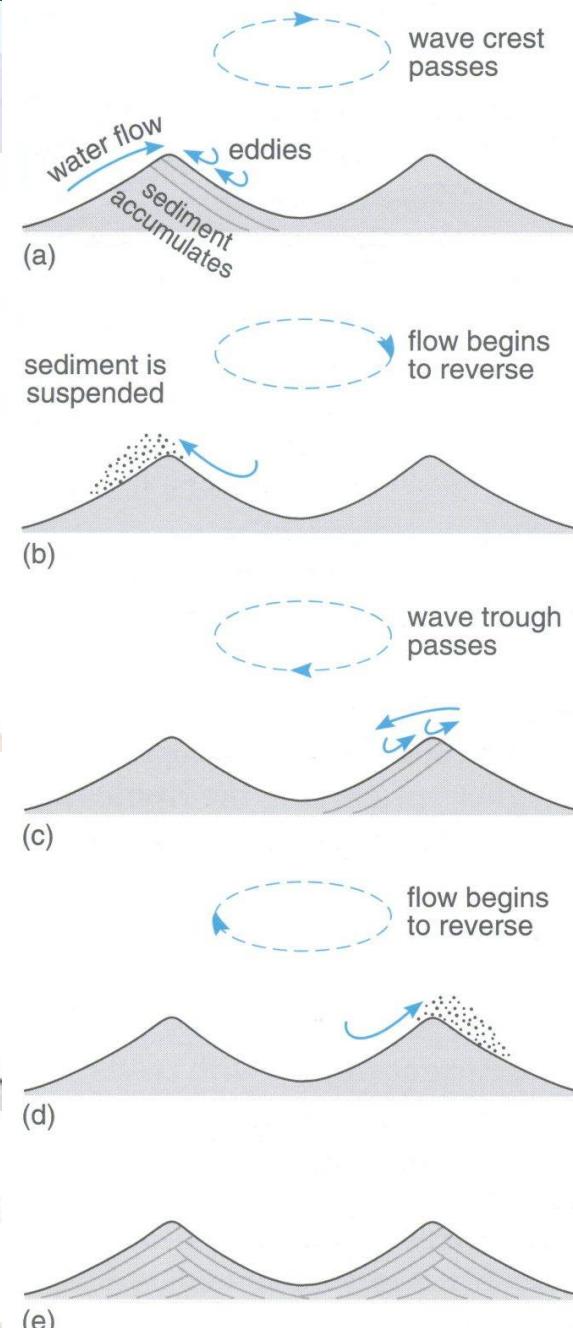
How do coastal landscapes form?



KEY



successive
position of
ripples



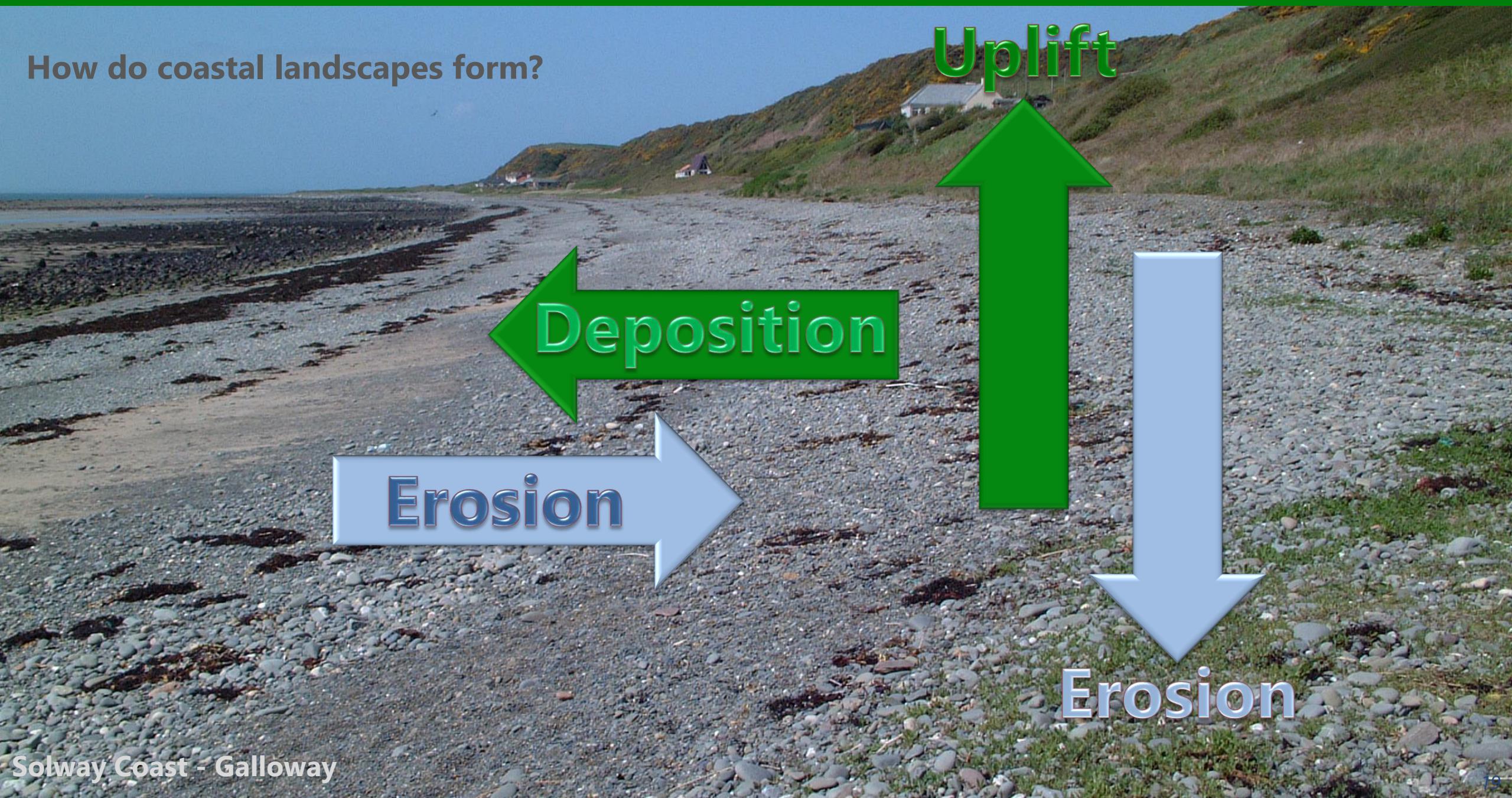
How do coastal landscapes form?



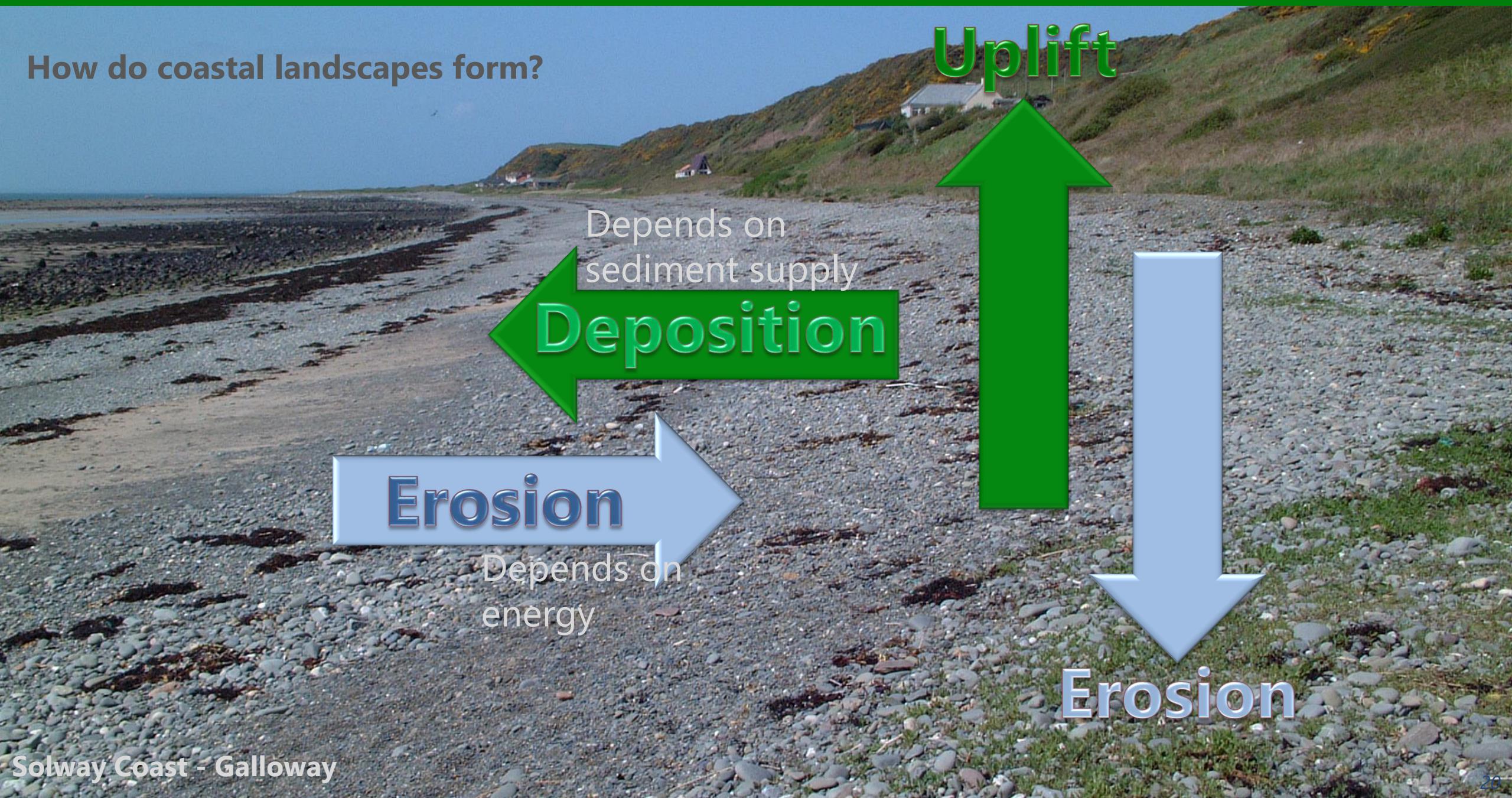
How do coastal landscapes form?



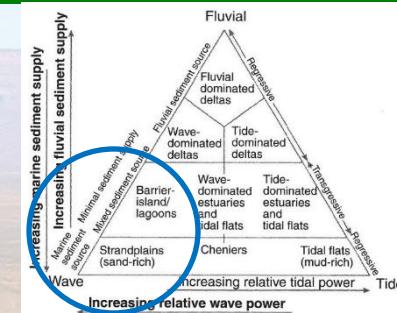
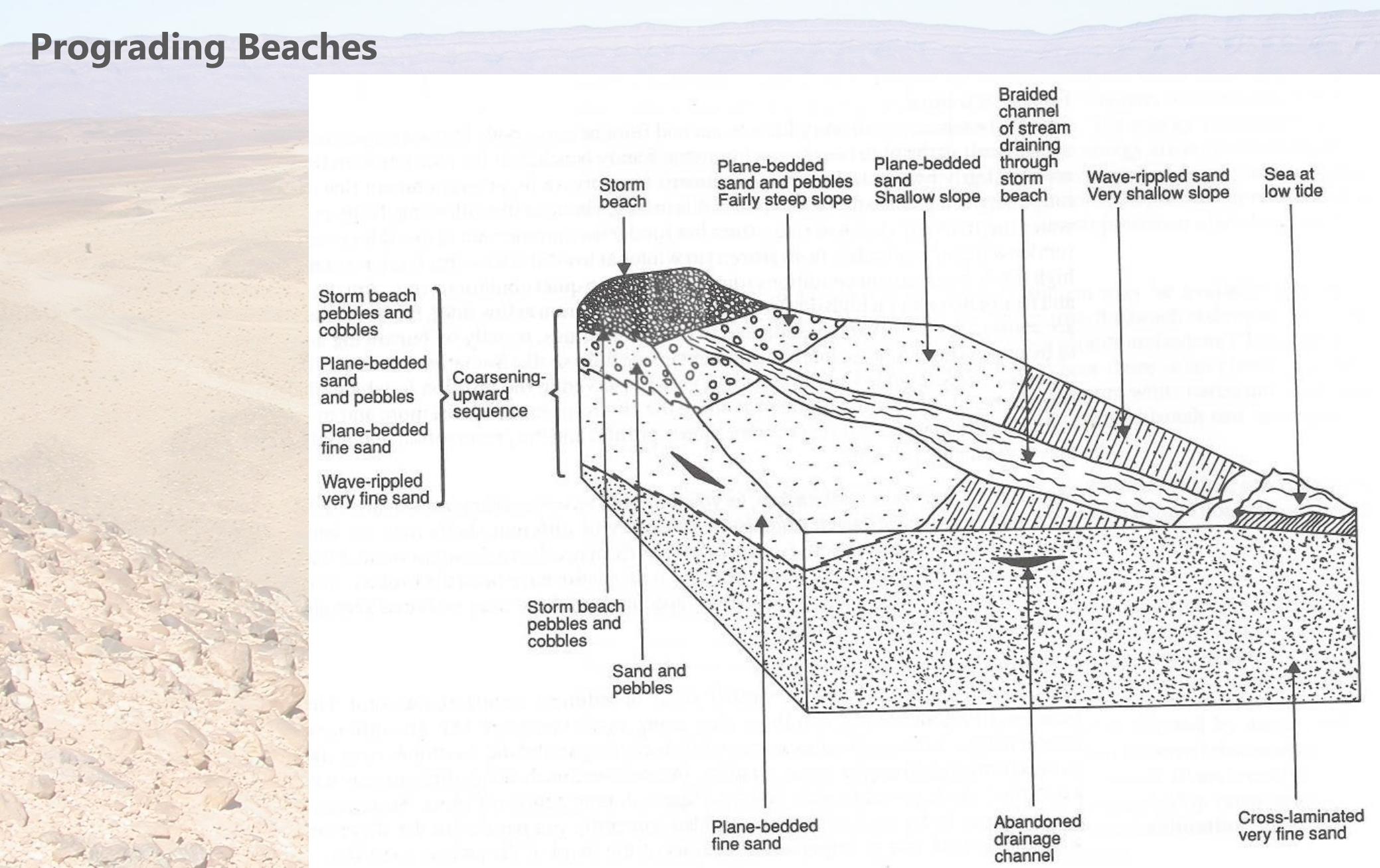
How do coastal landscapes form?



