

ES202 Lab Video Exercise

Earth Revealed – Running Water: Landscape Evolution (fluvial2.mpeg)

What is the process that has eroded the Grand Canyon? How long have these processes been operating?

How many tons of sediment does the Colorado River carry every day?

Define the term river “base level”.

True or False: Tectonic uplift of the landscape will cause rivers to extensively deposit sediments.

True or False: Over time, rivers will transform from processes of vertical erosion, to processes of lateral erosion.

True or False: all rocks and sediments erode similarly, at similar rates, under the forces of river erosion.

Draw a sketch of a dendritic river drainage pattern. What types of underlying rock structure result in this shape?

True or False – a drop in base level results in triggering vertical river erosion and down-cutting.

Define the term “floodplain”, how does it relate to the river channel. Draw a sketch.

Define the term “river terrace” and discuss how they form.

Draw a sketch and describe a “meander” pattern that develops in rivers.

Define the term “delta”, what are they composed of? How do they form?

Give an example of a large delta area that comprises part of the United States.

True or False: The Mississippi river is dynamic and continuously shifting its course due to flooding and sedimentation.

END THE VIDEO WITH DISCUSS OF MISSISSIPPI RIVER MANAGEMENT AND CORPS OF ENGINEERS