

lico formations, and consisting of fine sands, sandy loams, clays, and probably, in places, of shell marls, are spread over the entire surface of the county.

*Water Resources.*—The quality of water obtained from shallow driven and open wells in Beaufort County depends largely upon the situation of the wells with relation to the present topography. As noted under topography in this chapter, the eastern third of the county is a low plain whose greatest elevation is less than 20 feet above sea level. The shallow wells situated within this area range from 5 to 20 feet in depth. The sandy loams covering the surface grade down into interstratified, bluish sands, and bluish to drab clays, the latter being often referred to by the well owners as "blue mud." Shell beds occur within the Pleistocene deposits of this area and in the underlying Tertiary. The thickness of the surface deposits is slight, and the ordinary dug wells frequently reach the shell beds from which a hard water is obtained. Wells entering the beds of so-called "blue mud" obtain a poor quality of water; the sands interstratified with the "blue mud" or clay are water-bearing. The water level over this entire lower terrace is very near the surface, and in digging these shallow wells care is taken to keep above the objectionable clay beds. The water of this low plain is rather hard and somewhat high in chlorides and is more highly mineralized than the shallow well waters in higher parts of the county. For this reason cisterns are much in use.

The city of Washington, situated on this lower terrace, is said to be underlain almost entirely by sand to a depth of 10 feet or more, the base of which is water-bearing and has been tapped at many places by bored and driven wells. Among dwellings water from such a shallow source is of course subject to contamination.

In the higher central and western parts of the county shallow wells and springs furnish the chief water supply for domestic use. It is as a rule very soft, and where not subject to surface pollution is of good quality.

About 3 miles north of Washington is a spring owned by the Washington Investment Company which has a flow estimated at 24,000 gallons per 24 hours. This water is sold to a limited extent in the city.

All of the deeper wells of the county obtain their water supply from deposits of Tertiary age, either Eocene, Miocene, or Pliocene. The water is as a rule hard. Except in the lowlands bordering Pamlico River and its tributaries, flowing wells have not been obtained. A considerable number of deep wells have been drilled in the county. The table of well statistics given below includes those concerning which