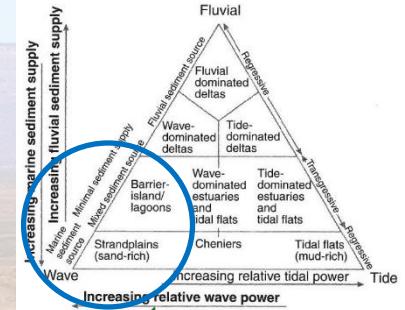
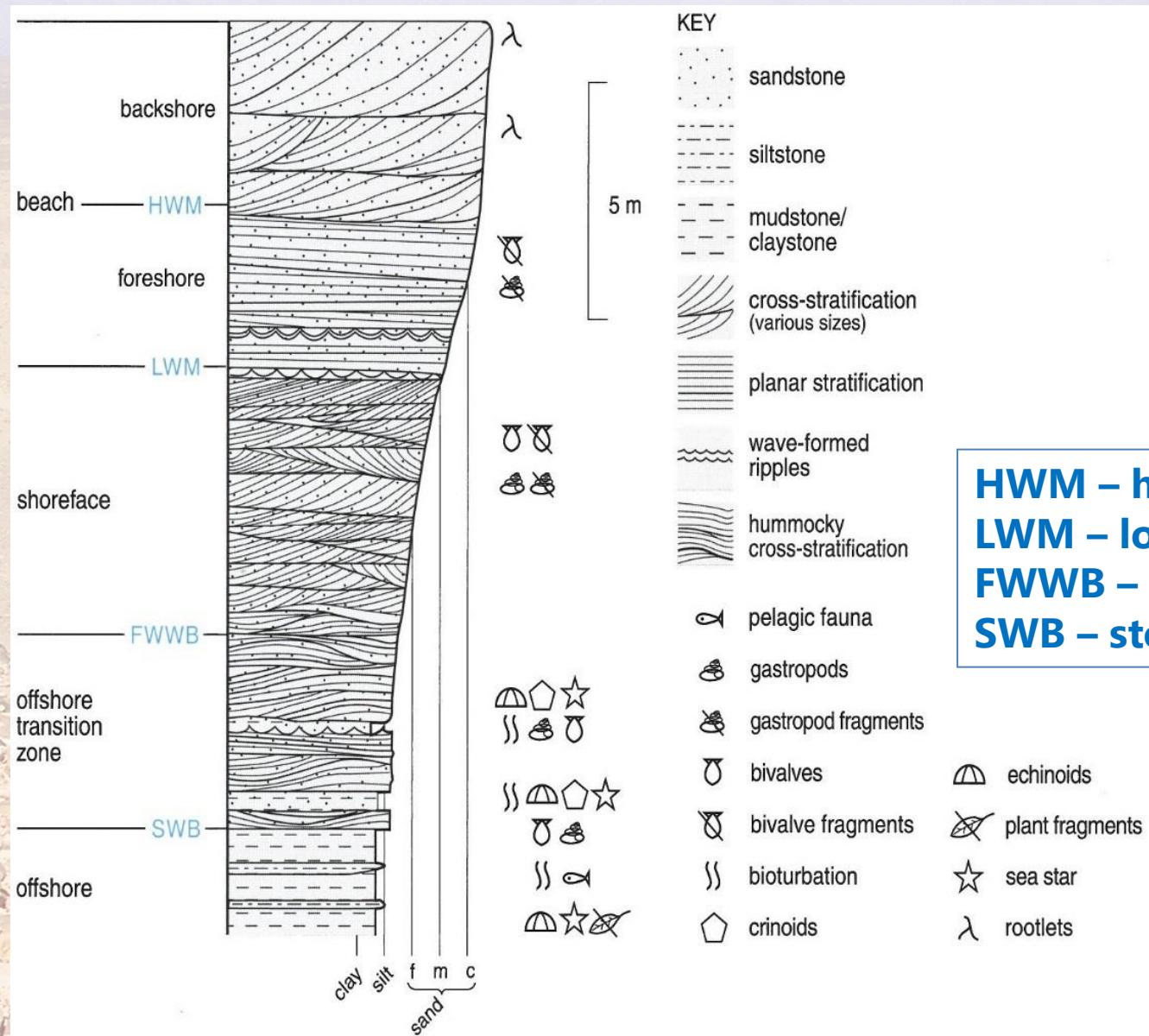
How do coastal landscapes form?



Prograding Beaches



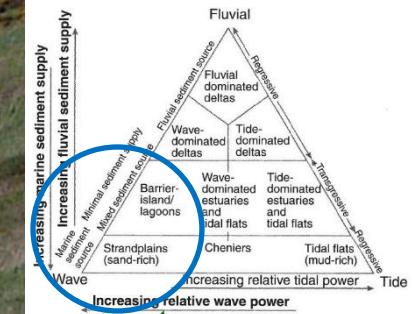
Prograding Beaches



Deposition

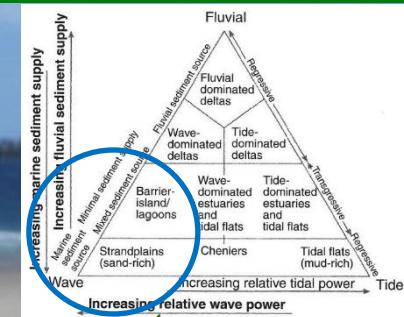
HWM – high water mark
LWM – low water mark
FWWB – fair weather wave base
SWB – storm wave base

Prograding Beaches | Solway Coast, Galloway



Deposition

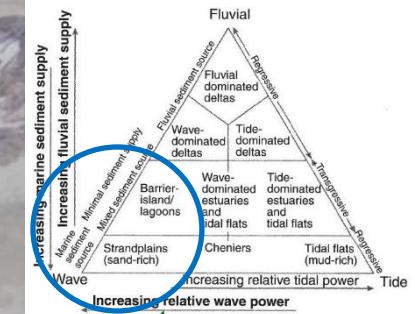
Strandplain beaches | Uig, Isle of Lewis



Deposition

Erosion

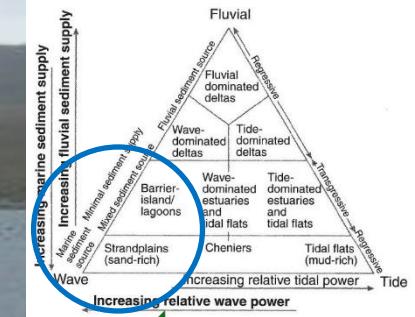
Strandplain beaches | Uig, Isle of Lewis



Deposition

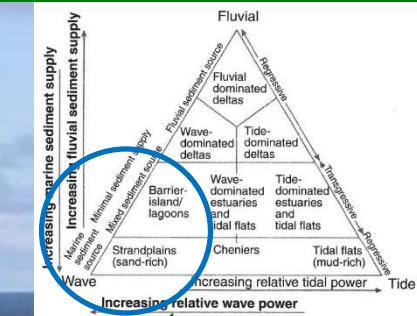
Erosion

Spit | Mainland, Shetland



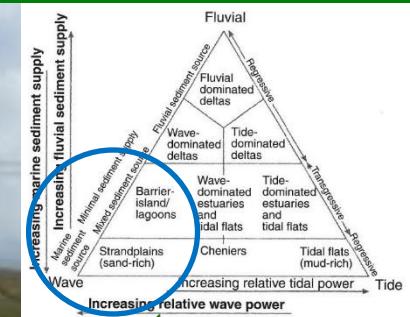
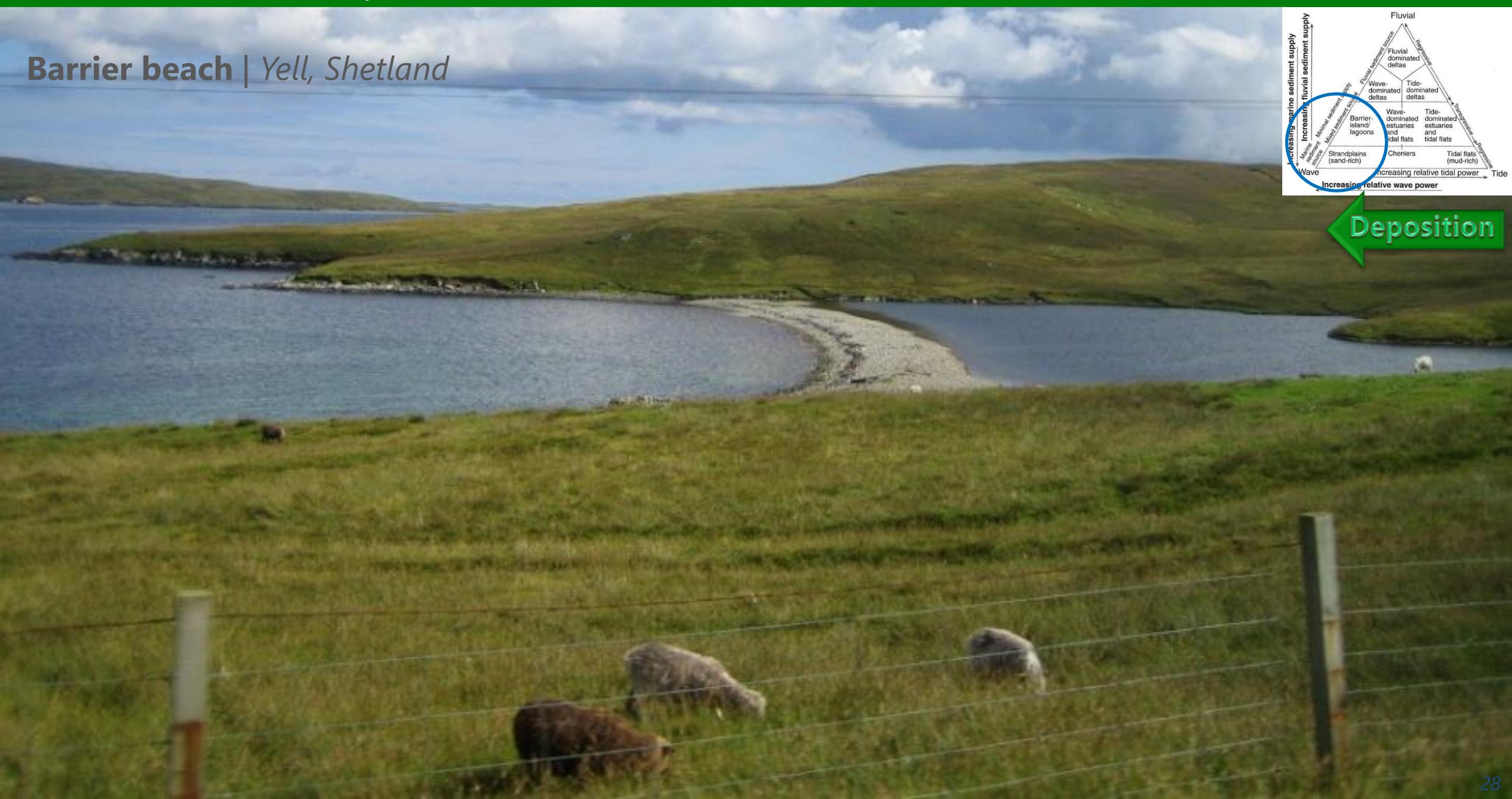
Deposition

