

## Water, Erosion, and Sediments

### Background:

1. What do the following words mean?  
Weathering

The breaking down of rocks by natural forces.



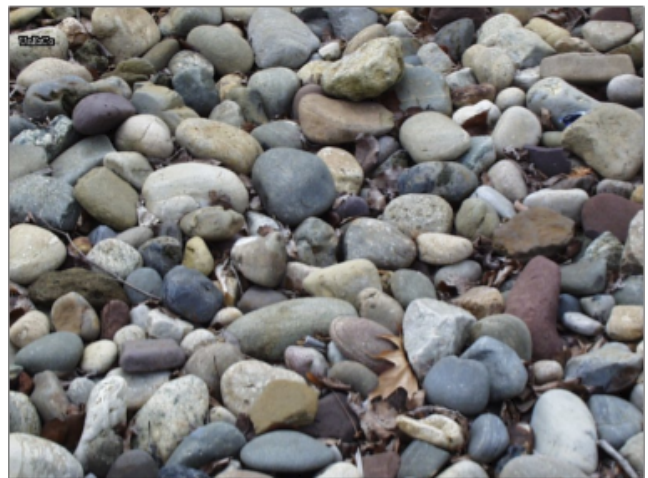
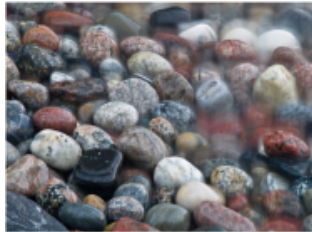
Erosion (Transportation)

The pieces of rock are carried away by water, ice, and wind.



## Sediments

The various sized pieces of broken down rock. The most common are rocks, pebbles, sand and silt.



## Deposition (Sedimentation)

When the sediments settle to the bottom of a stream, river, lake, sea or ocean. This can also happen on the surface of the planet such as out in the desert.



## River channel

The path that a river normally takes.

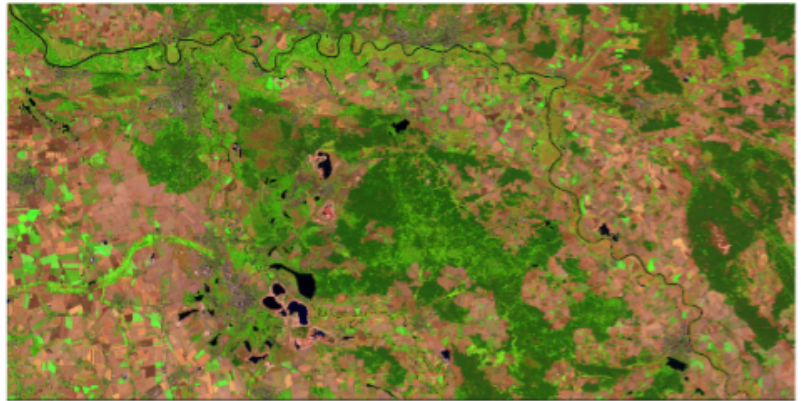


## Flood plain

The flat land on either side of a river channel where a river may travel especially when there is more water than the river channel can handle.



Elbe River, Germany  
2002



Dresden



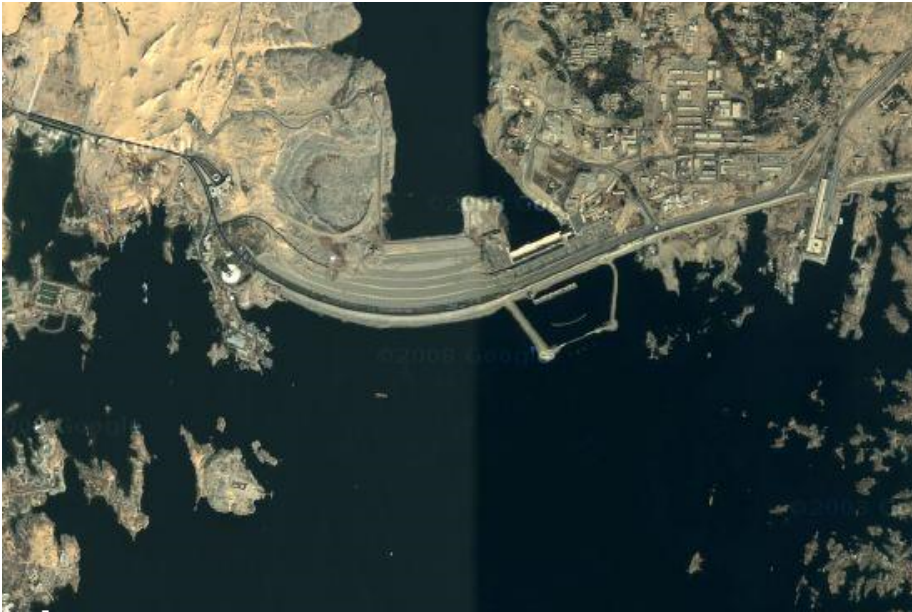
Notice the normal river channel and how wide the flood plane has become.

