



# Understanding a river system

## Source

The point of where the river starts.

## Gorge

Where a waterfall/river has worn away into the surrounding bedrock and formed a defined channel.

## Waterfall

This is often formed when a river has worn away a soft rock material and left the remaining hard rock at a higher level, forcing the water to flow from a higher level to a lower level.



## Meander

As the river erodes horizontally to the right side then the left side, it forms large bends (meanders). The force of the water in the channel erodes and undercuts the riverbank on the outside of a bend as this is where the water flow has most energy. On the inside of a bend where the river has less energy, material carried by the river is deposited.



## Tributary

A small river flowing into a larger river.



## Floodplain

An area of land that borders a river and covers with water in times of flood. This is usually consistent with a flat landscape.



## Levee

During flooding, the river velocity slows down and deposits any material it is carrying e.g. mud, silt and rocks. These materials get deposited on the banks of the river and over a number of years, can build up to form high banks.



## Estuary

This is the point where the river meets the sea.



## Oxbow Lake

An abandoned meander. The river erodes the outside of the bends and deposits on the inside as it meanders down the valley. The erosion narrows the neck of a meander and during times of high flow e.g. during a flood, the river will cut through the neck. The river continues on its journey and the meander is deserted, creating an 'oxbow lake'.



## Erosion

The wearing away of rock and soil found along the river bed and banks by the force of fast moving water.



## Deposition

When a river loses energy it will drop or deposit some of the material it is carrying. Deposition is common towards the end of a river's journey.



## River Beach

The river flows slowly on the innermost section of a turn, so it can't carry any of the larger material suspended in the river flow. These larger rocks and material get deposited to form a beach.