Tombolo | St. Ninian's Isle, Shetland



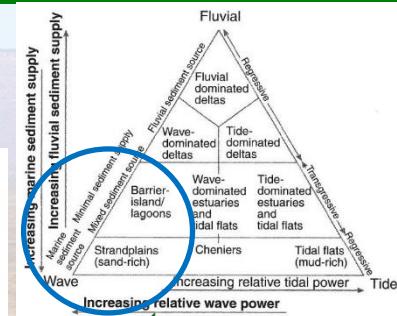
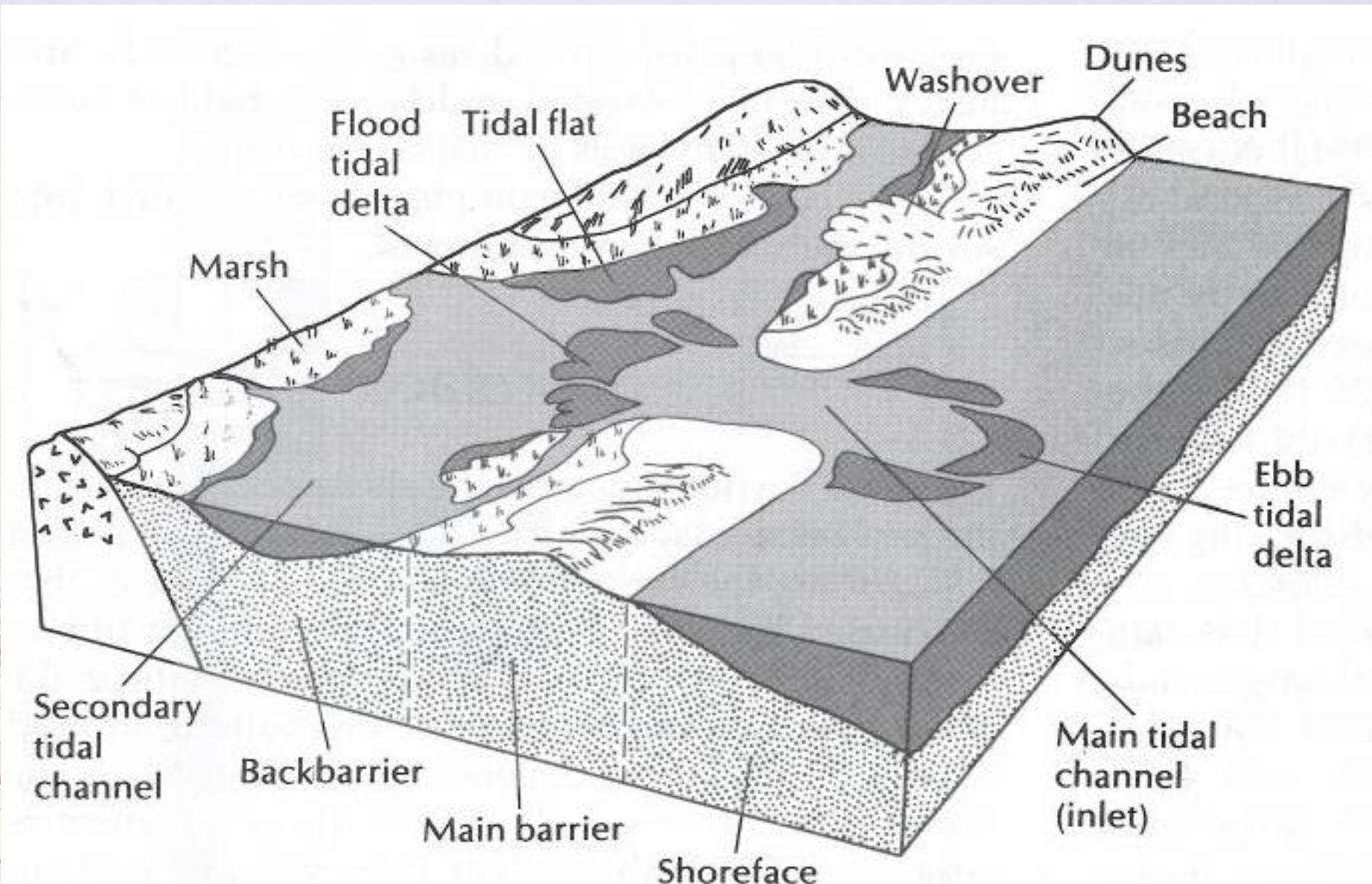
Deposition

Barrier beach | Yell, Shetland



Deposition

Barrier Islands

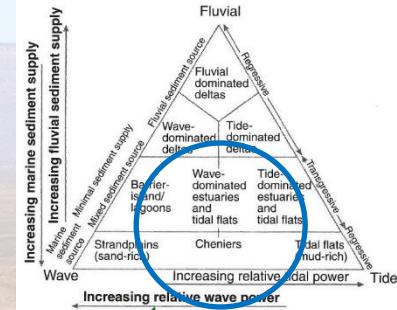
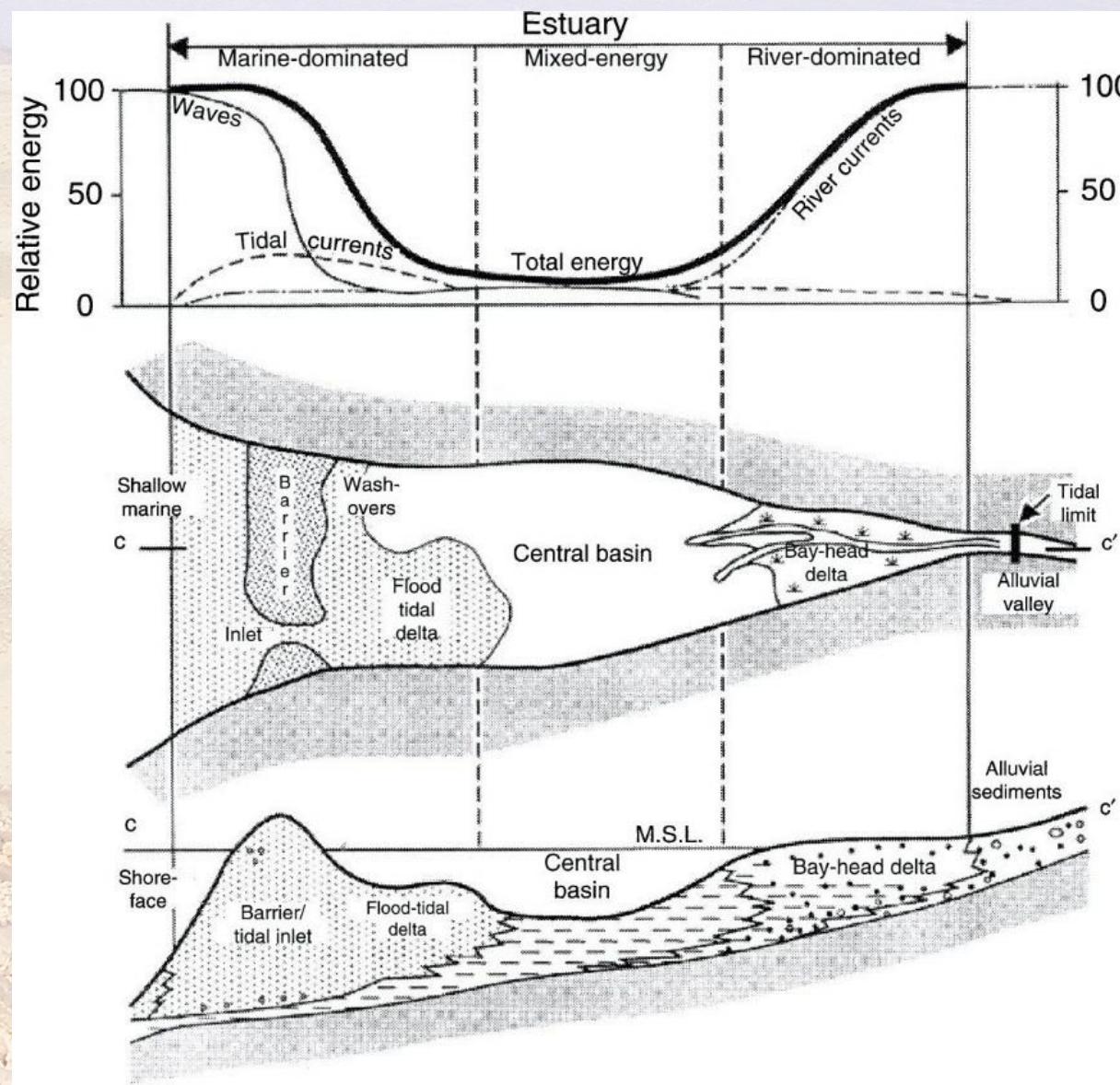


Deposition

Barrier Islands | Benbecula



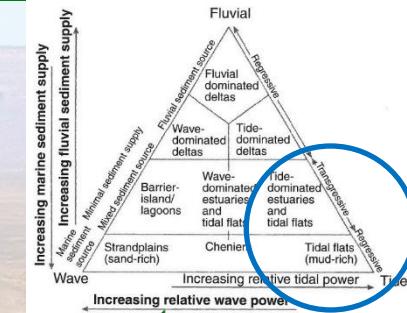
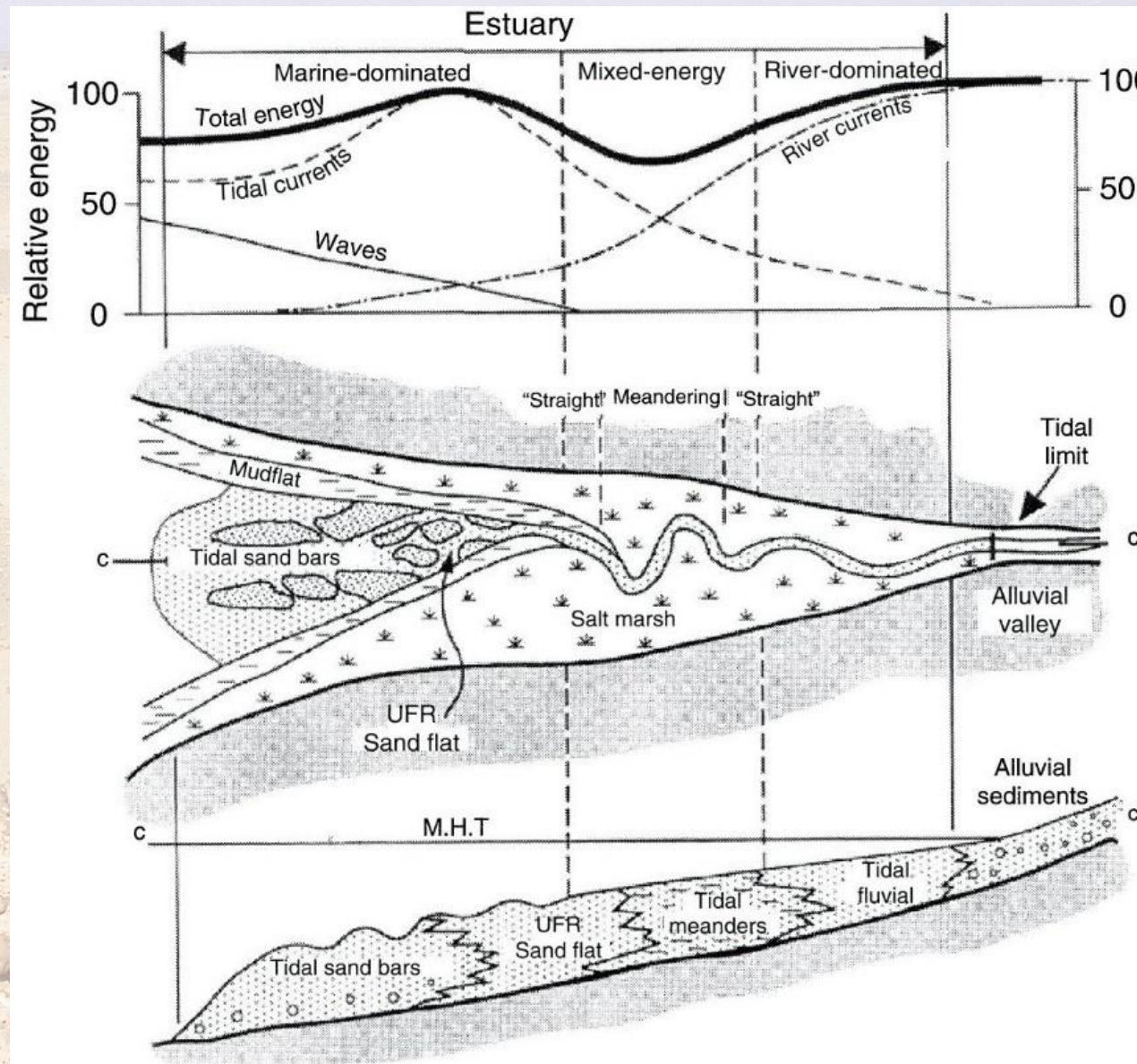
Estuaries | Wave-tide dominated



