

An aerial photograph of a coastal city, likely San Francisco, showing a large bay with a bridge, a city grid, and a beach. The image is used as a background for the text.

The Changing Shape of the Land: The Action Of Water

Rivers

Rivers flow from high, mountainous lands, across lower lands, and eventually find their way to the sea. Moving water is powerful, carrying large amounts of sediment that can be deposited along the way. Over time, rivers can gouge deep canyons.



V-Shaped Valleys

Over time, deep v-shaped valleys are carved by rivers of moving water.





U-Shaped Valleys

Wide u-shaped valleys indicate that a glacier carved through the landscape.

Many u-shaped valleys were created in the last ice age.

Fjords are u-shaped valleys filled with water.



Oceans

Breaking waves have a dramatic effect on the shape of our coastlines.

Pounding waves can gouge into cliff faces. Large rockfalls will occur when a weakened cliff face can no longer support the weight of the rock above.

Over time, sediment is washed away, to be deposited at beaches and sandbars along the coast.

Sometimes sediment can collect together to change the shape of the coastline. For example sediment can build up, connecting an island to the mainland.



Coastal Weathering

Coastal weathering can create some very interesting landscapes. These isolated rocks were once part of the mainland.

