

Environmental Setting

The Wilson Farm Tenancy Site lies within the northern portion of a subdivision of the Atlantic Coastal Plain known as the Mid-Peninsular Drainage Divide (Custer 1989), an area defined by low rolling hills with heightened elevation in relation to the surrounding Coastal Plain, creating a divide separating the headwaters of streams that drain into the Delaware River and Bay to the east from those that drain into the Chesapeake Bay to the west. The principal drainage in the immediate site area is a perennial tributary of Great Bohemia Creek. This tributary, located roughly 250 feet north of 7NC-F-94, flows westward before joining the parent stream, approximately 1.4 miles west of the site. Great Bohemia Creek continues west and southwest to its confluence with the Elk River about 11 miles from the Wilson Farm Tenancy. The Elk River enters Chesapeake Bay several miles farther downstream.

Elevation variations within this subprovince of the Coastal Plain are slight, a characteristic that serves to restrict the flow of surface water into low-order headwaters of streams and rivers and results in the formation of dispersed swampy marshes and wetlands in areas of poor drainage (Custer 1986). Elevations along the divide reach as high as 80 feet above mean sea level (amsl), while the vast majority of the state's coastal plains lie at elevations of less than 60 feet amsl. The Wilson Farm Tenancy Site is at an elevation of approximately 60 feet amsl.

The geological formations underlying the site area are dominated by sands and gravel of the Middle Pleistocene Columbia Formation (Pickett and Benson 1983), consisting of glacial outwash sediment with clasts of sandstone, siltstone, and shale from the Valley and Ridge province, along with pegmatite, micaceous schist, and amphibolite from the Piedmont. In the site vicinity, this formation caps earlier Paleocene marine deposits belonging to the Vincentown Formation, and the upper Cretaceous and Paleocene Hornerstown Formation, also of marine origin (Ramsey 2005). The sands of the Columbia Formation have been extensively reworked and transported via eolian means.

The soils mapped for the site area belong to the Matapeake-Sassafrass Association and consist of well-drained, medium to moderately coarse sandy clay loams found on uplands (Matthews and Lavoie 1970). More specifically, the site falls within the mapping unit described as Matapeake silt loam (MeB2), 2–5% slopes. These soils occur on upland interfluves and side slopes (National Resources Conservation Service 2010). A typical profile for Matapeake silt loam consists of a grayish brown (2.5Y 5/2) silty loam Ap horizon that caps a light yellowish brown (2.5Y 6/4) silt loam E horizon (heavily leached). This layer, in turn, is underlain by a yellowish brown (10YR 5/4) silt loam Bt1 horizon, which caps a strong brown (7.5YR 5/6) silt loam Bt2 horizon. The underlying 2BC horizon consists of strong brown (7.5YR 5/6) sandy loam.

At the time of the data-recovery investigations, the site area was used as a cow pasture. The immediately surrounding area is a mix of agricultural properties and recent residential development. While much of the land adjacent to Choptank Road in the vicinity of the Wilson Farm Tenancy Site consists of agricultural field and pasture, extensive residential subdivisions

have sprouted on former farmland, particularly to the east and south along U.S. Route 301 in the direction of Middletown.