Deposition

Erosion

Estuaries | Tide dominated



Deposition

Erosion

Estuaries | *Rockcliffe, Galloway*

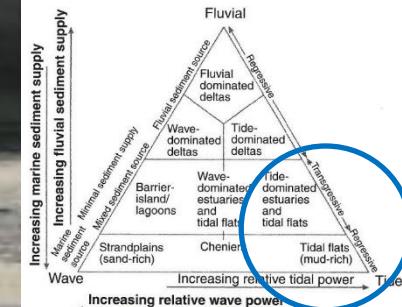
Intertidal muds

Saltmarsh

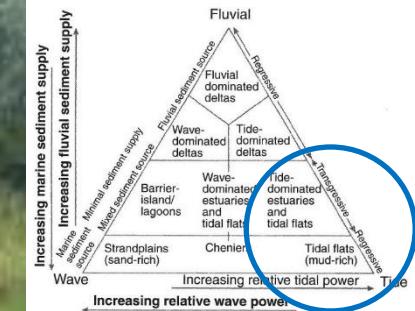
Fluvial channel

Intertidal muds

Saltmarsh



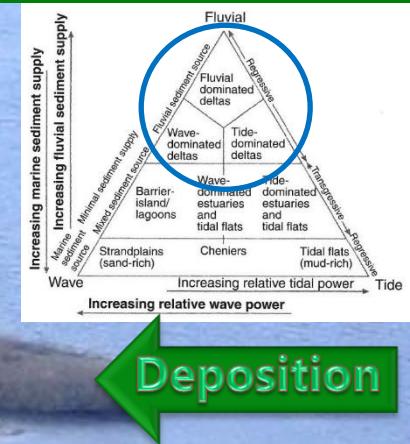
Estuaries | Cree, Galloway



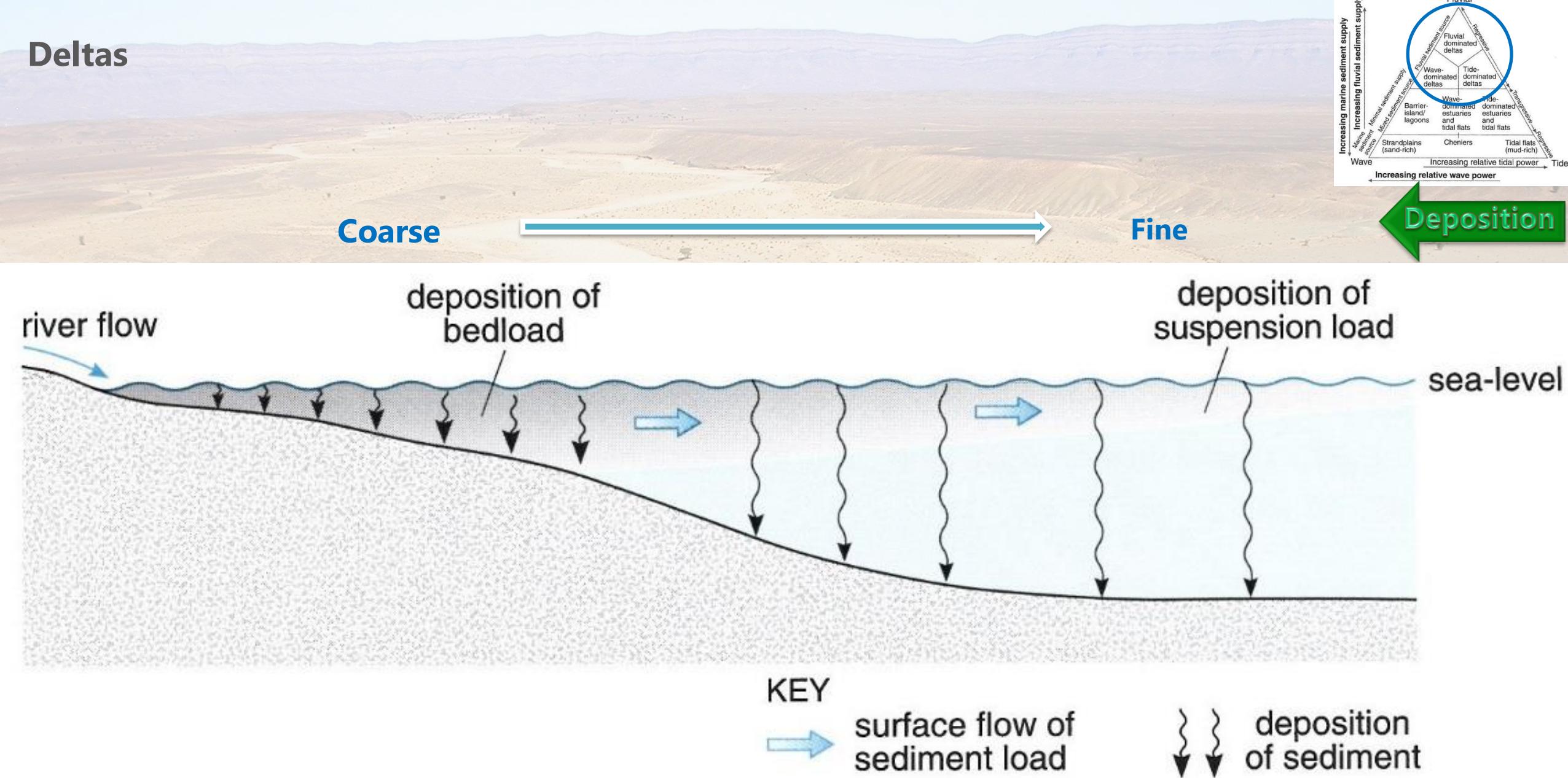
Deposition

Erosion

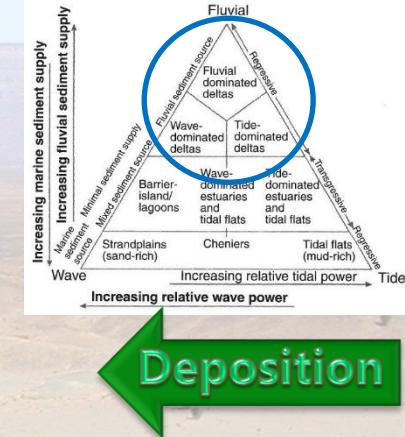
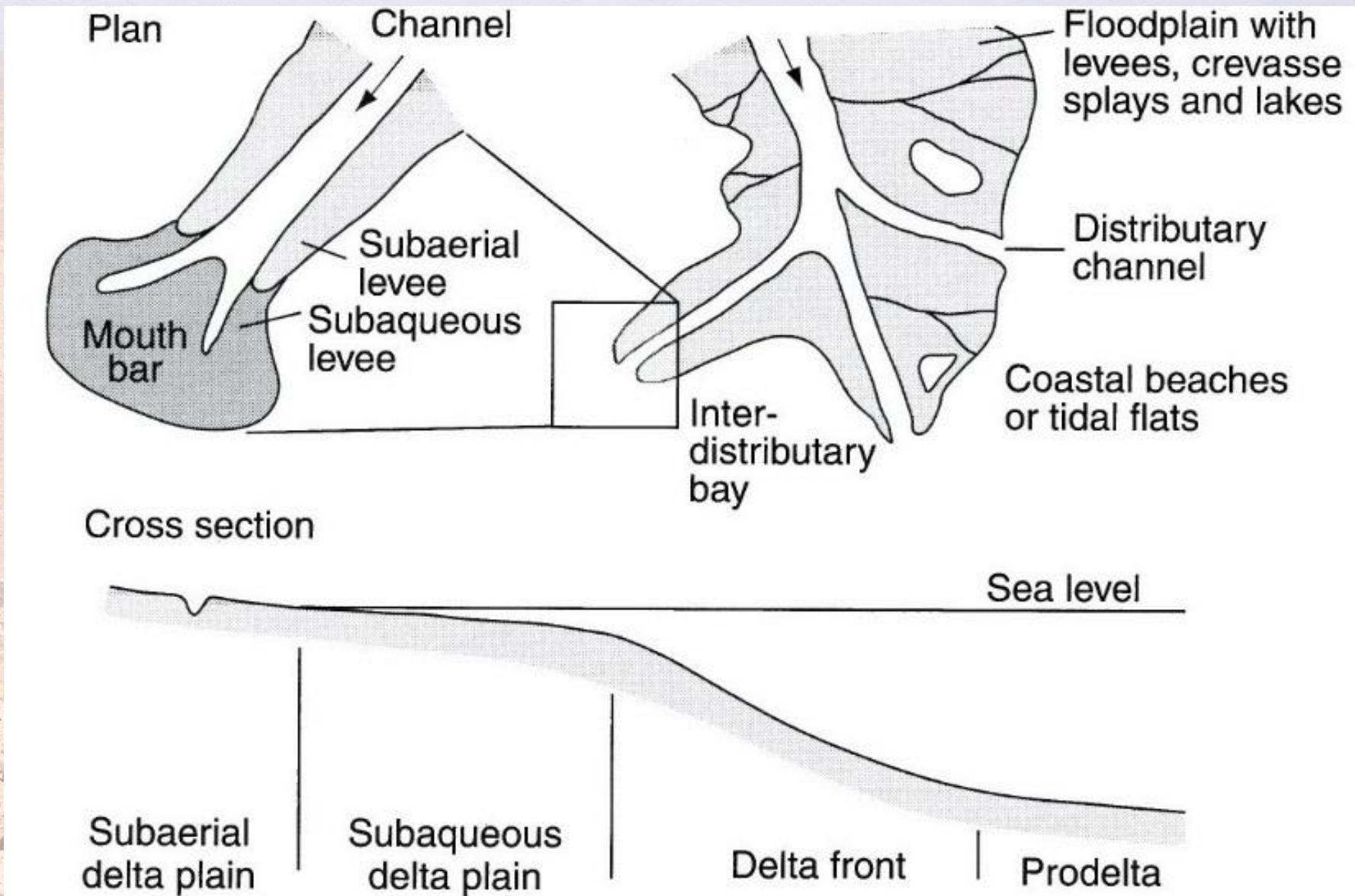
Deltas



