

The depression of the Piedmont border during this epoch was at least 500 feet, since that difference in elevation is found between the earlier and later Pliocene deposits. To the northward the elevation may have been much greater, since marine Pliocene deposits have not there been recognized within the subaërial division of the Coastal Plain. To the formation produced during this epoch the name of Lafayette has been given throughout the Gulf, where the name was first used, as well as along the Atlantic border where similar deposits have been found as far north as the highland bordering the valley of the Delaware in eastern Pennsylvania. No fossils of any significance have thus far been found in the deposits, so that the age of the strata must remain in doubt, although most geologists have regarded the Lafayette formation of Pliocene age, probably representing its closing epoch.

After the close of Lafayette deposition the land was again raised above sea level and subjected to extensive erosion. The streams of the eastern Piedmont have been shown already to have superimposed courses, and these are doubtless due to the cover of Lafayette deposits over much of this area. The relatively long period of erosion which followed compared with later time caused the opening up of the channels across the Coastal Plain in much the same position and form as they exist to-day, although they did not receive their full strength or final touches until the close of the Pleistocene.

Many writers have referred to the anomalous courses pursued by some of the larger streams of the district. Shattuck in reviewing this subject in connection with a study of the Coastal Plain drainage of Maryland, says:

"The anomalous course pursued by the Susquehanna after leaving the Piedmont, in turning south along the western margin of the Coastal Plain instead of continuing a direct course to the ocean, has arrested the attention of many geologists who have worked in this region. McGee thought this curious feature was to be explained by deformation along the 'fall line'; but Darton has suggested a more plausible cause. He believed that a submarine bar was built by the Lafayette approximately in the position now occupied by the Eastern Shore, and that a depression existed between this bar and the mainland. When the post-Lafayette uplift took place, this depression was changed to a slough, and down this trough the Susquehanna found its way. A similar state of affairs now exists off the coast of the Carolinas, where a great barrier beach cuts off the rivers from direct contact with the ocean. If this coast were to be lifted, Roanoke River would be deflected southward along the coast and follow the depression of Albemarle and Croatan sounds until a convenient opening could be found through the obstruction to the ocean beyond. It is probable that the channel of Chesapeake Bay was not so pronounced during the post-Lafayette uplift as later, when the subsequent formations had an opportunity to widen and lengthen this barrier first outlined by the Lafayette sea."