Lab 5, part 1: Depositional Environments and Facies Changes

A. Below, on the idealized elevation profile of the area south of Tom’s River delta (see accompanying map, along the cross-sectional line A-A’), locate and label above the profile line the following environments:

1. Mid-continental shelf
2. Inner continental shelf
3. Foreshore beach
4. Backshore dunes
5. Subtidal lagoon
6. Tidal mud flats
7. Supratidal marsh
8. Fluvial (river) areas
9. Upland

B. Under the appropriate depositional environment on the cross section, below the profile line, write the number of a rock (use the R numbers from lab 2). This is the rock that would be the result of the lithification of the sediment in that depositional environment. Color each depositional environment’s rock a different color. Note that you may repeat some of the rock numbers and not use others at all.

C. Under the number of the rock, list what sedimentary structures (from lab 3) you might expect to see.