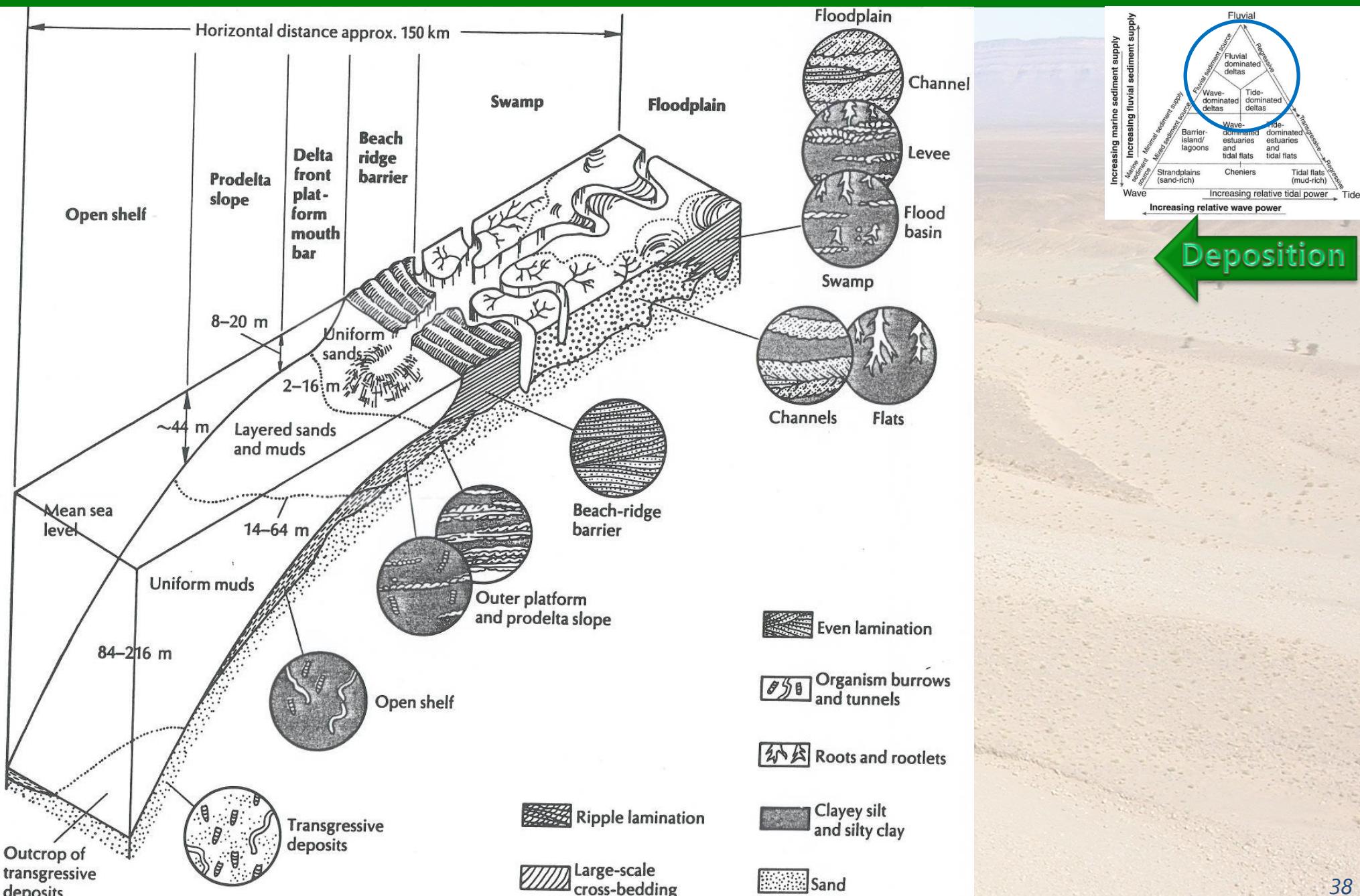
Deltas



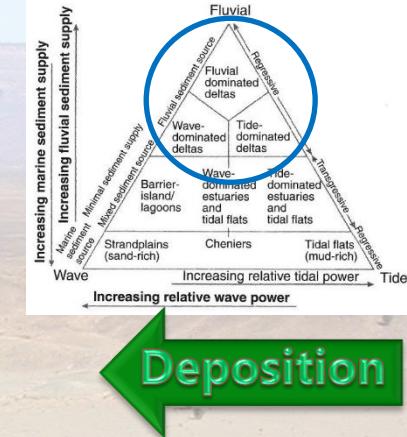
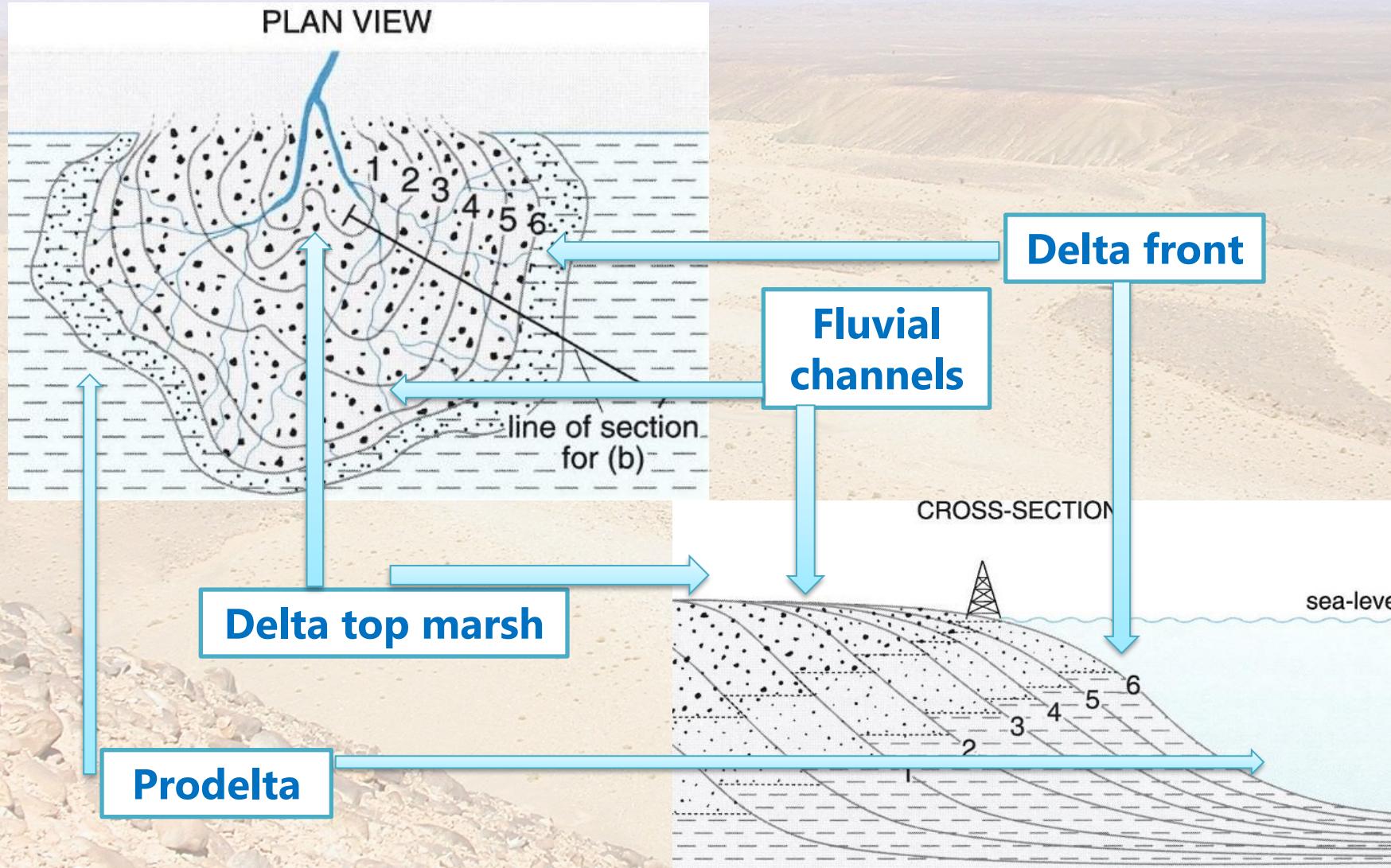
Deltas



Deltas

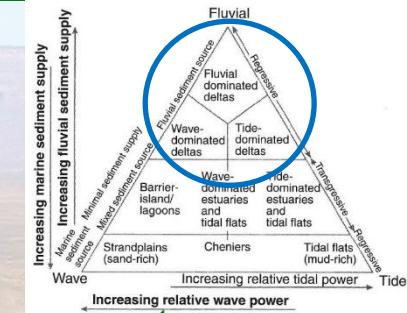
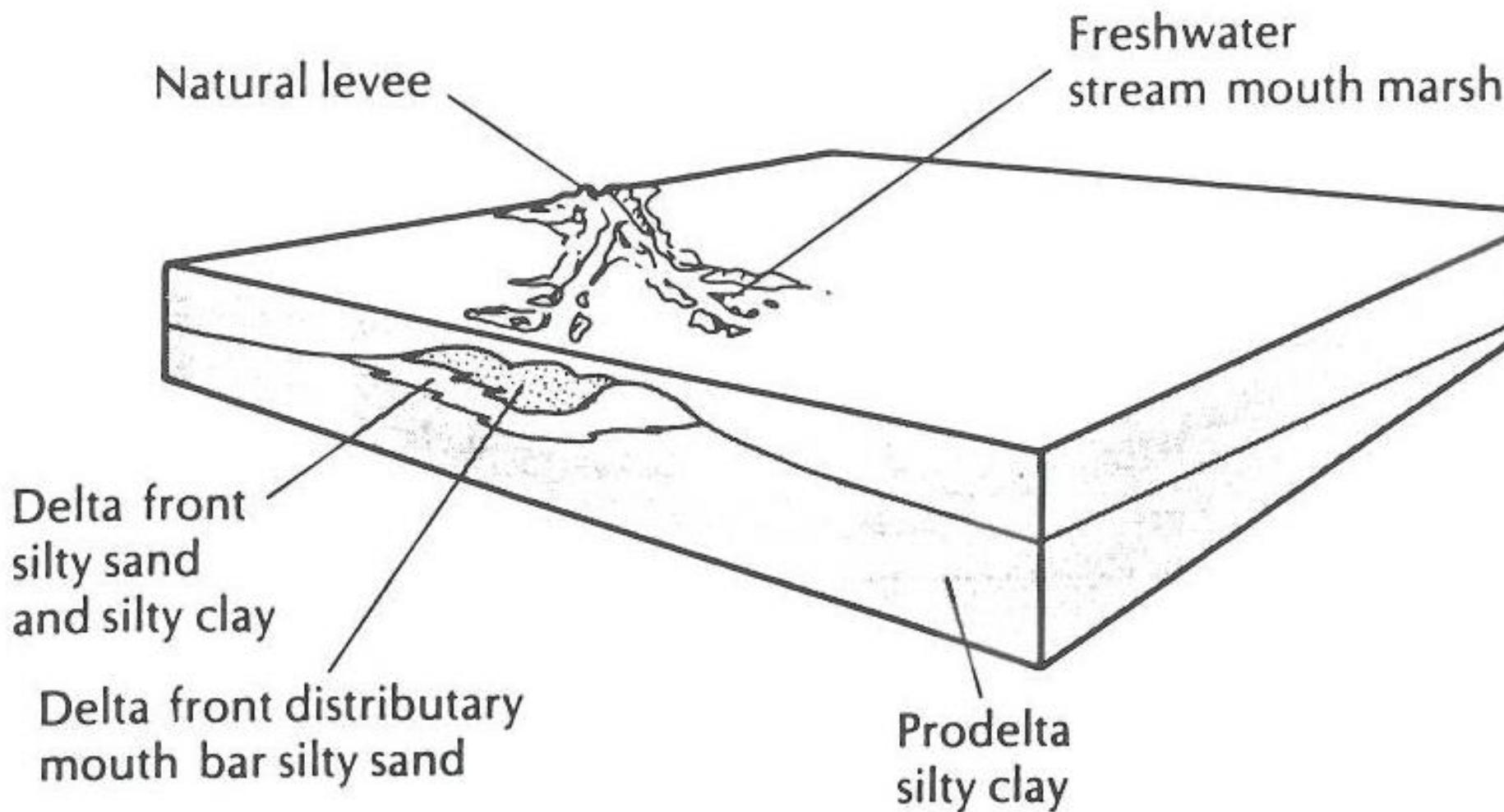


Deltas



Deltas

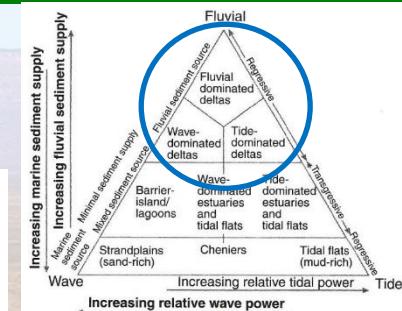
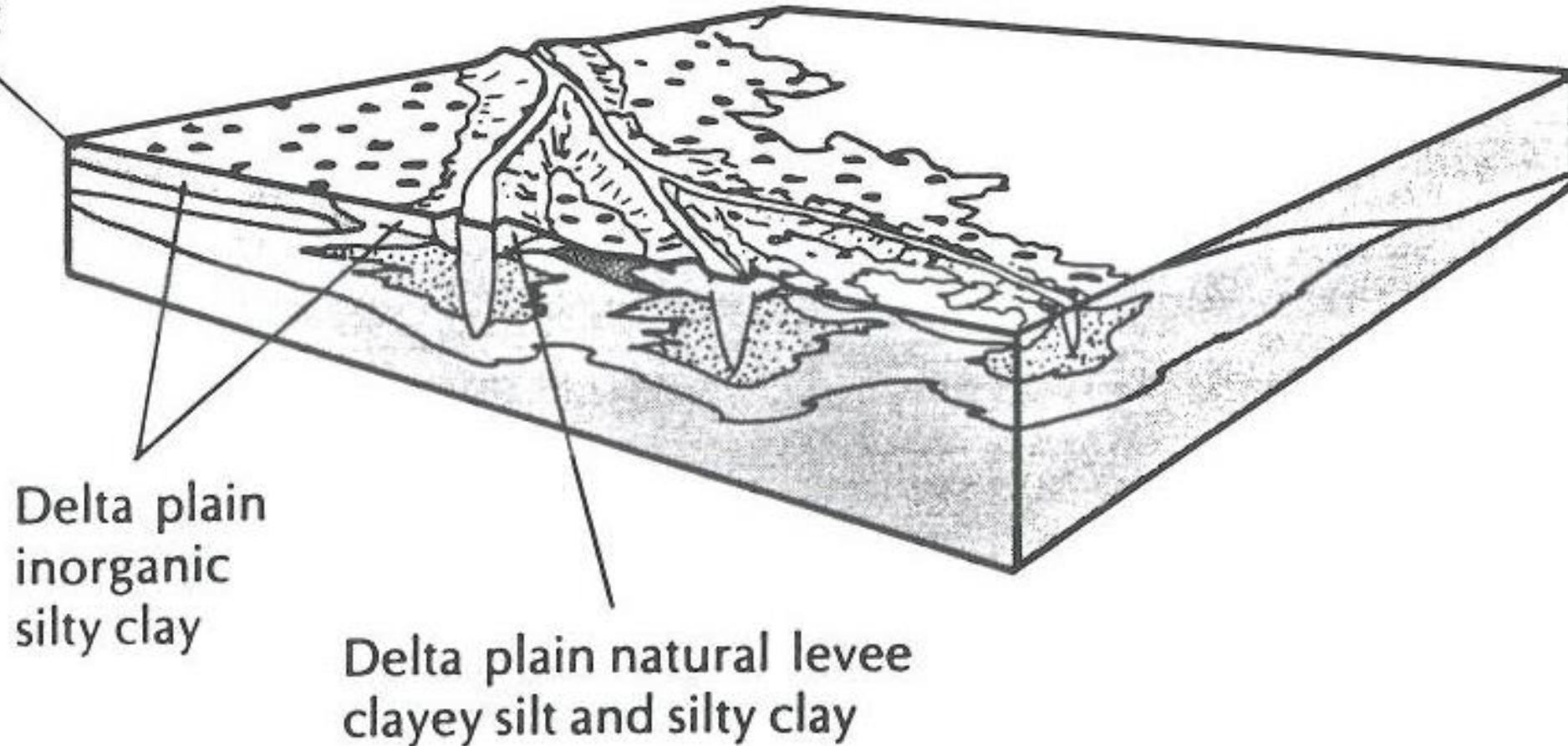
A Initial progradation



