

## 8.2 notes

How does gravity cause erosion?

Objective: Describe how erosion can be caused by gravity

Gravity pulls all things towards earth's center. This downward pull of gravity can cause materials to move from areas of high elevation to areas of low elevation. The force of gravity can cause rocks and glaciers to move down mountain slopes, and also cause rivers to flow toward the oceans.

Gravity can also cause mass erosion, or the downhill movement of weathered materials. It can occur quickly or slowly. Materials moved downward by gravity come to rest in piles at the base of a slope. These piles are called talus. The talus can then be carried away by running water or other agents of erosion.



## SUDDEN MASS EROSION

Landslides are the sudden mass erosion of rocks down a hill.

Earthquakes, volcanic eruptions, or even heavy rains can loosen rocks on a hill. The force of gravity may suddenly pull the loosened rocks down the slope of a hill, and damage anything that get in their paths.

A mudflow is the rapid mass erosion of mud down a hillside. They usually happen in dry, mountainous region after a heavy rainfall. They commonly occur in hillsides of southern California.

## SLOW MASS EROSION

Earthflow and creep are both slower forms of mass erosion. Earthflow is the slow movement of soil, rocks, and plant life down a slope. It can cause part of a hillside to look like it is sliding away.

Creep is even slower, and can be very hard to see. Bent trees or bent telephone poles are important clues that it is happening.