## River delta

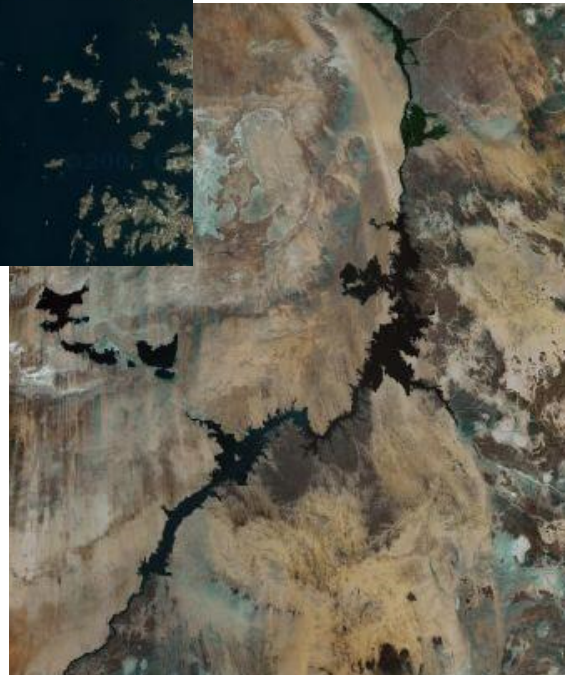
When a river or stream flows into a stiller body of water such as a sea or the ocean, the sediments are no longer easily carried by the river or stream. Deposition occurs forming a river delta.



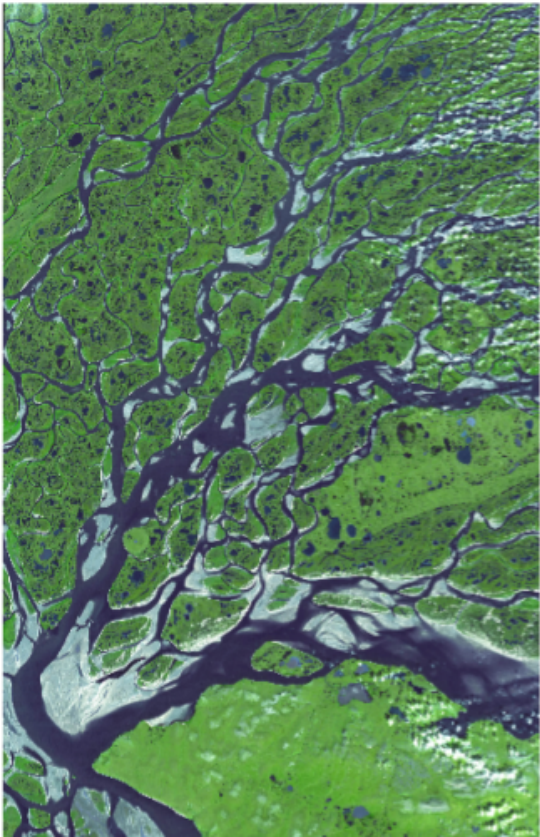
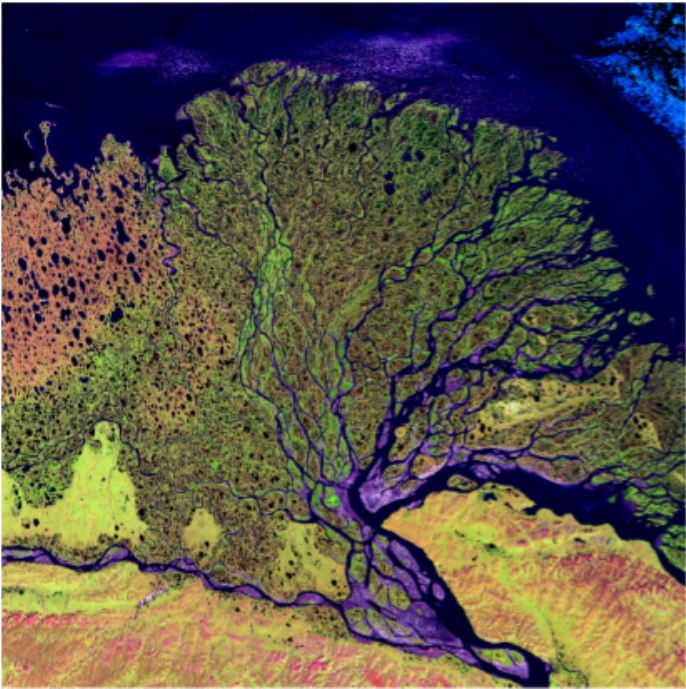
Nile River Delta



The Aswan dam is holding back the Nile river. The lake behind the dam will eventually fill with sediments.



Lena River Delta, Russia

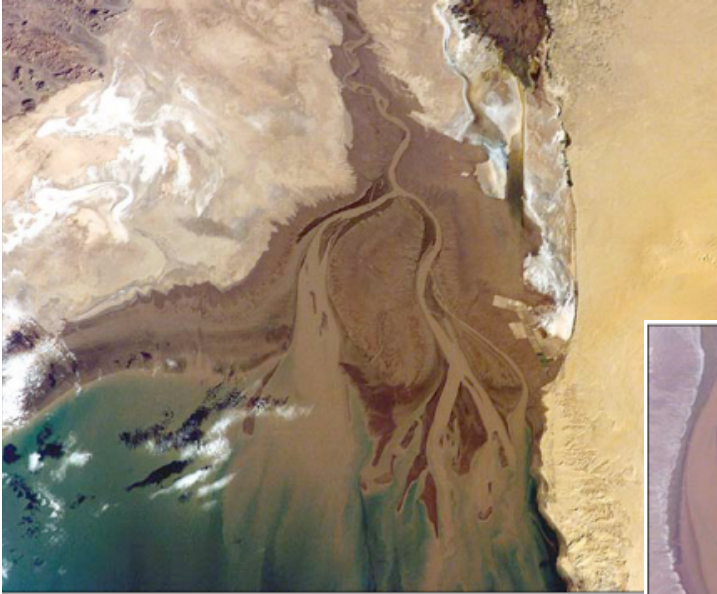




Mississippi River Delta



The Mississippi River Delta is a bird's foot delta. The extension of the delta is helped by the construction of levees which make ship travel up the river possible.



**The Mouth of the Colorado River Delta April 27, 2002**

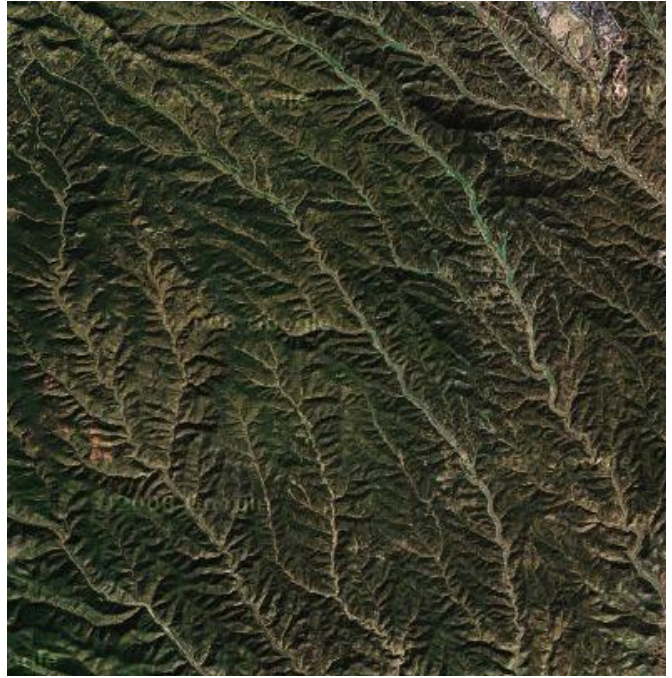


**Isle Montague and Isla Pelicano at the mouth of the Colorado River  
March 12, 2002**

## Alluvial fan

When water doesn't flow all year, sediments are deposited at the end of a canyon on flatter land at the edge of the mountains.





### Stream channels and topography

In steeper mountains, here the eastern side of the Rockies, stream and river channels run in a straighter fashion than on flatter land.





Notice traces on the flood plain of where the river once ran.



Andes Mountains  
One of the tributaries of the Amazon River

Again following the same pattern from steep mountains to flat land. This time we are looking at the Amazon river.









Again notice where the river once was.





Mouth of the Amazon River in the Atlantic Ocean