Deltas

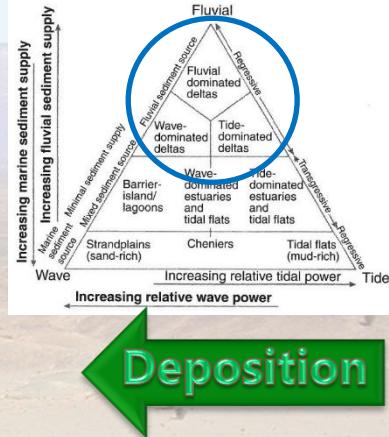
B Enlargement by further progradation

Delta plain
peat

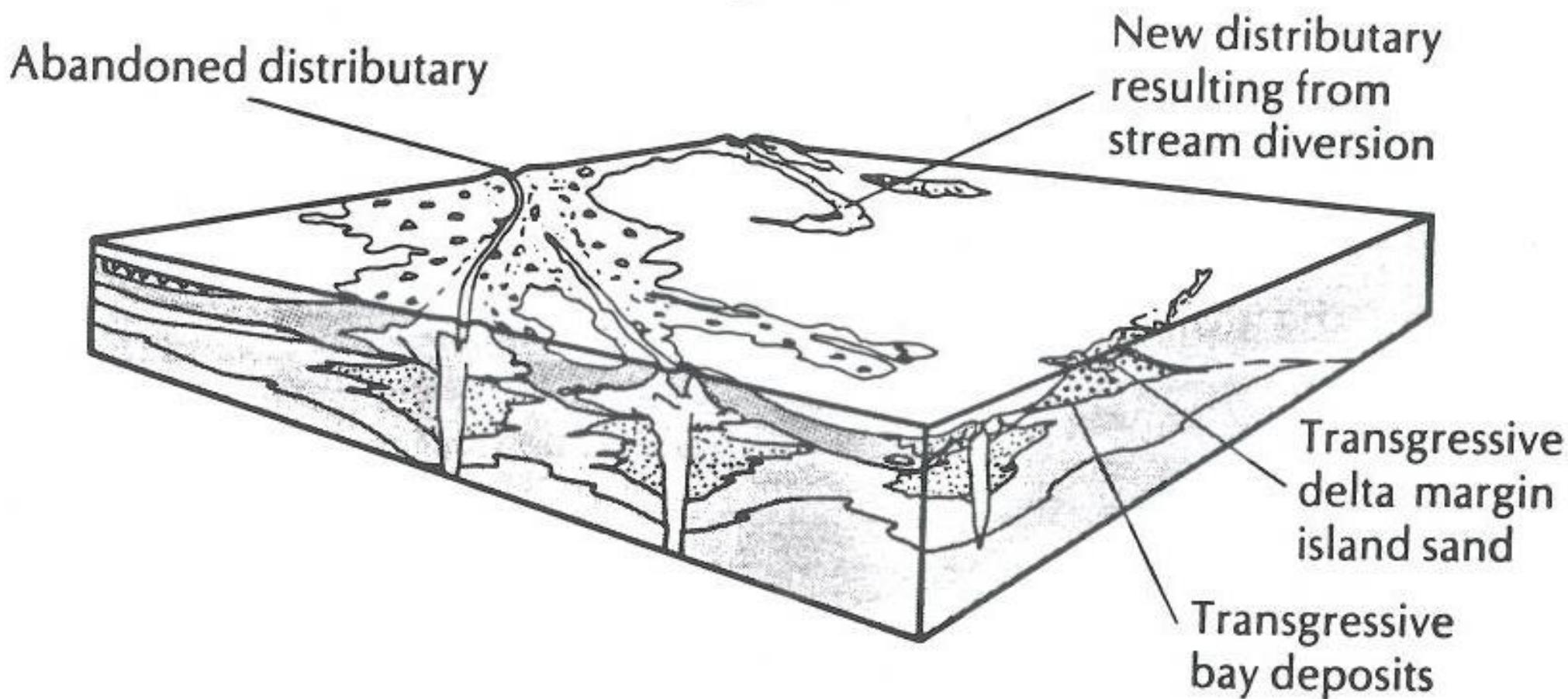


Deposition

Deltas

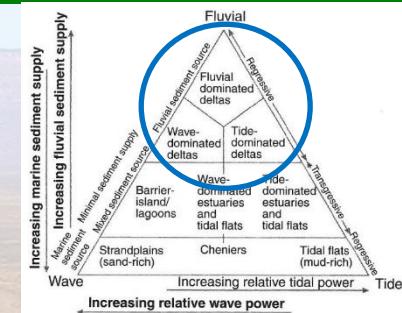
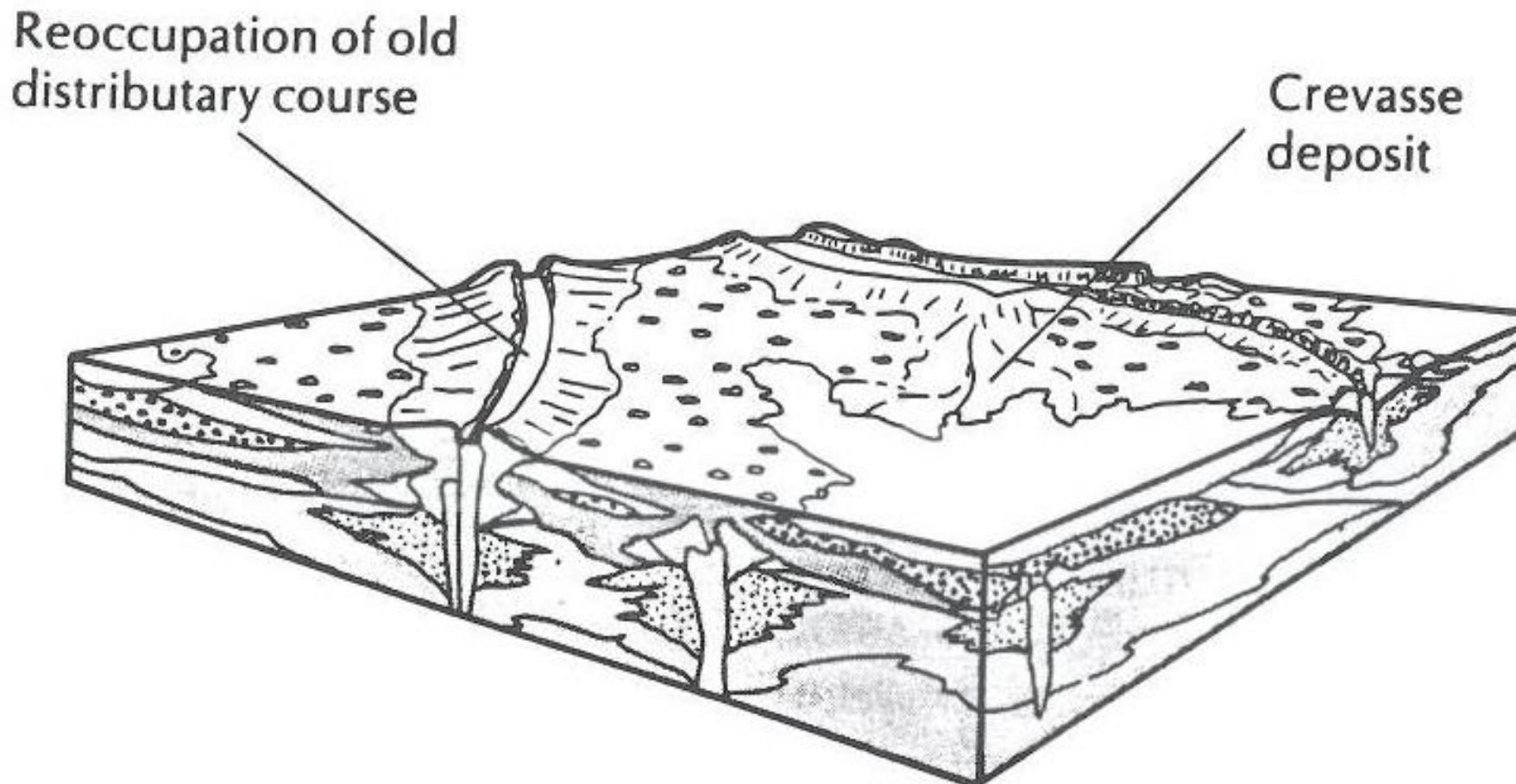


C Distributary abandonment and transgression

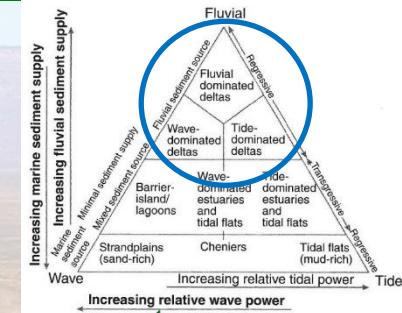
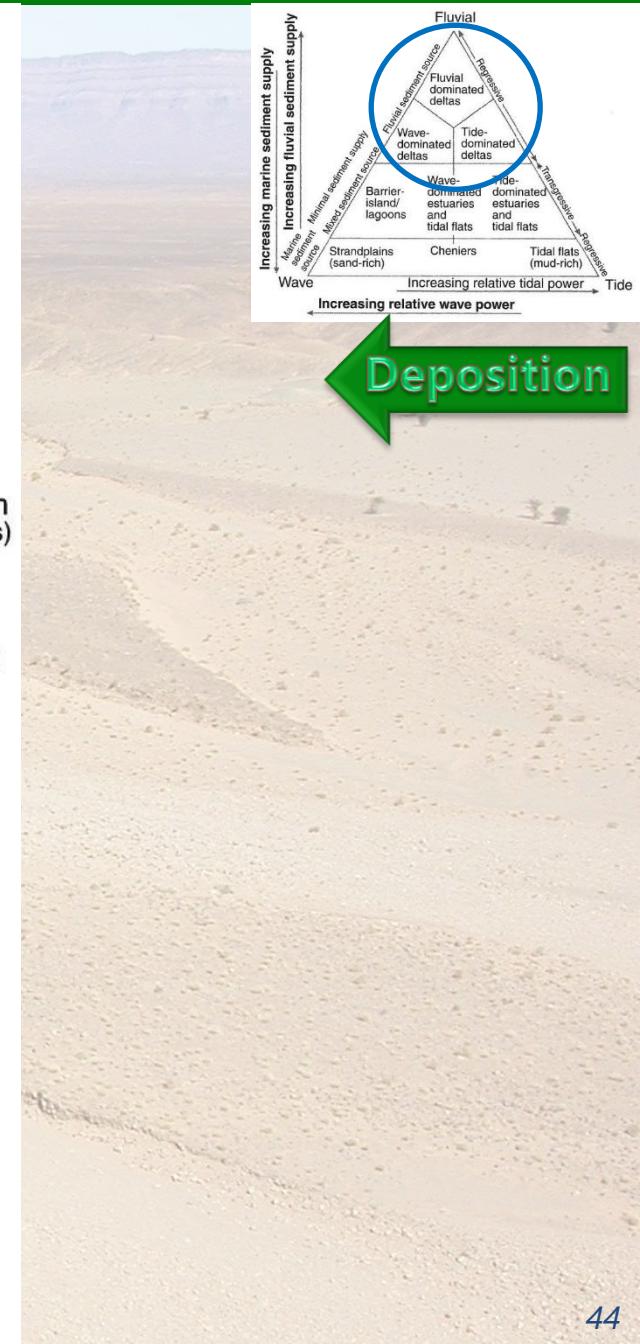
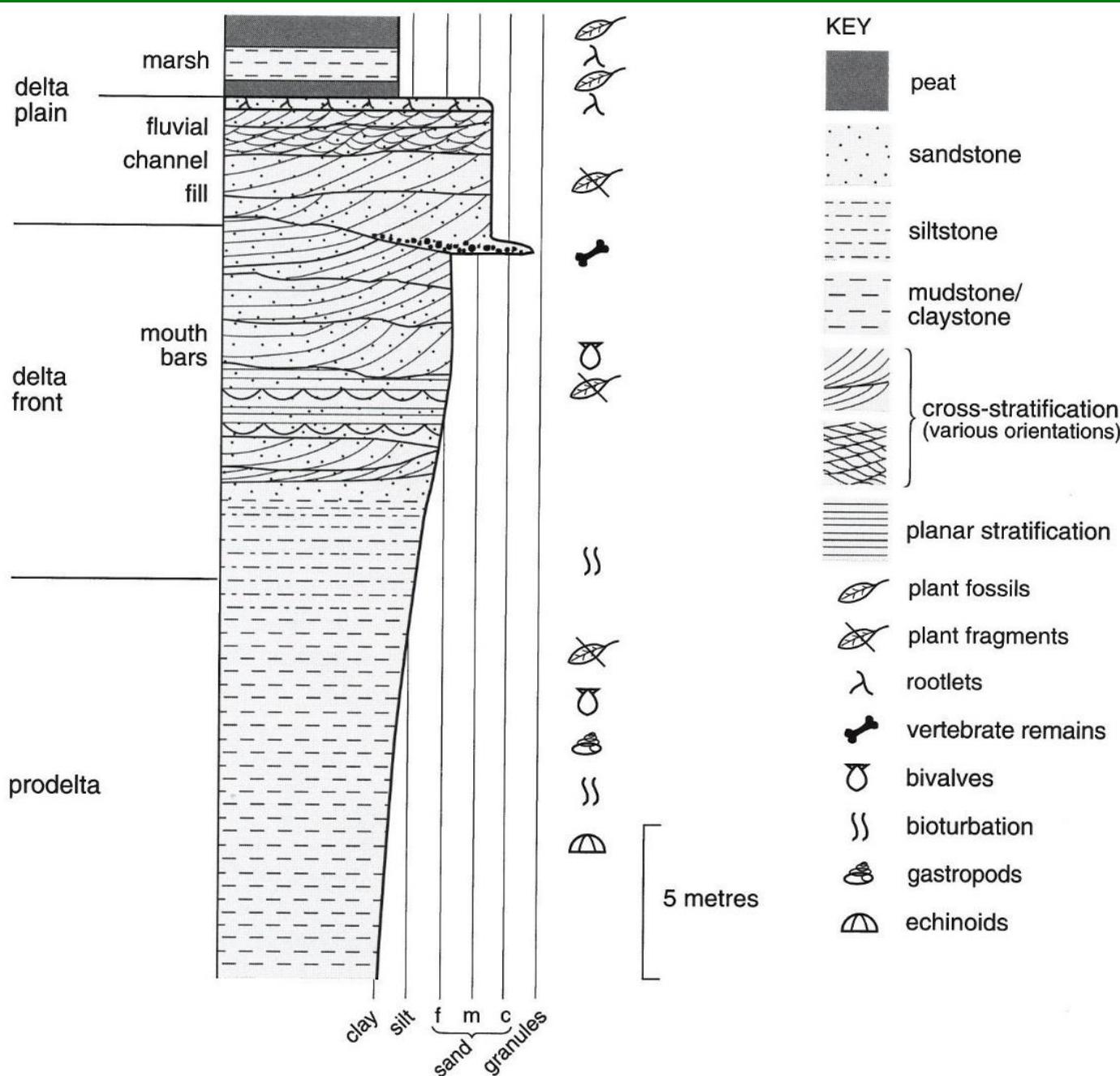
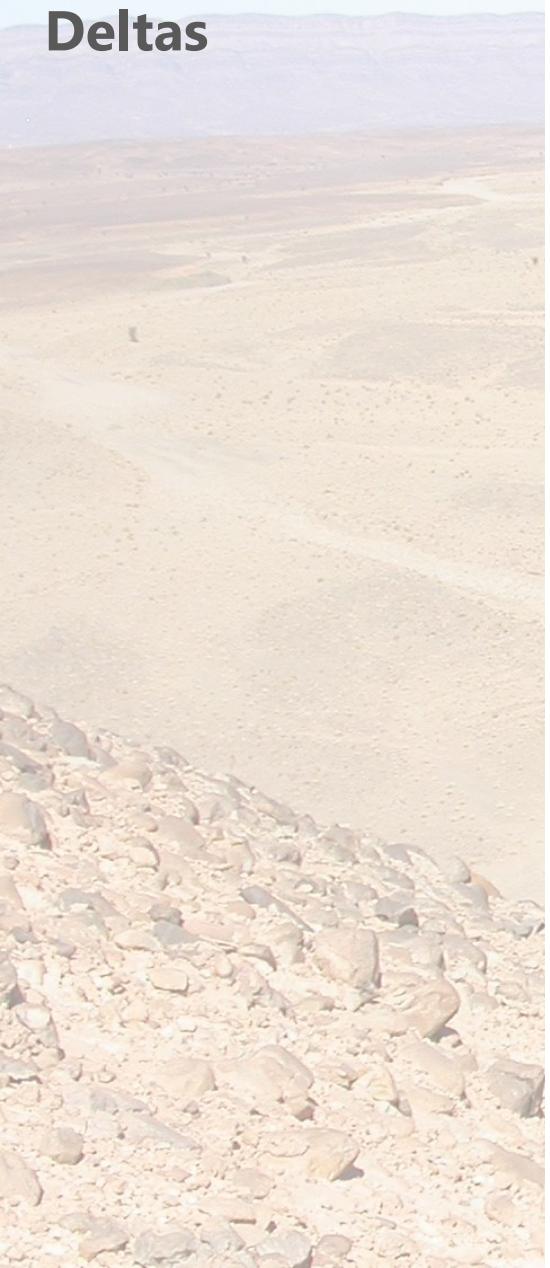


