

Septic Tank Absorption Fields—Wake County, North Carolina (1)



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Background

 Aerial Photography

Soils

Soil Rating Polygons

-  Very limited
-  Somewhat limited
-  Not limited
-  Not rated or not available

Soil Rating Lines

-  Very limited
-  Somewhat limited
-  Not limited
-  Not rated or not available

Soil Rating Points

-  Very limited
-  Somewhat limited
-  Not limited
-  Not rated or not available

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Wake County, North Carolina

Survey Area Data: Version 27, Aug 27, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 25, 2022—May 20, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Septic Tank Absorption Fields

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
CeB	Cecil sandy loam, 2 to 6 percent slopes	Somewhat limited	Cecil (95%)	Slow water movement (0.82)	0.5	2.6%
			Pacolet, moderately eroded (5%)	Slow water movement (0.82)		
ChA	Chewacla and Wehadkee soils, 0 to 2 percent slopes, frequently flooded	Very limited	Chewacla, frequently flooded (50%)	Flooding (1.00)	2.6	14.9%
				Depth to saturated zone (1.00)		
				Seepage, bottom layer (1.00)		
				Slow water movement (0.50)		
			Wehadkee, frequently flooded (45%)	Flooding (1.00)		
				Depth to saturated zone (1.00)		
				Slow water movement (1.00)		
			Riverview, frequently flooded (5%)	Flooding (1.00)		
				Depth to saturated zone (1.00)		
				Slow water movement (0.50)		
MaE	Madison sandy loam, 15 to 25 percent slopes	Very limited	Madison (92%)	Slow water movement (1.00)	0.1	0.5%
				Slope (1.00)		
				Seepage, bottom layer (1.00)		
			Pacolet (8%)	Slope (1.00)		
				Slow water movement (0.82)		
PaD	Pacolet sandy loam, 10 to 15 percent slopes	Somewhat limited	Pacolet (85%)	Slow water movement (0.82)	4.3	24.7%
				Slope (0.63)		

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
			Wedowee (8%)	Slope (0.63)		
				Slow water movement (0.50)		
PaE	Pacolet sandy loam, 15 to 25 percent slopes	Very limited	Pacolet (85%)	Slope (1.00)	10.0	57.3%
				Slow water movement (0.82)		
			Wedowee (8%)	Slope (1.00)		
				Slow water movement (0.50)		
			Madison, moderately eroded (7%)	Slow water movement (1.00)		
				Slope (1.00)		
				Seepage, bottom layer (1.00)		
Totals for Area of Interest					17.4	100.0%

Rating	Acres in AOI	Percent of AOI
Very limited	12.7	72.6%
Somewhat limited	4.8	27.4%
Totals for Area of Interest	17.4	100.0%

Description

ENG - Engineering

Septic tank absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 24 and 60 inches is evaluated. The ratings are based on the soil properties that affect absorption of the effluent, construction and maintenance of the system, and public health. Saturated hydraulic conductivity (Ksat), depth to a water table, ponding, depth to bedrock or a cemented pan, and flooding affect absorption of the effluent. Stones and boulders, ice, and bedrock or a cemented pan interfere with installation. Subsidence interferes with installation and maintenance. Excessive slope may cause lateral seepage and surfacing of the effluent in downslope areas.

Some soils are underlain by loose sand and gravel or fractured bedrock at a depth of less than 4 feet below the distribution lines. In these soils the absorption field may not adequately filter the effluent, particularly when the system is new. As a result, the ground water may become contaminated.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to

validate these interpretations and to confirm the identity of the soil on a given site.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher