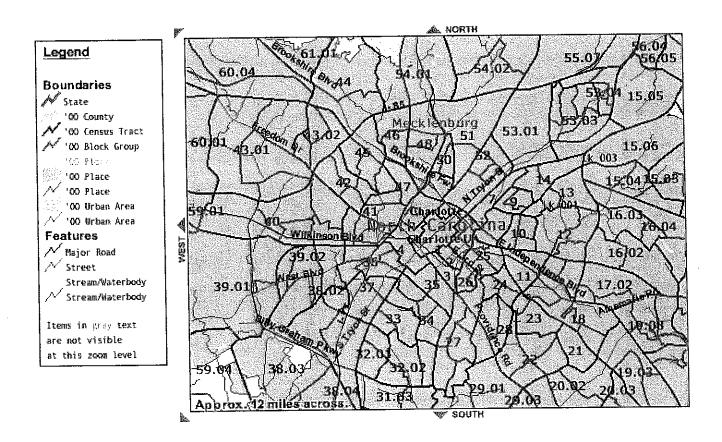
APPENDIX H FARMLAND PROTECTION DOCUMENTATION





Soil survey of Mecklenburg County, North Carolina

United States Department of Agriculture Soil Conservation Service in cooperation with

Mecklenburg County Board of Commissioners and North Carolina Agricultural Experiment Station

By Clifford M. Mc Cachren, Soil Conservation Service

Soils surveyed by Clifford M. Mc Cachren, William E. Woody, Jerry V. Stimpson, Clarence E. Brandon, and Roger J. Leab, Soil Conservation Service

MECKLENBURG is a highly urbanized county in the south-central part of North Carolina, adjoining York and Lancaster Counties, South Carolina. The county has a total area of 336,530 acres, or 525 square miles.

In 1977, the total population of Mecklenburg County was approximately 424,000, which is 7 percent of the population in the state. Charlotte, the county seat, has a population of approximately 339,200. It is the largest city in the state and the hub of the major trade, distribution, inancial, and transportation center of the Southeast. Urbanization is claiming many acres of farmland in the county each year. More than 50 percent of the county is now in nonfarm use.

Farming is still a viable industry in the county. Hay, soybeans, and corn for grain and silage make up a large percentage of the harvested cropland. The rest is small grain. Beef cattle is the dominant livestock enterprise. Dairying also has a major impact on the agricultural economy. Swine and poultry enterprises are relatively unimportant.

General nature of the county

Mecklenburg County was established in 1762 from a part of Anson County and included, at that time, parts of what are now Cabarrus, Union, Lincoln, Rutherford, Cleveland, and Gaston Counties. The county, in its present boundaries, was established in 1842.

Settlers chose the name Mecklenburg for the county, hoping to gain favor with King George III of England whose wife, Queen Charlotte, was born in a German province of that name. The city of Charlotte, incorporated on November 7, 1768, was named for the queen.

Following the Revolutionary War in 1799, gold was discovered mear Concord in Cabarrus County, then a part of Mecklenburg. Charlotte became the gold-mining capill of the United States until the discovery of gold in California in 1849. The quantity of rich ore led to the

establishment of a branch of the United States Mint in Charlotte in 1836. Five million gold dollars were coined at the mint between 1837 and 1861.

By 1900, Mecklenburg had a population of 55,268. The population tripled by 1950 and then more than doubled by the 1970's. The Camp Green Army Base was established in 1917. The forerunner of Douglas Municipal Airport was opened in 1936 and the Charlotte Memorial Hospital in 1940. City and county schools were consolidated in 1959. Central Piedmont College opened in 1963 and the University of North Carolina at Charlotte in 1965.

Public and private educational facilities in the county have kept pace with the population growth. There are 94 elementary and junior high schools and 10 high schools in the Charlotte-Mecklenburg System. In addition, there are 14 state-approved parochial schools and a number of other private schools.

Institutions of higher education in the county include the University of North Carolina at Charlotte, Queens College, Johnson C. Smith University, Davidson College, and the Central Piedmont Community College, which offers a wide variety of vocational, junior college, and adult education programs.

Industrial and commercial development has been enhanced by excellent transportation facilities. Two interstate highways, I-77 and I-85, converge at Charlotte. There are 115 trucking firms in Charlotte, operating more than 5,000 tractor-trailers. Charlotte is the only major trucking point with overnight access to both New York and Florida. In addition, two railroad lines and five commercial airlines serve the area.

Physiography, relief, and drainage

Mecklenburg County is entirely within the Southern Piedmont physiographic region. It is characterized by broad, gently rolling interstream areas and by steeper slopes along the drainageways. No prominent hills stand out above the generally level uplands. The highest point

1. Cecil

Aently sloping to strongly sloping, well drained soils that have a predominantly clayey subsoil; formed in residuum from acid igneous and metamorphic rock

This unit occurs throughout most of the county on broad smooth ridges and side slopes on the uplands. It makes up about 41 percent of the county. It is about 65 percent Cecil soils and 35 percent soils of minor extent.

Cecil soils have a yellowish red sandy clay loam surface layer and a red clay and clay loam subsoil.

Minor in this unit are areas of the steeper Pacolet soils, areas of Helena soils in depressions and around the heads of drainageways, and small scattered areas of Mecklenburg and Enon soils where the parent rock is less acid.

This unit is used mainly as cropland or pasture. Erosion is the main limitation in farming.

The Cecil soils in this unit have moderate potential for most row crops, moderate potential for woodland, and high potential for most urban uses.

2. Cecil-Urban land

1.

Nearly level to strongly sloping urban areas on well drained soils that have a predominantly clayey subsoil; formed in residuum from acid igneous and metamorphic ck

This unit, the business and commercial district of downtown Charlotte and the commercial, industrial, and residential areas around the edges of the city, makes up about 18 percent of the county. It is about 52 percent the Cecil-Urban land complex, 20 percent Urban land, and 28 percent soils of minor extent.

The Cecil-Urban land complex part of this unit is 50 to 70 percent Cecil soils and 15 to 35 percent Urban land. It is mainly around the edges of the city. Cecil soils have a yellowish red sandy clay loam surface layer and a red clay and clay loam subsoil. Urban land is covered mostly by houses, paved streets and sidewalks, apartment buildings, small shopping centers, schools, churches, paved parking lots, and recreational areas.

The Urban land part of this unit consists of areas where more than 85 percent of the surface is covered by asphalt, concrete, buildings, or other impervious cover. It is mainly in the central business district of Charlotte and along major traffic arteries around the city.

Minor in this unit are scattered areas of Mecklenburg and Enon soils. These soils are underlain by thin strata of acidic and basic rocks and are thus less acid than Cecil soils. Also in this unit are reshaped areas, as a result of site preparation during construction, and cut and fill areas. In the cut areas most or all of the natural soil has been removed. In the fill areas the original surface is covered with more than 20 inches of fill mate-

This unit is used almost entirely for urban purposes.

3. Iredell-Mecklenburg

Nearly level to strongly sloping, moderately well drained and well drained soils that have a predominantly clayey subsoil; formed in residuum from diorite, gabbro, and other rock high in ferromagnesian minerals

The largest areas of this unit are in the southwestern and south-central parts of the county. Other areas are in the northeastern and northwestern parts. The landscape is one of broad flats and gentle side slopes. The flats are broken by many large knolls of slightly higher elevation.

This unit makes up about 11 percent of the county. It is about 40 percent Iredell soils, 35 percent Mecklenburg soils, and 25 percent soils of minor extent.

Iredell soils are moderately well drained. They are on the broad flats and gentle side slopes. The surface layer is olive brown fine sandy loam, and the subsoil is light olive brown clay and clay loam.

Mecklenburg soils are well drained. They occupy the broad ridges, the gently sloping to strongly sloping side slopes, and the large knolls on the flat landscape. The surface layer is dark reddish brown fine sandy loam, and the subsoil is yellowish red clay.

The minor soils in this unit are mostly Wilkes and Davidson in the southern part of the county and Enon, Wilkes and Helena in the northern part.

This unit is used mainly as cropland and pasture. The wetter areas are mostly forest. Erosion and wetness are the main limitations in farming.

The major soils in this unit have moderately high potential for most crops, moderate potential for woodland, and low potential for most urban uses.

4. Wilkes-Enon

Gently sloping to steep, well drained soils that have a predominantly clayey subsoil; formed in residuum from diorite, hornblende schist, and other basic rock, or from mixed acidic and basic rock

This map unit occurs as scattered areas throughout the county on broad and narrow ridges and strongly sloping to steep side slopes. It makes up 13 percent of the county. It is about 40 percent Wilkes soils, 30 percent Enon soils, and 30 percent soils of minor extent.

Wilkes soils are on narrow ridges and moderately steep to steep side slopes adjacent to drainageways. The surface layer is dark grayish brown loam, and the subsoil is strong brown clay and clay loam.

Enon soils are on broad ridges and gently sloping to strongly sloping side slopes. The surface layer is brown sandy loam. The subsoil is yellowish brown sandy clay loam, clay, and clay loam.