Deltas

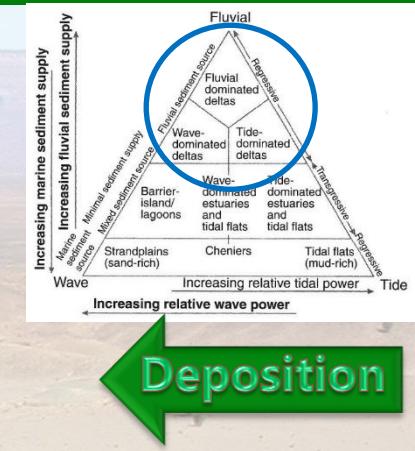
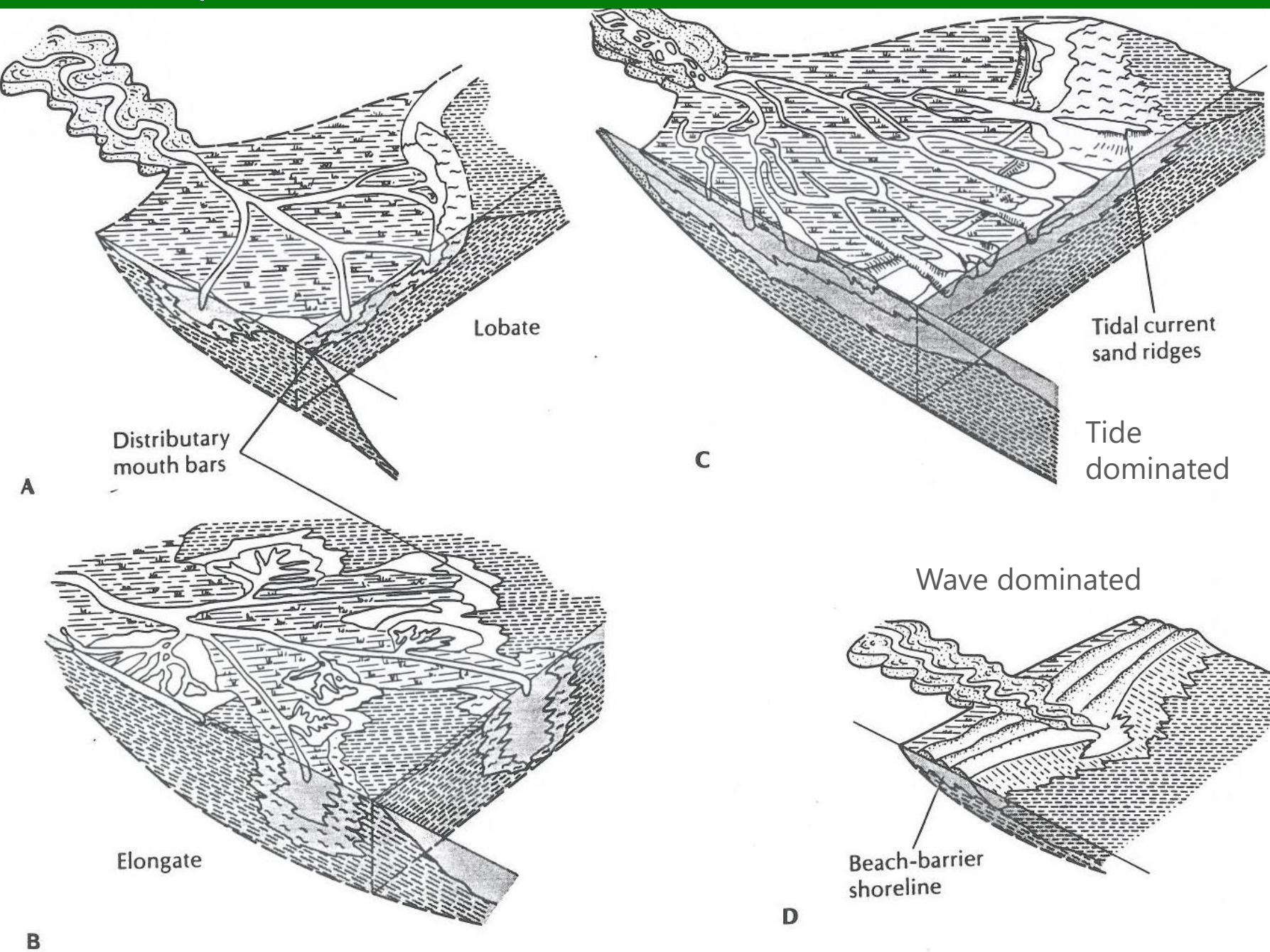
D Repetition of cycle



