

Floodplains

What is a floodplain?

A floodplain is an area of flat ground next to a river. The floodplain usually stretches from the river's banks to the edge of a valley. These areas are often flooded in times of heavy rain.

How are floodplains made?

As a river meanders, it erodes the sides of the valley, making it wider. The widening of the valley floor creates lots of flat land on both sides of the river. This flat land can easily flood when river levels get too high.



Why do they flood?

When the amount of water in a river gets too high, the river bursts its bank and water spreads across the floodplain. The floodplain remains underwater until the river levels get lower and the water slowly drains into the ground.

Can the flooding be stopped?

Even though floodplains are natural features, humans have tried to control the impact of flooding with man-made features. One type of man-made feature is a floodway. This is a channel built on either side of the main river channel to hold any floodwater. Another man-made feature is a flood fringe. This is an area of flat land next to the floodway that is lower than the level of the river. A flood fringe traps floodwater and prevents it from spreading too far.

Can floodplains be useful?

When a river floods and water spreads over the floodplain, lots of mud and silt from the river is taken with it. When the floodwater drains away, the mud and silt are left behind. This creates excellent soil for farming, so a lot of floodplains are used as farmland. Floodplains are also used for housing because the land is flat and cheap to buy. However, homes built on floodplains have to be designed carefully so they won't be badly damaged during a flood.