



## Topography of the Coastal Plain Region 3

Generally, the land surface of the Coastal Plain rises only about 30 meters above sea level and dips less than one degree. The primary reason for the flat nature of the Coastal Plain is the unconsolidated sediments that are the ‘bedrock’ of the region. The sediments in the Coastal Plain have not been significantly compacted or cemented and have certainly not become rock. There is little resistance to erosion because of the nature of the sediments, and therefore ridges do not form in the Coastal Plain. There is some moderate difference in relief between the western Coastal Plain and the eastern Coastal Plain due to the ages of the deposits. Cretaceous and Tertiary deposits dominating the western Coastal Plain show more relief than the younger Quaternary deposits that are close to the shoreline and constantly pounded by wave action and flooding.

Long Island, Cape Cod and the smaller islands off the New England Coast, though formed from glacial deposits, have the same flat nature as the topography of the rest of the Coastal Plain. The glacial deposits are unconsolidated sediments that erode as easily as the sediments of the Coastal Plain further south.

The wedge of sediments that forms the bulk of the Coastal Plain eroded from the topographically higher Appalachian/Piedmont region to the west. The hard bedrock of the Appalachian/Piedmont region lies beneath the Coastal Plain, but is deeply buried by the wedge of sediments. The boundary between the exposed Appalachian/Piedmont rocks and the wedge of Coastal Plain sediments is called the **Fall Zone**. At numerous places along this boundary line are cascades and small waterfalls, such as the Great Falls of the Potomac. Rivers have eroded very slowly through the Appalachian/Piedmont bedrock and then very quickly through the soft Coastal Plain sediments to create a sharp drop in stream elevation at the Fall Zone (Figure 5.15).

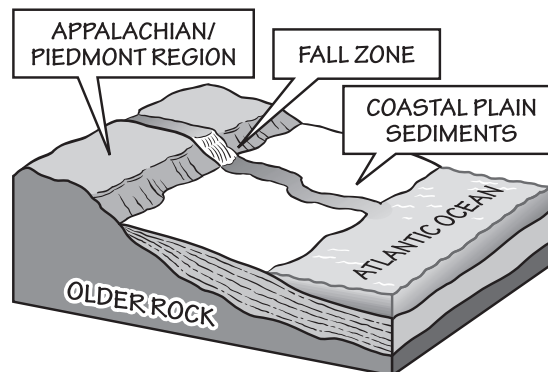


Figure 5.15: The location of the Fall Zone between the Appalachian/Piedmont and Coastal Plain regions. Figure by J. Houghton.

### Cities along the Fall Zone

Follow the boundary between the Coastal Plain and the Appalachian Piedmont regions and count the number of cities that you find there: Washington, D.C., Baltimore, Wilmington, Philadelphia and Trenton. When settlers first came to America, they found that they were unable to navigate their ships past the Fall Zone, where the relief of the land was considerably greater than the flat Coastal Plain. Thus, many of the large cities of the East Coast, sprung up along the Fall Zone where shipping was still viable and cheap water power for mills was available.

