

cutting has been deep, as at Halifax, the wells must be sunk deeper before reaching the level of ground water. Springs are abundant, but small, and are little used.

In the western half of the county the crystalline rocks, where not outcropping, are close to the surface, and the wells at many places enter their upper decomposed portions. Owing to the greater relief, the level of ground water is in many places at a considerable depth beneath the surface, and dug wells in places reach a depth of 80 feet. Open wells are mostly used, driven wells being restricted to areas covered by remnants of the Coastal Plain deposits. A good many springs are used in this section of the county. At Sunlight the engines on the Seaboard Air Line Railway are supplied from a spring.

Deep wells which enter the underlying crystallized rocks and derive a supply of water from them have been drilled at Scotland Neck, Enfield, and Halifax. A much softer water was thus obtained at Halifax, and the people depend mostly upon this deep well, although a few dug and driven wells are in use. At Enfield two attempts to obtain artesian water were made a few years ago with a hand drilling machine, but in each case drilling ceased when the rock was reached. A small amount of water was found at 20 feet and just above a 10-foot bed of Miocene shell marl at 60 feet. The water from the latter horizon was of an unsatisfactory quality. Below the shell marl, red clay extended down to the bedrock. Later, about 1900, two deep wells were put down about 450 yards apart. In one of these, the town well, the water is reported to come chiefly from a crevice at 160 feet. In the other, the graded-school well, a crevice encountered at 115 feet hung the drill and prevented further drilling. The water of these two deep wells is used by many of the people for drinking purposes. There are, however, many driven wells 18 to 20 feet deep in use. The town owns 20 open wells averaging about 20 feet in depth, which are used for fire protection. Those recently dug are about 8 feet square. Two of the earlier ones are at least 12 feet square. One gasoline and one hand engine are used for fire purposes. The gasoline engine can exhaust one of these in one-half hour, but it will refill in about the same length of time. Thus far there has been sufficient water for fire protection.

At Norfleet, situated on the Chowan terrace, a well was sunk to a depth of 225 feet. Water encountered at 170 feet rose within 8 feet of the surface. Hoping that a larger supply would be obtained, drilling was continued to a depth of 225 feet, but without success, and the casing was pulled back to 170 feet.

At Rosemary, a small town in the northern part of the county, water