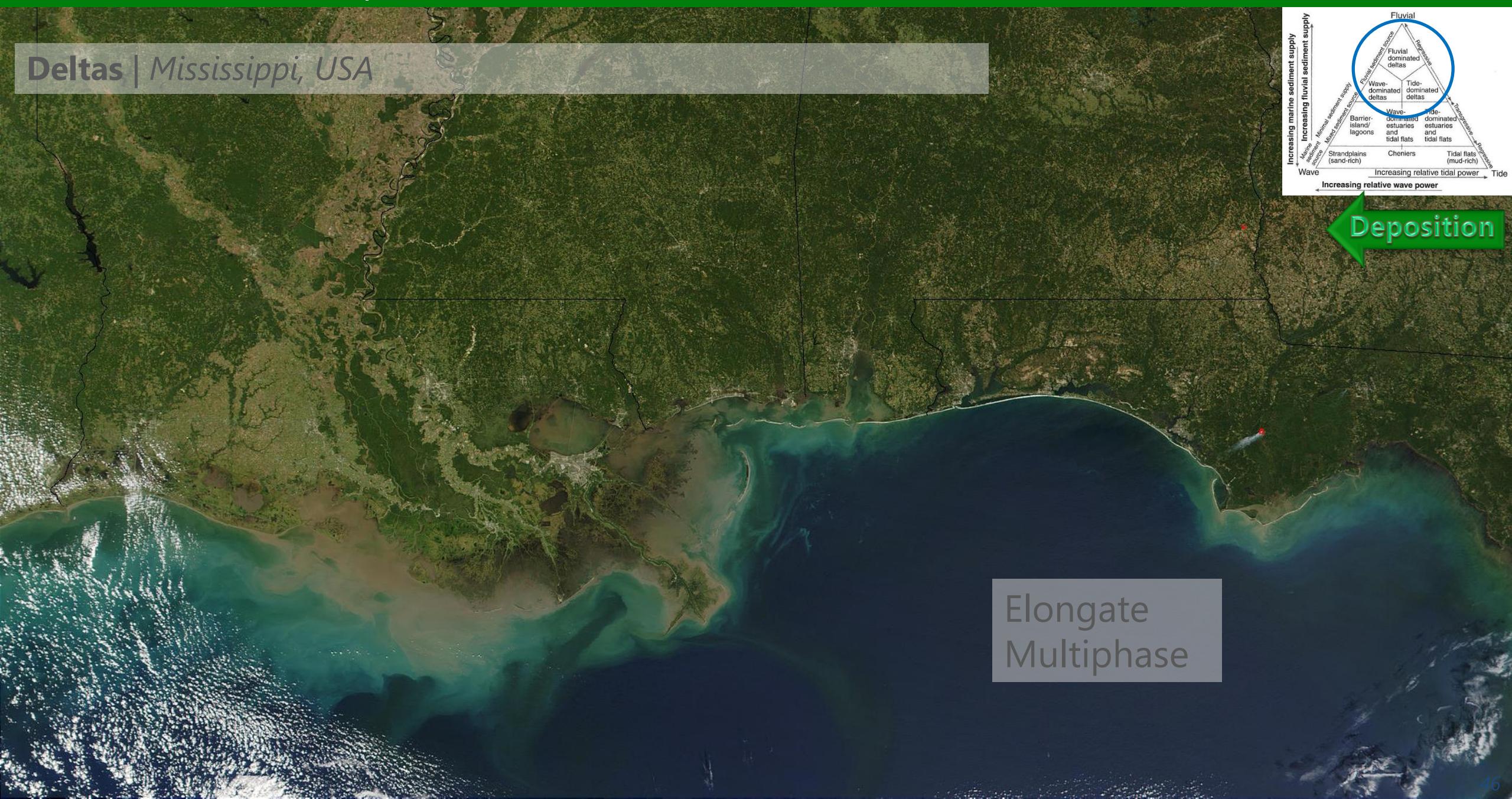
Deltas



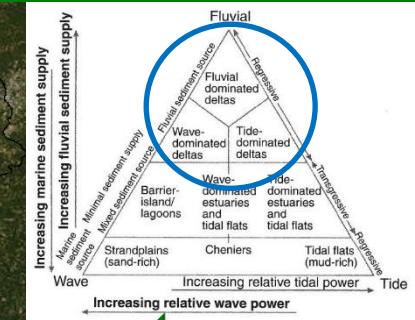
Deposition

Deltas**Deposition**

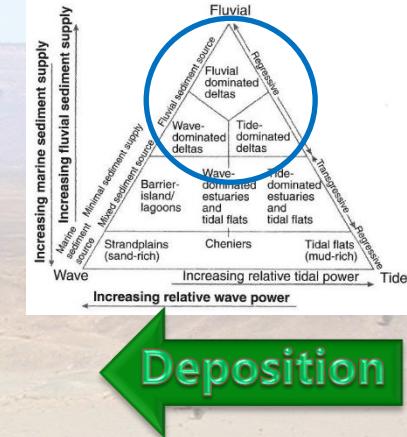
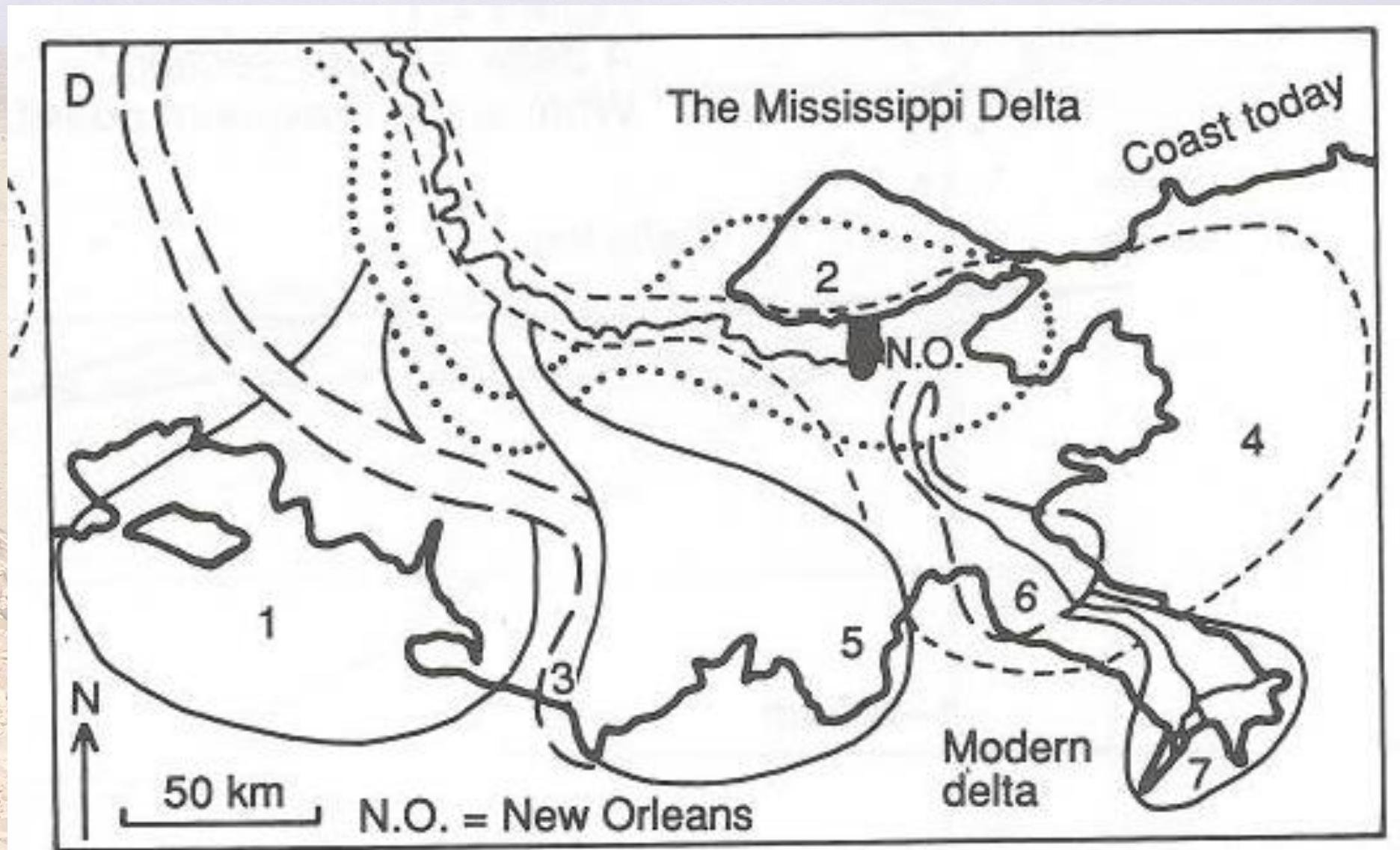
Deltas | Mississippi, USA



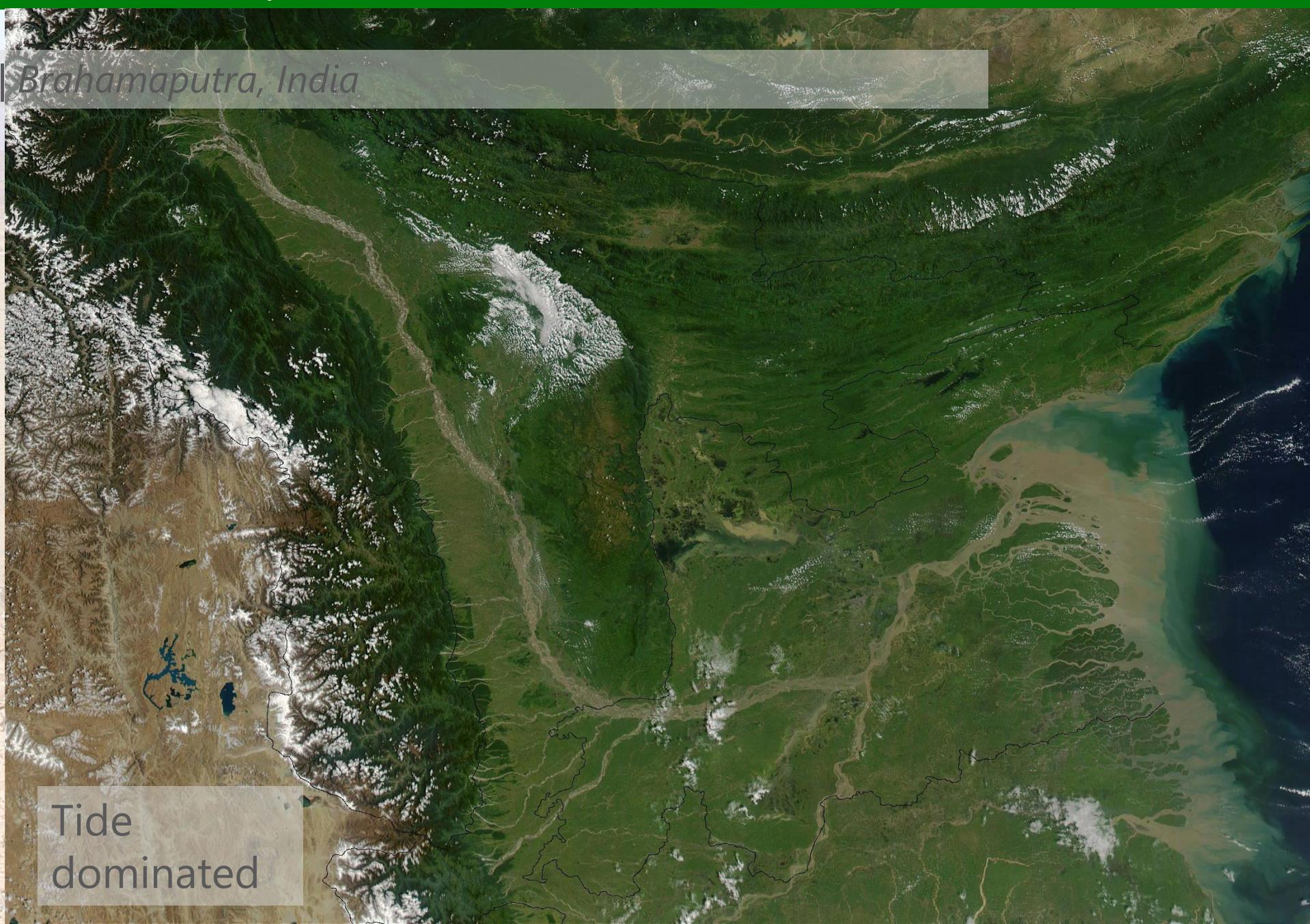
Elongate
Multiphase



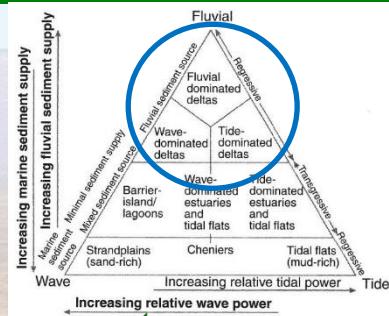
Deltas | Mississippi, USA



Deltas | Brahmaputra, India

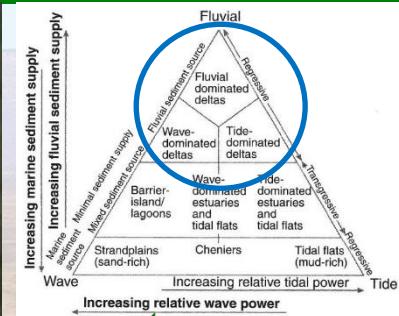
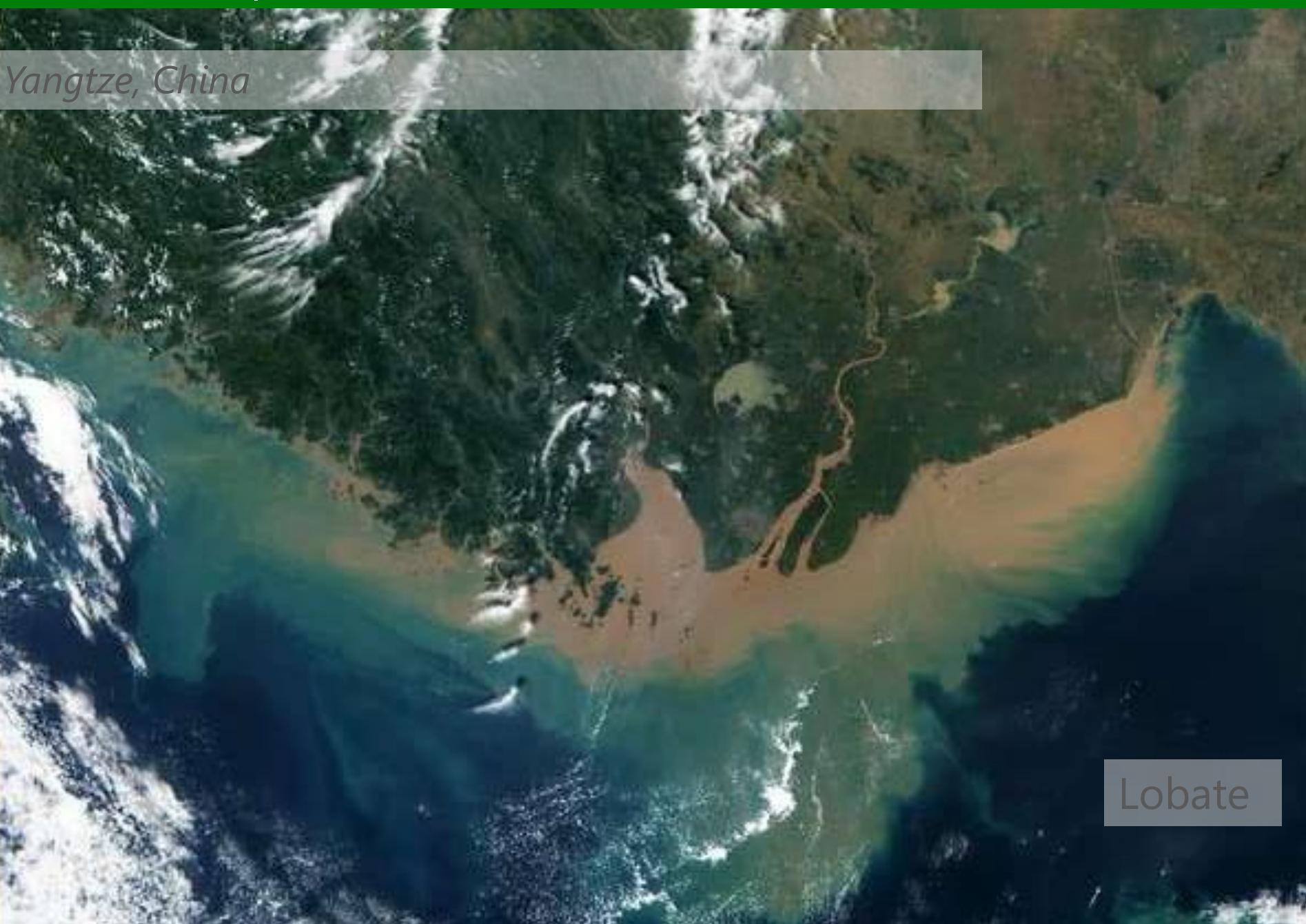


Tide
dominated



Deposition

Deltas



Deposition