# Mono Lake North Shoreline Stratigraphy

## Materials:

printed image of road cut, tracing paper, pencil/eraser, colored pencils, rock hammer, hand lens, mapboard, Brunton, rulers, aerial image of the region

## Goals:

1)   Accurately map and describe (field observations) sediments preserved in a road/stream-cut deposit in order to interpret the origin of deposition

2)   Map, in the field and remotely, the geomorphic expression of lake level fall (paleoshorelines)

3)   Later: Use field notes from this activity to compare paleoshoreline stratigraphy with modern shoreline stratigraphy.

## Activity:

1)   Draw the complete cross-sectional view of the exposed sediment cut.  Define notable layers, grain size, changes in sediment type, and dimensions of the outcrop (could give them a panoramic photo this to draw over with tracing paper)

2)   Describe (with words) the stratigraphy of the outcrop: for each defined layer, describe the sediments: grain size, sorting, roundness, lithology, imbrication, as well as the relationship between layers (unconformity (type), conformable), and the thickness of the layer.

3)   Draw a stratigraphic column in your field notebook with a scale and appropriate symbols.

## Hand In:

1) Drawing of outcrop, stratigraphic column, description of sediments and map-view interpretation of shorelines.

2) 1-p narrative interpretation referencing your map, cross-section, and stratigraphic column.